Doing Meaning:
A Theoretical and Grounded Exploration of
Workplace Relationships and Meaningful Work

by
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Abstract

The purpose of this dissertation is to illuminate the connection between workplace relationships and meaningful work. This goal is accomplished through two papers. The first paper adopts a social networks lens to develop a process model explaining how the strength of intraorganizational network ties may influence meaningfulness. Ties of different strengths are expected to influence work meaningfulness through the mechanisms of individuation, contribution, and unification. Rather than one type of tie being superior in terms of its impact on meaningfulness, the theory explains the importance of maintaining a diverse network portfolio that includes both strong and weak ties. The second paper explores how people actively construct the interpretations of their interactions with others in a way that impacts the experience of meaningful work. By conducting an ethnographic study of veterinary workers, the concept of cognitive relationship crafting and its three dimensions of contact, character, and impact crafting are introduced. The data is used to explain how these different forms of cognitive relationship crafting link to meaningful work, as well as the possibility of virtuous cycles of meaningfulness when mechanisms of agency are combined with the mechanisms of unification and contribution enabled by cognitive relationship crafting.

Keywords:  Meaningful work; workplace relationships; job crafting; network theory
I dedicate this dissertation to my husband,
Stephen Robertson, and to my family.
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Chapter 1

Introduction

Whether they like it or not, half of most peoples’ adult lives is spent engaged in one activity: work (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Historically, work has often been considered inherently bad. The Greeks, for example, believed that work was a curse (Maywood, 1982). This is reflected in the Greek word for work, derived from the Latin term poena, which translates to sorrow (Hill, 1996). The past two decades has seen the development of a new perspective on work, rooted in positive organizational scholarship, which suggests that work may have a profoundly positive influence on peoples’ lives, independently of the income that it generates (Cameron & Caza, 2004). An instrumental component of the positive organizational scholarship perspective on work is meaningfulness (Wrzesniewski, 2003). Despite its potentially positive impact, there is still much to learn about meaningful work (Rosso, Dekas, & Wrzesniewski, 2010). This dissertation aims to contribute to the growing management literature on work meaningfulness. In particular, the papers that comprise this dissertation extend existing theory about the role of interpersonal relationships in meaningful work. This is important because while there is currently quite a bit of research identifying the outcomes of meaningfulness, knowledge of the sources of meaningfulness and how these sources connect to meaning is far less advanced (Lips-Wiersma & Morris, 2009). By developing an understanding of why people come to experience their work as meaningful, management scholars would be in a better position to advise organizations about how to create more meaningful work for their employees.

The first paper uses social network theory as a lens to develop a model that explains how ties of different strengths can influence the experience of meaningfulness through different mechanisms. Whereas previous theorizing has suggested that only high quality connections are likely to contribute to meaningful work, the theory in this paper explains how other types of relationships also have the potential to enhance
meaningfulness. In fact, rather than one type of tie being superior in terms of its impact on meaningfulness, the theory explains the importance of maintaining a diverse network portfolio that includes both strong and weak ties.

The second paper is a qualitative empirical investigation of veterinary workers and their experience of meaningful work. It addresses the suggestion that researchers gain greater understanding of the process of meaning-making as it is experienced by employees (Driver, 2007). Through interviews, informal conversations, and observations, I identify several practices that veterinary employees engaged in with their animal patients and human clients that influenced their experience of meaningful work. These practices include shaping the way they interpret the character, content, and impact of their work in their interactions with others, a practice that I have termed cognitive relationship crafting. I explain the mechanisms through which these practices appear to link to meaningfulness, and identify how cognitive empathy plays an important role in protecting the meaning of employee’s work when interactions become challenging. I also address Rosso et al.’s (2010) suggestion that the mechanisms of meaning may be connected and amplificatory by showing how the mechanisms of unification and contribution that arise through interactions can form virtuous cycles with self-oriented mechanisms that enhance the meaning of employees’ work.
Chapter 2

Finding Meaning in Social Networks: A Theory of How Both Strong and Weak Ties Can Lead to Meaningful Work

How can we live a meaningful life? This is a question that philosophers have struggled to answer in theory and humans have struggled to realize in practice. As Frankl (1966), a founding scholar of meaningfulness, wrote: “Man is characterized by his reaching out for meaning or purpose in life. And restless is his heart…unless he has found and fulfilled meaning and purpose” (p. 21). While meaningfulness was once considered to be unsuitable for academic inquiry (Yalom, 1980), this attitude has now changed and scholars are being encouraged to explore this complex element of what it means to be human (Debats, 1999; Metz, 2002). Within the management field this has led to a growing interest in meaningful work, which is an important experience in itself (Pratt & Ashforth, 2003; Wrzesniewski, 2003) and contributes to leading a meaningful life (Debats, 1999; Steger & Dik, 2009).

Meaningfulness of life scholars have begun to identify the sources of meaning (Battista & Almond, 1973; Debats, 1999; Ebersole & DePaola, 1987; O’Connor & Chamberlain, 1996; Schnell, 2011). A theme across these studies is that interpersonal relationships, particularly relationships with family, partners, and friends, create meaningful lives. While these studies do not identify workplace relationships as a source, the same kinds of processes that link personal relationships to life meaning may also be operating within the work context; therefore, it seems very likely that work relationships influence whether or not people experience meaningful work (Kahn, 2007; May, 2003). However, the types of relationships that are likely to lead to meaningful work, and the processes underlying why relationships influence meaningfulness, are not well understood. The goal of this paper is to address this gap in the literature. Drawing
from network theory, this paper contributes to the current understanding of meaningful work by elaborating on how certain workplace relationships, even those that have not typically been considered likely to lead to meaning, may contribute to meaningful work.

This paper makes three contributions to the management literature. Two of these contributions are to the literature on meaningfulness at work, which is an area of management scholarship that is lacking in both theoretical and empirical development. One of the most understudied areas concerns the sources of meaningfulness (Fock, Yim, & Rodriguez, 2010; Lips-Wiersma & Morris, 2009). The theoretical model introduced herein explores the influence of one source of meaningfulness: workplace relationships. More importantly, the theory elaborates on the processes through which these relationships are likely to link to meaningfulness.

A second contribution to the meaningfulness of work literature is made by elaborating on the properties of relationships that are likely to be relevant to meaning. The little research that has touched on workplace relationships and meaning has focused on the importance of belonging to broader organizations or groups (Rosso et al., 2010). This means we have little understanding of how the content of individual relationships could be relevant to meaning. The processes operating within a relationship or series of relationships at work are likely to be different from the broader social identity processes associated with experiencing attachment to an organization. By focusing on the relationship level, the theory identifies several relational properties that are likely to shape people’s experience of meaningful work. The proposed theory therefore addresses Rosso et al.’s (2010) call to identify the micro categories of relationships that are likely to matter to meaning, and extends theory about how each of these categories is likely to individually or jointly impact meaningfulness.

Finally, this paper contributes to the social networks literature. While some studies have looked at how individual attributes, such as gender and race impact the formation of ties (Ibarra, 1993), few have considered the psychological consequences of network patterns, most likely because early networks researchers frowned on these kinds of inquiries (Mayhew, 1980; Wellman & Berkowitz, 1988). Yet, it is becoming an increasingly important area for management scholars, as evidenced by the upcoming special issue in *Organization Science* on this topic. The paper elaborates on why
organizations should care about the way their employees are tied to one another, because these relationships can affect their experience of meaningfulness, and hence other relevant variables like affective commitment and turnover intentions.

The theoretical model developed in this paper has two components. The first uses a social network lens to explain how tie strength is likely to influence work meaningfulness. The processes argued to connect tie strength and meaningfulness are drawn from Rosso et al.’s (2010) framework on the mechanisms of meaning. This framework is notable because it is the first comprehensive summary of how work becomes meaningful (Steger, Dik, & Duffy, 2012). Rosso et al. (2010) suggest that there are two dimensions that characterize the processes of meaningfulness. The first is agency-communion. Agency relates to individuals’ drive to separate from and influence the world around them, whereas communion is the drive to be integrated into the world. The second is whether action is self-oriented and internal or other-oriented and external. The interactions of these two dimensions create four pathways to meaningfulness: (1) individuation (self-agency) – this is a process that enables people to feel that they have personal value, (2) contribution (other-agency) – this is a process that enables people to feel that they are doing something important for a cause outside of themselves, (3) self-connection (self-communion) – this is a process that enable peoples to feel that they have an internally consistent identity, and (4) unification (other-communion) – this is a process that enables people to feel that they are connected to others (Rosso et al., 2010). The first part of the theory will explain why strong ties are likely to lead to meaningfulness through the mechanisms of unification and weak ties are likely to lead to meaningfulness through the mechanisms of individuation.

The second component of the model elaborates on the characteristics of relationships that may influence the degree to which strong and weak ties lead to meaningful work. Not all ties of the same strength are expected to be equal, and the content of the tie is likely to account for some of this variation. Relationship content is accounted for through interdependence, which is likely to be relevant in the workplace context. Considering interdependence also enables the identification of a particular type of tie, referred to as a beneficiary tie, which is expected to have a unique influence on work meaningfulness by opening up the third pathway of contribution. By combining tie
strength with content, a holistic story of how workplace relationships matter to meaning is developed.

The following section will provide an overview of the meaningful work literature, focusing on what is known about its consequences and sources, in order to demonstrate the need for a relational theory of work meaningfulness. The theory will then be presented, with propositions developed to summarize its core components. The paper will conclude with a discussion of the theory and point to some related questions for future research.

Finding Meaningful Work

A persistent challenge for scholars has been defining meaningful work. Meaning has been variously defined as the amount of significance that a job holds for an individual (Pratt & Ashforth, 2003), the belief that work is important and fits within a broader social context (Britt, Adler, & Bartone, 2001), and the value of work relative to an individual’s personal ideals (May, Gilson, & Harter, 2004). This paper adopts Rosso et al.’s (2010) definition of meaningful work, which takes into account these earlier definitions: “work experienced as particularly significant and holding more positive meaning for individuals” (p. 95), where “meaning” is the result of making sense of something within the context of one’s life. In empirical studies, meaningfulness is measured on a positive scale ranging from 0, which is the absence of meaning (also referred to as meaninglessness) to a high degree of meaning (Debats, 1996). Since the individual is the only one who can determine whether his or her work meets the criteria of meaningfulness, it is by nature a subjective concept. While some scholars have argued that an objective definition of meaningfulness is possible and necessary (Kekes, 2000), the psychological approach to meaningfulness has demonstrated a preference for subjectivism. The theory developed in this paper embraces a subjectivist approach because it is consistent with prior studies of meaningful work and it appears to be all that is necessary to affect various psychological and organizational outcomes, making it worthy of study in itself.
Scholarly interest in meaningful work appears to have been driven by its association with other positive outcomes. Almost all of the research about meaningful work suggests that it is a good thing for individuals and organizations. At the personal level, meaningfulness enhances psychological wellbeing (Ryff & Singer, 1998; Zika & Chamberlain, 1992) and meaninglessness undermines it (Debats, 1996). To the extent that meaningful work is a part of leading a generally meaningful life, people who consider their lives to be meaningful are better able to cope with stressful events (Park & Folkman, 1997), have higher self-esteem (Battista & Almond, 1973), and are more satisfied with their lives (Chamberlain & Zika, 1988). As one might expect, meaninglessness is associated with a variety of negative psychological conditions, including depression and anxiety (Antonovsky & Sagy, 1986; Crumbaugh, 1968; Debats, van der Lubbe, & Wezeman, 1993), suicidal ideation (Harlow, Newcomb, & Bentler, 1986), and increased need for therapy (Battista & Almond, 1973). Considering scholarship on the meaningfulness of work specifically, Ramlall (2008) theorizes that meaningful work is likely to be the key to general happiness for employees. Further, there is empirical evidence that employees who experience their work as meaningful report more personal fulfillment and growth (Spreitzer, Kizillos, & Nason, 1997), as well as overall job satisfaction (Fairlie, 2011; Scroggins, 2008).

Organizations also benefit when their employees experience work as meaningful. It is a significant predictor of job engagement (Jelinek & Ahearne, 2010; Kahn, 1990; May et al., 2004), affective commitment (Bunderson & Thompson, 2009; Fairlie, 2011), and willingness to spend time at work regardless of whether or not its compensated (Wrzesniewski et al., 1997). Employees who experience their work as meaningful report higher levels of intrinsic motivation (Fried & Ferris, 1987; Renn & Vandenberg, 1995; Spreitzer et al., 1997), perform better (Ahearne, Mathieu, & Rapp, 2005; Rapp, Ahearne, Mathieu, & Schillewaert, 2006), and are less likely to intend to leave their employers (Scroggins, 2008). In addition to promoting positive outcomes, meaningful work inhibits negative outcomes. Long hours have been positively associated with deviance and poor psychological health, except in cases where employees experience their work as meaningful (Britt, Castro, & Adler, 2005; Jelinek & Ahearne, 2010). Stressful working conditions are also less damaging to employees who do meaningful work, perhaps
because they are more readily able to identify the benefits associated with stressful events and therefore cope better (Britt et al., 2001).

In spite of all of the positive outcomes associated with meaningful work, little is known about why people experience work as meaningful (Lips-Wiersma & Morris, 2009). Preliminary work in this area has identified several potential sources of work meaningfulness, as summarized in Figure 1. These sources are: individual traits, job design, the connection between people and their jobs, and workplace relationships. Because relationships are the focus of the proposed theory, it will receive the most attention in the following discussion, which will identify gaps in our current understanding of how workplace relationships influence meaning.

**Figure 1. Sources of Work Meaningfulness**

 Certain people may be more likely to experience any job they do as meaningful by virtue of their personal traits. Hardiness, which encompasses the attitudes of commitment, control, and challenge thereby enabling people to transform stressful events into growth opportunities (Maddi, 2002) has been positively associated with meaningful work even when it is repetitive (Isaksen, 2000) and stressful (Britt et al., 2001). People who have a
calling orientation, which is a belief that work is inseparable from life and an important source of fulfillment (Wrzesniewski et al., 1997), experience their work as more meaningful than individuals with job or career orientations. Finally, people with spiritual beliefs are more likely to see their work in the context of a higher purpose and therefore to experience it as meaningful (Lips-Wiersma, 2002).

There may also be some jobs that are more likely to be experienced as meaningful than others, based on their characteristics. According to Hackman and Oldham (1980), to increase the meaningfulness of a job, managers need to design the characteristics of jobs in order to ensure that there is high task identity, task significance, and skill variety. There are plenty of studies supporting these ideas (Johns, Jia, & Fang, 1992; Renn & Vandenberg, 1995). Subsequent research has expanded on the job characteristics associated with meaningfulness. Kahn (1990) found that challenging, creative, and moderately autonomous work tended to be experienced as meaningful. May et al.’s (2004) study found that job enrichment was positively associated with experienced meaningfulness. The status of the job may also influence meaning. High status roles that enable people to influence others and to feel valued tend to be experienced as more meaningful (Kahn, 1990).

Not only can the job itself influence meaning, but so can the relationship between people and their jobs. Work roles carry identities, and the more people believe that their personal identities match their work role identities, the more meaningful the work becomes (Kahn, 1990). Person-job fit is one of the more investigated antecedents of meaningfulness, and several studies have found a positive association between perceived fit and experienced meaning (Brief & Nord, 1990; May et al., 2004; Shamir, 1991). Similarly, Bunderson and Thompson (2009) identified occupational identification as having a positive impact on experienced meaning, fully mediating the relationship between having a calling orientation and meaningful work.

Most of the prior research on the sources of work meaningfulness has focused on individually oriented factors, and not on how others may influence meaningfulness (Rosso et al., 2010). Yet, relationships are a potential source of meaningfulness worthy of further investigation for many reasons, not least of which is that unlike an individual’s traits or the design of a job, they can be a source of meaning for almost any individual in
almost any job. The basic premise linking relationships to meaning is that by interacting with others, employees are able to satisfy the “fundamental human motivation” to belong (Baumeister & Leary, 1995, p. 497). Early theorizing by Maslow (1943) suggested that people are motivated to achieve affection and belongingness. McClelland’s (1965; 1985) extensive work on motivation has provided evidence that workplace relationships can contribute to satisfying the need for affiliation with others.

Prior research examining the potential link between coworker relationships and work meaningfulness has suggested that these relationships will contribute to meaning when they are rewarding, in the sense that people both share and listen to one another’s private problems (Isaksen, 1995; May, 2003) and promote “dignity, self-appreciation, and a sense of worthwhileness” (Kahn, 1990, p. 707). All three of these studies implicitly argue that it is the quality of the relationships that matter. While he did not operationalize quality, Kahn (1990) focuses on how meaningful relationships are mutual in the sense that both parties give to and receive from them. While May et al. (2004) consider the emotional dimension of the relationship, as would be present in a friendship. Pratt and Ashforth (2003) suggest that close-knit family type relationships at work will promote meaning.

Unlike with coworkers, supervisory relationships are often seen as a means of transmitting information about the meaning of work to employees. For example, Fock (2010) found that high quality supervisor-supervisee relationships, which he defined as involving high mutual trust, concern, and obligation, were important to meaningfulness. In the North American context, however, it was not the relationships themselves that contributed to meaning, but rather the way in which they facilitated development of a customer orientation and employee self-determination, which in turn led to meaning. Relationships with managers or leaders, in particular transformational leaders, may be vehicles for intentionally imputing meaning into work (Bono & Judge, 2003; Piccolo & Colquitt, 2006). The question remains as to whether different types of relationships with supervisors or leaders may contribute directly to experienced meaning, rather than simply being a source of information about the meaning of work.

Wellman and Spreitzer (2011) have built on these ideas, arguing that individuals who want to make their work more meaningful should increase their high quality
connections at work. High quality connections, a concept developed by Dutton and Heaphy (2003), have three characteristics: they are imbued with positive emotion, can withstand strain, and are conducive to generating new ideas and perspectives. Dutton and Heaphy (2003) argue that not only are low quality connections less positive than high quality connections, but that they actually have a detrimental impact on individuals. They assert that “low-quality connections leave damage in their wake” and impose an “emotional and physiological toll” (p. 265). Although they are not entirely clear about why low quality connections will have a negative impact, their ideas imply that these connections may sap the energy and enthusiasm of people involved.

While not explicitly conceived of in this manner, the relationships explored by meaningfulness of work scholars and the concept of high quality connections have some overlap with the concept of strong ties. Notably though, the processes through which these strong ties are linked to meaning remain unexplained, and it is unclear which dimensions of relationships are likely to be most important in terms of their influence on experienced meaning. Certainly some low quality connections are likely to be detrimental, but it is questionable whether they will necessarily have a negative impact on peoples’ work lives. It sounds ideal that a person could create a workplace filled with high quality connections, but one cannot help but wonder whether this is the best path to meaningfulness in all circumstances. These relationships are likely to be time consuming and emotionally demanding, so it would be difficult to maintain many of them at once and they could interfere with peoples’ ability to get their work done. Does this not matter when it comes to meaningfulness? To develop a more complete picture of when and why certain workplace relationships may or may not be linked to meaningfulness, it is important to account for a greater range of possible forms. The theory developed in this paper strives to do that by focusing on how strong and weak ties can contribute to meaningfulness.

A Social Network Theory of Work Meaningfulness

The relationships between actors in a network are referred to as ties and they have two dimensions: content and form. Tie content involves the “interests, purposes, drives, or motives” of the actors that are unique to the relationship (Knocø & Yang, 1982,
Tie form, on the other hand, describes the structure of the interaction through which the content manifests (Knoke & Yang, 1982). Tie strength is the form that has received the most attention in network research (Marsden & Campbell, 1984). Granovetter (1973) was one of the first to direct attention to this topic. He defined tie strength as involving: (1) the amount of time spent in a tie, (2) the intensity of the tie, (3) the intimacy of the tie, and (4) the degree to which the tie is characterized by reciprocal services. The theory proposed in this paper focuses on tie strength as the core independent variable. There are at least two advantages to focusing on tie strength. First, prior research suggests tie strength is important because it shapes a wide variety of network outcomes. Second, a tie cannot simultaneously be strong and weak, and therefore tie strength is more likely to be able to distinguish between workplace relationships than tie content. The following section will establish the rationale for the proposed relationships between weak and strong ties and the different pathways to meaningfulness. This will be followed by an analysis of relevant relationship context variables and conclude with a discussion of why the diversity of an individual’s network portfolio is likely to be important for work meaningfulness.

**Tie Strength and the Path to Meaning**

**Strong Ties and Unification**

Unification is a path to meaningfulness that occurs at the intersection of others and communion. It suggests that meaningfulness is experienced when people connect to one another and to their values. There are three dimensions of unification. The first dimension is an individual’s sense of purpose as it is reflected through his or her value system (Rosso et al., 2010). The second dimension is social identification with others (Rosso et al., 2010). The third dimension is the sense of belonging that comes from being connected to others at a personal level, focusing on the comfort and support that arises through these relationships (Rosso et al., 2010). The number of strong ties that an individual maintains at work is expected to be positively related to experienced meaningfulness, mediated through all three mechanisms of unification.
**Strong Ties and Similar Values**

The individuals to whom one is strongly tied are likely to share similar values and to behave in ways that enact and reinforce those values. There are at least two processes at work that lead to shared values amongst strong ties: people are more likely to learn an organization’s values and to create new shared values through their strong ties than their weak ties.

The organizational socialization literature, for example, has emphasized how an important means through which individuals learn about and adopt an organization’s values is informal interactions with other members (Van Maanen & Schein, 1979). Louis, Posner, and Powell (1983) identified building relationships and daily interactions with peers, supervisors, and senior coworkers as the most helpful and effective socialization tactic, enabling newcomers to learn the organization’s values and norms, a finding echoed by Ostroff and Koslowski (1992) across a wide variety of organizations. Socialization to values occurs more readily through strong ties than weak ties (Granovetter, 1983). This insight has been supported in the organizational socialization literature, as Morrison (2002) found that tie strength was positively related to social integration. The mutuality and trust engendered by strong ties is a key mechanism in promoting shared values. Fock (2010) describes how high quality relationships with supervisors, which are similar to strong ties, increase the likelihood that the employee will adopt the supervisor’s values. The strength of the tie is positively related to the strength of the social influence and therefore the tendency to share values (Somma, 2009).

One of the characteristics of strong ties is frequent interactions (Granovetter, 1973), which enables people to learn more about one another, share information, and ultimately create new shared views (Haythornthwaite, 2002; Krackhardt, 1992). The more people interact with each other, the more they are likely to compare their perceptions and experiences and ultimately become more similar in terms of their attitudes and values (Brass, Galaskiewicz, Greve, & Tsai, 2004; Erickson, 1988; Tsai & Ghoshal, 1998). Strong ties are likely to form a mutually reinforcing cycle leading to ever-similar values because frequency of interaction breeds similarity, and as people become more similar, they are likely to interact more frequently (Blau, 1977; Homans,
This is why, for example, organizational subunits where the members are strongly tied to one another tend to develop values that differ from other subunits (Tsai & Ghoshal, 1998).

People who are strongly tied tend also to be tied to common others (Granovetter, 1973; 1983), potentially leading to cliques. Cliques are densely interconnected subnetworks where everyone knows everyone else (Scott, 2000). Formation of cliques should reinforce shared values. In his study of Simmelian ties, which are strong ties in cliques of three, Krackhardt (1999) found that shared values and norms were likely to emerge and that people would follow them in order to stay part of the group. Simmel (1908) suggested that similar processes would emerge in cases where there are strong redundant connections between more than three people. Indeed, Coleman (1988) emphasizes how in a low density network there is more likely to be differences in peoples’ values and preferences, whereas high density networks facilitate the development of shared norms and values. He studied the extreme case of New York diamond merchants where people routinely make high value deals without contracts because everyone knows everyone else and so the values surrounding market interactions are shared by all participants. Furthermore, because everyone is connected it is easier to ensure that members adhere to those shared values, because members’ behavior can be monitored and informal or formal sanctions can be applied when necessary (Coleman, 1990; Kilduff & Brass, 2010). Thus, as the number of strong ties increase within an organization, so does the likelihood of being part of a clique, which will reinforce the experience of meaningfulness through shared values.

Proposition 1a: The more strong ties that individuals maintain, the more they will perceive that they share values with co-workers, and they will therefore experience their work as more meaningful.

Strong Ties and Social Identification

In addition to supporting the development of shared values, strong ties are also likely to promote social identification. The social identification process is predicated on individuals figuring out to which groups they belong and do not belong. Social identification is based on the extent to which an individual finds members of a group to be familiar and attractive, as well as through the generalization of traits from the group to
the self and the self to the group (Smith, 1966). While interactions with ingroup members are not required to form a social identity (Tajfel, 1982), they do promote its development (Ashforth & Mael, 1989). This is because interactions can help people determine which traits to use as bases for categorizing themselves and others into social groups (Hogg & Turner, 1985). In other words, a primary way in which we learn about the characteristics of others is through interacting with them. Once we learn about their characteristics we can assess whether we are similar or dissimilar to them and therefore part of the same social group or not. The strength of identification with a particular category can in turn be shaped by the number of ties that are connected through that identity (Stryker & Burke, 2000).

Intraorganizational network ties have been identified as a main source of social identity at work (Podolny & Baron, 1997) because strong ties facilitate the two core processes of social identification: familiarity and generalization. First, the more interaction ego has with alters, the more familiar they are likely to become. The familiarity promoted by strong ties leads people to become more similar to one another in terms of their values and attitudes (Erickson, 1988; Granovetter, 1973). Research suggests that individuals tend to be more attracted to similar others (Cialdini & Trost, 1998) and to therefore consider themselves to be a part of the same social category. Second, the similarity promoted by the frequent interaction involved in strong ties should support generalization because it enables people to more clearly see the generic traits that they have in common and may therefore be used as a basis for categorization (Stryker, Owens, & White, 2000). Lawler and Yoon (1996), for example, argue that increasing the frequency of exchange will increase individuals’ identification with one another.

A question that arises is whether strongly tied individuals who socially identify with one another will also socially identify with the organization. Research suggests there may be a connection. Pratt (2000) discovered a positive association between the strength of mentor relationships and organizational identification, and Stryker and Burke (2000) similarly found that more interactions with organization members tended to increase organizational identification. In examining the relationship between strong ties and organizational identification, Jones’ (2011) found that it was categorizations of prestige that accounted for the connection, which were enabled by strong ties. Thus, not
only will strongly tied individuals tend to socially identify with one another, the more strong ties that an individual maintains at work, the more he or she is likely to also socially identify with the organization.

As the number of strong ties increase and people become a part of densely connected subnetworks, social identification is likely to be further reinforced. Podolny and Baron (1997) argue that dense networks, like cliques, are superior when it comes to developing social identity in organizations. This is because dense networks facilitate the production of consistent social cues which help to ensure that individuals have a clear idea of who they are and where they stand relative to other organizational members. Additionally, members of cliques or other dense networks are more likely to enforce conformity to prototypical in-group behaviour (Bienenstock, Bonacich, & Oliver, 1990). Taken together, this suggests the second direct proposition:

Proposition 1b: The more strong ties that individuals maintain, the more they will perceive that they share membership in a social group, and they will therefore experience their work as more meaningful.

Strong Ties and Comfort/Support

Finally, strong ties are likely to lead to meaningful work because they facilitate the provision of comfort and support. In his introduction of the concept of strong ties, Granovetter (1973) argued that they are likely to be characterized by “reciprocal services” (p. 1361). Social support is one form of reciprocal service. Strong ties are likely to be positively related to the provision of social support for two reasons. First, alters will be more likely to offer support to egos with whom they are strongly tied. Second, egos are more likely to seek out support from their strong ties than from their weak ties.

The more strongly tied a pair of individuals are, the more motivation they have to provide resources and support to one another (Granovetter, 1983; Krackhardt, 1992; Lin & Bian, 1991). This results in the provision of a greater overall amount of social support in strong ties (Haythornthwaite, 2002; Wellman, 1979). One reason why this occurs is that strongly tied people actually enjoy helping each other more than do weakly tied people (Wellman, 1979). Strong ties are also more likely to provide one another with
more forms of social support (Granovetter, 1983; Haythornthwaite, 1996; Marsden & Campbell, 1984). Second, the more strong ties that individuals have, the more reciprocal relationships they have to draw on when they need social support, increasing the likelihood that it will ultimately be provided (Lin, 1999). As a result, strong ties will be positively associated with feeling socially secure in organizations (Ibarra & Andrews, 1993; Krackhardt & Stern, 1988; Podolny & Baron, 1997).

Not only are strong ties more likely to provide more social support to one another, but the number of strong ties that an individual maintains can influence their perceptions of overall organizational support. This is defined as a belief that the organization as a whole both values what the employee brings to the organization and cares about the employee’s well-being (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Hayton, Carnabuci, and Eisenberger (2012) found a significant positive relationship between the number of reciprocated multiplex exchange relationships, essentially the same as strong ties, and perceived organizational support.

As the number of strong ties that an individual maintains increases and form densely interconnected subnetworks, social support will be further increased. Aside from the fact that people generally treat one another better in dense social networks (Moody & White, 2003), the more people within a network know one another, the more likely they are to learn that someone needs social support (Vaux & Harrison, 1985). People tend to provide more career and social support to one another in dense networks (Balkundi & Harrison, 2006; Ibarra, 1995; Vaux & Harrison, 1985). There is also more incentive to provide social support in a dense network: others will be more aware when a member provides support to another member, which can have valuable social and reputational effects, thereby making support provision more personally beneficial (Buskens & Raub, 2002). In addition to support from particular others, Hayton et al. (2012) found that the density of an individual’s intraorganizational ties was positively related to employees’ perceptions of organizational support. Thus, the more strong intraorganizational ties that an individual maintains, the more social support they will receive from other individuals and the more they will perceive that the organization as a whole supports them. As such:
Proposition 1c: The more strong ties that individuals maintain, the more they will experience social support from co-workers, and they will therefore experience their work as more meaningful.

Weak Ties and Individuation

While strong ties are likely to lead to meaningfulness through the mechanisms of unification, this is not the only way through which people may come to find their work meaningful. Individuation is a second mechanism of meaningfulness, which is actually more likely to be experienced when people maintain weak ties. Because strong ties are time consuming, they may take away from individuals' productivity at work (Balkundi & Harrison, 2006). Further, strong ties are unlikely to be a source of novel information that could help individuals to excel at their work (Granovetter, 1973). Weak ties matter because they are more likely than strong ties to be local bridges, meaning that they connect groups of otherwise untied individuals (Granovetter, 1973; Friedkin, 1980). The idea of a local bridge was expanded upon through Burt’s (1992) theory of structural holes, which are separations between non-redundant contacts. Burt has criticized Granovetter for focusing too much on the strength of ties, when actually it is the local bridge or structural hole that accounts for the benefits of the weak tie. In other words, weakness may be a correlate rather than a cause of structural holes. The difference is that tie strength is a relationship-level variable, whereas a structural hole is a network-level variable (Levin & Cross, 2004). As this theory is focused on the relationship level, it will adopt a focus on tie strength, keeping in mind that one of the processes underlying why tie strength is likely to matter in organizations is through local bridges or structural holes. The following section will expand upon the basic processes through which weak ties are likely to support meaningfulness.

Researchers have found that individuals tend to experience work as meaningful when it allows them to set themselves apart as being important and valuable, though a process called individuation (Rosso et al., 2010). Individuation has three sub-processes. The first two relate to self-efficacy, which is the belief that one has the capacity to make one’s goals a reality or have an impact on the world (Bandura, 1977; Baumeister & Vohs, 2002). The first self-efficacy process is competence, or individuals' beliefs that they are capable of performing their work well. When people learn and surmount
challenges at work, it promotes a sense of competence that leads to meaning (Gecas, 1991; Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005). A second self-efficacy process is autonomy, which is the ability to make one’s own decisions about how to carry out work or manage the work environment (Deci, 1977). It is related to power because the meaningfulness of self-efficacy comes from peoples’ perception that they are self-determining and not powerless in their lives (Wrzesniewski & Dutton, 2001; Baumeister & Vohs, 2002). Finally, individuation links to meaningfulness through self-esteem (Rosso et al., 2010), or the extent to which an individual likes him or herself (Baumeister, 1998). Being successful at work may enhance individuals’ self-esteem and increase their sense of being a valuable employee (Baumeister & Vohs, 2002). The proposed theory suggests that the number of weak ties that an individual maintains at work is likely to be directly related to experienced meaningfulness through all three processes of individuation.

**Weak Ties and Competence**

A key way through which individuals become competent in their work is by learning skills and knowledge that can help them to accomplish their tasks (Masten & Reed, 2002; White, 1959). One of the most important sources of knowledge required to excel at work and solve challenging problems are interpersonal relationships (Hutchins, 1991; Lave & Wenger, 1991). Indeed, Spreitzer (2005) identifies interpersonal relationships as the main source of learning in organizations. However, it is not just any relationship that is likely to contribute to gaining the knowledge needed to achieve competence, but rather weak ties in particular. Weak ties have several advantages when it comes to knowledge flow. First, they are less costly to maintain than strong ties (Hansen, 1999), which means that for a given time investment in relationships, an individual can maintain a greater number of weak ties and hence have more potential sources of information. Second, the people that individuals maintain weak ties with are likely to belong to different social groups within the organization and as a result possess novel information (Granovetter, 1973). This is in contrast to strong ties, which tend to occur between members of the same social group or clique, and are therefore likely to possess information already known to ego (Granovetter, 1973).
Levin and Cross’s (2004) research has supported Granovetter’s (1973) theory, that by connecting individuals beyond the strong tie network, weak ties give people access to novel information that can help to differentiate them from those inside their strong tie network. While strong ties were not detrimental to work outcomes, weak ties were the source of the most useful knowledge and made the greatest contribution to successful project outcomes, under conditions of both high and low trust, because they provided non-redundant information (Levin & Cross, 2004). Thus, the more weak ties that an individual maintains, the more non-redundant information they will be able to access (Podolny & Baron, 1997), which should lead to greater competence. People who only maintain strong ties may be deprived of competence because they will be confined to the views and ideas of people who are similar to themselves (Granovetter, 1983). The other advantage of weak ties is that they do not bind people into rigid structures (Blyler & Coff, 2003; Hansen, 1999), rather people have more flexibility to get what they want, from who they want, when they want, without the risk of insulting anyone.

People who maintain more weak ties than strong ties at work are more likely to be tied to people at higher levels in the organization (Seibert, Kraimer, & Liden, 2001), which is important when it comes to competence. Ties to higher status individuals may be beneficial because they tend to be useful sources of both financial and knowledge resources (Graen, Cashman, Ginsburg, & Schiemann, 1977; Ibarra, 1992). High status members are also likely to have more useful contacts with people outside of the organization that possess non-redundant information (Carroll & Teo, 1996; Stevenson & Gilly, 1991). Therefore, individuals who have more weak ties to high status organizational members may be able to increase their competence by taking advantage of the extraordinary information and other resources likely to be possessed by their high status ties. Along these lines, Morrison et al. (2002) found that the number of ties an individual maintained with high status organization members was positively related to task mastery, which they defined as possessing information about how to perform particular work tasks, and to role clarity, which they defined as possessing information about role expectations and responsibilities. People who know more about how to perform their work tasks and what their responsibilities are at work are likely to be more competent, and hence to experience meaningfulness through individuation.
As the number of weak ties that an individual maintains increases, so does the likelihood that those ties will be local bridges between organizational subnetworks. One measure of this type of connection is betweenness centrality (Everett & Borgatti, 2005). Egos with high betweenness centrality are particularly likely to experience competence at work because they have optimal access to knowledge, resources, and brokerage opportunities (Podolny & Baron, 1997). First, people with high betweenness centrality are likely to be first to hear about important information (Seibert et al., 2001). They will thus have a first mover advantage that could enhance mastery and competence. Further, the people that ego connects are likely to belong to different parts of the network and therefore will tend to have non-redundant knowledge and skills (Krackhardt, 1992) which ego can then use to develop innovations and creative solutions to problems (Burt, 2004). The process of accessing diverse information can also increase skill variety (Kilduff & Brass, 2010), which may enhance competence. Indeed Mehra et al. (2001) found that betweenness centrality was positively associated with individuals’ ability to find and use relevant information and therefore improved their problem solving ability at work. On the other hand, the ties of egos with low betweenness centrality, because they are otherwise directly connected to one another, can actually act as a constraint on competence because they tend to bind people to coming to a consensus on existing alternatives even when an opposing idea would be better for the organization (Balkundi & Harrison, 2006). This suggests:

**Proposition 2a:** The more weak ties that individuals maintain, the more competent they will be at work, and they will therefore experience their work as more meaningful.

**Weak Ties and Autonomy**

The extent to which ego maintains weak ties will also be connected to autonomy and control. The more power that an individual has in an organization, the more autonomy and control they will have. Social networks are an important source of power in organizations (Brass, 1984), and weak ties in particular are associated with power (Granovetter, 1973). Access to information and resources are important intraorganizational sources of power (French & Raven, 1959) that can be facilitated by the maintenance of weak ties (Brass, 1984; Brass & Burkhardt, 1993; Kilduff &
Krackhardt, 1994). These arguments are bolstered by the fact that people who maintain many weak ties are more likely to be connected to people in diverse units in the organization (Seibert et al., 2001). Since people in general form ties to close others, the diversity attained by people with weak ties increases their access to and control of diverse resources, which enhances their organizational power (Brass, 1984).

The number of weak ties also increases influence and bargaining power, which can enhance an employee’s control over their work. Because individuals can maintain more weak ties than strong ties, people who have primarily weak ties will have more people that they can go to in order to press their interests. In addition to the numbers argument, there are two other reasons why weak ties enhance bargaining power. First, the greater access to strategic information promoted by weak ties gives people an advantage in negotiations (Blyler & Coff, 2003). Second, because people with many weak ties will tend to be more competent, it is more costly if they leave the organization, which also enhances their bargaining power. They may, as a result, also have greater access to alternative positions in other organizations (Blyler & Coff, 2003). They are thus in a strategic position to extract rents and exert control over their current organizations (Coff, 1999).

As the number of weak ties that an individual maintains increases, so will their tendency to act as a local bridge. This increases the likelihood that others will be dependent on them, and therefore enhances their level of control (Brass et al., 2004). Being central to a network is often recognized as a source of informal power (Balkundi & Harrison, 2006). Indeed, one of the main benefits of structural holes identified by Burt (1992) is that they increase individuals’ control in the network. The individual who spans the structural hole takes on the role of *tertius gaudens*, or a third who benefits, and as a result is able to seize bargaining power and control (Burt, 1992). Thus, when people have many weak ties, they will have more opportunity to extract rents by taking advantage of otherwise unconnected others (Kilduff & Brass, 2010; Podolny & Baron, 1997). A reason why structural holes may promote autonomy and control is that in networks with many structural holes decision-makers are relatively disconnected to one another which increases uncertainty about who has authority. This increases subordinates’ abilities to play people off of one another and enables them to take control.
of ensuring their own goals become realized in the workplace. This leads to the following proposition:

*Proposition 2b: The more weak ties that individuals maintain, the more autonomy and control they will have at work, and they will therefore experience their work as more meaningful.*

**Weak Ties and Self-esteem**

The logic linking weak ties with self-esteem is closely related to their association with competence. While in some ways self-esteem is similar to a personality trait, prior research has suggested that it can also be influenced by an individual’s experiences (Leary & Downs, 1995). Workplace achievements are one type of experience that has the potential to contribute to self-esteem (Crocker & Park, 2004; Gecas, 1991; Leary & Downs, 1995) and ultimately to the experience of meaning (Baumeister & Vohs, 2002). Individuals who maintain many weak ties may be particularly likely to have achievements at work. This is facilitated by the fact that people who maintain weak ties are more likely to be linked to others in both different functions and higher levels in the organization (Seibert et al., 2001). Ties across functions are relevant to achievements because they give greater access to non-redundant information (Granovetter, 1973) which is likely to enhance overall performance. Ties to higher status members may also play an important role here. Cross and Cummings (2004) found support for their hypothesized positive relationship between ties to higher status network members and performance as measured by employee evaluations. Thus, the competence promoted by weak ties is also likely to improve employees’ job performance and hence their self-esteem at work.

One of the most important achievements that people can attain at work that are likely to promote self-esteem are promotions (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). Maintaining weak ties has been positively associated with the tendency to achieve promotions (Granovetter, 1983). Naturally, this is likely to be facilitated by the positive relationship between weak ties and performance, which should in turn be connected to promotions. Weak ties may also lead to promotions independently of performance. Granovetter (1973; 1983) argues that the more weak ties one has the more people are likely to be promoted because of their advantageous network position. One reason may be that when the weak ties involve connections to higher levels in the
organization it enhances career sponsorship, which is when higher status members help to promote the development of a junior employee in the organization (Seibert et al., 2001). Seibert et al. (2001) confirmed the importance of both access to information and career support derived from weak ties as they were both related to promotions.

As the number of weak ties that an individual maintains increases, so too does their likelihood of achieving high betweenness centrality. Individuals with high betweenness centrality should be in a better position to accomplish significant achievements in the workplace, such as gaining salary increases and promotions. In his seminal study, Burt (1992) found that male managers who had more structural holes in their networks were promoted more quickly. Since then, Mehra et al. (2001) identified betweenness centrality as a main predictor of individual performance ratings. One reason why betweenness centrality may be linked to performance is that centrally located individuals are in an ideal position to locate and use knowledge to improve the quality of their decisions (Hansen, 2002). Central actors are likely to be more in demand by other organizations and so could leverage this power to convincingly argue for greater compensation or promotions from their current organization (Blyler & Coff, 2003). Employees who are able to achieve high performance ratings, salary increases, and workplace promotions are likely to have higher self-esteem, which should enhance their sense of being engaged in meaningful work through the process of individuation. Therefore:

Proposition 2c: The more weak ties that individuals maintain, the higher their self-esteem will be at work, and they will therefore experience their work as more meaningful.

Now that the basic relationships comprising the proposed theory of intraorganizational network ties and work meaningfulness have been established, the role of tie content and how it may amplify or constrain these relationships will be explored.
Tie Content as a Relationship Context Moderator

Relationship context moderators are concerned with properties of the tie linking ego and alter (Scott, 2000). This aspect of the theory incorporates elements of relational content into the basic discussion of relational form that is captured by the concept of tie strength. When it comes to intraorganizational networks, an important aspect of ties is whether they involve job interdependence (Podolny & Baron, 1997). Interdependence is the extent to which two people rely on the outputs of one another’s work (Wageman, 2001). This leads to two basic types of ties: (1) position-to-position ties that involve job interdependence, meaning that people are connected to one another based, at least to some degree, on their organizational tasks, as in the case of a reporting relationship, and (2) person-to-person that ties do not involve job interdependence, and so there is no requirement for the people to interact in order to accomplish their work (Podolny & Baron, 1997).

Tie Strength, Person-to-Person Ties, and Unification

The basic premise so far has been that the number of strong ties a person maintains at work is likely to link to meaningfulness through unification. This connection is likely to be strengthened when the strong tie is person-to-person, such as a pure friendship tie. Research on networks has identified friendship ties as important mechanisms for sharing values (Ibarra, 1993; Lincoln & Miller, 1979). Intimacy and stability are core components of these ties, which increases the likelihood that they will be a source of shared values (Gibbons, 2004). Indeed, because people generally want to be similar to their friends, they tend to develop shared values and beliefs by comparing themselves to and ultimately imitating their friends (Erickson, 1988). Gibbons (2004) has argued that friendships are likely to be a source of new shared values because when relationships are based on trust and affection, they are not threatened by changing values. Any new values that are developed will likely be shared because friendships encourage conformity (Krackhardt, 1999).

Intraorganizational friendships are also likely to support the process of social identification. Brass (1984), Ibarra (1992), and Krackhardt (1992) have all found evidence that friendship ties lead to the development of a shared identity. Finally, friendship ties tend to be particularly important sources of social support (Balkundi &
Harrison, 2006). People are more likely to seek out support from their friends because these ties are characterized by intimacy and trust (Gibbons, 2004). Thus, people should be more willing to indicate that they are in need of help to their friends. Expressing a need for help is an important part of actually receiving it. Secondly, people are more likely to provide help to their friends than to the other people to whom they are tied (Gibbons, 2004). This is because friendship ties are more likely to be characterized by altruism, which is a willingness to engage in actions that benefit others rather than the self (Gibbons, 2004). The following proposition summarizes these anticipated effects:

**Proposition 3a:** The positive relationships between strong ties and all three components of unification (similar values, social identification, and social support) will be moderated by tie content, such that the relationships will be particularly strong when the tie is person-to-person.

**Tie Strength, Position-to-Position Ties, and Individuation**

When ties are position-to-position, or based on formal job interdependencies, this is likely to amplify the relationship that exists between weak ties and individuation. This is because position-to-position ties are more likely than person-to-person ties to enhance feelings of competence, autonomy, and achievement. In terms of competence, research by Burkhardt (1994) has suggested that the pure advice networks that are typical of position-to-position ties tend to support individuals’ feelings of competence with, as well as attitude towards, workplace technology. Furthermore, position-to-position ties, because they involve shared work, are more likely than person-to-person ties to be a source of relevant workplace knowledge and information. Thus, when individuals have a large number of weak ties that are also position-to-position, they will be in a better position to gain information about how to do their jobs well, thereby enhancing their competence.

Whether or not a tie is position-to-position is also likely to support individuals’ achievements at work. The size of an individual’s position-to-position network has been found to be positively associated with performance on the job (Sparrowe, Liden, Wayne, & Kraimer, 2001). Finally, while there is not as much evidence linking position-to-position networks with autonomy, they have been associated with the degree of an individual’s power in organizations (Sparrowe et al., 2001). Thus, when an individual
maintains many weak position-to-position ties, their likelihood of becoming highly competent, accomplishing achievements, and increasing their organizational power at work will be maximized. This idea is captured by the following proposition:

**Proposition 3b**: The positive relationships between weak ties and all three mechanisms of individuation (competence, self-esteem, and autonomy) will be moderated by tie content, such that the relationships will be particularly strong when the tie is position-to-position.

**Position-to-Position Ties and Contribution**

There is a special kind of position-to-position tie that is likely to open up a third pathway to meaningfulness. This is the case where alter is a direct beneficiary of ego’s work, and it should enable experiencing meaning through contribution. Contribution is the extent to which people believe that their work is important to society or contributes to something beyond themselves, and it can be achieved through a variety of mechanisms (Rosso et al., 2010). The first of these also relates to self-efficacy but through the perceived impact of one’s actions, rather than through competence. Perceived impact captures the idea of making a prosocial difference to others (Grant, 2008). A second way in which people experience contribution is through the feeling that their work serves a purpose, or has some significance, in the larger society (Rosso et al., 2010). Contribution is also related to transcendence, and while it is possible that ties with beneficiaries do involve transcendence, prior research suggests that making a difference and purposefulness are likely to be the strongest pathways through which these ties will connect to meaning.

A beneficiary of ego’s work is someone who is positively affected by it, and contact with beneficiaries is the degree to which jobs enable people to be exposed to and interact with beneficiaries (Grant, 2007). The majority of prior studies have focused on beneficiaries outside of the organization, such as how a patient benefits from the services of a doctor. While beneficiary relationships that span organizational boundaries are likely to be relevant to experienced meaningfulness, they are not directly of interest to the current theory. However, the concept of a beneficiary and the theory behind why contact with beneficiaries should matter to ego is still likely to apply in the intraorganizational context. While it could be argued that all of an individual’s coworkers
are beneficiaries in the sense that doing his or her job keeps the organization running smoothly, there are also likely to be coworkers who benefit more directly from ego’s work. For example, a doctor may be a direct beneficiary of a nurse’s work if the nurse’s detailed notes help the doctor to do her job more effectively. Direct beneficiaries are the individuals of interest in this paper.

When alter is a beneficiary, this is likely to enhance ego’s perception that his or her work makes a prosocial difference. The idea of making a prosocial difference is closely related to Hackman and Oldham’s (1976) concept of task significance, which is the extent to which a job affects the lives or work of others within or outside the organization. There is evidence that task significance leads people to experience their work as more meaningful (Fried & Ferris, 1987; Morgeson & Humphrey, 2006). It is certainly possible to have high task significance without maintaining ties to beneficiaries; for example, the knowledge that one’s work makes a prosocial difference to others could be sufficient. However, the more actual contact that people have with beneficiaries, the more likely they are to perceive their work as significant (George, 2003). This is because beneficiary contact enables people to appreciate the tangible consequences of their impact on others (Grant, 2007). In other words, the relationship matters. This is likely why initial work on the task characteristics model suggested that supporting contact between employees and beneficiaries would enhance task significance (Hackman & Oldham, 1980; Hackman & Oldham, 1976). Indeed, one of the fundamental findings of Grant et al.’s work (2007) has been that actual contact with beneficiaries increases peoples’ belief that they are making a prosocial difference because contact causes the idea of making a difference to be more cognitively accessible to people than the mere theoretical knowledge of their impact (Grant, 2012). Therefore:

Proposition 4a: The more beneficiary ties that individuals maintain, the more they will perceive that their work makes a prosocial difference, and they will therefore experience their work as more meaningful.

In addition to increasing the perception that the work makes a prosocial difference, the more contact employees have with beneficiaries, the more likely they are to experience work as purposeful. Firstly, research has suggested that many people
define the purpose of their work as having a prosocial impact on beneficiaries (Colby, Sippola, & Phelps, 2001; Ruiz-Quintanilla & England, 1996). Thus, to the extent that this is true, the more contact that individuals have with the beneficiaries of their work, the more likely they are to feel that the purpose of their work is clear and being accomplished. A study by Grant (2012) provides support for the link between contact with beneficiaries and feeling that work has a purpose. He looks at the interaction between transformational leadership vision and beneficiary contact. Such a vision could be interpreted as being similar to the overall purpose for an employee’s job. Grant (2012) found that when people had contact with beneficiaries, it tended to make them believe more strongly in the leader’s vision and its likelihood of having a prosocial impact because the contact made the beneficiaries “more cognitively accessible and emotionally vivid” (p. 461). On the other hand, people were more likely to question a leader’s vision or see it as mere rhetoric when beneficiary contact was lacking. Contact with beneficiaries serves as the action component that increases the sense of connection that people have to the purpose of their work as articulated by leaders. Beneficiary ties are therefore what enable people to believe in a leader’s vision and feel that they are accomplishing it, which is expected to enhance their sense of being engaged in purposeful work.

**Proposition 4b:** The more beneficiary ties that individuals maintain, the more they will believe that their work is purposeful, and they will therefore experience their work as more meaningful.

The question arises about whether contact with beneficiaries needs to be through weak or strong ties. Grant et al.’s (2007) research has found significant effects for even minimal contact with beneficiaries, which suggests that weak ties have the potential to enhance contribution. That means, if the choice is between no tie and a weak tie to a beneficiary, having the weak tie should involve greater meaningfulness. At the same time, strong ties may have a stronger effect than weak ties. In breaking down contact with beneficiaries, Grant (2007) considers frequency, duration, physical proximity, depth, and breadth of contact. He theorized that the more of these dimensions characterized the relationship, the more people would perceive themselves to be having a prosocial impact on beneficiaries, which is essentially the same as making a prosocial difference. One would expect that these five dimensions would be present more strongly in strong
ties than in weak ties. Thus, the above to propositions will hold with respect to all ties, but should be stronger when the ties to beneficiaries are strong than when they are weak.

In order to conceptualize the interaction of tie strength and type of tie, it is possible to depict them in a framework. As can be seen in Figure 2, strong ties and unification will tend to go together, particularly in cases where the tie is person-to-person. Weak ties and individuation are likely to go together, particularly in cases where the tie is position-to-position. With position-to-position ties where alter is a beneficiary of ego’s work, reaching meaningfulness through contribution also becomes a possibility, particularly in the case of strong ties.

**Figure 2. Interaction of Tie Strength and Type of Tie**

<table>
<thead>
<tr>
<th>Type of Tie</th>
<th>Strong</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Person-to-person</strong></td>
<td>Particularly conducive to unification (akin to a friendship tie).</td>
<td>Not conducive to unification.</td>
</tr>
<tr>
<td></td>
<td>Somewhat conducive to individuation because may be a source of non-task related information.</td>
<td></td>
</tr>
<tr>
<td><strong>Position-to-position</strong></td>
<td>Somewhat conducive to unification.</td>
<td>Particularly conducive to individuation (akin to an advice tie).</td>
</tr>
<tr>
<td></td>
<td>Not conducive to individuation because unlikely to be a source of non-redundant information.</td>
<td>When beneficiary, will be somewhat conducive to contribution.</td>
</tr>
<tr>
<td></td>
<td>When beneficiary, will be particularly conducive to contribution</td>
<td></td>
</tr>
</tbody>
</table>

**Network Portfolio Diversity and Meaningful Work**

The above theory contributes to the literature on meaningful work by expanding upon the processes through which individual relationships with coworkers are likely to
lead to meaningfulness. It represents a departure from prior theorizing which has argued that individuals desiring meaningful work should maximize high quality connections like strong ties, and minimize low quality connections like weak ties. A question that remains, however, is whether weak and strong ties contribute equally to meaningfulness. For example, would an individual who maintains a given number of weak ties experience their work as being as meaningful as an individual who maintains the same number of strong ties, or another individual who maintains the same number of ties but balanced between strong and weak? First, it is important to recognize that there is a limit to the maximum number of ties that a person can maintain, so it is not possible to infinitely increase both weak and strong ties. Because strong ties require a greater time commitment than weak ties, the maximum number of strong ties that an individual can maintain will be less than the maximum number of weak ties. Therefore, if it was purely a question of more ties leading to more meaning, one would have to conclude that weak ties would always be superior because an individual can have more of them at any one time. While weak ties are undoubtedly important to meaningfulness, this paper suggests that individuals who maintain both strong and weak ties are more likely to experience their work as meaningful than individuals who maintain only one type of tie.

A person who maintains only weak ties would experience meaningfulness through individualization and potentially contribution if they are also beneficiary ties, both of which are agency mechanisms. Agency was one of the fundamental human motives identified by Bakan (1966) and it involves pursuit of one’s own interests. A person who maintains only strong ties would experience meaningfulness through unification, which is a communion mechanism and also contribution if the strong ties are also beneficiaries. Communion is the second human motive identified by Bakan (1966), positioned as opposing agency, and involves a focus on the needs of others. The question that emerges is whether there is something unique about people who maintain both strong and weak ties thereby enabling them to reach meaningfulness simultaneously through the pathways of agency and communion? Research on the mechanisms of agency and communion provide some insight into this question and support the contention that people who maintain both strong and weak ties are likely to experience their work as more meaningful than people who maintain ties of only one type.
The combination of weak and strong ties maintained by an individual can be conceived of as their intraorganizational network portfolios (Roth, Seidel, Ma, & Lo, 2012; Seidel, Polzer, & Stewart, 2000). Similarly to a financial investment portfolio where people decide how to distribute their monetary resources, people have a given amount of time resources that they can allocate between ties of different strength. A non-diversified portfolio might involve investing as few resources in as many weak ties as possible or all of one’s resources in one or a few strong ties. Both of these possibilities have important implications for the experience of meaningfulness at work. A person who maintains only weak ties at work will reach meaningfulness solely through agency and so this would be an example of unmitigated agency. The concept of unmitigated agency is distinct from agency because it captures those people who focus only on their own interests without regard for the interests of others (Bakan, 1966). At the other extreme, a person who only maintains strong non-beneficiary ties would experience meaningfulness solely through communion, making it an example of unmitigated communion. Unmitigated communion differs from communion because it involves concern for others at the expense of oneself (Helgeson & Fritz, 1999).

In his initial contemplation of agency and communion, Bakan (1966) cautioned against the dangers of unmitigated agency. He suggested that if people pursued only agency in their lives that it would lead to the dissolution of society and various negative personal outcomes like infanticide, cancer, and suicide (Bakan, 1966). This is because unmitigated agency leads to a negative view of the world and of others that would manifest in serious physical illness. While maintaining only weak intraorganizational ties is unlikely to have the extreme negative effects anticipated by Bakan, there is evidence that individuals who pursue unmitigated agency do experience negative outcomes like distress, low self-esteem, and poor health behaviour (Fritz & Helgeson, 1998; Helgeson & Fritz, 1999). If the pattern of ties that one maintains at work reduces both one’s psychological and physical health, the meaningfulness of that work is also expected to be undermined. In their exploratory study, Lips-Weirsma and Morris (2009) found evidence to support this idea, as participants who felt that their work was purely concerned with individual goal accomplishment experienced a diminished sense of meaningfulness over time.
When all of one’s ties are strong and one becomes embedded in a dense clique where everyone knows everyone else, the possibilities of leaving that group are constrained and so one’s own needs can very easily be sacrificed. While Bakan (1966) did not contemplate the dangers of unmitigated communion, there is growing evidence that it too can lead to suboptimal functioning for human beings. Unmitigated communion is positively related to greater personal distress, in part because these individuals tend to become overly involved in other peoples’ problems and to take on the distress of others (Fritz & Helgeson, 1998; Helgeson & Fritz, 1998). There are also physical implications like poor health behaviour (Fritz & Helgeson, 1998). These negative physical and psychological outcomes will also tend to undermine the experienced meaningfulness of work. Indeed, people who feel that their work involves sacrificing their own interests to the interests of others over time, also experience diminished meaningfulness (Lips-Wiersma & Morris, 2009). This is because, consistent with the research on unmitigated communion, being overly concern for the needs of others is associated with burnout which will reduce experienced meaningfulness (Langle, 2003).

Network theorists have long recognized that different tie strengths fill different, but important roles and that people should not necessarily pursue one type of tie at the expense of the other (Haythornthwaite, 2002). A similar principle would appear to apply to an individual’s network portfolio and its impact on work meaningfulness. Both the pursuit of agency and of communion can have many positive effects for individuals (Helgeson, 1994) and as explained in this paper they are also expected to enhance the meaningfulness of work. Experienced meaningfulness is facilitated through a combination of being able to make a unique contribution (agency) while also seeing those contributions within the context of the larger society (communion) (Lips-Wiersma & Morris, 2009). Problems are likely to arise when only the mechanism of agency or of communion is activated, as would be the case when people pursue only one type of tie at work. Therefore maintaining some degree of diversity in one’s network portfolio is likely to promote the experience of work meaning. This suggests the final proposition:

Proposition 5: Individuals who maintain diversified intraorganizational network portfolios will experience their work as more meaningful than individuals who maintain non-diversified intraorganizational network portfolios.
Conclusions and Implications

The topic of meaningful work has been subject to weak theory development and disjointed research (Wrzesniewski, 2003). Although scholars have begun to identify some of the sources of meaningful work, no one has yet systematically investigated them. By combining the above propositions, a model of intraorganizational relationships and the processes associated with experienced meaningfulness of work is formed. This model is depicted in Figure 3.

Figure 3. Model of Relationships and Work Meaningfulness

There are a couple of ideas that ought to be borne in mind about the model. Although difficult to depict, it is important to consider all of an individual's ties as they make up their network portfolios rather than only focusing on each tie individually. While diversity is expected to enhance meaning, the exact percentage of investments in the different types of ties that will be optimal is likely to depend on the individual and also possibly the
nature of the work. Secondly, the model captures the configuration of an individual’s workplace relationships at a given moment in time, but ego networks are in a state of continual flux (Knoke & Yang, 1982). Most people are going to have two general types of ties in organizations, those they are required to maintain and those that are discretionary. There are going to be some position-to-position ties that individuals are forced to maintain in order to keep their jobs, such as those with bosses and intradepartmental coworkers. However, people will still retain some control over the strength of these position-to-position ties. They have more discretion over their person-to-person ties and over how strong they would like those ties to be. While it is difficult to capture such a dynamic process in a figure, one must remember that intraorganizational relationships are likely to be undergoing nearly constant change, particularly as people enter and leave an organization, and therefore so may the meaning experienced at work.

Another issue that warrants consideration is the clean distinction made in the model between strong and weak ties. Creating such a distinction enhances the parsimony of the model and enables clear delineation of the different processes that may be at work in linking relationships and meaningfulness. In reality, the distinction between weak and strong ties may not always be clear cut. Granovetter (1973) suggested that weak ties would involve interacting with someone more than once a year, but less than twice a week. Applying such a standard would enable clear categorization of a tie as either strong or weak. Others, however, have adopted more of a relative standard by considering degree of strength or weakness. For example, Hansen (1999) looks at average weakness on a 7-point Likert scale rather than dichotomizing the variable in order to allow for a finer grained quantitative analysis. Levin and Cross (2004) similarly measure degree of tie strength but still distinguish between strong and weak ties in their results and discussion. Regardless of whether one uses a dichotomous or continuous variable, I would expect the weak tie processes to hold for ties that are relatively more weak and the strong tie processes to hold for ties that are relatively more strong. Whether these relationships are affected by the degree of tie strength is an empirical question that I hope future researchers will explore. Another potential issue is whether a tie can be both simultaneously strong and weak: for example, if an individual interacts with a coworker about personal matters only once a
week, but about work-related matters twenty times a week, then could the tie be considered weak and strong at the same time? Granovetter (1973) would consider such a tie to be strong since he was focused on strength independently from tie content. As such, according to the theory one would expect it to link to meaningfulness primarily through unification processes. Yet, the question of how the combination of different types of content that may characterize a tie could influence the processes is an interesting one for future research that could extend the theory presented here.

**Practical Implications**

The theory leads to some important practical implications for organizations. Almost all employees express a desire for meaningful work (Treadgold, 1999). As such, insight into how organizations may facilitate work meaningfulness is likely to be welcomed. First, at a general level, the theory suggests that intraorganizational ties are an important source of meaningfulness. This means that organizations have an interest in allowing individuals to connect with one another. Even though relationships can distract people from their work, it may not be in an organization’s interests to try and discourage them, because not only do relationships themselves have possible positive performance implications, but by contributing to meaningfulness they have a number of other positive implications for individuals’ sense of well-being, as well as their likelihood of remaining committed to and engaged with the organization. Given that ties with beneficiaries are likely to foster meaningfulness through contribution, this paper echoes Grant’s (2007; 2012) suggestions to foster contact between individuals and the beneficiaries of their work. Additionally, workplaces that are interested in promoting meaningful work ought to support different types of ties between organizational members. Organizations should not assume that this only means promoting strong high density connections between employees, as if the organization were a tight knit family, but also supporting weak connections, for example through information databases or message boards. Because individuals have the most knowledge about their existing ties, giving them the freedom to craft the relational element of their jobs may facilitate meaningfulness without requiring organizations to fundamentally change the nature of employees’ work, and so has the potential to be used in all types of organizations.
Conclusion

By analyzing research on meaningful work through a network theory lens, this paper has developed a theory about the processes that are likely to link intraorganizational relationships to meaningful work. It contributes to positive organization scholarship by identifying types of ties, other than high quality connections, as potential sources of work meaning, and more importantly explains why and how these ties will link to meaning. Rather than viewing meaningfulness as a static variable that employees either have or do not have, it elaborates on how meaning is likely to be a fluid process depending, at least in part, on the composition of an individual’s network portfolio. This matters to organizations because, while they may not be able to control individuals’ personal orientations towards work or the nature of the tasks involved in work, they can create conditions that facilitate the types of relationships that enhance meaning. For many employees, it truly may not be about what they do, but rather who they do it with, when it comes to meaning. This theory and the work that it will hopefully inspire are intended to promote the idea that work need not be a soulless drudgery, but rather, as a result of the relationships that can be fostered in the workplace, may promote individual well-being through a sense of experienced meaning.
Chapter 3

Connecting with the Animals:
Cognitive Relationship Crafting and the
Mechanisms of Meaningful Work

I think it’s a bit of a one-way dialogue to the animal so if you want to make something in your head to make you feel better, you kind of can. Where with a person, it’s a little more complicated than that… I feel I made such a difference to that pet in that kennel who’s not feeling well. I see things that can convince me that this is true. But if you’re working with a person, you could be doing just as much good but you’re not seeing these things because it’s a person that maybe doesn’t want to show it. (Veterinary technician, participant)

The idea that work can be meaningful is a powerful one because it means that rather than being a soulless drudgery or a chore, work can have a uniquely positive influence on the lives of individuals. Meaningful work is defined as “work experienced as particularly significant and holding more positive meaning for individuals” where “meaning” is the result of making sense of something within the context of one’s life (Rosso et al., 2010, p. 95). Understanding meaningful work is important because the majority of people report desiring it (Treadgold, 1999), and many of these individuals consider meaningful work to be more important than extrinsic rewards (Towers Perrin, 2003). Perhaps this is why even hard-driving managers, such as Jack Welch, encourage prospective employees to ask themselves questions such as: “Will the new job turn my crank, touch my soul, give me meaning?” (Welch & Welch, 2007, p. 110).

Not only is meaningful work desired by employees, but its experience is associated with a number of positive outcomes. Ramlall (2008) theorizes that it is the key to general happiness for employees, and there is empirical evidence that people who experience their work as meaningful report more personal fulfillment and growth (Spreitzer et al., 1997), as well as overall job satisfaction (Fairlie, 2011; Scroggins,
Organizations also benefit when employees experience their work as meaningful. Meaningfulness facilitates various forms of connection between individuals and their work, such as job engagement (Jelinek & Ahearne, 2010; Kahn, 1990; May et al., 2004) and affective commitment (Bunderson & Thompson, 2009; Fairlie, 2011). These employees are more intrinsically motivated to perform their work (Fried & Ferris, 1987; Renn & Vandenberg, 1995; Spreitzer et al., 1997) and ultimately turn out a better performance (Ahearne et al., 2005; Ramlall, 2008; Rapp et al., 2006). Experiencing work as meaningful also inhibits negative workplace outcomes, such as deviance (2010) and stress (Britt et al., 2005), which may result when employees work long hours.

While many previous studies have focused on identifying the outcomes of work meaningfulness, there remains little understanding of why employees come to experience their work as meaningful. This gap is unfortunate because it means that scholars have little advice to offer managers who would like to create working conditions that promote meaningfulness. Rosso et al. (2010) have begun to rectify this situation by developing a summary of the currently identified sources of meaningfulness, which include the self, others, the work context, and spiritual life. The present research focuses on the role of others on meaningful work for two reasons. First, when one explores the meaningfulness of life literature, others, and in particular personal relationships, have been identified as the most common and the most important source of meaning (Debats, 1999). Second, others as a source of work meaning has attracted the least empirical attention (Rosso et al., 2010) and as a result there remain many unanswered questions about why and under what conditions others may contribute to meaningful work. By drawing on in-depth qualitative data across five veterinary clinics, this paper develops a grounded theory of how others can influence the experience of meaningful work. Rather than discrete characteristics of interactions, the theory focuses on the importance of how people think about the behaviour, intentions, and characteristics of others during interactions.

The veterinary industry was selected as a context to study workplace interactions and meaningfulness for two theoretical reasons. First, occupations where people work with animals have been identified as being deeply meaningful (Bunderson & Thompson, 2009). Human-animal work may therefore be considered an extreme case for meaningful work, which is helpful for building theory (Eisenhardt, 1989). Second, unlike
some forms of human-animal work, the veterinary context is highly interactional, providing ample opportunity to study different types of interactions with both humans and animals. The opportunity to explore human-animal interactions and contrast them with human-human interactions is important because, as explained by Knight and Herzog (2009): “the ways in which we treat animals shed light on general processes that govern human social cognition and behavior” (p. 459). The veterinary field therefore uniquely positions this study to contribute to understanding how workplace interactions may shape the experience of meaningful work.

**Contributions of the Research**

This paper makes three contributions to the meaningfulness of work literature, which is an important area of management scholarship that is lacking in both theoretical and empirical development. First, the research addresses Wrzesniewski’s (2003) and Lips-Wiersma and Morris’ (2009) recommendations to develop knowledge about the least understood dimension of meaningful work: the sources of meaningfulness. This paper is the first to use in-depth qualitative data to unpack one of the sources of meaningfulness – workplace relationships – and to develop a process model linking this source to meaning. Relationships are a particularly important area to focus on because research about meaningfulness in life suggests they are likely to have a profound impact on meaningfulness and yet, of all the sources of work meaningfulness, relationships have received the least amount of empirical attention (Rosso et al., 2010). Perhaps this is because studying interactions and relationships in real time requires an ethnographic approach to inquiry, which can be very time consuming for the researcher. Yet, qualitative investigations may be particularly appropriate because they enable the researcher to explore meaningfulness through the often overlooked lived experiences of individual employees (Lips-Wiersma & Morris, 2009).

Second, the paper addresses Rosso et al.’s (2010) recommendation to “broaden the frameworks” that meaningfulness of work scholars use to study the role of others in the workplace (p. 102). Prior research that has considered workplace relationships and meaningfulness, has either used an identity based lens or focused on the more general conception of belonging to larger social groups. The research presented here adopts a
micro-sociological lens on relationships, which enables exploration of how the actions, words, and emotions of the various others that a person encounters at work can impact that person’s experience of meaningfulness. Workplace interactions are one of the least studied areas of organizational behaviour (Oldham & Hackman, 2010), and therefore there is little understanding of the aspects of interactions that may be relevant in the workplace. This paper elaborates on the dimensions of interactions that emerged in observing and discussing peoples’ work. The theoretical model that is developed is the first to adopt a dyadic approach to meaningfulness and therefore enhances the understanding of the role of others in the workplace.

Third, the paper introduces a new form of job crafting, cognitive relationship crafting, which involves changing the way people think about their interactions with others. Three dimensions of cognitive relationship crafting are identified: character crafting, contact crafting, and impact crafting. Cognitive relationship crafting differs from previous studies that have examined the connection between relationships and meaningfulness because it focuses on how people make sense of their interactions, rather than on their objective dimensions, such as interaction length or degree of emotionality. This means that the same interaction can be interpreted as either enhancing or undermining meaningfulness based on the way one thinks about the characteristics and behaviour of the other person, as well as one’s own influence on the other during interactions. Cognitive relationship crafting is a powerful process because it opens up the potential to make any person’s work more meaningful without needing to change the content of their jobs or the people with whom they interact. It may not be reasonable, for example, to expect all or even the majority of one’s workplace relationships to be emotional, mutual, and respectful, but unlike prior theorizing, this paper suggests that it does not preclude these interactions from contributing to meaningfulness. Cognitive empathy is theorized to play a particularly important role when it comes to interactions and meaningfulness because it is expected to buffer challenging interactions from undermining meaningfulness, while also opening up new direct pathways to meaningfulness. It may therefore be the key to linking even what might have been called “low quality connections” to meaningfulness.

This study also contributes to the growing literature on human-animal interactions. Prior research in this area has focused almost exclusively on owners and
their companion animals. The relationships that humans may develop with animals at work are likely to be qualitatively different from companion animal relationships: there is no ownership involved and the relationship is likely to be characterized by mutual obligations, such that the behavior of the animal reflects on the worker’s apparent competence and the worker’s behavior impacts the animal. Further, unlike companion animal relationships, working relationships are more likely to involve unpleasant interactions, such as performing painful procedures for the animal’s benefit or for the benefit of other humans. Thus, the proposed research begins to address Arluke’s (2002) recommendation to focus on the needs and experiences of people who work with animals.

**Research on Meaningful Work**

In order to appreciate the need to further understand the influence of workplace interactions on meaningfulness, one must first situate it within the broader meaningfulness of work literature. This section elaborates on the definition of meaningful work and introduces some of the factors that researchers currently believe contribute to the experience of work meaningfulness, with a focus on the role of others and relationships. The job crafting literature is introduced in order to explore how relationship crafting has been linked to meaningfulness. This will set the stage for understanding how cognitive relationship crafting differs from these prior approaches. The purpose of the literature review is to highlight the gaps in our understanding of others as a source of meaning in order to develop the research questions.

One of the challenges associated with studying meaningful work is developing a clear definition of the concept. Rosso et al. (2010) have defined meaningful work as work that is significant and that has positive meaning for individuals, which means that people make sense of it in a positive way within the context of their lives. This definition is consistent with earlier definitions, such as the amount of significance that a particular job holds for an individual (Pratt & Ashforth, 2003), the belief that one’s work is important and fits within a broader social context (Britt et al., 2001), and the value of work relative to an individual’s personal ideals (May et al., 2004). As a positive concept, meaningfulness ranges from the absence of meaning, referred to as meaninglessness,
to a high degree of meaning (Debats, 1996). Since the individual is the only one who can determine whether his or her work meets the criteria of meaningfulness, it is by definition a subjective concept. While some philosophers have argued that arriving at an objective definition of meaningfulness is both possible and necessary (Kekes, 2000), the psychological approach to meaningfulness has demonstrated a preference for subjectivism. The theory developed in this manuscript embraces a subjectivist approach because it is consistent with prior studies of meaningful work in organizations (see, for example, Lips-Wiersma & Morris, 2009; May et al., 2004) and it appears to be all that is necessary to affect various psychological and organizational outcomes, making it worthy of study in and of itself.

**Others as a Source of Meaning**

It may be surprising to learn that despite all of the positive consequences associated with meaningful work, very little is known about why people experience their work as meaningful (Lips-Wiersma & Morris, 2009). One of the reasons for this oversight is that, for those adopting a subjective perspective on meaningfulness, the potential sources are virtually limitless (Metz, 2002). However, within both the meaningfulness of life and meaningfulness of work literatures, there do appear to be some sources that are particularly likely to shape meaning experiences. Rosso et al. (2010) identify the self, others, the work context, and spirituality as the four main categories of sources of meaningful work. Of these sources, others has received the least amount of empirical attention, despite the findings that they are most important source of meaningfulness in life (Debats, 1999; O'Connor & Chamberlain, 1996; Schnell, 2011). Prior research on others as a source of meaning has focused on how belonging to broader social groups can influence meaning (Rosso et al., 2010). However, no one has yet adopted a dyadic approach, focusing on actual interactions between two individuals, to explore the influence of others on work meaningfulness.

A dyadic interaction is said to occur when one individual engages in behaviour toward another individual and the second individual responds in some way (Hinde, 1976). Hosey (2008) emphasizes that an interacting partner’s reactions are not always directly observable, but that this does not preclude an interaction from having taken place. A relationship develops when there are recurring interactions between the same
two individuals over time (Hinde, 1976). Relationships are dynamic in the sense that each interaction acts as a source of feedback to the participants, which is in turn likely to influence their future interactions (Waiblinger et al., 2006).

In the workplace, individuals are likely to regularly interact with coworkers, supervisors, and clients, and each of these types of interactions may influence meaningfulness in different ways. The basic premise linking interactions with others to meaning is that they enable people to satisfy their relatedness needs, which Baumeister and Leary (1995) have described as the “fundamental human motivation” to belong (p. 497). Prior research has suggested that an individual’s relatedness needs are particularly likely to be met when they feel that they are not just an occupant of a particular role, but rather that others value and respect them as individuals in that role (Locke & Taylor, 1990). Such interactions are sometimes referred to as high quality though, as will shortly be discussed, the meaning of this term varies across studies.

Prior research has found evidence that the more rewarding the interactions between individuals and their coworkers (Isaksen, 1995; May, 2003), the more likely these individuals are to find their work to be meaningful. Interactions between coworkers that promote “dignity, self-appreciation, and a sense of worthwhileness” contribute to the experience of meaningful work (Kahn, 1990, p. 707). These studies implicitly argue that it is the quality of the interactions that matter to meaning. While he did not clearly operationalize quality, Kahn (1990) focuses on how meaningful interactions are mutual in the sense that both parties give to and receive from them. This mutuality is what enables them to increase peoples’ dignity and sense of being valued. High quality is also conceived of as having an emotional dimension, such as a friendship, where the workplace interactions extend beyond being purely professional (May et al., 2004). Pratt and Ashforth (2003) similarly suggest that close-knit family type relationships at work will promote meaning.

Unlike with coworkers, rather than linking the nature of the relationship to meaningfulness, supervisory relationships are more often seen as a means of transmitting information about the meaning of work to employees. For example, Fock (2010) found that high quality supervisor-supervisee relationships, which he defined as involving high mutual trust, concern, and obligation, promoted meaningfulness. In the
North American context, however, it was not the high quality relationships themselves that contributed to meaning, but rather the way in which they facilitated development of a customer orientation and employee self-determination, which in turn led to meaning. Relationships with managers or leaders, in particular transformational leaders, can be vehicles for intentionally imputing meaning into peoples’ work (Bono & Judge, 2003; Piccolo & Colquitt, 2006). A similar idea is alluded to by Isaksen (2000), as he observes how people may look to their coworkers for information about whether or not their job is meaningful.

When it comes to clients, meaningfulness tends to be derived from interactions where the client expresses appreciation or admiration for the employee’s work (Kahn, 1990). Similarly, Grant (2007) in his studies of contact with beneficiaries outside of the organization, such as clients, suggests that the depth and breadth of contact may shape the motivation to make a prosocial difference, which may in turn influence meaningfulness. The general premise seems to be that if clients give positive feedback to employees then they will experience a sense of being valued, which enhances meaning (Kahn, 1990).

Clearly, there is some evidence that interactions with others at work can lead to meaning. What is missing, however, is an understanding of what dimensions of interactions are important. Underlying a lot of the explanation is the theory that high quality connections, which are defined as being respectful, mutual, and emotional, will lead to meaningful work, but what do these interactions look like in practice? We have little understanding of what type of content is likely to be interpreted by employees as indicating that they are respected and valued. It is also not clear whether all people are likely to interpret the content of their interactions in similar ways. A second consideration that is insufficiently developed in the literature is an understanding of the process underlying why some interactions contribute to meaning. Is belongingness the only mechanism or could there be something else at work in interactions? Perhaps the processes underlying why different groups of people, such as coworkers, clients, or leaders can link to meaningfulness may be different from one another.
**Relationship Crafting and Work Meaningfulness**

Another related area that has emerged as being relevant to meaningful work is job crafting, where individual employees adapt the elements of their work to suit their own skills and preferences (Leana, Appelbaum, & Shevchuk, 2009; Wrzesniewski & Dutton, 2001). Job crafting is defined as “the physical and cognitive changes that individuals make in the task and relational boundaries of their work” (Wrzesniewski & Dutton, 2001, p. 179). Wrzesniewski and Dutton (2001) identify three types of job crafting. The first is task crafting, which involves changing the task boundaries of the work. This could involve adjusting the number of activities that a person does on the job or the content of those activities. For example, a professor who enjoys research may choose to take on additional projects in exchange for obtaining a release from teaching. Relational crafting involves adjusting the interactions and relationships that an employee has at work. A salesperson, for instance, could invest in getting to know his clients on a personal level so that she adds an affective dimension to her interactions with them. Both task and relational crafting involve actual physical changes to the work. The third form of job crafting, cognitive task crafting, sometimes referred to simply as cognitive crafting, differs in that it is an entirely psychological process. It occurs when individuals change the way they think about how the tasks that comprise their jobs are related to one another. This could involve an employee seeing his work as a unified whole, rather than a set of unrelated tasks.

Relational job crafting therefore may be one way in which people could shape the ways in which others influence the meaningfulness of work. These changes involve either the quantity or quality of workplace interactions (Wrzesniewski & Dutton, 2001). The limited prior research on relational job crafting has tended to focus on the quantity dimension, likely because it is easier to identify and measure than quality. Relationship quantity has two dimensions: (1) the number of people that employees choose to interact with at work, and (2) the frequency with which employees interact with those individuals with whom they maintain relationships. The first dimension is similar to what Ghitulescu (2006) termed relational range and measured by asking participants to indicate the number of groups of people in the workplace with whom they interacted out of the total number of possible groups of employees.
In one of the initial studies that inspired the concept of job crafting, Dutton, Debebe, and Wrzesniewski (2000) observed how some hospital cleaners chose to interact with nurses and patients, thereby creating additional workplace relationships, even though doing so was not a required part of the job. Similarly, nursing studies have suggested that not only do nurses develop relationships with their patients, which could be considered a required part of the job, but they also go out of their way to develop relationships with the patients’ families, who provide valuable information and input to the nurses’ work (Benner, Tanner, & Chesla, 1996; Jacques, 1993). In a recent study of job crafting, Berg et al. (2010) identified a related practice, called creating additional relationships, which involves adding to the number of people a person interacts with at work. While it seems to occur less frequently and is likely not in the organization’s interests to the same degree as creating relationships, employees also consciously decrease the scope of their relationships at work. For example, in Cohen and Sutton’s (Cohen & Sutton, 1998) ethnographic study of hairdressers, the participants described “firing” unpleasant clients. One might expect therefore that adding high quality relationships and eliminating low quality ones would enhance the meaningfulness of work.

The second dimension of relationship quantity relates to employees consciously altering the number of times they interact with particular others at work. Ghitulescu (2006) considered the frequency dimension of interactions, which she referred to as relational strength and measured as the frequency of interaction with all other groups of employees that a participant interacted with during a typical month. People may consciously increase the frequency with which they interact with others, which would likely increase the strength of those relationships. Decreasing the frequency of interactions appears to be more common than reducing the scope of relationships, perhaps because it is more subtle. Berg et al. (2010) describe an employee who consciously reduced the frequency of interaction with her supervisor because she felt that these interactions ended up taking more time than necessary when she would rather be working on other things. Grant et al. (2007) also describe customer service workers who intentionally avoided interacting with disagreeable customers. Since increasing the frequency of interactions may enhance the mutuality of relationships it may also increase their quality and thereby connect to meaningfulness. Of course
frequency is only one part of the overall picture and the quality of relationships is likely to interact with frequency to influence their outcomes.

The job crafting literature offers no clear parameters for assessing the quality of relationships. However, qualitative studies have produced useful descriptions of instances where employees have consciously altered relationship quality. For example, Berg et al. (2010) provide the example of an employee who consciously changed the quality of an existing relationship with a younger member of the organization so that rather than simply telling that person what to do, the participant tried to make the relationship about mentoring and fostering enthusiasm for the work, which made him feel like he was “fulfilling a little bit of that part of my other passion for teaching young people” (p. 166). Going back to the study of hospital cleaners who consciously increased the scope of their relationships on the job, they also crafted the quality of those relationships by using them as an opportunity to brighten the other person’s day. Another way in which people may craft the quality of relationships is by changing them from being purely professional, to more personal. In Cohen and Sutton’s (1998) hairdresser study, participants engaged in practices such as asking questions and making personal disclosures, in order to get to know their clients on a more intimate level. They therefore essentially changed the nature of some of their workplace relationships from one of providing service to one more akin to friendship. Crafting both the quantity and quality of relationships therefore requires people to actually make changes to who they interact with at work and to the content of those interactions. This study aims to elaborate on how people might craft the dimensions of their interactions at work in a way that is related to meaningfulness.

Thus, the two questions that guided this research were: (1) what characteristics of dyadic interactions with both humans and animals influence veterinary workers’ experiences of meaningful work? And (2) what are the processes linking these interactions to work meaningfulness?
Methods

In order to answer these questions, an interpretive qualitative approach to inquiry and ethnographic research methods were adopted. Interpretive qualitative research, given its emphasis on studying phenomena in naturalistic settings and privileging participants’ subjective understanding of their local realities, is well suited to exploring social processes (Gephart, 2004). Ethnography, as a form of interpretive qualitative inquiry, is a method that is centrally concerned with describing, analyzing, and interpreting the lived experiences of cultures or groups of people (Fetterm, 2003). It involves prolonged interactions between the researcher and participants in their natural environments, through observation, participation, informal conversations, and more formal indepth interviews (Lee, Mitchell, & Sablynski, 2009). Being intimately involved in the lives of participants enables the ethnographer to generate authentic interpretations of their behaviour (Fetterm, 2003). Rather than a traditional ethnography, which requires the researcher to study a single culture or setting for a prolonged period of time, this research adopted an ethnographic approach to data collection and analysis across multiple settings.

An ethnographic approach is an appropriate method for the proposed research for two key reasons. First, studies of meaningful work have suffered because they have lacked long-term engagement with participants and this has prevented researchers from grasping the subjective aspects of meaningfulness, as it is experienced by individuals in their daily lives. As Driver (2007) explains: “We need descriptions and stories of meaning-making that facilitate the process of meaning-making not as an other-defined, objectifying intervention but rather as a potential inspiration for individuals engaging in a process” (p. 25). Ethnographic methods enable the study of meaningful work as defined and experienced by the individuals engaged in this work, which is suited to the subjective approach adopted. Second, a micro-sociological lens is strongly associated with ethnographic approaches because it involves a focus on explaining human behaviour from within the group in real time. Ethnography allows researchers to observe interactions and to develop familiarity with the participants in a way that aids in interpreting the meaning of the symbols and native methodologies that form the essence of the interactions.
Research Context

The data collection was carried out over a period of approximately eight months in five veterinary clinics. One participating clinic was identified through a personal contact at the university. Through this contact, the researcher was invited to give a talk at a veterinary conference where she introduced the study and solicited participation. Following this talk, four additional clinics volunteered to participate. The five clinics included in the study represent diverse types of veterinary clinics. In terms of size, they ranged from four to over 50 employees. Three of the clinics were family practices where the veterinarians and technicians often saw animals throughout the course of their lives. Two of the clinics were specialty referral clinics, where veterinarian-patient-client relationships tended to be more short-lived and where the problems being dealt with were often acute. This enabled comparisons between the types of cases, as well as the length of relationships developed.

Prior to beginning data collection, I obtained ethics approval for the research through the Simon Fraser University Office of Research Ethics. Informed consent was obtained from all participants before data was collected and used in the analysis. Participants were asked to sign two informed consent forms. The first form was signed prior to a participant being observed and indicated that they were comfortable with my observing and taking notes about their work. The second form was provided at the beginning of each interview. It informed the participants of their rights, the benefits of the research, and noted their willingness to have the interview be digitally recorded. The interview proceeded only after the participants indicated that they understood the consent form and continued to agree to participate in the interview. As per SFU’s research ethics policy, participants had the right to ask for their data to be removed from the research subsequent to data collection. None of the individuals asked to participate in the research declined the invitation, and none have since asked for their data to be removed from the analysis.

Data Collection

In line with the ethnographic approach adopted, data was collected via three primary means: participant observation, informal conversations, and formal interviews.
At all of the sites, I began by spending time observing people engaging in their work. During the observations, I took detailed notes by hand, describing the actions that employees engaged in, as well as any interactions they had with coworkers and patients. Field notes are detailed descriptions of observations and conversations that capture as much of the social processes in the research setting as possible (Hammersley & Atkinson, 2005). During the field note phase, it is important to avoid filtering information because it can be difficult to tell which data will eventually be useful to the theory (Hammersley & Atkinson, 2005). Ideas about how data may be related were therefore recorded separately in the form of memos, which were revised and updated throughout the data collection process. I wrote my field notes while witnessing events and engaging in conversations whenever possible, or as soon after these events as I could, in order to preserve as many exact words and gestures used during interactions as possible. After each day in the field, I typed up my handwritten notes and spent time reflecting and memoing about what I had observed. I would often follow up on my observations during informal conversations or through the formal interviews. The informal conversations represented impromptu opportunities to talk to people about their work and meaning. In total, I conducted twelve days of observations: three days at clinic 1, one day at clinic 2, two days at clinic 3, two days at clinic 4, and four days at clinic 5.

In terms of sampling for my observations, I was invited to observe anything and everything that went on at the various clinics. Four of the clinics were small enough that most of the time I could keep track of what each employee was doing. Because my interest was in interactions, I focused on observing as many of these as possible, and less so on individuals working on their own doing tasks like cleaning or restocking inventory. I would use quiet times devoid of interactions to ask informal questions about peoples’ work, and they were often eager to share their opinions and experiences with me. All of my participants seemed to welcome being observed and were happy to engage me in conversation about their work and personal lives. This resulted in 39 single spaced pages of observation notes.

I also used quiet times to undertake the formal interviews. Because of the unpredictable nature of the business, interviews were only formally scheduled at one of the clinics, and in the other clinics I was opportunistic in terms of interviewing people when they were available. At all but the one larger clinic, I was able to interview all of
the veterinarians, technicians, and assistants who were working during the days of my observation. My goal was to speak with as many people as possible in order to generate a complete picture of the range of different experiences at each clinic. In total, I conducted 54 interviews, with 11 veterinarians, 20 veterinary technicians, and 23 veterinary assistants. This resulted in 1,027 single-spaced pages of interview transcripts. The sample was 87% female which is representative of the gender demographics in the clinics individually and the field as a whole. Table 1 includes a breakdown of the number of people interviewed in each clinic by position, as well as the percentage of total employees that participated in the study.

**Table 1. Participant Demographics by Clinic and Position**

<table>
<thead>
<tr>
<th>Site</th>
<th>Veterinarian</th>
<th>Veterinary Technician</th>
<th>Veterinary Assistant</th>
<th>Total</th>
<th>% of Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic 1</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>12</td>
<td>75%</td>
</tr>
<tr>
<td>Clinic 2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Clinic 3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>60%</td>
</tr>
<tr>
<td>Clinic 4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>83%</td>
</tr>
<tr>
<td>Clinic 5</td>
<td>4</td>
<td>14</td>
<td>11</td>
<td>29</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>20</strong></td>
<td><strong>23</strong></td>
<td><strong>54</strong></td>
<td></td>
</tr>
</tbody>
</table>

The interviews were responsive in the sense that there was recognition that both the interviewer and interviewee bring their own perspectives and biases to the table. Rather than assuming that objective reality can be found, responsive interviewing aims to develop an understanding of the participants’ worldviews by being flexible and adapting the interview to each participant (Rubin & Rubin, 2005). As such, I did not follow an interview script, but still adopted a general flow for the questions in the interviews. The opening questions were about the nature of the participants’ work and were intended to be general in order to help develop rapport. Ensuring that the interviewee is at ease is crucial for generating truthful responses to more sensitive questions (Feldman, Bell, & Berger, 2003). From there, I introduced questions designed to learn more about the participants’ interactions with both people and animals at work, and their experiences of work meaningfulness. I encouraged participants to share particular stories of relationships or interactions in order to remain grounded in their everyday experiences.
Given the responsive nature of the interviews, I added and deleted questions based on the participants’ responses, as well as prior interviews. As such, the interview protocols were updated and adapted continuously throughout the research. When a new theme emerged in an interview that seemed important, I specifically incorporated questions about this theme in later interviews. For example, I initially approached the study with a focus on human-animal interactions, but interactions with clients emerged naturally as a theme participants wanted to talk about and one that provided a useful counterpoint to their interactions with animals. As such, I revised my initial questions to explore both human and animal interactions on the job. This helped to immerse me in the context as I developed a continuously deeper understanding of what was going on. While certain questions were asked in every interview, I often varied their exact order to maintain as natural a conversation as possible with the interviewee, which is important for developing rapport (Rubin & Rubin, 2005). See the Appendix for a summary of questions asked in the interviews, though order and exact wording often varied in response to the interview's conversational flow. The length of the interviews ranged from approximately 30 minutes to over an hour. All of the interviews were taped and transcribed, which ensured that the participants’ thoughts were accurately captured.

**Data Analysis**

Analysis of the data proceeded in several phases. Following the suggestion that qualitative researchers begin analyzing their data during the data collection process (Miles & Huberman, 1994), I began reviewing my notes after the first day in the field. As mentioned earlier, part of the purpose of beginning the analysis process at this stage was to update the interview protocols to ensure that questions were responsive to the issues that mattered to interviewees. During this review process, notes about potential themes of interest and surprising findings were made and used to guide future data collection. These notes also helped to generate the initial series of open codes for the coding stage of the research. It is through the coding process that key themes and relationships between these themes were identified.
Open Coding

Open coding is the process of breaking data apart into the smallest possible units, associating those units with concepts, and identifying the properties of emergent concepts (Strauss & Corbin, 1998). For the open coding, Charmaz’s (2006) detailed description of grounded theory coding was used as a guide. She encourages the use of word-by-word, line-by-line, and incident-by-incident coding, with the goal of being open to all theoretical directions and to code as much as possible without making assumptions about the final theory (Charmaz, 2006).

After an initial series of open codes was developed, the qualitative software program NVivo 10.0 was used for all stages of coding. NVivo is useful because it is very flexible, making it easy to quickly recall text segments and to check the consistency of the coding. Throughout the open coding process, new codes were developed and initial codes were dropped or subsumed under different codes, and NVivo makes it possible to make these changes relatively easily and consistently. For example, while I initially coded for all instances of empathy, I later broke that down into cognitive empathy and emotional empathy, and then further distinguished between explaining behaviour and putting oneself in the other’s shoes as different forms of cognitive empathy. All of the field notes, conversations, and interviews were read multiple times in order to ensure that the open codes that were developed captured the major themes of the interviews. No minimum threshold of prevalence was employed, as there is a difference between prevalence and importance when it comes to qualitative data (Hannah & Lautsch, 2011). However, prevalence is one way in which the researcher’s attention is drawn toward a theme, so it is often implicitly incorporated into the analysis process. All of the codes that have ultimately been included in the findings were present in at least 10% of the interviews, suggesting there is some commonality in experience across individuals.

Focused Coding

Once the bulk of the open coding was finished, which occurred when the majority of the themes present in the data were captured by at least one of the open codes, I began the focused coding process. This involved grouping higher order codes and linking these codes to one another. While open coding breaks data apart, focused coding is a way of re-integrating the data in a theoretical way (Charmaz, 2006).
focused coding stage is related to axial and selective coding, as described by Strauss and Corbin (1998). Focused coding is comparative in the sense that it often involves looking across interviews for themes that condense data (Charmaz, 2006). For example, I initially had open codes for “innocence”, “forgiveness”, and “honesty” and these codes were later related to each other as instances of character crafting.

As the focused coding proceeded, tables and taxonomies were developed to summarize key themes. For instance, I created a table that summarized how people thought about meaningfulness, interactions with animals and people, and their experiences of empathy in order to identify patterns across the interviews. Additionally, extensive memoing was used, which allows for the collection and recording of ideas about the theory based on the data analysis process. Memoing is important during the coding stages because it ensures that the researcher does not become overly focused on labelling, and continues to relate concepts to one another, even if only in a preliminary manner (Strauss & Corbin, 1998). Memos are the primary link between data collection and the product of the research (Charmaz, 2006). As with all interpretive qualitative research, there was iteration between analyzing the data, consulting the literature, and memoing about my own interpretations, which ultimately resulted in the theory of meaningfulness in human-animal work that will be presented in the following section.

Findings

The questions that guided this research asked about the dyadic characteristics of interactions with humans and animals that are relevant to meaningful work in the veterinary industry, and how those interactions link to meaningfulness. The findings will begin with a discussion of meaningful work in general. The findings will then explore the aspects of interactions that shaped the experience of meaningful work for the participants. Whereas relationship crafting has looked at dimensions like the frequency and quality of interactions, the cognitive dimension of interactions is what emerged as being important in this research. That people might think about similar interactions in completely different ways, which would in turn affect their experience of meaningfulness on the job, is an idea that has not yet been explored in the literature. Participants
engaged in cognitive relationship crafting through how they thought about the physical and verbal actions of the people or animals with whom they were interacting, the nature of these individuals, and the impact of their own behaviour on other people and animals through interactions. The ways in which participants made sense of these three components also impacted the extent to which they tended to engage in cognitive empathy with the people and animals with whom they interacted. This is important because cognitive empathy appears to be able to buffer challenges to meaningfulness that arise through interactions. The differences between how veterinary workers approached and thought about their interactions with animals and their interactions with people were instrumental in shedding light on relevant themes, and so both will be explored throughout the findings.

**Experienced Meaningful Work**

The idea that working with animals tends to be experienced as meaningful (Bunderson & Thompson, 2009) found support in the research. Almost all of the participants described their work as being highly meaningful. They were aware, for example, that they could earn more money in other industries but continued to choose to work in the veterinary industry because of the meaning they derived from their work. An assistant emphatically explained: “I find meaning in this because like we help animals every day and we’re saving animals’ lives.” Another participant said about her job:

> I find it very meaningful and I find – like I’m proud that I have, that I work with animals and that I love like learning new things about them and just helping them to have a better life.

Some of the participants did find the interactions that they had with others at work to be meaningful in and of themselves. One veterinarian said: “There’s just something about that interaction with something else that’s living,” while another explained: “the relationships you develop with both the people and the patients is why I’m in it.” The majority of the participants were initially attracted to joining the veterinary profession because of a deep love of or affinity for animals that often began early in their childhoods. Some of the interactions that employees had with animals over their years of practice were so deeply meaningful that they could not even talk about them without becoming emotional. Participants could easily recall those patients with whom they had
developed a special bond. For example, a technician fondly recalled a Mastiff who she regularly saw for nail trims and described him as “the greatest dog in the world. Like it was oh, a Mastiff and he’s such the best boy ever, I loved that dog.” An assistant shared a story about a series of interactions she had with a client and his cat that influenced her experience of meaningfulness:

I’ve seen cases come in like Jerry one of the cats that’s here boarding, like he’s had a really bad time lately like he’s had health issues for the past maybe 2 or 3 months and they’re finally getting kind of stabilized. But I think it’s really, like his owner is totally financially constrained and is carrying like a, I guess he’s paying off his bill as he goes, but he’s always so like committed to that cat, that he would have done anything to find out what was wrong with him and to help him and we’ve kind of helped him along through that journey and I think the relationship we’ve built with him in helping out his cat, I think that’s really meaningful. I find that meaningful.¹

Of course, not all of the interactions that the participants had contributed to a sense of being engaged in meaningful work, and some of them even undermined meaningfulness. The following section will delve into the dimensions of interactions with animals and with people that helped to shape the participants’ sense of meaning in their work. Additional examples of these themes can be found in Table 2.

Table 2. Relevant Dimensions of Interactions

<table>
<thead>
<tr>
<th>Interaction Dimensions</th>
<th>Illustrative Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal and Physical Actions of Others</td>
<td>“So like a lot of time I will go and say hi to their dog and I will ask if they can have a treat and you know I talk to the dog and give the dog a treat and there often like all waggy and happy.”</td>
</tr>
<tr>
<td>Friendly Behaviour</td>
<td>“There’s lots of the animals where it’s like you know, like they’ll see me on the street even and it’s like they remember who I am or whatever and you know their tails start wagging whatever.”</td>
</tr>
</tbody>
</table>

¹ Animals’ names have been changed in order to protect the identity of participants.
| Affectionate Behaviour | “So I just always like to really treat them as if this was my dog or if this was my cat and really, I mean, if any of the pets are, are willing to, you know, like me and want me near them I mean, I’m more than willing to, to hug and snuggle all of them.”

“Yeah. Like I mean just my last shift that I worked. I just think of that, you know. It was, it was very busy. It was a bit stressful. I was in, you know, in a kennel with a patient doing vitals and he just rested his head on my shoulder. Gave me a little lick on the side of my face and put his paw on my leg and it’s just like okay. You know, you get a little bit of a tear and it’s like, enough said. Okay, yeah, okay good. Brings you kind of back to reality and it’s like that’s why I’m here. That’s why I do what I do. So. Yeah.” |
| Disrespectful Behaviour | “I can think of one particular owner who [sighs], who I guess just didn’t, didn’t like the way I did what I did. And sent me a really long email about everything and kind of tore into me a bit, and I think part of it was based in a misunderstanding on her part, and so I tried to reply but like there’s no pleasing this woman, it’s just like you know what, and she eventually ended up going somewhere else because of it, which in my mind, like I felt, like I felt bad that she didn’t have a good experience here cause I think that we did the best, I think we provided her with excellent service and good medicine and like I wouldn’t have done really anything different, I think it was maybe just the way it was presented or how she took it, or whatever. And in that regard I’m sort of sorry that she left, but on the other side, there’s no pleasing this woman, I can only imagine how challenging she could be in certain situations so the fact that she’s gone is okay. Then I don’t have to deal with that.”

“And then you also get all of the mean comments, like, one mean guy the other day was like, well that seems really inhumane and he was screaming in the reception area and I was standing behind the desk. It’s really inhumane you have to have two thousand dollars or you won’t help my pet! You know? I was like oh my God, you know. Like first of all his dog had, I can’t even remember. It was something wrong with its leg. It was still mobile, but yes, a surgery. And when he said $2,000 I was thinking, well, it’s probably more like $3,500 but whatever. I’m not, you know, I’m not going to get you more mad. And, but he was just like, yep, that just seems really, really inhumane.” |
| Characteristics of Others | Other as Virtuous | “Again, it still surprises me like how much we can do to these animals. They’re just so resilient and they just still trust us and love us so much.” |
“They’re always there for you to go to, unjudging and loving you unconditionally so. Yeah, I think it’s really nice to be able to work with animals and everyone I tell that I work with animals is like, oh, wow.”

<table>
<thead>
<tr>
<th>Others as Lacking Virtue</th>
<th>&quot;I remember we had one cat that had brain tumours and it, it was, it just laid on its side and you know she had to force feed it. She had to express its bladder. It was alive but it wasn’t living. You know? Every time that cat came into the hospital I would get angry because I thought why are you making this poor animal live in this state? You know?”</th>
</tr>
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<tbody>
<tr>
<td>&quot;We’ve had cases of neglect. Where owners would refuse to treat their animals and their animal needs to be treated. So dealing with clients in that respect can be quite difficult because at the end of the day, we are here for the animals. And if the owners are not treating their animals how they should be, then we have to, you know, take other means to make sure that animal’s looked after. So that can be quite a challenge, working with people in that sense.”</td>
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<tr>
<th>Impact on Others</th>
<th>Others Expressing Appreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“She was a treat and she was just such a you know, genuinely caring and appreciative and just very thankful for what you did.”</td>
<td></td>
</tr>
<tr>
<td>“And the reason I say that is just because I know how thankful people can be and how thankful they are to us, like, after the fact. Even though it’s such a sad, sad time for them. They still are so very thankful for how, you know, everything is handled.”</td>
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<table>
<thead>
<tr>
<th>Behaviour Indicating Having Made a Difference</th>
<th>“It’s like even like just seeing a pet like you know Samson, whose here today, like the other day he was feeling, like he wasn’t eating, he was really dehydrated, you know, diarrhea and it’s like he’s leaving today and he’s perked up greatly and it’s just like it’s amazing how like small little things happen.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>“We had this one, and she just makes me laugh, she is this Bishon that looks like a Fraggle. And I remember because I was working in ICU when she initially came in and she was alligator rolling and like, you couldn’t like get her to stay still. You would pick her up and she would just try and roll out of your arms just because of her, the disease process in her brain. And then 48 hours on the treatment, she’s like a totally different dog. And we actually, she had been a long-term patient for like that last three years and she just finally stopped the treatments and it’s just like, that is a great feeling because”</td>
<td></td>
</tr>
</tbody>
</table>

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it's not often that we get to kind of get them completely into remission and off the treatments all together. So that’s, that’s like a long-term goal but that one’s like, I just, the difference it made in that dog is just ridiculously amazing.”

**Verbal and Physical Actions**

When engaged in an interaction with a patient or client, participants would constantly consider the message that was being conveyed by the actions and language of their interacting partners. Some of these verbal and physical actions were interpreted as indicating a positive response to the participant, which was instrumental in experiencing a sense of meaningfulness in the work. Other actions had the opposite effect, and sometimes led the participants to question why they engaged in their work. Animal behaviour appeared to be open to a wider variety of interpretations and this provided the opportunity for the participants to make sense of it in more positive ways.

**Friendly Behaviour**

One of the most common themes that emerged in the data in discussing interactions that contributed to a sense of doing meaningful work was people, and particularly animals, engaging in behaviour that participants interpreted as being friendly. One veterinarian explained how the animals she preferred to interact with were “really cooperative…and that usually comes along with a nice demeanor and they’re very sweet.” A technician similarly explained, “I just appreciate a really good, happy personality in a patient.” This usually meant that the animals behaved in an extroverted manner towards the participant, by initiating contact, and engaging in behaviours like wagging their tails for dogs and purring for cats. An assistant fondly described:

One of my favourite animals is this dog named Buddy...we’ve seen him through some horrible ups and downs, and it’s so awesome cause after everything he’s finally in a good place and he’s just like, he’s such a happy, happy dog.

When an animal’s actions are interpreted as being friendly, it promotes the development of a bond between the veterinary worker and the animal. As an assistant explained: “Yeah the ones that come back on a regular basis and that are really friendly
cats, I find that I will grow quite fond of them.” Participants particularly appreciated patients who maintained their friendly demeanors despite undergoing difficult or painful procedures: “Like it’s so amazing what they let us do and what they can tolerate and just they still kiss our faces and are wagging their tails after, it’s so amazing.” The animal’s perceived ability to keep their spirits up and remain friendly even in the face of adversity seemed to inspire the employees and give them energy to continue carrying out their work. As one technician explained: “just the pets themselves are just great, are happy even though they’re sick.” Another one contrasted this aspect of interacting with animals, which she thought would be different from interactions with humans under similar circumstances, and enabled her to find meaning in her work:

Like I mean I used to see these animals, these dog chemo patients and the cat chemo patients and they’re lively dogs, they’ll go and play Frisbee and they’ll go play with you on the back, they’ll want to go for a run and they’re chemo patients. You see a human chemo patient and they’re just begging for death sometimes. It’s a completely different experience with animals.

Interestingly, in one particular case at one of the clinics, certain procedures were being carried out over the past few months out at the request of the veterinarian that seemed to prevent the animals from maintaining a friendly demeanor in the clinic. The assistant and technician who dealt with these animals would describe how the cats would vomit upon seeing them, and how they would have to restrain the animals so hard to carry out their procedures that they felt like they were hurting the animals. Having these kinds of interactions was seriously undermining the meaning of their work. As one of these employees explained about whether or not she found her work to be meaningful: “It’s getting less so. I used to like all the time, but, it just seems like more recently in the last six months it’s kind of taking a nosedive.”

Physical Affection

A second theme that emerged, particularly in observing interactions, was how participants engaged in giving and receiving physical affection from animals. A unique aspect of human-animal interactions is that they are not constrained by the same norms as interactions with other humans. While it may be inappropriate for a human nurse to kiss and hug her patients, veterinary workers engaged in this behaviour towards the animals on a continuous basis. For example, a veterinarian, after carrying out a
procedure on a fearful dog, walked around the clinic hugging and cradling the small dog
in her arms for several minutes. Even though she no longer needed to engage with that
animal in any way, she chose to take time out of her day for that physical interaction.
The participants would routinely kiss the animals on their faces after procedures, and
refer to them in endearing terms like “pickle,” “pumpkin,” and “baby.” They would
sometimes even put themselves at risk in order to accomplish this physical affection. I
observed one technician walk over to a kennel containing a cat labelled as “caution”,
which indicated that it had engaged in aggressive behaviour at the clinic. She said she
just “needed” to pet him and asked the cat “not to be a caution for five minutes” so she
could have that moment with him, which she ultimately did.

Being able to take the time to pet, hug and kiss the animals was a key driver for
engaging in the work. As one assistant explained, having “that little cuddly moment” with
the animals was what encouraged her to continue in her work. Another one said:

I love spending a bit of time with the animals too. I find when they’re
in hospital, sometimes they get depressed so I'll just when I do the
treatments a lot of times I usually sit with them and pet them and
stuff like that.

In their interactions with animals, it was those instances where the animals
reciprocated affection that seemed to be particularly meaningful. For example, I
observed a vet with a big smile on her face exclaim “thank you for the kisses” to a rather
exuberant young dog. A technician explained that when animals “waive their tails or purr
or nuzzle up against you, that’s one of the best parts is when they’re loving towards you
and you get little cuddles and stuff from them.” These instances clearly stood out to
participants, and animals who engaged in these behaviours quickly became favourite
patients, integral to meaningful interactions. As a technician noted about one such
patient: “He just wants to give everyone kisses, he just loves everyone so, he’s like one
of my favorite dogs in the whole world.” Sometimes even one such interaction with an
animal was enough to make an impact on the employee:

There was this white cat that came in one time and I don’t even
remember his name but any time you would walk by his kennel he
would just go up and he would just like head butt the, the bars and
just like meow and reach his little hand out for you to come over and
say hello and. You know, he, for whatever reason he just touched my
heart and was just a little snuggle bug. But I mean, he was only here once, right? And saw him, wasn’t even a patient of a client that I knew. Just saw him in the general ward area, had a little snuggle.

Disrespectful Behaviour

A theme that emerged quickly in talking to the participants was that human clients were often seen by the participants as behaving in a disrespectful, and occasionally even abusive, manner. Almost all of the participants had experienced these kinds of encounters. As one said: “I’ve been called a lot of things. I’ve had people throw stuff at me.” Another assistant shared a negative interaction that had recently occurred at the clinic:

In order to have things done like to get medications and blood work results for a doctor to give them results you have to have an exam of the pet and it has to be done on a yearly basis otherwise we can’t renew certain medications and things like that and she got really mad, swearing, hanging up the phone, yelling, screaming over the phone to almost everybody in the clinic.

While obviously these kinds of dramatic interactions stood out to participants, most of the interactions that they had with people were not so extreme. And yet, even more mundane day-to-day interactions with people were often interpreted negatively by the participants. As one explained:

Whereas owners sometimes, I mean, and I’ll, you know how people always say that, you know, communication and it’s so easy to miscommunicate when you’re speaking verbally. It’s so easy. That oftentimes you know you get the wrong vibe or you take something the wrong way and so it’s, it’s really easy to, to not get along with people I think.

An ongoing issue at all of the clinics centered around money, either clients not wanting to pay for services that had been rendered, or not being willing to pay for procedures that the participants felt were necessary to help the animal. The latter was particularly upsetting for the assistants and technicians since they were often the ones who had to have conversations with the clients about these issues. For example:

Yeah and its really, really stressful when the best thing for the animal is something like medication or some type of treatment, and even if it’s not that expensive having to argue and justify that with someone,
it’s difficult because I’m in this industry because I love animals and I want to help them, like I’m not your financial advisor, I understand that you can’t afford it and find a way to work it out, but people get upset and get angry and when you’re communicating with someone that’s not willing to kind of meet you part way and talk to you, like they, I don’t know why they talk down to us so much, but they seem to. Like clients get angry and that can be really challenging to be like I’m actually just trying to help your pet and we’ll do what we can but we can’t make it better for free. Where it’s like it needs surgery and that’s not free.

A related theme was clients who were not willing to listen and follow the directions provided by the participants. A great deal of the participants’ jobs involves giving advice to owners about how to care for their pets and providing instructions to follow after the animals were discharged. For the technicians and assistants, a lot of frustration was associated with these conversations when clients would show they were not listening to their opinions. “They don’t take us as serious as the veterinarians. Most of the time, they want to speak to the vet, speak to the vet.” Often they would have ongoing interactions with clients who would not listen to them, call back for advice, and then continue not listening. An assistant said: “So I think because that’s challenging sometimes it’s kind of hard for us because you’re dealing with it daily. You always have a handful of clients on a daily basis that don’t understand what’s going on so it can be frustrating for us.” These clients would then redirect their frustrations about the animal not getting better on the veterinary employees.

It’s frustrating more so is what it is in the sense that they’re noncompliant with what you’re recommending -- The client. So they bring their pet in, they want the advice, they want the medical treatment, they want all that. But they don’t follow through so they don’t give medication when they should, they don’t go on the food they should be on so then –and then they come back complaining that nothing is working.

Because the behaviour of animals was often interpreted in positive terms, while the behaviour of humans was interpreted as being disrespectful, the former tended to enhance the experience of meaningfulness, while the latter undermined it. As a result, participants described human interactions as “definitely probably my least favourite thing about the job” or something they would eliminate if they could. Interestingly, animals often behaved in a similarly or even more aggressive and uncooperative manner than human clients did. In fact, many of the participants had been injured by animals on the
job, some of them to the point of needing to be hospitalized. Dealing with animal aggression was an everyday occurrence. Participants readily shared war stories with me about times where they were hurt by fractious animals. An assistant recalled an incident with a dog that had occurred the previous day: “And then all of a sudden, the doctor came over, and she freaked. She just went insane. Like she was still muzzled but she was growling like that like intense growl that gets you pretty scared, was like trying to kill him and was flapping all over the place, got out of her leash, was running around the clinic.” Aggressive cats were perhaps even more common. One technician explained:

I’ve been bit a couple pretty good times by cats, sometimes in the heat of the moment it’s like, they’ve both been times were they’ve been like the animals been on its death bed from doing lots of like lots of emergency health care and you know like trying to do oxygen stuff and it just you know, a flash will happen.

Even when animals were not overtly aggressive, they frequently behaved in a difficult manner, such as being hard to restrain or wriggling away, which made it hard for participants to carry out their work tasks. Sometimes this was merely an inconvenience. As an assistant noted: “The dogs if they’re just trembling or just fidgeting the whole time and just trying to fight you the whole time, it’s definitely, it’s irritating.” At other times this behaviour resulted in injury: “I just recently had a shoulder injury from a 40-kilo dog. Tried to jump off the table and I had to catch it so it wouldn’t hurt itself.” However, the ways in which the participants made sense of these actions by animals differed strongly from how they interpreted similar human actions. This idea will be explored later in the findings.

Characteristics of the Other

During interactions with both people and animals, the participants also developed beliefs about the nature or traits of their interacting partners. When it came to animals, almost all of the participants constructed them as possessing virtuous natures. They often used words like innocent, honest, and forgiving to describe animals. The idea that animals love people unconditionally was brought up a number of times, as one technician explained:
For me, I think sometimes what it is and probably why that is perceived is because animals are, it’s an unconditional love from an animal. Right? It doesn’t, doesn’t matter what words are said, how they’re said, what frustration or whatever might be there, that animal always loves that person.

Because animals were seen as being unconditionally loving during interactions, this also enabled participants to infer that the animals forgave them when they had to carry out painful procedures: “And even if you do like horrible stuff to them, like you spay them or something, they still come back and they love you.” Interactions with animals were perceived as different from interactions with people because animals are never devious or sneaky. One explained: “I think they’re more honest. I mean, they’re not, they, they don’t lie and they’re, you know, they are never malicious.” Another said, in contrasting interactions with animals and people:

And so I think you have a lot more, I don’t know if it’s just, not loving, caring, but it’s, it’s way easier to accept anything that [animals] want to give to me because I know it doesn’t come from anywhere of an ill intention.

Innocence was another important theme related to the virtuousness of animals because it meant that even when they caused their own illnesses or injuries, the participants did not hold it against them in any way. This was even the case when animals would return multiple times for the same kinds of afflictions:

They don’t understand the consequences. They don’t know that eating that tennis ball leads to surgery, and then eating the second tennis ball is going to lead to another surgery. So maybe that makes it better for me that they really don’t understand.

While animals were seen as being virtuous, participants often emphasized opposite traits about owners, describing them using terms like selfish and dishonest. This theme was particularly prominent with the veterinarians, as they had all throughout their careers endured situations where people had tried to take advantage of them, and this sometimes made them question the purpose of their work. As one said:

Like you get a lot of the really selfish clients that, you know, they just think if they throw money at you, you should be able to fix everything and they should get VIP service and you know. And sometimes it’s just, like in the vet industry, really you don’t make a lot of money, and
so you do it for the love of the animals. And then when you get snotty clients that you have to be nice to, you know, it’s like why do I even bother?

Another vet explained: “I’ll tell you there’s a sector of people, there’s a genetic mal- misprint or something somewhere out there that there is an evilness in people, I swear to god, I’m not saying that people are evil or whatever, but there’s a meanness in people that I don’t like and I never knew about it until I started seeing it.” She had encountered instances of people lying to her in order to take advantage of the free services she offered for rescue groups. Another practice owner and veterinarian explained how after giving a discount to a client to save that animal’s life when the client claimed he could not afford to pay, that client subsequently told others to go to his clinic because you could get out of paying for the services.

One of the most emotionally difficult aspects of the job emerged when participants felt that people were being selfish in the way that they were taking care of their animals. Participants sometimes believed that they knew how to take care of the animals better and often wished they could take the animals away from these selfish clients. Sometimes these interactions surrounded the issue of owners being unwilling to pay for procedures that would save an animal’s life and therefore opting to euthanize the animal instead. In many cases, when this happened, the clinics would actually take ownership of the animal, do the procedures, and then rehome the animal instead of putting it down, if the owner would consent. Many of the participants ultimately ended up adopting these clinic animals as their own so they could provide the kind of home they felt the animals deserved. When one owner would not agree to this process and insisted the animal be put down, the technician involved found it very hard to deal with. She shared the following story:

It was this lady and she had a cat and she did. She was older and she thought she was going to be dying soon and she didn’t want something, she said she didn’t want her cat to end up in a garbage can. And so she wanted to euthanize it so that she knew what had happened. And I’m like, you know, if you like we can take your cat and we can adopt her out. And she’s like, no, no, no. She’s been, I want to know what happened and we’re like how about we’ll just take her and the cat can just live in the clinic and we won’t even adopt her out and she’ll just live here and we’ll take care of her. There was no convincing her. She was dead set on, to euthanize this cat. And it
was really hard to, because with the law, they’re property and so if we say no she’ll probably either one do something herself or take it somewhere else and so in the end we actually did have to end up euthanizing the cat and yeah...Because there was like absolutely nothing wrong with the cat. Nothing. The cat was –I don’t know. I can’t remember how old the cat was. I remember it was a black and white cat though. But super nice cat. No health problems. And it was all just because she didn’t want her cat to end up in a garbage can because that’s what she thought would happen. The clients, I actually kind of like not seeing the clients as much anymore because it’s, sometimes it can make it harder because of things like where they’ll think one thing or want to do one thing even though you know that it’s like the wrong thing or they won’t want to do something even though you think that they should do something and you can’t really tell them to do it. Like, you can’t make them do it.

Another upsetting situation that would reinforce the selfishness of some people from the perspective of the participants was when clients would opt to euthanize their animals, but not be willing to stay with the animal while the procedure was being carried out. One technician explained her attitude toward this behaviour: “This pet gave you everything for 10 years and they’re scared and they just want you to sit there and pet them and you can’t do that because it’s too hard for you?! Like, no. Like in all honesty those are the worst.” These situations, and instances where people would opt to keep animals alive while the participants perceived that they were suffering, caused extreme emotional distress for the participants and undermined the meaning of their work. One participant even went so far as to refuse to participate in activities like putting animals on the ventilator, which she perceived as being the ultimate in human selfishness.

**Impact on the Other**

It was through thinking about the actions and characteristics of the people and animals with whom they interacted that participants were able to construct interpretations of the impact of their work on others. Interestingly, it was those actions and beliefs that made it easy for participants to believe that they were having a positive impact on others that were experienced as meaningful. On the other hand, interactions that made having an impact more difficult undermined meaningfulness.
Actions and Impact

Animals that were seen as behaving in a friendly manner helped the participants to construct their work as impactful because these animals made it easier for them to carry out the tasks that were required as part of the job. Friendly patients tended to be more biddable than aggressive ones, which has a big influence on how easy it is for employees to carry out their work procedures. For example, I observed two assistants work with a Boxer who needed to have bandages changed on his face. When discussing whether one would be comfortable restraining, she replied: “Yeah, I like him. He’s such a nice dog.” They smiled continuously throughout the procedure at the dog who was wagging his tail frantically and both clearly seemed to be enjoying the interaction. One exclaimed: “I like Wesley a lot! I like Boxers. They’re stupid and crazy, but so friendly.” The other agreed and said she wished he could be her own dog. They finished their procedure without any incidents and were then able to carry on with the rest of their work, facilitated by their cooperative patient.

Similarly, when animals gave or returned affection it was often interpreted as if the animal was showing appreciation for the participants’ work, which emphasized to them the idea that they were making a difference. As one technician explained about an Australian Shepherd she had worked with recently: “She’d come and sit in my lap and snuggle with me just be real sweet. So I think when you get that feeling like you really made difference in one pet’s life.” Another explained to me:

Here an animal giving you their paw or licking your face or something is like you know enough said. Okay. You know? Just reminded me why I do this every day and why you make it so easy for me to do, you know, to do what you do. And you just kind of stop and you have those moments with them, right?

When people behaved disrespectfully by being rude or not listening, it had the opposite effect. In some cases, failing to follow directions meant that despite all of the participants’ efforts and the procedures carried out that the animal is ultimately not helped. This undermines the meaning of the work because it is wasted effort and the animal suffers as a result. The following quote is from a veterinarian and explains how owners who wouldn’t listen in interactions could make her feel as if her work was not making a difference:
And that’s the reason because people call and they’re like I don’t know what I’m supposed to do and it’s like well on your notes that you got, you were supposed to come back 3 months ago and you were supposed to be treating with this, so I don’t mind explaining stuff to people and going over things, but its I think the more frustrating part is when it comes back and they just didn’t do it and it’s like well that’s frustrating cause like we said we’re here to help your pet and you can only help them you know, you help them as much as we do really, a lot of times its all the owner.

While interacting with clients who did not listen or would not pay for services was dreaded by employees, interacting with cooperative and willing clients was a pleasure. As one technician explained: “The owner is just willing to do whatever it takes and just genuinely so caring and you know wanting to do what it takes to fix their pet and you know taking what you have to say and really listening to you.” Similarly to friendly patients, these kinds of clients were the ones that participants were able to bond with and became favourites over time. The willingness to help the animal was integral as explained by these participants:

It’s nice to meet owners that want to do everything and are really nice to deal with. Not crabby, thinking you’re trying to take their money.

For some, the few good clients would compensate for what often seemed like far more numerous difficult clients. As a technician shared: “You get one person like you know Fergus’ owner and really it just makes it, you know, it just washes all the rest of that crap away because, you know, you do it for those people.”

A surprising finding that emerged, in particular at the large specialty clinic, was owners who would insist on continuing to carry out painful procedures or prolonging their animals’ lives when the participants believed that it would be more compassionate to euthanize the animal. As one explained:

I’m sitting there, I’m just holding this cat like I’m starting to tear up because I felt so bad for this cat. Where I was kind of getting frustrated and sad and mad because I’m just like this cat is suffering like please lady, like let’s just help it out and kind of thing.

These situations were detrimental because they affected the ways in which participants interpreted the impact of their work – rather than helping, they believed they were being asked to harm the animals. There were a couple employees who dealt with
this kind of situation more routinely than the other staff and they were very honest about how it was undermining the meaning of their work and as such they were seriously considering leaving the field. Even the positive interactions they sometimes had with the animals could not make up for this part of the work. One of these employees explained: “It’s just, it’s becoming where those little gestures are being like outweighed by the amount of owners that I’m telling you about that just won’t stop. And the animals, in my opinion, are suffering.”

Characteristics and Impact

Because animals were constructed as being virtuous, participants often inferred that they were also appreciative of their work. An assistant explained how because animals are unconditionally loving, “they always seem to be thankful for what you’re doing for them.” This was in contrast to people: “I don’t have anything against people but I just find that like on a baser scale, it’s like animals they simply, like you’re helping them and they’re appreciative of that help.” Similarly, a technician noted:

Sometimes you can almost think like there could be some sort of... I don’t want to put human terms on an animal but perhaps you can think that you can see that animal knows you’re helping them and sometimes when you can feel that or see it or whatever by the behaviour.

Further, the virtuous traits believed to be displayed by animals during interactions made helping them more important because they became truly deserving of that help in the participants’ minds. As one assistant said: “Working with the animals like I mean they’re all innocent, they’re all sweet. They all deserve help.” Therefore carrying out their work became more personally significant:

While animals they don’t -- whether they’re homeless or whether they have a great home or whether they have a crappy home, they never got to choose any of that. It’s just what was handed to them. And so I think I have greater compassion for animals and because of that I want to, have more of a need to protect them and take care of them because they don’t have a choice.

They drew on these traits when explaining why working with people would not be as meaningful to them as working with animals, even though the tasks they would be carrying out in human nursing would be similar and accompanied by much higher
financial compensation. As one assistant explained about why working with animals is more meaningful. The idea that people might understand you are trying to help them and still be disrespectful was particularly unappealing to the participants.

But I think we just have more of that understanding towards [animals] because we know that they can’t understand that we’re trying to help them. But with people I think that you have that frustration more that if you’re trying to help a human patient and they know... They’re supposed to know that – I mean you assume that they know that you’re trying to help them because they’re at a hospital, but then they might start – they may still try and fight you and not listen to you and you’re like hey, look, I’m trying my best to help you here and you’re not coping. I don’t know. I just feel like it’s more meaningful for me to pick up dog poop than human poop.

In comparison to animals, humans were seen as lacking virtue, which would then make helping them less meaningful. A technician said: “Well, I used to work with children and I almost find working with animals more meaningful and more rewarding for myself because they don’t talk back to you.” An assistant similarly explained:

I think working with humans I don’t – humans wouldn’t be as meaningful because...sometimes you get to know the people and you find out they’re not really that good of people.

Not all interactions with people were seen as lacking meaning. In fact it was the ones where people did express appreciation that seemed to matter a lot to the participants. While participants could and often did infer that the animals were appreciative, being told that the work you do has made a difference was important to the participants’ sense of work meaning and only human clients could take on this role. As one veterinarian explained: “Just getting thank you notes or people making a phone call or an email or whatever hourly communication of events for what you did. So and so is doing better or you helped us through a very hard time, whatever the situation is, people saying thank you is very rewarding.” A technician at another clinic explained:

So at least I could sit there and talk with this lady and be like, I know you don’t know me at all, but I’m asking you to trust me with your best friend here and let me take him and you know, I know you’re not going to meet these doctors, but let them take care of him. And, and we did and I sent her some video of him doing rehab. Once he was here, he was here, I think he was here for like a week or so and he went home walking. And you know, she was just so appreciative. She
used to send us emails every, you know, just be like, showing us what he’s doing now and you know. And if I had not been there on that day he may have been euthanized. Or, you know? Like, it just, and things like that, you can’t, you can’t put a price on that.

When people express appreciation through their interactions, it becomes concrete and vivid evidence that the work you have done has helped or made a difference in both the patient’s and the client’s life. This is exemplified by the following two quotations:

And both times the clients have asked to meet me personally and thank me personally...And that is meaningful.

When owners are really grateful, it makes me feel like I did something meaningful, like it was important to that person. Like a while ago, we don’t usually allow owners to stay overnight with their pets but this one dog was very sick and it probably wasn’t going to live long and the owners just wanted to spend that one last night with them. And that's annoying for us because we have to step over them to deal with other patients and they always are asking questions and stuff like that but then, you just try and be your nicest and be conscious of the fact that they are going through a hard time. And then we got this really nice Thank You card. The dog did die the next day but it was the nicest Thank You card to the staff and this, it just makes you think like, "Oh yeah, that really meant something to that family." And probably to that dog, that it wasn't alone here feeling uncomfortable; that it was there with people that loved it and that's a good way to go.

Thus, while it was easy for them to infer that animals were appreciative, as long as their behaviour could be interpreted as friendly or affectionate, participants needed to hear it from human clients to feel that their work was having an impact on the people. This greater flexibility seemed to come naturally with animal interactions therefore gave participants more opportunity to craft the impact of their work.

**Cognitive Empathy and Meaningfulness**

One of the greatest contrasts that emerged from the research was the ways in which participants made sense of difficult animal interactions in comparison to difficult human interactions, and the implications of this cognitive process on their sense of work meaning. Participants readily engaged in two forms of cognitive empathy with animals: explaining away difficult behaviour and putting themselves in the other’s shoes. Table 3 contains additional examples of both forms of cognitive empathy.
### Table 3. Cognitive Empathetic Practices during Interactions

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<th>Empathetic Practices</th>
<th>Illustrative Quotations</th>
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<td>Explaining Away</td>
<td>“And it’s not the dog’s fault you know, if they’re a fear biter, they’re the most unpredictable but they’re just scared. And you can’t get mad at them, I don’t get mad at them at all.”</td>
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<td>Behaviour</td>
<td>“If they’re not we kind of just say well you don’t know that we’re helping you we’re really trying to help you and you’re trying to bite us, but that’s fine because you don’t understand that we’re trying to help you. But I think we just have more of that understanding towards them because we know that they can’t understand that we’re trying to help them.”</td>
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<td>“Most of the time, I can understand. I don’t get angry when owners don’t have the money because what are you going do? You don’t have the money. I don’t get angry if they honestly believe they’re doing what’s best for the pet. Even if I feel like they’re not if they honestly believe it and they’re operating under the best information that they have at the time, I don’t tend to get angry at that.”</td>
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<td>“But I think it’s trying to, trying to understand and trying to be in the person’s position I think in this industry its really easy to focus only on the animal and to lose compassion for the people and you really have to find a balance sometimes. Like sometimes it’s as a result of mental illness that they’ve neglected their animal or something and it’s trying to find that balance of compassion for the animal and advocate for them but also work with the person so that the situation didn’t happen for them, that animal again.”</td>
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Putting Self in the Other’s Shoes

“Sometimes, yeah. I used to always laugh and compare the, you know, the odd. The odd time – we have a pet ambulance service. They’re not affiliated with us but we do use them and other clinics around the hospital use them. So the odd time they would go and pick up a pet from a family home and bring them to us for an out-patient ultrasound and then take the pet back again. And I used to compare it to an alien kidnapping. [laughter] Well, I mean you think about it. Like, somebody shows up in a white van, takes you away, probes you, and takes you back again.”

“And it’s just, I think if any of us like with that, it can be as simple as just like using the empathy thing and just thinking if I were in this terrifying situation where I don’t know what’s happening, like I’m sick, I’m sore, like I’m injured. All these, you know, I’m just not feeling good, I don’t speak the language of everyone else does maybe, there’s a bunch of people around in a shelter type situation, you’ve got barking dogs, it smells like fear, the dogs lost its home or it’s you know, everything that it knows so it just can be, it becomes very understandable why they might not want to come or they might actively you know be encouraging you to back off.”

“Because it’s, yeah. It, it, it would, because it would the same thing as like us. If we went to the doctor and if say the nurse came, or say even if the receptionist came in and then told us that, we’d be like, well you want to hear it from the doctor, so. I think it’s understandable.”

“Because then you think like, ”If I was leaving my animal somewhere, I’d want people to take the best care of it that they could,” and you can associate with that person that that’s what they’re feeling too when you see them.”

Cognitive Empathy with Animals

Rather than becoming angry at animals who behaved in a difficult manner during interactions, the participants would look for reasons to justify the animals’ reactions. This helped the participants to make sense of their interactions with animals in a way that prevented them from taking the animal’s behaviour personally. As a technician explained:

I understand why they’re doing it. Like I got bitten by a dog a couple weeks ago and like I wasn’t upset about it cause I’m like well the dogs scared and it was reacting, well the owner was present as well, so it was reacting to everything and my arm just happened to be where her mouth was.

Because they were able to construct reasons that could explain the animal’s behaviour, it was therefore interpreted as appropriate or justified in the situation:
I always just say like I know like you’re mad because you’re getting poked or whatever. Like it’s not like a natural setting for them to be in a hospital so I’m like you have every right to be like super mad and super grumpy because you’re in pain. You’re in a hospital, it smells funny, we’re poking you, like it’s not – you know, like you have every right to be unhappy kind of thing so.

Some even went so far as to say: “There’s nothing an animal can do that would make me think that I wouldn’t have a good relationship with them.” If any anger was expressed as a result of difficult animal behaviour during interactions, it would be directed towards the human owners, either because of a failure to appropriately train and prepare the animal for being at the veterinary clinic, or for failing to warn the participants that the animal had the potential for aggression so that the participants could take steps to protect themselves, such as by sedating or putting on a muzzle before carrying out their procedures. A technician explained:

The animal you know even if they’re fractious and they’re bad or they just don’t listen or whatever it is that they’re doing, they’re still an animal and you can’t, I don’t know, you can’t hold it against them for just being what they are and how they were brought up and trained or not trained or whatever.

In interpreting this behaviour from animals, participants would sometimes compare it to human behaviour, which they saw as being very different. As such, it wasn’t that they were generally patient or forgiving individuals, but rather that it was far easier for them to justify animals’ behaviour. Therefore not only was the positive behaviour engaged in by the animal seen as virtuous, loving or forgiving for example, their negative behaviour was interpreted similarly because participants did not believe they had the capacity for ill intention. These beliefs are exemplified by the following two quotes:

Because people have sides to them that we don’t see in animals. You know what I mean? Like I don’t know, people can be finicky. They can be fickle, they can be demanding, they can be aggressive, they can be rude. Animals are just what they do. They bite you and I have scars all over me from getting thrashed on by a dog or by a cat but it’s an animal. It’s its instinct to survive, it’s its instinct to get away from you and your needles so. You don’t even think about it twice when it happens from an animal.

Like if a dog or a cat is biting me or scratching me, I know it’s because they’re scared. It's not because they're just actually mean. They
don't bite you like an old person in the hospital would bite someone because they're out of their mind or grumpy. They're terrified of you and they're trying to defend themselves or they're painful.

A second way in which participants would make sense of difficult animal behaviour was by putting themselves in the animal’s shoes. Unlike the first practice, which requires the participant to draw on their general knowledge of animal behaviour, imagining themselves in the animal’s shoes created a sense of kinship or common perspective with the animals. This further reinforced the idea that difficult animal behaviour was acceptable during interactions. A veterinarian explained: “They don’t know why they’re here or understand that we’re doing things to them, it’s like well I would be pretty cranky, you know.” Imagining themselves in the animal’s shoes had a similar cognitive impact to explaining away difficult behaviour, in that it allowed the participants to avoid taking these challenging interactions personally or thinking badly about the animal. This result is illustrated by the following quotes at different clinics.

So I never, I never really take it personally if a dog like backs away from me or you know because I understand like yeah oh who’s this strange lady coming over to pet me and stuff like that, like you know, I wouldn’t want, like if I was scared I would be like don’t touch me right now. So I think it’s okay.

I would be scared too especially when sometimes they can’t understand us because say their owners don’t speak our language so they don’t understand our commands. So they’re just terrified and I would totally understand that because like I would be lashing out too if somebody was trying to restrain me and poke holes in me and I didn’t understand why. So I mean I understand why they’re scared so I’m not going to blame them.

As I observed interactions, I noticed that the participants would actively put themselves in the animal’s shoes in real time during interactions. They accomplished this by sharing their understanding of what their own reactions would be during the situation out loud, while carrying out their procedures. Because the animals could not use language, the participants became the voice of the animals, giving themselves information to help them make sense of the animal’s behaviour. For example, while watching an exam which involved putting dye into a cat’s eye to check for ulcers, the veterinarian said: “I know its irritating. I’m a bitch. If you could just rip my eye with your claw, you’d do it. I know. I’d do it too.” Then to the technician, the veterinarian explained: “He’s being a bit antsy, but I don’t blame him.” When more than one
participant was working with an animal at the same time, they would sometimes work together to construct this conversation. While a veterinarian was pulling blood from a dog, she engaged in this back and forth interaction with the technician who was restraining that dog. The dog was being challenging and moving around a lot, so the technician said: “He says, I moved that needle for you, made it difficult.” To which the veterinarian responded, “Alfred, now I am going to need to poke you twice.” The technician then replied, “He says I’m very scared.” This helped to remind the participants that even though the interaction was taking up a lot their time on a busy day that the animal was behaving in a way that they could personally relate to and this helped them to remain calm and understanding.

Cognitive Empathy with People

When it came to difficult interactions with clients, there were practices that some of the participants engaged in that appeared to protect the meaning of their work, which similarly to animals, involved cognitively empathizing with the experiences of the clients. Explaining away challenging behaviour and putting themselves in the other’s shoes came naturally to most of the participants in animal interactions, however achieving empathy with people was harder and for many of them not something they were currently able to do. One assistant explained her lack of empathy for humans: “For me humans talk back. Humans can make their own decisions and choices and where they end up in life is because of their own choices and their own decisions that they have made.” Another one in describing her frustration towards owners said:

We’re the ones that have to do the treatments and procedures and the owners don’t like see all of it. They’re not there for all of it. They don’t necessarily get what’s happening or they’re in denial about it. They don’t want to see what’s happening and I have a really hard time with that.

Interestingly, there were a few participants who were able to empathize with the clients and when they engaged in this practice, they made sense of difficult interactions in a more positive way, and as a result they did not see the interactions as undermining
the meaning of their work. I learned of instances where participants were able to both explain the reasons why people sometimes behaved in a difficult manner and to see the situation from the client’s perspective. For example, one of the technicians explained to me about an interaction she had recently had with a client who was asking a lot of questions and taking up her time, which some people might have found frustrating, but she did not. In this situation she was explaining away the client’s demandingness by realizing the stress from his pet’s surgery had been traumatic for him and his family:

You have to remember that people are often in a stressed kind of feeling when they’re bringing their pets here, especially in the early days when they’re coming just after surgery. Like there was a guy yesterday that came for the first time and he said to me that he was more traumatized about his dog’s surgery than the dog was...The dog is just getting on with it and kind of managing and him and his wife are like, oh my god, what’s just happened. So, yeah, it’s just I sat and chatted to him for a good kind of 20 minutes about everything and just answered his questions and just listened to him really be a soundboard as well. A lot of people need that I think when they get to come to us.

A more experienced technician explained how learning to become more empathetic with clients over time in her career had transformed the way she thought about difficult interactions with clients:

I kinda taught myself after doing it a while is the whole, I think it’s moreso changing my perspective and the fact that I’ve been able to change it to see that when a client is being, like sometimes they’re just being a penny pincher, but a lot of times like the franticness and the craziness is actually coming from somewhere good. So I think that’s a big change, so I’ve probably more so changed my own perspective more and more. In that and that trying to see where that kind of neurotic-ness, I mean sometimes it’s just an ugly place, but sometimes it really is just coming from like you know it’s like their child and they’re panicking and how do they react, they react badly, but it’s at least you know coming, its heartfelt at least so you know.

In some cases, participants were able to put themselves in the client’s shoes to understand why they made the decisions that they did about their animals:

I think maybe a while ago there was a dog that got hit by a car and both of its back legs were fractured and it was a bigger dog; and that’s a lot harder to care for because it's not going to be -- you’re going to have to be picking it up and moving it around and that's heavy, like if both of the back legs got amputated. But it's sad to see that and they
were like, "Well no, we can't do that," and they couldn't even afford to go to the surgery to get the legs amputated which is -- I mean, that's very understandable. I don't have ten grand. I wouldn't be able to do it if I -- well, I mean I work here but if I didn't...It wouldn't be an option for me.

There were four aspects of the ways in which participants interpreted the actions of clients during interactions that triggered cognitive empathy. It was not that the clients behaved differently in these interactions, but rather that the participants appeared to think about the clients' behaviour in a different light. The first of these was when participants considered the dynamic between people and their pets. While participants often had an easy time bonding with the animals themselves they sometimes forgot about the relationship that the owners also have with their animals, and how these relationships can impact the way a person behaves when the animal is ill or injured. This means that sometimes the reason why people were being difficult to manage, or angry and emotional was, as the above quote suggests, because of how much they care about their pets. When workers were able to appreciate that aspect of the bond, they were better able to empathize with owners’ behaviour. One of the experienced veterinarians shared a story about a turning point in her career and the way she interacted with her clients:

I used to work at other clinics and there were just different clientele and some had pretty hard lives and would come in and I was younger so I didn't always get it, but I got it after and one in particular stood out where it was a young mom, really young and she was harsh, like hard. And she just was really edgy and I you know didn't know what to do with her and she had a cat that had an abscess, a tooth rot abscess on its chin and I think it was the second or third time she had come in and I was really on the defensive because she was very offensive and I was like, oh this, and then we got around to kind of how it happened with her cat, how this all started and she lived in not a great area of town and she opened the door and there was a guy at her door, either homeless or someone who was on something, and he kicked her cat and she just started crying right then and there and...and I just realized like oh my god this cat is really important to this girl, she’s got a hard life and this really horrible thing happened to her and her cat.

A second dimension that facilitated empathy with clients was learning the details of a person’s life story, personally or with the animals. This made the participants aware that the decisions that people make or the reasons why they may not be able to provide
the kind of care to the animal that the participant would can be a result of complicated life situations. As one vet explained: “There are a few where you end up meeting them and knowing their story, you understand where they’re coming from and you know why they’re doing what they’re doing.” One particular situation I observed demonstrated this idea in real time. It was on a particularly busy day and the vet was running behind on her appointments. The client was asking a lot of questions, some of them repetitive, and it was clear from the tone of her voice that the vet was becoming annoyed. As the owner continued asking questions, she went on to say how she felt so much guilt for allowing the dog to get injured and not having treated it sooner, and she told the vet how her husband was gravely ill and she didn’t think she would have been able to cope with it if it hadn’t been for the companionship of this dog. As she told the story, she began to cry and I could see the vet’s whole attitude towards her change as she realized that all of the questions this owner had were coming from a place of pure concern for the animal, and that this lady was also dealing with the serious illness of her husband. The vet began to cry as she was now talking to the owner with more patience, and then explained to me about animals: “It’s such a huge impact these guys have.”

The issue of putting animals on a ventilator at one of the clinics was a controversial one that generated a lot of negative emotions in some of the participants and anger towards owners. A veterinarian who had done this practice explained why for her she did not feel this anger towards the owners as a result of learning their stories:

Because I have no idea what the connection that animal has to that owner....Like I will do whatever you need to do for that dog or "my wife is in palliative care right now. She’s in hospice. She’s going to die in the next two to three days. Our whole family is seated beside her. This dog is her dog." "I don’t care. She will die before this dog dies." “Okay.” So I do whatever the hell I can, and I will make this dog survive. I don’t care if he is -- I don’t care if I’m breathing for him, if I’m beating his heart for him because we have the ability to do all of that. This dog can be in suspended animation essentially until this owner passes away. But if that’s what they need to be able to continue on with their life, who am I to say no because I’m -- if they can afford to do it ---- and they need to do this. It's not even a want. It's a need. That’s the thing. It gets to a point where it's a need because this is their only something. And a lot of animals come in and they have cancer, but they will do everything more and you ask -- and you question why but then you realized it’s because the owner has cancer. And to be able to give up on their pet that has cancer would mean to give up on themselves that has cancer and for them to put
the two together and say, “Well, I’m giving up on my dog. How do I know my husband is not going to give up on me?” Like there’s a connection that I will never know about.

Cognitive empathy was also facilitated by those situations where the participant had gone through a similar experience in their own lives or who had a family member who may have behaved in a similar manner. Drawing from one’s own experiences enabled the participants to realize that the actions a person took did not necessarily mean they were “bad” or lacked virtue. A vet explained why she didn’t get angry with people who had left a disease or injury untreated because of having a similar experience with her own dog:

But the four years leading up to that he used to never sleep on the bed, he used to sleep on the basement, in the bathroom downstairs with my old dog. But the problem with that is in the middle of the night I would hear this god awful screaming, like what the hell, I thought maybe [my other dog] had bit him or something right, but I think what he was doing, I think he was having seizures... But you could look at that situation and go God, aren’t you really crappy for letting him seizure for four years, but it’s like I didn’t know. And then literally the week he started sleeping on my bed, he had a seizure, and it was like oh my god have you been doing this the whole time now? I mean I felt awful right. But there’s no point in beating yourself up about it, you didn’t know. You know.

A situation that made many of the participants angry was when owners would not be present at the euthanasia of their pets. They saw this as evidence of people being selfish and ultimately failing in their responsibilities of owners. One assistant explained how she was now able to understand why people made this choice, as a result of her personal experience:

But through the years to the point I’m at now, I respect that whatever that person needs. I am a real proponent now -- I think I started my career with total focus on the animal, now I’m focusing on both. I really believe that whatever is best for that person should be done. Because how much better is it for the animal to have a familiar face and at what detriment could that be to the person if they think they can’t handle that. I don’t know. My mom did not want to be with our cat. My dad wasn’t with me either. I was with my cat for the euthanasia, my parents didn’t want to be in the room. My mom just flat out said there’s no way I’m going to see that. And my dad wanted to see her after – you know, sometimes they visit the body afterwards. My dad wanted to do that and my mom said no I don’t need to see anything like that. So I just think that’s their choice.
A final theme that emerged was that it was those participants who were older and had been in the field for a number of years who took a different approach to their interactions with people. They appeared to have greater capacity for empathizing and dealing with the human component of their work. This theme is alluded to in the above quote, and another participant explained similarly:

Sometimes. I think sometimes it was just take a deep breath and step back. We’re here to do what we can for the animals, not make judgments about the owner. Just because they do things different from the way I might do things doesn’t mean that their way is wrong. It means that their way is just different. Did that make sense? I really think that it was easier for me to do than for some of my coworkers. I think that that’s based purely on the fact that I came into this in my 40s, and a lot of them are in their early, early 20s when -- a lot of them are in their early 20s at the beginning here. Some of them are more mature than that now and have more life experience and maybe react in a different way. But I think that when you’re in your 20s, you’re not always able to see the other side of the coin, I think.

Thus, while it was easier for most participants to cognitively empathize with and derive meaning from their interactions with animals, those instances where veterinary employees are able to empathize with the human clients may be particularly important. Interestingly, it was those employees who had stayed in the field for a longer period of time that seemed most able to do this. A couple of them described how although they were initially drawn to the industry because of the animals, their focus had shifted over time more towards the human side. Turnover of assistants and technicians tends to be quite high and this may be in part because they are not able to achieve empathy with the people and, as some have said, this wears on them over time.

**Cognitive Empathy and Impact**

Because many of the participants would try to understand the reasons for the animal’s behaviour or imagine how they would behave in a similar situation, this changed the way they approached difficult animals during interactions. Their goal became minimizing the animal’s fear and making the experience of being at the vet more pleasant. They accomplished this by first paying close attention to animal behaviour and the signs they might be giving out about their current state of mind. As one vet explained, she would look for: “Body position, how they’re, what their comfort level is,
like how they’re looking at me. How they’re dealing with their owner. Even just like facial expression, ear posture, and sort of getting a feel for what their demeanor is.” A technician similarly explained how she would be attentive to the animal’s body language at the outset of an interaction:

Body language. Well, growling. The obvious one. And just being like nervous. You can usually read if they’re nervous, tail -- When you start seeing the cat with a tail flicking and then shortly after they’re scratching. So you start - seeing the cues.

Participants would then use their knowledge of animal behaviour to adjust their own behaviour in an attempt to effect change in the animal’s behaviour. This thoughtful adaptation of one’s own behaviour is exemplified through the following quotes:

I’ve definitely had a couple of dogs I think in particular who are clear, clearly fearful, like fearful to the point where you know they are going to be a fear biter. And they’ll attack you and it’s not because they’re nasty and aggressive, it’s just they’re fearful, they’re, they think you’re going to hurt them or whatever and they’ve got a maybe an abused history or whatever, and so those guys I go really slow and I try and, instead of coming right at them towards their face, I’ll sort of try and sit next to them first and like not even make eye contact and just kind of wait for them hopefully to come smell me instead of me approaching them and if they feel comfortable like that sometimes I’ll just try and touch them like near their back leg or on their side, again not too close to their face. One, so I have time to get away, and two so it’s less aggressive, and if they’re good about it then I you know, I talk to them usually when I’m doing that too.

And I’ve studied some behavior in the past and having dogs of your own, you learn this kind of stuff too and, yeah, you just need to look at each patient differently and understand if they’re very kind of nervous then you want to keep very quiet around and then do everything very slowly and very gently. And then you have the crazy, excitable dogs that come in that you need to kind of get them to ground a little bit more. So, yeah, it’s different with every patient.

Therefore, learning to control their own behaviour in order to communicate their intentions to the animals was a conscious process that participants engaged in during interactions. They would also support each other during this process. For example, if one person was becoming too fearful of being bitten or attacked by an animal and therefore was feeling like they could not behave in the calm manner they wanted, they would often ask a coworker to take over for them. One technician explained to me the
importance of making sure you did not approach an animal either nervously or aggressively because of your own sense of fear:

And that’s kind of how you have to be with a dog and a cat. Because if you come in the room and you’ve got really dominant, like really strong negative energy, they feel it and they, you know, their dart hairs go up and then they’re totally like anxious around you. And you know, so you kind of have to be able to turn it on and off here. When you walk in a room and you know there’s a bad cat in there you’ve got to walk in there perfectly calm and assertive, like, energy and not be like hoooh, I’m scared. Because they’ll eat you up if they know you’re scared.

When participants consciously adapted their own behaviour to try and calm aggressive animals, they were in turn sometimes able to impact the animal’s behaviour. Those instances where participants were able to “win over” animals across a series of interactions was described as one of the best parts of the job. As one explained: “The process of getting better and the change of the patient, sometimes they are, I mean when you are dealing with bad, very bad, aggressive animals and during the process, some processes take longer than others, you can see the transformation of that patient. You will see that they know what you are doing and then they will change from aggressive not to soft and nice, but tolerate you and respect you. That’s the other best feeling.” When asked to describe instances where they felt their work was meaningful, these transformative interactions were often cited:

That was a whole lot of oncology, too, is you, it’s good when you have the pets that are scared and aren’t, you know, we had a cat that was super mad and peed on me when it first met me and you just work them on a weekly basis and she just, and you break down that little barrier and they just, then they’re nuzzling and you know they’re purring when they see you. It’s like, okay. I’ve won you over.

But we’ve had one that’s an Akita that they’re usually quite a shy dog or aggressive dog and she was completely boring and we’ve been seeing her for like five to six months, five months something like that. So boring. Like she won’t take treats from us, she wouldn’t take any cookies or anything like that and she used to fight us in the beginning like just fidget and not do what she’s told. But now, she knows the drill. She’ll sit and the only way – she still won’t take a treat from me, but if I kind of get peanut butter on my hand and smear it on her tongue then she’s all like, oh I’m going to lick it off your hand...So, yeah, for a dog that’s completely boring and then by interacting with us and us earning her trust and that sort of thing, it’s quite nice. That’s rewarding.
The transformation of animal behaviour across interactions was interpreted as evidence that the veterinary employee did make a difference in their work. A “favourite” patient at one of the clinics, who was mentioned by several of the participants, was a young dog with juvenile diabetes. In talking about this dog, they all described how he was very badly behaved and ill when they first started seeing him, and now he was so friendly and pleasant, and would let you do anything to him. They interpreted this behaviour change as meaning: “he knows you’re trying to help.” At another clinic, a technician shared a similar kind of story about a patient:

But we have a dog now, he had this weird neck abscess thing and he was growling and trying to bite people and stuff. And then when we lanced it and expressed it and it wasn’t as much painful, he was way better. Like, didn’t try and bite, wasn’t growling. Like, he seemed like way happier and like, with a dog in, sometimes even in ICU, they come, they’re like super sick. They won’t eat and they walk really slow and then when you start to get them better they’re eating, they’re wagging their tail, they’re walking and looking happier. Like, you can...You can see it and you can see that you made them feel better. Kind of like, yeah.

Interactions with animals therefore often create a reinforcing cycle of meaning. The veterinary worker pays attention to the animal’s behaviour without taking it personally, uses this information to change their own behaviour towards the animal, which in turn often transforms the animal’s behaviour in a positive way, and is interpreted as having made a difference to that animal. Then, every time they see that animal it is a reminder of the impact of their work.

Unlike with animals, where the participants believed that by observing them and changing their own behaviour, the animal’s behaviour would improve, some didn’t believe that they could have such an effect on other people. As a veterinarian explained: “Yeah and I guess again even the patients that are really challenging, like there’s things that we can do that make them better, but challenging owners you can’t really make that better, right?” This is not to say that changing the client’s behaviour was not possible through empathy, it just was not a belief that was common amongst the participants. One of the few participants who was conscious of the importance of being empathetic towards clients, explained how her own approach and behaviour could also impact the client’s behaviour during interactions:
Compassion is, is, for me, the top of anything in terms of my work, in terms of being compassionate with the pets of course but with the clients as well because I’ll often hear stories of, “Can you talk to this owner? Because they’re really not being nice because ra-da-da-da-da-da.” And I’ll say, well, okay, and you know when you go in from an open place and as soon as I offer any kind of compassion it’s like that just completely dissipates within the owners because of course I know all the reasons why they’re presenting themselves this way – because their dying pet – you know, because of all this stress surrounding their pet...Just bring in a little bit of compassion and compassion goes a mile. You know? Like people just melt to it and they quickly, ah, well, thank you so much just for listening. And hearing because you know this is what this pet has meant to, you know. The stories come out and then you, then you, you know, and things just all of a sudden now you’re just too, you know, people sharing stories and hearing each other’s sides and it’s like everything else has just disappeared and you, you, all of a sudden you have this connection and it’s just, you know. It’s beautiful.

Thus, participants were easily able to craft animal behaviour in positive ways during interactions, which facilitated both empathy and feeling that their work was impactful. Many of them preferred animal interactions, as a result. One technician explained: “If I could stay in the back the whole day and not have to deal with anybody that would be awesome. Just bring the animal back, let me do what I need to do and send them back out front again. You know, that would be the perfect scenario.” However, the few participants were able to achieve cognitive empathy with humans during difficult interactions seemed to find their work more deeply meaningful. These were also often the people who tended to stay longer in the profession, suggesting that empathy with all of one’s interacting partners at work may be a key practice in sustaining commitment to the occupation over time.

**Discussion**

This research aimed to explore the content of interactions with animals and humans that could influence the experience of meaningfulness at work, as well as the processes that might account for these relationships. There are few prior studies that have looked at the connection between human interactions and meaningful work, and organizational behaviour scholars have never considered the potential impact of interactions with non-human beings. This research suggests that interactions with
animals in the workplace can have a profound impact on experienced meaningfulness. Further, by focusing on what makes human-animal interactions meaningful, this study sheds light on some new dynamics of these interactions.

Prior research in the job crafting literature has examined how people might alter the quantity and quality of their interactions in order to make them more meaningful. The high quality connections research would suggest that in order to enhance meaning, people should increase the number of high quality connections and minimize or eliminate low quality connections. These kinds of relationship crafting decisions did not emerge strongly in the research. In part, this may have been because veterinary practices are service firms that depend on clients for income and therefore the workers may not have had the ability to simply end low quality connections without experiencing a financial burden. Even if a client was being disrespectful or difficult, someone had to deal with them. While some participants fantasized about a job where they would not have to interact with people, this simply was not an option. Does that mean there was no relationship crafting occurring in the workplace? The answer to that is no. Instead, the relationship crafting that emerged was different from the kind previously contemplated in the literature.

The practice that participants engaged in might more accurately be termed “cognitive relationship crafting”. Similarly to cognitive task crafting, which involves changing how one sees the tasks that comprise a job (Wrzesniewski & Dutton, 2001), cognitive relationship crafting involves changing how one sees interactions with others at work. Cognitive relationship crafting appeared to have three dimensions. The first I have termed “contact crafting”. This is where participants actively constructed stories about the meaning of particular words and gestures used by others in interactions. For example, a dog wagging his tail might be constructed as indicating that the dog is friendly, whereas a person who ignores what the participant is saying may be constructed as behaving disrespectfully. Yet different people might interpret the very same gestures in different ways. The tail wagging can be a sign of stress and discomfort, and the client’s failure to listen as indicating overwhelming concern for her pet. The second dimension of cognitive relationship crafting occurs when people develop beliefs about the nature of the other based on their behavior in interactions. This is referred to as “character crafting”. The third dimension is “impact crafting,” and it
occurs when people alter their perceptions of the impact of their work through their interpretations of the actions of others. For example, a dog that licks a participant’s hand after a procedure might be constructed by one person as indicating that the dog is appreciative of her help, whereas for another person this might simply be interpreted as the dog liking the taste of salt on one’s hand.

**Cognitive Relationship Crafting and Mechanisms of Meaning**

One of the reasons why interactions and relationships can be such a powerful source of meaningfulness at work is that they enable people to experience meaning through different mechanisms. Rosso et al. (2010), in their review of the meaningfulness of work literature, have identified several mechanisms of meaning that can be categorized along two dimensions: self/other and agency/communion. The four categories that emerge capture all of the existing ways through which people are known to arrive at the experience of meaningful work. The first is individuation (self-agency), which involves believing that one has the capacity to influence the external world. The second mechanism is self-connection (self-communion), which involves a sense of having a coherent and confirmed identity. The third mechanism is contribution (others-agency), which involves believing that one’s work has a purpose and makes a prosocial difference to others or society. The final mechanism is unification (others-communion), which involves believing that one belongs to a social group. I suggest that the three forms of cognitive relationship crafting contribute to meaningfulness through two of these mechanisms: contribution and unification, because these mechanisms involve connections to others, and therefore fit with interactions and relationships. However, as will be discussed in the following section, contribution and unification appear to be particularly meaningful when they trigger individually oriented mechanisms, which may result in a reinforcing cycle of meaningfulness at work.

**Cognitive Relationship Crafting and Unification**

The mechanism of unification has three dimensions: (1) purpose through value systems, which is where people feel that they are doing the right thing because they are acting in accordance with shared values; (2) belongingness through social identification, which is the sense of belonging to a valued group; and (3) belongingness through
interpersonal connectedness, which is feeling a sense of closeness that makes people feel comforted and supported (Rosso et al., 2010). Character crafting was intimately connected with both purpose through value systems and belongingness through social identification. Many of the participants described themselves as animal people and talked about feeling more of a connection to animals than to other people. The character crafting these people engaged in also tended to construct animals as virtuous and people as lacking virtue. Thus, in seeing themselves as people who preferred and were more connected with animals, it enabled the participants to see themselves as sharing values with the fellow animal people they worked with, more so than with human clients. In fact, in talking about instances where clients behaved selfishly with their animals, the participants tended to emphasize that they would never do this, thereby setting themselves apart from an unattractive social group. Taking the time to do things that these owners did not do, such as by grooming a dirty animal that was brought in, even when doing so was not a part of the job, helped to reinforce this sense of belonging to a positive group with values different and better than the non-virtuous clients. Thus, in some ways, by focusing on the negative aspects of some clients, and by believing that they themselves did not share those characteristics, the participants were able to identify both the positive in-group (animal people) and the undesirable out-group (clients who behaved selfishly with animals). This in turn enabled them to build a more positive social identity for themselves, which seemed to enhance the meaning of their work through belonging to this group.

At the same time, contact crafting went a long ways towards helping people to reach meaningfulness through interpersonal connectedness. One of the main things that seemed to keep participants in their occupations, despite the frequently stressful working conditions and relatively low pay, was the ability to create bonds, particularly with animal patients. The ways in which people crafted the actions of animals enabled this bonding. For example, animals that were crafted as being friendly were more likely to become favourites that the veterinary worker would look forward to seeing. Giving and in particular receiving affection from animals helped people to accomplish interconnectedness in a very physical way that is often not possible when interacting with other humans, as a result of social norms in human-human interactions. Interpreting the physicality of interactions as indicating that the animal is experiencing
feelings of love or caring towards the worker creates a sense of both supporting and being supported by animals, which in turn enhanced their sense of meaningfulness in work. Sometimes participants saw their role as being the “rock” for animals that were going through a hard time simply by being there to physically hold on to them and reassure them through petting and kissing.

Cognitive Relationship Crafting and Contribution

Contribution as a mechanism of meaningfulness has four dimensions: (1) self-efficacy through perceived impact, which is the sense that a person has that they are capable of making a prosocial difference at work; (2) purpose through significance, which is the sense of doing work that is important; (3) transcendence through interconnection, which is the sense of connecting to or contributing to something outside of or greater than the self; and (4) transcendence through self-abnegation, which is the sense of subordinating oneself to something outside of or greater than the self (Rosso et al., 2010). Cognitive relationship crafting is related to the first two mechanisms. Empathy, which will be discussed in the following section, takes on a special role in meaningfulness at work and is related to the transcendence dimension of contribution.

Impact crafting, which involves how people think about the way their job affects others through their interactions, is connected to both perceived impact and significance. When people are able to craft the way they look at their interactions with others to feel that they are making a difference, they experience a sense of being able to make their goals a reality and to shape the world around them, which is the essence of self-efficacy (Bandura, 1977). When the workers I studied believed they were able to change the actions of animals over time in positive ways, this enabled them to experience a sense of making a prosocial difference at work, which enhanced the meaning of their work. Similarly, when clients expressed appreciation for the veterinary workers’ efforts, this made the workers feel like they did make a difference and that this difference was significant, in that it truly mattered to someone else. This is consistent with prior research by Kahn (1990) where he identified expressing appreciation as promoting meaningfulness in interactions with clients. Appreciative clients seemed particularly important to the vet workers because it enabled impact crafting as proof they had made
a difference. This may be why they often posted thank you cards and letters in prominent places around the staff room.

Character crafting relates to the significance dimension. This is because the way people think about the character of others, enables them to determine whether or not those others are worthy of being helped. The idea of providing help to a worthy recipient is experienced as more significant than helping someone who is seen as less deserving of such efforts. This became particularly apparent through the differences in the ways in which people constructed the characters of people and animals. Because the participants often focused on the virtuousness of animals, seeing them as possessing traits like honesty, loyalty, and kindness, this made the work they did of helping animals lead longer and healthier lives more important. In the few cases where animals were not seen in these virtuous ways, the role of the veterinary worker in helping that animal took on less importance. For example, there was one case where a crow was in the hospital after having run in to a vet’s window. One of the assistants, who had a strong dislike for birds because she saw them as aggressive and scary, showed no interest in the welfare of this bird and chose not to interact with it during her shift. Unlike with the dogs and cats she worked with, it seemed unimportant to her whether or not this bird lived or died. In analyzing why they felt their work was more meaningful than doing a similar job with people, participants often drew on the virtuousness of animals compared to the virtue lacked by people. When people were seen as selfish or dishonest, doing a job that helped them would not be as important because they were not “deserving” of this help. One participant explained how because people talked back and did not show appreciation for others’ efforts, she would find it more meaningful to clean up dog poop than to work as a human nurse.

**Empathy as a Buffer to Meaningfulness Challenges**

Even though cognitive relationship crafting facilitated the experience of meaningfulness at work, this was not to say that there were no challenges to this sense of meaningfulness. These challenges came when people or animals acted in ways that had the potential to undermine the mechanisms of unification and contribution. Participants were able to preserve a sense of doing meaningful work when they were able to craft these actions in a positive way, such as by seeing an aggressive animal as
if it were friendly. In cases where participants were not able to do this, it was cognitive empathy that played a buffering role.

It seemed relatively easy for most of the people I studied to achieve and maintain cognitive empathy with animals. Even when animals behaved in unpleasant or challenging ways, such as by being aggressive or uncooperative, workers explained away animals’ challenging behaviour and also put themselves in the animal’s shoes to justify why animals behaved as they did. For example, most participants explained that they empathized with aggressive cats because these cats were acting out of pure instinct, rather than some kind of evilness. Workers were easily able to transition both to and from anthropomorphic interpretations of animal behaviour. Thus, a purring cat might be seen as kind and loving, but a fractious cat was not seen as mean or evil, but rather just behaving naturally as a cat. This flexibility in action crafting thereby promoted cognitive empathy, which in turn enabled the workers to preserve a sense of doing meaningful work even in the face of challenging animal behaviour.

In contrast, human-human interactions appeared to be much more difficult, in the sense that they were more likely to undermine employees’ sense of meaningful work. This came up frequently during the interviews and in listening to the participants talk to one another about their clients. I was told that clients could be difficult to get along with, would lie, and ignored what they were told. These behaviours undermined the participants’ sense of meaning because they all made it more difficult to help the animals themselves. For example, veterinarians would sometimes perform tricky surgeries with success, nurse the animals back to health, but because the owners would stop giving routine medications at home as instructed, when the animals would come back in to the clinic, they would see that the surgery had not made the animal any better off. When clients would not follow through with instructions or would hide information, they would make the interactions that the veterinary worker had with the animal feel less impactful because they did not result in helping the animal to the extent that the workers felt would otherwise be possible. As a result, these interactions also influenced impact crafting, but in a way that undermined the participants’ sense of making a prosocial difference in their work.
There were, however, a few interviewees who took a different perspective to their interactions with human clients. These were workers who were able to engage in the same empathetic practices that others found so easy to accomplish with the animals. In such cases, even difficult interactions did not undermine meaningfulness. Again, being empathetic has the potential to create a virtuous cycle, where as the one assistant explained, compassion can “melt” a person’s difficult behaviour. Empathy also changes the veterinary worker’s perspective from being self-oriented to other-oriented. I identified four themes that were associated with the ability to cognitively empathize with other people: appreciation of the dynamic between the client and their pet, learning a person’s story, having experienced a similar situation oneself, and maturity.

Not only is engaging in empathy likely to prevent the contribution mechanism from being undermined, but it may also reinforce the mechanism as well as open up new mechanisms of contribution that could enhance meaning through the process of transcendence. First, when participants empathized with the animals, it prompted them to change their own behaviour in the interaction. When they believe that the animal is acting out of instinct-based fear, rather than, for example, not liking the worker herself, they are more likely to take actions to try and alter the animal’s response. Second, as a result of changing their own behaviour, the workers often succeeded in transforming the animal from uncooperative to cooperative during interactions. The change in the animal’s behaviour allowed participants to construct evidence of having made a difference, which was integral to their sense of being engaged in meaningful work.

Empathy also enables veterinary workers to experience meaningfulness through the process of transcendence. Transcendence has been broadly defined as connecting to an entity beyond the self (Maslow, 1971). Within the management literature, transcendence has mainly been considered as a category of values. Schwartz (1992), building on Rokeach’s (1973) earlier work, incorporates the “self-transcendence” category into his circumplex model of values, which includes: (1) universalism, defined as a general concern and desire to protect people and nature, and (2) benevolence, defined as more particularized concern for improving the welfare of specific others. The nursing and health literatures distinguish between two types of transcendence. The first is cosmic transcendence, which is about seeing oneself as part of a larger pattern of existence; this is the form of transcendence that tends to be connected with religion.
The second is a more everyday form of transcendence, self-transcendence, which is “decreases in attachment to one’s own perspectives, viewpoints, truths, and construal self, as well as extension of care, compassion, and concern toward others including both past and future generations” (Le, 2011, p.173). Therefore, self-transcendence may be more than a value, or individual trans-situational goal (Rokeach, 1973), but also an experience. Cognitive empathy involves subordinating one’s needs and interests to those of others, even if only for a brief period in time, and during that time people are likely to experience self-transcendence. This experience, whether it be a result of cognitively empathizing with people or with animals, extends the contribution mechanism linking interactions with meaningfulness through what Rosso et al. (2010) identify refer to as interconnection self-transcendence.

**Virtuous Cycles of Meaningfulness**

While Rosso et al. (2010) suggested that there are likely to be interrelationships between the mechanisms of meaningfulness, no one has yet to explore how and why this may be the case. The data in my research sheds some light on possible interconnections between the different mechanisms of meaningfulness. These interconnections seem to reinforce and amplify one another, heightening the experience of meaningfulness at work.

**Self-Connection and Contribution**

Self-connection is a mechanism of meaning that occurs at the intersection of the self and agency. It is accomplished through authenticity, which involves a sense of acting in a way that is consistent with one’s own beliefs and values, feeling that other people confirm your self-believed identity, and coming alive when working (Rosso et al., 2010). Authenticity emerged in the data through the animal person concept. When asked about why they initially pursued work in the veterinary industry, almost all participants described that it was their affinity for animals. Often this was something that began during their childhood and participants would eagerly share stories about old pets or times where they had nursed a stray animal back to health. This connection with animals was very important to their identities and a source of pride. When it came to
workplace interactions, a connection between authenticity and contribution emerged, which influenced the participants' experiences of meaningfulness.

It would appear that there is a distinction between simply making a prosocial difference and making a difference that is in alignment with one's fundamental beliefs about the self. Because many of the participants saw themselves as animal people, being able to make an impact on animals through their work and therefore to say that they helped an animal was particularly important. For these people, there was something unique about making a prosocial difference to animals that was integral to their experiences of meaningfulness, and I suggest this is because it enables them to act in a way that is consistent with their own beliefs about themselves as animal people. It would explain why some of them believed that human nursing, which would involve many of the same tasks, would not be experienced as meaningful or why they considered veterinary work to be more meaningful than previous jobs where they had spent their time helping people. For participants that did not see themselves as "people-people" contributing to the welfare of other humans would not be as authentic. This created a reinforcing cycle of seeing oneself as an animal person, being able to spend one's days helping animals, and therefore contributing to a sense of coherence in one's identity.

Contact crafting appeared to facilitate this reinforcing cycle of authenticity and contribution. People have a lot of leeway in terms of interpreting animal behaviour, but many of the participants would construct animal interactions as indicating friendliness and affection. Seeing interactions this way contributed to experiencing the work as meaningful because it was essentially interpreted as the animals validating the participant's sense of self. Having a positive interaction with an animal was evidence of the participants having a special connection with animals, which enabled authenticity. The relationship with the animal therefore becomes a means of validating one's own beliefs about the self, and so helping the animal is not just a prosocial contribution to something external but also affects meaningfulness by reinforcing self-coherence.

Similarly, for animal people, being able to transcend the self by empathizing with animals reinforces their authentic identities. As described in the findings sections, empathizing with the animals was relatively easy for the participants to achieve, even
when the animal was being dangerously difficult. They seemed to take great pride in being able to say they did not get angry with an animal even though it had bitten or scratched them. Perhaps this is because they felt that true animal people would be able to understand and forgive animals for these kinds of actions, and therefore by doing so, they not only experienced a sense of belonging to something greater through the process of transcendence, but they also were able to further reinforce their own identities. Interestingly, those few participants who empathized more strongly with people, also seemed to express that caring for people was equally as important to them. For example, one of these participants said that she did the job to help people through helping animals, rather than to strictly help the animals. Being able to empathize and communicate well with people, should therefore not only directly contribute to meaningfulness, but also enhance it by reinforcing her authentic self as a people person, as well as an animal person.

**Individuation and Unification**

A reinforcing cycle of meaningfulness also occurred between individuation and unification. Individuation is a mechanism of meaningfulness that is centered on an individual’s ability to affect the world around him or her. It has three components, two of which – control/autonomy and competence – are part of self-efficacy. The third is self-esteem. Competence, as a component of individuation, appeared the most strongly in the data. This was particularly in terms of the skill that the participants’ had for dealing with animals on the job. Several assistants and technicians, for example, mentioned how they were particularly good at handling fractious cats, which gave them both a sense of control over their work because they knew they could handle any cat that was brought in, as well as a sense of competence through having a special skill. The confidence that comes with competence may actually help to reinforce mechanisms of unification in the work.

Competent veterinary workers have a strong belief in their own ability to observe and interpret animal communication, and to communicate back to the animal in a way that it will understand. Participants would describe particular body postures or vocalizations that they would look for when interacting with an animal. Their ability to observe this information, and then adapt their own body language to help communicate
with the animal, was instrumental in helping to create a sense of interconnection. Essentially, it enabled the participants to engage in symbolic interaction with the animals that were brought into the clinic. Rather than just doing something “to” a compliant animal, a symbolic interaction takes on the experience of mutuality. Mutuality has been theorized to be an important component of meaningful interactions (Dutton & Heaphy, 2003). This is likely to be essential to belongingness because rather than a one way connection, as might be the case when a worker anthropomorphizes an animal, a symbolic interaction is more likely to promote a sense of interconnectedness which in turn contributes to meaningfulness.

Finally, it was competence that facilitated the workers making an effort to connect with animals even when they were behaving in a difficult manner. It was through making such efforts that veterinary workers were able to positively influence the animals’ behaviour, transforming it, for example, from aggressive to friendly. These transformations were important because they facilitated a sense of interconnectedness between the animal and the worker. This would explain why it was those relationships where the person felt the animal liked them in particular (such as an aggressive animal that was friendly to them, but not to other employees) that were cited as being particularly meaningful interactions. Developing this kind of bond with a difficult animal sets the participant apart as having special skills or ability to connect. Since the animal’s behaviour reinforces the worker’s sense of competence, interacting with the animal becomes even more meaningful and a deeper bond can be developed.

The above interconnections may be particularly important because they actually result in expanding the mechanisms of meaning so that they simultaneously incorporate self-other and agency-communion. Lips-Morris and Wiersma (2009) have suggested that when work enables people to balance both the needs of others and the needs of the self, it is likely to be experienced as particularly meaningful. Relationships that are crafted such that they do enable satisfaction of these competing demands seem to be particularly important for veterinary workers.

These ideas are illustrated in Figure 4. The key contributions of the model are the interrelationships between the different forms of cognitive relationship crafting, the processes through which they influence meaningfulness, and the possible reinforcing
cycles between the mechanisms of contribution and self-coherence, as well as unification and individuation. Certainly, there are likely to be other possible ways in which the different mechanisms of meaningfulness may influence one another. The cycles included in this figure are the ones that appeared to be most important within the context that I studied. Theoretically, they are interesting possibilities because they show interrelationships across the dimensions of meaningfulness, suggesting that there are likely to be benefits to those circumstances in which people can simultaneously meet the needs of agency and communion, as well as self and others. Empathy can emerge in response to interactional challenges to meaningfulness and it both enables the processes of unification and contribution to be maintained despite these threats, while at the same time adds to the contribution mechanism when it facilitates changing the animal’s behaviour and through its ability to open the pathway of transcendence.

**Figure 4. Model of Cognitive Relationship Crafting and Meaningful Work**

Redefining our Understanding of Relationships and Meaning

Kahn (2007) has theorized that relationships in the workplace will contribute to meaning when they can accomplish one or more of five needs: enabling task
accomplishment, career development, sense making, the provision of meaning, and personal support. Various types of relationships can help us accomplish these things to different degrees and people may need to change their relationships at work to accomplish these goals. He described the sensemaking component as how relationships help people to “make sense of events, experiences, and shifting organizational and environmental contexts” (Kahn, 2007), but did not explicitly consider the importance of how people make sense of the relationships themselves. Other scholars have suggested that the relationships that will contribute to meaningfulness are high quality connections, which are defined as interactions imbued with positive emotion, that can withstand strain, and that are conducive to generating new ideas and perspectives (Dutton & Heaphy, 2003). The implication is that at a given moment in time a connection can be labeled as either high quality or low quality, and that people would be better off to eliminate their “toxic” low quality connections and instead cultivate as many high quality ones as possible. Both of these approaches suggest that the meaning lies in the nature of the relationship.

This research suggests that meaningfulness scholars need to pay more attention to the sensemaking processes of the people who participate in interactions. Weick (1993) describes sensemaking as “an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what occurs” (p. 635). Pratt and Ashforth (2003) have acknowledged that the assessment of meaningfulness is the outcome of sensemaking processes – what they explain as sensemaking with the purpose of answering questions about the significance of our lives and work. They focus on how organizations can facilitate the experience of meaningfulness by influencing how people think about organizational membership and the goals of the organization. Relationships are positioned in a more macro sense in that organizations that create family-like ties amongst members can in turn promote a sense of meaningfulness. They do not consider how relationships with organizational outsiders, which were the focus of this research, could influence meaningfulness. Here, sensemaking, or what Lips-Morris (2002) might refer to as meaning-making, is also crucial and in fact this research suggests that the meaning-making people engage in around micro interactions is central to their overall assessments of work meaningfulness.
When one considers the way the participants interpreted their interactions, the idea that an interaction could be considered high quality or low quality becomes rather fuzzy. This is because an interaction can be experienced very differently depending on how one makes sense of the other person or animal’s behaviour. Take for example, an animal that bites a veterinarian during a routine exam. One vet may anthropomorphize this animal during the interaction and conclude that the animal is mean and intended to hurt her. That animal may then become less deserving of help, as a result undermining the meaningfulness of the work she does. Another vet may see the animal as being scared to death and believe that she would do the very same thing if she were in the animal’s place. In that case, her empathy could make her work even more meaningful because she might see herself as carrying out the important function of eliminating an innocent creature’s fear, and her empathy facilitates self-transcendence which also links to meaningfulness. Is this interaction high or low quality? The assessment of quality depends almost entirely on the perspective of the worker and very little on the behaviour of the interacting partner.

My intention is not to undermine the importance of interactions, but rather to emphasize the amazing quality that human beings possess to shape the meaning of the world around them. Character crafting, contact crafting, and impact crafting, along with cognitive empathy, enable people to change the way they think about their interactions on the job, without changing the interactions themselves. It is most apparent in interactions with animals because their inability to use language to explain what they feel or think, enables people to fluidly move between different interpretations of the other. Cognitive relationship crafting is very powerful because it means that any relationship can be meaningful depending on the way that people interpret the behaviour of their interacting partners. While many workers interact with only humans and not animals on the job, if they could more readily appreciate the reasons why other people may behave as they do, they might be more likely to experience their work as impactful and be more empathetic towards others’ social transgressions, as my participants were with animals. This would help to protect the meaningfulness of their work from being undermined by challenging interactions, as well as possibly increasing meaningfulness by enhancing contribution through self-transcendence. Empathy therefore is not only likely to enrich the lives of the people we interact with on the job, by encouraging us to change our
behaviour towards them, but it is also likely to change our own experiences on the job by shifting the way we think about the work we do and transcending our own narrow worldviews. Organizations that help their employees to empathize with others, for example by implementing emotional intelligence training programs, may as a result also increase the extent to which these employees experience their work as meaningful.

Limitations

In ethnography, the researcher is the primary instrument of data collection. While the researcher can be a “sensitive and perceptive data gathering tool” (Fetterman, 2003, p. 41), the data she gathers will, by definition, be subjective and influenced by her own perceptions and beliefs about the world. This is most likely to be viewed as problematic by traditional positivist researchers who expect research to be designed in an objective manner (Lee et al., 2009). While objectivity may not be possible in the case of ethnography, I undertook several steps in this research to minimize my impact on the participants. First, I was highly attentive to what the participants had to say and aimed to represent their voices as accurately as possible in the research (Strauss & Corbin, 1998). It was also possible that my presence in the setting influenced the ways in which participants behaved (Maxwell, 2004). My own sense was that my presence did not have a major impact because participants spoke very candidly about the people and animals they interacted with on the job. I believe that the influence of my presence was minimized because I was around the same age and gender as the majority of my participants and therefore felt that I blended into the context quite easily. Participants seemed to connect with me quickly and readily shared personal details with me when not prompted. In some ways they treated me as an employee in training and enjoyed showing me procedures and explaining how I might carry them out. In a few instances they asked for help in restraining an animal or putting supplies away during quiet times where there was not much to observe. I believe that this was evidence that they did not see my presence as being obtrusive and for the most part carried on with their activities as they normally would. Finally, I was conscious of searching for disconfirming evidence during the data analysis process in order to enhance the validity of my conclusions (Strauss & Corbin, 1998). I also worked to include as many direct quotes and descriptions of observations as possible in order to allow the readers to assess the
credibility of my interpretations and, if they choose, to develop their own interpretations of the data (Maxwell, 2004).

The research process itself may also have been an intervention in the lives of participants (Fine, 1993). By asking questions about work meaningfulness, I may have led participants to think about the concept in new ways or they may have attempted to provide me with the answers that they believed I wished to hear. I deliberately framed my questions about work meaningfulness in open-ended ways and encouraged participants to use their own understandings of meaningfulness rather than imposing a definition on to them. All but one of the participants were readily able to describe what meaningful work meant to them in their own words, and the other did so after I explained that there was no “right” answer to the question. Further, there was variation in the extent to which people experienced their work as meaningful. While the vast majority did describe their work as meaningful, some found it more meaningful than others, and there were several participants, as discussed in the findings section, that explained that they no longer felt their work was meaningful as a result of incidences occurring the workplace. By encouraging participants to speak in their own voices and to tell detailed stories about their work lives to support their descriptions of meaningfulness, I believe that I did capture elements of their own experiences rather than simply imposing my expectations upon them. Thus, while these practices cannot and should not remove the subjectivity inherent in qualitative research, they do help to increase the credibility of the findings and the theory built from them.

A final limitation of the findings is generalizability. While veterinary work is an ideal extreme case for the study of interactions and meaningfulness, one cannot be certain about the extent to which they will generalize to other settings. I believe that the results will have some generalizability. First, there are a wide variety of human-animal occupations which share similarities with veterinary work in terms of requiring interactions with both animals and human clients, and which have not yet been studied by academics. Examples of such occupations include animal trainers, groomers, caretakers (such as kennel workers or stablehands), and humane society workers. We might expect that the influence of human-human interactions and human-animal interactions would be comparable in these other human-animal work settings. Veterinary practices are also an example of small professional service firms structured
as sole proprietorships or partnerships, and a large part of the business revolves around managing clients. The interactions that veterinarians have with their human clients may be relevant to other types of professional service firms, as well as small proprietor-run businesses. Finally, it is possible that cognitive relationship crafting and cognitive empathy may be relevant to interactions with coworkers in non-animal work settings. One would expect that similar cognitive processes may be activated in thinking about the behaviour and actions of coworkers in interactions, which could therefore activate the mechanisms of meaning. It may be that cognitive empathy is easier to achieve with coworkers whom one knows well, which might make these relationships more conducive to meaningfulness than client relationships. These are questions that I hope future research will explore given the increasingly interactional nature of work (Oldham & Hackman, 2010).

**Conclusion**

Finding meaningfulness in life is a goal for which many people strive and have striven throughout history (Frankl, 1992). There is evidence suggesting that when individuals’ work is meaningful it can be instrumental in helping them to achieve happiness and minimize psychological distress (Chamberlain & Zika, 1988; Debats et al., 1993). There may indeed be truth in Dosteyevski’s famed quote that: “Deprived of meaningful work, men and women lose their reason for existence; they go stark raving mad.” Yet, existing research about meaningful work has left many questions open about why and how people come to experience their work as meaningful. By conducting an ethnographic study of meaningfulness in the veterinary context, this research has elaborated on how dyadic interactions are likely to be relevant to the experience of work meaningfulness in human-animal work and beyond. I have developed the concept of cognitive relationship crafting and identified its three dimensions of contact crafting, character crafting, and impact crafting as facilitating the experience of work meaningfulness. I have explained the impact of cognitive relationship crafting on cognitive empathy, which is also expected to be integral to the experience of meaningful work. I suggest that impact crafting may link to meaningfulness through the process of self-efficacy, and that cognitive empathy may link to meaningfulness through self-transcendence. The theory of cognitive relationship crafting and work meaningfulness
presented in this paper differs from existing approaches to linking meaningfulness and interactions, which have instead taken the interactions component as a stable property, and assumed that one must change the interaction if one is to change the meaning. I suggest that it is more important to change the way one thinks about those interactions. This research is one step toward understanding how organizations may be able to help all individuals find greater meaningfulness in the work to which they devote so much of their existence.
References


Appendix

Sample Interview Questions

To start off, I’m just hoping to learn a little bit more about what you do here at [your organization] and about your general experiences in [this line of work].

How would you describe the work that you do? What drew you to this line of work?

Human-animal interaction questions

It seems that an important part of your work involves interacting with both people and animals [tailor to the specific organization and kind of animal work]. I was hoping that you could start off first with sharing with me some more about what it’s like working with these animals.

What kinds of interactions with animals do you have on a typical day?

What sort of things do you think of when you are interacting with an animal?

Do you approach interactions with different animals in different ways? How?

Do you like the animals you work with? All of them? Some of them? Why? Can you tell me a story about an animal that you really like?

If there is an animal that you dislike, can you tell me a story about why you dislike it?

What was the most difficult interaction that you have had with an animal? What made it difficult? How did you feel?

Can you tell me about the most rewarding interaction you have had with an animal? What made it rewarding? How did you feel?

Do you feel that you have developed unique relationships with any of the animals you work with? If so, tell me about these relationships.
Human interactions questions

What people do you interact with on a daily basis?

How would you contrast your interactions with animals with your interactions with people at work? *Probe for relevant examples.*

Do you have a preference for interacting with people or animals? Why?

As you know, one of the important parts of my research is work meaningfulness and whether or not people experience their work as meaningful.

What does the term meaningful work mean to you?

Would you describe your work as meaningful? Why or why not?

Have you always felt this way? Or has the meaningfulness of your work changed over time? *Probe for stories of where they felt what they were doing was meaningful/meaningless.*

Can you think of an example of a time where you felt the work that you were doing was particularly meaningful?

Concluding

Are there any things about working with animals that you feel are important, but that I have not asked you about today?