The Support Provider Matters: Exploring the Influence of Support Provider Characteristics on Social Support Provision

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Submitted to the graduate degree program in Business and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Date Approved: June 30, 2021

Abstract

Social support is a major source of enrichment within dyadic relationships due to its role in alleviating stress as well as providing a variety of tangible and psychological resources that assist individuals in goal pursuit. Although social support is a dyadic process involving a support provider and a support recipient, the extant literature has remained fairly silent regarding how the support provider's characteristics influence support provision. Additionally, little is known about driving factors behind the various types of social support provided. In this dissertation, I examine six primary support provider characteristics emergent from self-determination theory (relationship quality, perspective taking, role knowledge, general self-efficacy, attachment orientation, and prosocial identity) that should influence the type and amount of social support provided. Drawing on a sample of 109 matched pairs of workplace and nonwork support providers identified by a support recipient, I used structural equation modeling and multiple regression to test a series of hypotheses examining the influence of these six characteristics on provision of specific types of social support. The results showed that relationship quality was a significant predictor of both instrumental and emotional social support. Additionally, general self-efficacy was a significant predictor of instrumental social support. These findings are important to social support research as they begin the process of understanding the support provider, thus providing possible new pathways to bolster social support provision. Further, these findings extend the high quality relationships literature by highlighting the positive gains from cultivating fulfilling relationships with others.

Acknowledgments

A wide range of individuals provided support during all phases of this dissertation. This dissertation is dedicated to:

- My wife – for consistently providing encouragement and ideas, for being patient with my mutterings and quirks that developed during this process, and for being an example that you can never care too much about people. You are included in more of this work than you would ever know. I love you.
- My parents, Dr. Wolfgang Deeg and Mrs. Janet Deeg – for valuing my education from childhood to now, for teaching me to love learning, and for consistently setting me up for success in all of my educational and life endeavors.
- My advisor, Dr. Douglas R. May – for seeing potential in me, for being steadfast in your focus on the positive, and for your encouragement and listening ear even in retirement.
- My other committee members, Dr. Ellingson, Dr. Guthrie, Dr. Li, and Dr. Schwoerer – for being vital sounding boards in the development of this work, for encouraging me to think more broadly, and for drawing out the best in me.
- The University of Kansas Office of Graduate Studies - for their generous support of this work.
- The four organizations whose membership participated – for trusting me and opening your doors to my data collection efforts.
- My colleague, Dr. Jinhwan Jo - for being an amazing friend throughout our journey at KU and for providing encouragement and positivity in a variety of ways.

- Other writing colleagues, especially Andrew Henck and Dr. Doreen Matthes – for providing emotional and appraisal support, especially during the isolating time of Covid-19.
- A variety of others who provided support throughout this process, including Christopher Tin, Christopher Caouette, and Karl Jenkins for the energy and focus their music provided during the long hours of reading, writing, and editing; and my feline companions, Panther and Tippy, for snuggling me whenever they could.
- God – for His constant grace, His steadfast mercy, and His continued sovereignty in provision throughout my entire doctoral program and life.

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Chapter 1: General Introduction

"I get by with a little help from my friends." – The Beatles

"Two are better than one, because they have a good reward for their toil. For if they fall, one will lift up his fellow. But woe to him who is alone when he falls and has not another to lift him up!" – Ecclesiastes 4:9-10

As the Beatles remind us, we have all benefited from the help of our friends. Friends can bring a meal after the birth of a child or stay up late talking us through a difficult problem. At work, colleagues can offer encouragement before a presentation or celebrate with us after it. Each of these are examples of social support, "actions that others perform when they render assistance to a focal person" (Barrera, 1986, p. 418). What sparks this behavior? Certainly not every friend (or coworker, supervisor, or significant other) provides social support or even the same kinds of social support. Indeed, recent reviews of the social support literature highlight that leaders, coworkers, and non-work-based individuals differ in how they provide support to employees (Jolly et al., 2020; Ng & Sorensen, 2008; Tews et al., 2020). What, then, makes one person more prone to provide support when others do not? Further, what prompts variations in the support that individuals provide to each other?

These questions remain unaddressed in a literature that has focused primarily on the support recipient. Scholars have paid a great deal of attention to the recipient of social support, exploring how an individual's personality and behavior leads to their receipt of more social support (Cutrona et al., 1990; Zellars & Perrewe, 2001) and highlighting the need to match support to the support recipient's needs and preferences (Cutrona & Russell, 1990; Cutrona et al., 2007). They have deeply debated whether social support buffers or directly impacts various stress-related outcomes (Cohen & McKay, 1984; Cohen & Wills, 1985; Viswesvaran et al.,

1999), with the consensus being in favor of the direct effect. The limited extant literature focused on the support provider examines motivations, and only those that drive general social support in intimate relationships (Feeney & Collins, 2003), leaving workplace support providers and the varied support that they may provide unexamined. Thus, while we understand a good deal about how social support functions to alleviate stress and enhance performance, why it might emerge, and whom it impacts, exploration of the support provider is still in the nascent stages. To further the understanding of this overlooked actor, I take a between-persons approach to understanding the support provider, examining how six characteristics reflective of the need satisfactions articulated in self-determination theory (Ryan & Deci, 2000) influence social support provision.

Social support has its conceptual roots in the field of community psychology (Caplan, 1974, 1976; Cobb, 1976). Originally, and predominantly, scholars examined social support as a mechanism by which an individual may have the effects of stress buffered or directly impacted (Cobb, 1976; Cohen & Wills, 1985; Fusilier et al., 1987). As scholars recognized the direct benefits of social support on individual health, attention shifted to other individual gains from social support (Gurung et al., 2001). In the workplace, social support has been found to diminish employee intentions to leave organizations (Choi et al., 2012), influence positive career outcomes (Scandura, 1992), and energize positive employee behaviors such as OCBs (Bavik et al., 2020; Cho & Treadway, 2011). As such, social support is a relevant construct when considering a wide range of employee inputs and outcomes.

In examining social support, scholars have relied on a variety of conceptualizations: network connectivity/social embeddedness serve as a proxy that an individual has support available to them, perceived (available) support reflects an individual's perspective that they have support available should they need it, and received support reflects the actual behaviors

focused on benefitting another (Barrera, 1986; Gottlieb & Bergen, 2010; Sarason et al., 1990). The notable difference between perceived support and received support is that perceived support reflects the support recipient's perceptions around the general availability of support provider, often based on their previous history of getting support (Veenstra et al., 2011). In contrast, received support describes actual behaviors of a support provider (Haber et al., 2007). Put more simply, "received support is helping behavior that did happen, and perceived support is helping behavior that might happen" (Norris & Kaniasty, 1996). Because I am endeavoring to understand what prompts support provider behaviors as opposed to support recipient perceptions, it is important to consider the support provider's actions, rather than the possibility of action. Thus, in this work, I emphasize received support and rely on Tardy (1985) and others who define social support as "actions that other perform when they render assistance to a focal person" (Barrera, 1986, p. 418). To reflect the individuals within this dyadic relationship, I will use the term ***support provider*** when referring to the individual who is providing assistance and the term ***support recipient*** when referring to the focal person.

The initial work surrounding antecedents of social support emphasized the distinguishing characteristics of the support recipient (Zellars & Perrewe, 2001). In this, scholars have highlighted support recipient mood (Clark et al., 1987), support-seeking behaviors (Collins & Feeney, 2000; Simpson et al., 1992), and individual differences that increase the support recipient's propensity to perceive support availability (Lakey et al., 1996; Veenstra et al., 2011). Scholars have shown that the individual can increase the amount of social support they receive as well as their perceptions of support availability within their networks (Heaney et al., 1995).

In considering the other half of the dyad, the support provider, scholars have primarily emphasized the support provider's roles, especially these roles in relationship to the support

recipient (e.g. a supportive supervisor or spouse). Within the workplace, scholars have examined both an individual's supervisor and their coworkers as support providers (Hammer et al., 2009; McMullan & Lapierre, 2018; McMullan et al., 2018; Ray & Miller, 1994). Social support from these individuals provides relief from stressors (Allen, 2001; French et al., 2018; van Daalen et al., 2006) as well as strengthens positive outcomes including job performance (Beehr et al., 2000; Gerdenitsch et al., 2016), diminished turnover (Tews et al., 2020), job satisfaction (Ducharme & Martin, 2000; Hurlbert, 1991), workplace adjustment (Fisher, 1985; Nelson & Quick, 1991), and even expatriate success (van der Laken et al., 2019). Outside the workplace, family members have been examined as a primary source of social support (although friends can and do play a role; Walen & Lachman, 2000). Here, similar outcomes have been found, including decreased stress (Adams et al., 1996; Carlson & Perrewe, 1999; Michel et al., 2010; van Daalen et al., 2006) and improved health and well-being (Leavy, 1983; Parasuraman et al., 1992; Ray & Miller, 1994; Turner, 1981). These impacts, however, are frequently linked to the role the support provider plays (e.g. supervisor, coworker, family, friend), with no attention to the individual, differential characteristics of the support provider. For example, Lindorff (2001) explored social support availability for managers and discovered that the source not only influenced its availability but also the actual type of social support provided. At work, fellow employees tended to provide instrumental support by offering distractions from stressors, while family and friends offered emotional social support. While this may be intuitive, other inter- and intra-personal factors are likely at play fueling the social support extended by these various parties. By only examining the source role, we have greatly limited our understanding of the emergence of social support. Indeed, Jolly and colleagues (2020) recently highlighted that while several meta-analyses have demonstrated differential effects of social support providers (e.g.

Chiaburu & Harrison, 2008; French et al., 2018) scholarship examining why this is the case is still nascent. With information only focusing on the support provider's role, one could assume that all coworkers provide the same amount and type of social support, even though scholarship on other related helping-behaviors shows that employees differ in the amount that they provide due to various characteristics (Hoffman et al., 2006; Rioux & Penner, 2001). Social support is likely no different, however the literature lacks an understanding of the personal characteristics of a support provider and how they might impact the type and amount of social support provided. Thus, I work to address this oversight (Brock & Lawrence, 2009; Jolly et al., 2020; Shumaker & Brownell, 1984) by prioritizing the following question within my dissertation:

How do characteristics of a support provider influence 1) the type and 2) the amount of social support provided?

This research expands several important areas of interest within management and social support scholarship. First, it extends social support scholarship by fostering understanding of a main actor within social support: the support provider. While research into other helping-oriented behaviors (e.g. OCBs and volunteerism) has noted individual, relational, and organizational determinants of these behaviors (Carlo et al., 2005; Omoto & Snyder, 2002; Organ et al., 2005), extant research on social support has tended to ignore the support provider characteristics while focusing on the support recipient. As mentioned, support provider-focused research has emphasized role differences influencing social support provision, with little consideration of the individual characteristics of the support provider. It is highly improbable that all coworkers will provide the same type and amount of social support, but we have little understanding of why this would be the case. Further, it could be the case that an individual's romantic partner provides more information or insights into a work problem (informational

social support) than that individual's coworkers, however, currently we lack a theoretical explanation for why. Thus, I contribute to the social support literature by exploring a notable question within the management literature: why do different sources of social support impact the support recipient differently? Because this impact is often due to the type of support provided, examining support provider characteristics that motivate these voluntary behaviors is key. To answer this, I rely on self-determination theory, a key theory within the voluntary behaviors literature, to explore certain individual characteristics that may reflect a support provider's relatedness, competence, or autonomy. Given these need satisfactions connection to voluntary behaviors, they provide a relevant lens to understand the support provider. Thus, self-determination theory provides the basis for this work as I *examine a wide range of support providers (coworkers, family, friends, etc.) and examine individual characteristics that may influence social support provision, leading to an understanding of social support influences separate from the support provider's role*. In examining such a wide range of support providers, I also expand the management social support scholarship by adding considerations beyond the workplace. While a key consideration in the psychology research on social support is an individual's friends and family, these sources are underexamined in the workplace literature. It is important, however, to understand what impacts off-the-job social support as well, especially as individual work and life continue to grow in their overlap.

Secondly, this work seeks to expand theory surrounding voluntary behaviors, specifically through a broader consideration of the self-determination theory-focused variables that impact individual volition (Gagne & Deci, 2005). Prior work has linked autonomous motivation to helping behaviors (Weinstein & Ryan, 2010), however the majority of this work has emphasized this motivation emerging due to satisfaction of an individual's need for autonomy, particularly

through prioritizing environmental or situational influences (Den Hartog & Belschak, 2012; Gagne, 2003; Güntert, 2015). I extend this literature by examining each of the three need satisfactions highlighted by Gagne and Deci (2005) as fostering autonomous motivation to help. By highlighting the impact of support provider characteristics that reflect need satisfaction in each of these three areas, I provide additional direction for volitional behavior scholars as well as for practitioners seeking another route to foster supportive behaviors.

Finally, it connects to previous research on positive relationships (Dutton & Heaphy, 2003) and highlights how such relationships may impact the provision of social support. Dutton and Heaphy (2003) have noted the power of high-quality connections in the workplace as vehicles for resource exchange, identity creation, growth and development, or knowledge transmission. Building on this, scholars have noted how both work (Colbert et al., 2016) and general relationships may impact an individual's sense of thriving or flourishing. Because social support often emerges within the context of relationships, this research provides added insights into the impact of positive relationships on individual behaviors within a dyad by highlighting how a support provider's perspective of relationship quality, their ability to engage in a behavior that enhances relational overlap (perspective taking), their knowledge of a support recipient's role, or their perception of security within relationships foster social support provision.

From this point, I will further review the social support literature, articulate my research model, and review my hypotheses with their relevant theoretical framing. Following that, I will discuss my research, including the sample and methodology. Finally, I will provide an analysis of the data and note implications for theory and practice.

Social Support

Review

As mentioned, social support has its genesis in the community psychology literature as a major factor in the stress-strain relationship. A wealth of research has affirmed the notion that social support is beneficial for reducing stressors (Beehr, 1985; Cohen & Wills, 1985; LaRocco et al., 1980) and strains (Ganster et al., 1986; LaRocco et al., 1980; LaRocco & Jones, 1978). Further, social support has been found as beneficial for cardiovascular, endocrine, and immune health (Uchino et al., 1996). To understand these processes, Barrera (1986) noted six models for how social support can impact perceptions and effects of stress as well as limit resulting distress (strains), highlighting how 1) social support may emerge following stress to help an individual manage it, 2) social support may decrease occurrences of stressful events due to its presence, and 3) social support and stress may co-occur and differentially influence experienced stress. Generally, social support aids with coping in the face of various stressors (Thoits, 1982, 1986); as individuals face issues they commonly turn to others for support and the received support may assist with self-conceptions and problem-solving (Swann & Predmore, 1985). Additionally, the received support may decrease the burden an individual faces by relieving them of workload or helping them remain emotionally strong. Within the management literature, social support aids with major stressors, particularly work-family conflict and burnout (King et al., 1995; Kossek, Pichler, Bodner, & Hammer, 2011; Lapierre & Allen, 2006; Pluut et al., 2018; van Emmerik, 2002; Zellars & Perrewe, 2001).

More recently, scholars have highlighted the benefits of social support beyond stress reduction or stress buffering. In this work, scholars have highlighted increased performance (Beehr et al., 2000; Gerdenitsch et al., 2016) as well as heightened satisfaction and well-being

(Colbert et al., 2016; Ducharme & Martin, 2000; Feeney & Collins, 2015; Lakey & Orehek, 2011; Sloan, 2012; Turner, 1981). Notably, in both the stress-focused and improvements-focused literatures, no differences between support providers have been explored outside of the role they hold. But, to whom an individual turns and that support provider's capacity and willingness to provide social support matters, as not all support providers have been found to provide the same benefits or have the same impact (Baruch-Feldman et al., 2002; French et al., 2018; van Daalen et al., 2006; Viswesvaran et al., 1999). One possible explanation for this inconsistency between support providers is the between-persons differences in characteristics. Therefore, the primary emphasis in this dissertation is on exploring support provider characteristics that influence social support provision; further, rather than focusing on general social support provision, I examine the four most common types of social support, elaborated next.

The Four Types of Social Support

Instrumental Social Support. In his pivotal work on social support, House (1981) notes four primary types of social support: instrumental, emotional, informational, and appraisal. Instrumental social support occurs when the support provider provides some tangible benefit to the support recipient (e.g. money or time). This could be a direct benefit, seen, for example, in a support provider bringing lunch to the support recipient at work or giving them money to help out with an unforeseen expense. It may also benefit the support recipient indirectly. For example, a support provider may pick up children from school or run an errand for the support recipient; this provides the support recipient with additional time and energy to focus on other activities. Alternatively, a support provider could help with work-related tasks, impacting the support provider directly by providing added work resources as well as indirectly by freeing up the support provider's psychological and physical resources to engage in other tasks. It should be no

surprise, then, that instrumental social support has been linked to performance (Beehr et al., 2000; Gerdenitsch et al., 2016) as well as decreased work-family conflict arising from time or other resource constraints (Carlson & Perrewe, 1999; Lapierre & Allen, 2006).

Emotional Social Support. Emotional social support occurs when the support provider provides feelings of care, empathy, love, or trust to the support recipient. In the social support literature, emotional social support is commonly viewed as the most relevant; indeed, almost all conceptualizations of social support include emotional support of one type or another and acts of social support most easily thought of by a layperson typically fall within this category (Gottlieb, 1978). Emotional social support can be seen in a variety of ways: the support provider can listen to a colleague vent about work frustrations and let them know that they are heard; alternatively, the support provider can express concern for a problem the support recipient is having or for how the problem is impacting them. In perhaps more romantic relationships, a support provider may provide intimacy by being close to the support recipient, or they may acknowledge workplace or life successes of the support recipient and let them know how valued they are. All of these actions likely heighten the support recipient's emotional state. Emotional social support has been linked to a variety of outcomes, including increased well-being and positive affect (Gable, et al., 2004; Morelli et al., 2015; Swann & Predmore, 1985), lower levels of burnout (Beehr et al., 1990; Kahn et al., 2006; Zellars & Perrewe, 2001), and increased job satisfaction (Baruch-Feldman et al., 2002).

Informational Social Support. True to its name, informational social support involves the sharing of information. This specifically consists of "providing a person with information that the person can use … to help themselves" (House, 1981, p. 25). This information might be something as simple as sharing a job training announcement (or a research article relevant to the

support recipient's work, as is commonly the case with this author); it may also be more socially-related, seen in the support provider introducing the support recipient to new people, thus expanding their social network. It is frequently subsumed as a type of instrumental social support (Jolly et al., 2020), however the focus on knowledge-sharing makes it conceptually distinct from the specific tangible actions described by instrumental social support. Given its inclusion within empirical work surrounding instrumental social support, we have less direct understanding of the role of informational social support, however, increases in knowledge from training programs or other knowledge transfer mechanisms have previously been linked to increased performance (Noe, 1986). Informational social support is likely to function in a similar fashion.

Appraisal Social Support. Lastly, appraisal social support, like informational social support, involves the sharing of information. Rather than being environmentally or task-focused, however, appraisal social support refers to the "communication of information relevant to self-evaluation" (House, 1981, p. 25); in this, appraisal social support may provide the support recipient with affirmations or other support that help them positively evaluate their capabilities, decisions, and self. This type of social support is different from feedback (or feedback interventions) commonly seen within the management literature in at least two ways: first, feedback interventions focus on providing information about an individual's task performance relative to goal attainment (Brown et al., 2016; Kluger & DeNisi, 1996), while appraisal social support does not have a focus on specific performance outcomes or goals. Second, feedback interventions may be positive or negative (Brown et al., 2016), while appraisal social support is overwhelmingly a positive phenomenon. Appraisal social support may be seen when a support provider reminds the support recipient of previous successes in an area in which the support recipient is currently struggling or affirms the support recipient of the wisdom or merits of an

action or decision they have made. Appraisal social support has previously been linked to positive health outcomes for individuals (Lewis et al., 2001) and is noted as a significant source of self-evaluation due to social comparison (House, 1981).

While one might note similarities between the four types of social support noted above (particularly with respect to appraisal and emotional as well as between informational and instrumental), scholars have identified each of these types as related, but distinct (Brock & Lawrence, 2009; Newcomb, 1990). Additionally, scholars have noted theoretical distinctions between these types, highlighting them as action-facilitating support (informational and instrumental) or nurturant support (emotional and appraisal) (Cutrona & Russell, 1990; Cutrona & Suhr, 1992). Lastly, empirical tests, specifically factor analyses, have revealed this noted multidimensionality of social support (Brock & Lawrence, 2009; Newcomb, 1990); in this research as well, confirmatory factor analysis of the data verified this four-factor consideration. There is some relatedness between social support types, with scholars noting that certain types of social support are likely to cooccur (e.g. individuals who provide instrumental social support to another are likely to also, by providing this tangible aid, provide the support recipient with feelings of love or warmth – emotional social support; Morelli et al., 2015). Given this discussion, I consider all four types separately, examining the impact of selected support provider characteristics on theoretically relevant types. Next, I turn to a closer examination of social support within the management literature before moving to the focal study.

Social Support within the Management Literature

Social support first emerged in the management literature as a consideration of the work environment that would help alleviate stress and resultant negative outcomes (Karasek & Theorell, 1990). The support that emerged from individuals was noted to function in a similar

fashion as perceived organizational support (Bavik et al., 2020), providing employees with a heightened sense of security and resource availability. As with the general psychological considerations of social support, scholars highlighted stress alleviation as the primary outcome of this environmental perspective of social support. As the scholarship matured, the conceptualization of social support shifted from that of an environmental variable to one more similar to the community psychology conceptualizations of perceived and received social support. In these next two sections, I review the research on the impact of perceived and received social support as well as the scant work previously done surrounding antecedents of social support.

(A brief pause for a discursion from Hobfoll (2009) who notes that most scholars have emphasized perceived social support due to the ease of gathering perceptions of social support as opposed to cataloging received social support events. However, "had we the movie of people's lives we would see that people's history of received support is the fountainhead of their perceived support" (Hobfoll, 2009, p. 100). I provide this brief aside to note that, while the majority of studies that will be reviewed below highlight perceived social support, they do, in some reflective way, shine light on received social support as well.)

Social Support Outcomes. As previously mentioned, management scholars have emphasized social support's role in alleviating stress and strain, particularly work-family conflict (Michel et al., 2011). Further, they have highlighted positive outcomes for the support recipient, notably in increased resources that impact job performance and job satisfaction. I begin this review by noting scholarship with an emphasis on alleviating stress and strain (Cohen & Wills, 1985) through both workplace- and family-based social support. Here, social support consistently results in lowered stress (Fenlason & Beehr, 1994; Ilies et al., 2011; Jones et al.,

2005; Rousseau et al., 2009; Scheck et al., 1997). Within the work-family literature, social support receives strong support for decreasing both work-to-family conflict and family-to-work conflict (Ferguson et al., 2010; French et al., 2018; Griggs et al., 2013; Kossek et al., 2011; Lapierre & Allen, 2006; Muse & Pichler, 2011; Pluut et al., 2018). Lastly, social support helps to decrease other negative workplace outcomes, including burnout (De Jonge & Schaufeli, 1998; Kahn et al., 2006; Lee & Ashforth, 1993; van Emmerik, 2002; Zellars & Perrewe, 2001), exhaustion (Bamberger et al., 2017; Halbesleben et al., 2010; Pluut et al., 2018; Uy et al., 2017), and turnover (Ehrhardt & Ragins, 2019; Ng & Sorensen, 2008; Tews et al., 2013; Tews et al., 2020).

Regarding positive outcomes, the emphasis on job performance and job satisfaction is notable within the literature. Specifically, evidence points to the importance of emotional social support stemming from job- and non-job-related communications (Beehr et al., 2000); discussing highs and lows of work with coworkers serves to positively impact job performance. Further, when supervisors provided family-related instrumental and emotional support, their subordinates demonstrated increased work engagement as well as decreased work-family conflict and subsequent performance gains (Muse & Pichler, 2011; Rofcanin et al., 2017). Also related to job performance, knowledge sharing by coworkers (linked to informational social support) enhanced task performance (Kim & Yun, 2015). Regarding more affective outcomes, a wealth of literature points to social support as a positive influence on job satisfaction, including during the onboarding process (Nelson & Quick, 1991), when work is unrewarding (Ducharme & Martin, 2000), and in general (Ng & Sorensen, 2008). Even customers can serve as support providers and provide benefits for the support recipients, improving positive affect among service employees (Zimmermann et al., 2011).

Social Support Antecedents. As mentioned, antecedents of social support have received far less attention in the literature. A few, however, have been examined, with most emphasis on attributes or efforts of the support recipient that lead to increased perception or receipt of social support. First, affective personality tends to lead individuals to perceive higher levels of social support (Iverson et al., 1998; Zellars & Perrewe, 2001). Two of the Big 5 (extraversion and conscientiousness) also positively impact perceptions of social support (Bowling et al., 2005; Chay, 1993); further, attachment orientation, a developmental perspective on how people approach relationships, may also influence perceptions of social support (Joplin et al., 1999). Finally, how an individual behaves at work may impact their receipt of social support (Bowling et al., 2005), with individuals who engage in helping behaviors also tending to be the support recipients of similar helping behaviors – social exchange (Blau, 1964) in action.

Regarding specific support provider-focused antecedents of social support, personality and reciprocity play a role (Bowling et al., 2005). Specifically, extraversion and agreeableness are both positively related to a support provider's giving of emotional social support; further, their expectations and prior experiences of reciprocity also influenced how much social support they gave. Additionally, having role overlap or integration prompted higher provision of social support among dual-career couples (Halbesleben et al., 2012); this similarity effect also emerges within organizations (McMullan et al., 2018) as well as across organizations with CEOs supporting fellow CEOs whom they recognized as members of the same "group" (McDonald & Westphal, 2011). This mirrors the influence of perceived self-other similarity in fostering empathy and altruism (Batson et al., 1981; Stürmer et al., 2006). Finally, positive affect does not just increase how an individual views the availability of social support; it also increases social support provision (Lin et al., 2017).

Purpose

As can be seen, social support provides a variety of meaningful benefits for individuals and their employers. My purpose with this dissertation is to identify specific support provider characteristics to extend theoretical and practical concerns surround social support. Through examining the characteristics of the social support source and highlighting the impact of need satisfactions on self-determined behavior, I hope to extend our understanding of how social support emerges from sources both in and outside of organizations. Further, by highlighting characteristics that may be further developed by interventions, I hope to provide guidance for organizations seeking to increase the support provision for and by their employees, thus resulting in greater functioning overall for an organization through the individual reliefs and gains stemming from social support.

Chapter 2: A Model of Support Provider Characteristics and Their Influences on Social Support Provision

Theoretical Framework

To identify relevant support provider characteristics and theorize potential relationships between these various support provider characteristics and the four main types of social support, I use self-determination theory (SDT; Ryan & Deci, 2000). This theory is highly appropriate for this investigation given its emphasis on the relationship between psychological need satisfaction and motivation, specifically of voluntary behaviors. Indeed, satisfaction of the three psychological needs articulated within SDT – relatedness, competence, and autonomy – have each been highlighted as influential in a variety of voluntary behaviors (Gagne, 2003; Roth, 2008; Weinstein & Ryan, 2010). Further, meeting these psychological needs has benefits beyond their motivational capacity to influence voluntary behaviors; a rich empirical history connects the satisfaction of the psychological needs of SDT with increased well-being (Reis et al., 2000; Ryan & Deci, 2001). Thus, providing social support may also benefit the support provider in addition to the support recipient. Below, I first provide an overview of SDT, then I further define these psychological needs, highlight support provider characteristics chosen to reflect satisfaction of these psychological needs, and provide theorizing surrounding my primary hypotheses.

Self-Determination Theory, An Overview

Self-determination theory provides a framework for understanding the personal and social factors that enable individual behavioral self-regulation and motivation (Deci & Ryan, 2008; Ryan & Deci, 2000). Within SDT, Ryan and Deci (2000) note two primary styles of motivation – controlled and autonomous – that help to direct individual behavior. For controlled motivation, external factors such as the promise of rewards or the desire to avoid punishment

drive behavior; for autonomous motivation, identification with or coherence among values and goals or interest or enjoyment in an activity provide motivation for individuals (Deci & Ryan, 1985; Gagne & Deci, 2005; Ryan & Connell, 1989). Thus, my focus here is on autonomous motivation, as social support typically emerges due to one's care for and beliefs about another (Feeney & Collins, 2003), reflecting the interest the support provider may take in helping another. As noted by Weinstein and Ryan (2010), autonomous motivation and autonomy need satisfaction are distinct concepts that reflect a motivational state and the experience of volition respectively. Satisfaction of the three basic psychological needs (relatedness, competence, and autonomy) help to facilitate this autonomous motivation. Put another way, when individuals experience these need satisfactions, they tend to act freely, drawing on their sense of self, personal values, and individual interests to guide their behavior (Gagne & Deci, 2005). Further, these need satisfactions also positively impact an individual's continuance in this behavior (Cerasoli et al., 2014); as individuals find a task to be more enjoyable or compatible with their self-concept, they are more likely to participate and continue their work on that task. Lastly, as individuals experience more autonomous motivation surrounding a task, they frequently exert more effort towards accomplishment of that task. Each of these experiences can be linked back to the autonomous motivation that arises due to experienced feelings of relatedness, competence, and autonomy.

In Figure 1, I provide the main model for my research which depicts relationships between the support provider characteristics described below and social support provision. It identifies characteristics of the support provider that may influence the frequency of provision of a particular type of social support. Next, I note the relevance of my selected support provider characteristics within the SDT framework and review my hypothesized relationships in further

depth. As previously noted, for clarity here, I use the term ***support provider*** when referring to the individual who is providing social support and the term ***support recipient*** when referring to the individual who is the target of the social support. Further, although previously discussed, for ease of reference, I include Table 1 here to provide definitions and examples of each of the four types of social support under consideration (instrumental, emotional, informational, and appraisal).

Individual Components of Self-Determination Theory, Support Provider Characteristics, and Their Influence on Social Support Provision

Relatedness. Relatedness refers to the need for individuals to experience satisfying or supportive social relationships (Stone et al., 2009). This is commonly felt when an individual feels connected to or cared for by another (La Guardia et al., 2000). These perceptions play an important role in actions that are social in nature (e.g. team sports, volunteering, and work teams) (Vallerand, 2000). Of importance for this work, empirical evidence has been found for relatedness satisfaction influencing prosocial behaviors (Weinstein & Ryan, 2010) as well as continued seeking out of similar prosocial experiences (Moller et al., 2010). This connection to voluntary behaviors seems to emerge due to the notion that as people develop relationships with others (or see relationships improve or new connections emerge), they tend to feel more intrinsic motivation with regards to those behaviors that initially sparked these relational benefits and thus experience increased persistence and intensity of motivation (Cerasoli et al., 2014).

Specifically related to helping behaviors such as social support, relatedness may drive this social support due to the empathic concern that it fosters for another (Settoon & Mossholder, 2002) as well as increased positive affect towards an individual (Duarte et al., 1994; Judge & Ferris, 1993; Venkataramani & Dalal, 2007). In this work, I highlight two possible support provider characteristics that represent their feelings of relatedness and are hypothesized to drive

social support through these mechanisms: *relationship quality* and *perspective-taking*. Here, I discuss each relatedness-focused characteristic and develop hypotheses on their influence on social support provision.

Relationship Quality. One of the primary ways in which individuals experience relatedness is through having relationships with others. Through relationships, individuals may provide learning, energy, and enrichment to one another (Ragins & Dutton, 2007); in this, relationships help to satisfy individual's need to belong (Baumeister & Leary, 1995) and to meet their desire for intimacy and interdependence (Brewer & Roccas, 2001; Sluss & Ashforth, 2007). The effectiveness and success of a relationship in meeting these needs is often indicated by an individual's views of relationships quality, thus I view *relationship quality* as one way to represent relatedness and examine the influence of a support provider's relationship with the specific support recipient target. To be as inclusive of a wide variety of dyadic relationships, I take a broad view of relationship quality and define it as the *essential goodness of a relationship* (Brock & Lawrence, 2010; Norton, 1983). In this view, relationship quality serves to capture several features that scholars have noted as indicative of positive relationships (e.g. satisfaction, trust, closeness, respect). As individuals experience higher levels of relationship quality with others, their need for relatedness is met.

As mentioned, relationship quality facilitates voluntary behaviors. Indeed, Dutton and Heaphy (2003) note that a high-quality connection with another strengthens the degree of connectivity between the individuals; the resultant feelings of positive regard and mutuality then prompt positive actions, likely due to an increased intrinsic value of the relationship (Settoon & Mossholder, 2002). Further, interpersonal relationship scholars have noted that close relationships are often key influences of interpersonal behavior (Reis et al., 2000); in this,

relationship quality or satisfaction with one's work and colleagues have been linked to helping (Anderson & Williams, 1996), caregiving (Feeney & Collins, 2003) and organizational citizenship behaviors (Bettencourt et al., 2001; Podsakoff et al., 2000; Smith et al., 1983). Examining specific workplace dyadic interactions, leader-member exchange (LMX, Graen, & Uhl-Bien, 1995) and coworker relationship scholars have noted a connection between relationship quality and positive outcomes (Dutton & Ragins, 2007; Rousseau & Ling, 2007). LMX research has highlighted the impact of positive LMX on positive behavior outcomes, including job performance and OCBs (Dulebohn et al., 2012; Ilies et al., 2007; Martin et al., 2016), as well as attitudinal outcomes, including commitment and job satisfaction (Dulebohn et al., 2012). Regarding other, less hierarchical relationships, the extant literature has noted how having higher quality relationships influences job satisfaction and affective commitment (Venkataramani et al., 2013), psychological safety (Carmeli et al., 2009), and flourishing (Colbert et al., 2016). With regards to social support, however, relationship quality has been frequently overlooked (Fincham & Bradbury, 1990), with most scholars modeling the mere presence of a relationship or marriage as enough to drive social support provision. It is safe to say that individuals vary in the levels of relationship quality they experience with others, thus it is possible for someone to participate in a relationship, but not be driven to provide any social support; understanding the relationship quality-social support connection in more depth is crucial. As mentioned, the quality of one's relationship with another will influence how they act towards the other due to the empathic concern for or heightened affect towards the other; this will emerge as individuals who experience higher relationship quality provide higher levels of instrumental, emotional, and appraisal social support.

Relationship Quality and Instrumental Social Support. Individual's evaluations of relationships and the resultant affect from these evaluations frequently influence behavior (Berscheid, 1994; Young & Perrewe, 2000). With regards to instrumental social support, I note that higher levels of relationship quality frequently lead to more positive feelings or regard for the support recipient (Colbert et al., 2016; Ryan & Deci, 2001), thus it is likely that these evaluations will prompt positive behaviors. Indeed, positive feelings and regard are associated with helping behaviors (Bartlett & DeSteno, 2006; Carlson et al., 1988; Isen & Levin, 1972; Keltner & Haidt, 1999), thus relationship quality should foster higher levels of tangible assistance (e.g. instrumental social support). In simple terms, individuals tend to do things with and for people that they like (Lawler et al., 2014). Given this, I expect:

Hypothesis 1a: Relationship quality will be positively related to provision of instrumental social support.

Relationship Quality and Emotional Social Support. As mentioned, individuals who experience higher relationship quality with another are likely to consider the other person positively. It is unlikely that high relationship quality simply emerges; when considering the different lenses through which an individual evaluates a relationship (e.g. trust, closeness, respect), it is evident that a support provider's perception of relationship quality depends, at least in some part, on the other's behaviors. Because of this, relationship quality may influence social support provision because of social exchange (Blau, 1964; Cropanzano & Mitchell, 2005). In this, we see a level of reciprocal interdependence arising, wherein the support provider provides emotional social support due to the emotional warmth that they themselves feel from the high relationship quality. For example, while a common trope within situational comedies is the unreciprocated "I love you", it is less likely that such a statement occurs without a response in

real life. In the present model, feeling that another person trusts and respects the support provider is likely to lead them to reciprocate in a similar fashion to echo back and engender equivalent feelings for trust and respect. The most likely way for this to emerge is through the provision of emotional social support, letting another know they are cared for and considered well. Thus, I expect:

Hypothesis 1b: Relationship quality will be positively related to provision of emotional social support.

Relationship Quality and Appraisal Social Support. Lastly, the impact of relationship quality on appraisal social support can be explained through positive appraisals and attributions that arise when the support provider considers the relationship they have with a potential support recipient. As previously discussed, high relationship quality fosters feelings of positive regard and mutuality (Dutton & Heaphy, 2003) as well as increased validation (Clark et al., 1986). Indeed, the support provider may attribute the positive relationship they have with the support recipient to various positive characteristics of that support recipient. These positive attributes may be salient as the support provider considers how best to help the support recipient, making them more easily voiced. Further, following the principle of reciprocity (Blau, 1964), the support provider may feel more compelled to offer positive affirmation of the support recipient in response to the positive subjective feelings they experience in the relationship. As a result of the positive attributions and desire to reciprocate positive affect, I expect:

Hypothesis 1c: Relationship quality will be positively related to provision of appraisal social support.

Perspective Taking. Another way in which individuals can experience relatedness is through engaging in perspective taking. Through placing themselves in another's shoes

(Galinsky et al., 2005), a support provider can develop empathy and feel a sense of connection with the target of their perspective taking; indeed, initial theorizing around perspective taking highlights its importance for fostering and building social bonds. Formally, *perspective taking* refers to the "active cognitive process of imagining the world from another's vantage point or imagining oneself in another's shoes to understand their visual viewpoint, thoughts, motivations, intentions, and/or emotions" (Ku et al., 2015, pp. 94-95); prior research has shown between-person variation in perspective taking capacities (Andrey-chik & Migliaccio, 2015; Davis, 1983). Perspective taking helps individual develop a more empathic connection with another individual by seeing things from their point of view; the more that this occurs, the deeper the self-other connection (in which the perspective taker conceptualizes the target as part of themselves) becomes (Betancourt, 1990; Davis et al., 1996; Galinsky et al., 2005; Oswald, 1996). In this, perspective taking reflects a cognitive process that is different from the affective nature of empathy (Clark et al., 2019; Eisenberg et al., 1998; Ganegoda & Bordia, 2019); in other words, perspective taking is the action an individual may perform, while empathy notes the feelings and understanding that may arise from this action. As an individual works to understand another, they can increase the felt connection they have with that person, leading me to emphasize a support provider's perspective taking as influential in fostering feelings of relatedness. Indeed, prior work has shown that individuals who engage in perspective taking are often more considerate and understanding of others (Goldstein et al., 2014).

Perspective taking influences a variety of behaviors, generally due to increased affective or cognitive responses. The affective response is commonly depicted as empathic concern (Coke et al., 1978), which is proposed to increase the likelihood an individual will act to reduce another's need or distress (Underwood & Moore, 1982). In addition to the empathic concern that

arise from perspective taking (Eisenberg, 2000), perspective taking heightens an individual's cognitive responses. Here, I note the increase in cognitive closeness and cognitive complexity (Ku et al., 2015). Specifically, cognitive closeness highlights the self-other connection noted above (Davis et al., 1996) in which the perspective taker becomes more likely to see their own characteristics in the target, with an emphasis on more positively-valenced traits. Additionally, by engaging in the mental exercise of perspective taking, an individual's cognitive frame-of-reference and processing ability are heightened (Ku et al., 2015; Todd et al., 2012). A variety of positive interpersonal behaviors have been observed as a result of the affective and cognitive responses stemming from perspective taking. Notably, perspective taking helps individuals relate more effectively with one another (Krauss & Fussell, 1991; Parker et al., 2008; Williams, 2007) by enhancing their communication ability and experienced trust within relationships. In this, scholars have highlighted perspective taking as a main factor in one's willingness to engage in caregiving behaviors (Collins et al., 2010; Mikulincer, 2006; Shaver et al., 2010). Moving outside of the home, perspective taking helps foster care and compassion for another person, leading to increased volunteerism behavior (Batson, 1998; Davis, 1996; Dovidio et al., 1990; Omoto et al., 2010; Penner & Finkelstein, 1998). Additionally, a wealth of social psychology experiments have linked induced perspective taking with various helping behaviors in lab settings (Coke et al., 1978; Galinsky & Moskowitz, 2000; Parker et al., 2008; Stephan & Finlay, 1999; Underwood & Moore, 1982; Vescio et al., 2003); continuing this focus on helping, within organizations, perspective taking commonly influences OCBs (Bettencourt et al., 2001; Parker & Axtell, 2001; Settoon & Mossholder, 2002). Because individuals differ in their perspective taking ability, I note that it should be influential in predicting differences between individuals in their social support provision. Given the increased ability to relate to and with another individual

that emerges due to perspective taking, I expect that the support provider will demonstrate affective- and cognitively-based behaviors in the form of emotional, informational, and appraisal social support.

Perspective Taking and Emotional Social Support. The empathic concern and self-other connection resulting from perspective taking both likely heighten the provision of emotional social support. As the support provider takes the perspective of another, they will grow in their understanding and sharing of that person's emotions (Cohen & Strayer, 1996; Peloquin & LaFontaine, 2010). Having this understanding may help the support provider foster closer relational bonds; to use social support phrasing, they become more willing to communicate feelings of care and respect. Additionally, as noted, perspective taking frequently results in a self-other connection (Davis et al., 1996; Galinsky & Moskowitz, 2000; Goldstein et al., 2014) that increase feelings of oneness. In this cognitive process, the support provider commonly experiences more feelings of closeness (Peterson et al., 2015) as well as higher levels of positive attitudes and warmth towards the target (Galinsky & Moskowitz, 2000). With regard to emotional social support, these felt positive attitudes would be expressed as the support provider relays feelings of appreciation or love. Thus, the increased empathic concern and cognitive closeness resulting from perspective taking lead me to expect:

Hypothesis 2a: Support provider's perspective taking will be positively related to provision of emotional social support.

Perspective Taking and Informational Social Support. Perspective taking is also likely to increase the support provider's giving of informational social support. Given the cognitive mechanics involved in information provision, it is logical that heightened cognitive closeness and cognitive complexity will fuel informational social support. The very act of putting oneself

in another's place gives rise to the consideration of "what would I do" or "what would I need to know" on the part of the support provider (Eisenberg et al., 1998; Ganegoda & Bordia, 2019). This consideration fuels how the support provider lends a hand, with those who more frequently engage in perspective taking being more able to determine needed information and more willing to offer it. Further, as perspective taking fuels higher cognitive complexity, support providers who engage in this process are able to consider and recall more relevant information for a given situation (Todd et al., 2012). These mutually reinforcing cognitive outcomes both aid and push the support provider to offer informational social support; the consideration of information needed in a situation as well as the gains in overall thinking (Epley et al., 2004) lead me to expect that:

Hypothesis 2b: Support provider's perspective taking will be positively related to provision of informational social support.

Perspective Taking and Appraisal Social Support. Finally, perspective taking is likely to foster greater appraisal social support provision following similar mechanisms to those proposed to influence emotional social support. Most importantly, the self-other connection that perspective taking facilitates will heighten the positive view that the support provider has of a support recipient. This may be due to the nature of perspective taking individuals to ascribe personal or self-descriptive characteristics to the target of their perspective taking; usually these characteristics are positively-valenced (Davis et al., 1996), thus fostering a positive image of the other for the support provider. Similarly, perspective taking has been shown to increase liking for the target (Davis et al., 1996; Galinsky et al., 2008; Ku et al., 2015) and pleasure at the achievements of the target (Aron et al., 1991), providing further support for the idea that a

support provider who more frequently engages in perspective taking will have and provide higher levels of positive appraisals to the support recipient. Thus, I anticipate that:

Hypothesis 2c: Support provider's perspective taking will be positively related to provision of appraisal social support.

Competence. Competence reflects an individual's need to be effective and to manage various challenges (Verbruggen et al., 2015); it is commonly felt when one attains or exceeds a personal standard in their performance (Sheldon et al., 2001; Ryan & Deci, 2000). Of note, competence has been found to be strongly correlated with prosocial behavior (Gagne, 2003) as well as engagement with and continuation in volunteering (Haivas et al., 2013). Here, feelings of competence are thought to influence these behaviors through the autonomous motivation that arises from finding the behaviors in line with their sense of self. This is likely linked to the experienced success and resultant feelings of self-worth that emerge from such behavior. Further, as social support reflects personal initiative, the competence that arises due to role knowledge and general self-efficacy can fuel the support provider's behavior through instilling can-do motivational states (Parker et al., 2010). This type of motivation arises from individuals believing they are capable of engaging in an action, that the action is under their control, and that the action is worth doing.

In examining its influence on helping behaviors such as social support, support providers who experience high feelings of competence may act in a more supportive manner due to increased feelings of capability, control, and value in the action (Parker et al., 2010), particularly seen in a heightened belief that the support provider 1) has the capacity to help and 2) can make a difference through their actions (Reeve et al., 2008). Further, competence is positively associated with self-esteem and vitality (Patrick et al., 2007), giving rise to the notion that

individuals whose need for competence is satisfied are likely to feel more secure and energized to help. Conversely, individuals who receive internal or external feedback implying incompetence may demonstrate a decrease in intrinsic motivation and focus only on those behaviors prescribed for them (Deci & Ryan, 1980). Thus, feelings of competence may be a crucial ingredient for propelling support providers to engage in self-directed and autonomous behaviors such as social support. In this work, I examine two possible support provider characteristics that reflect a support provider's feelings of competence and are hypothesized to drive social support through the above mechanisms: *role knowledge* and *general self-efficacy*. Here, I discuss each competence-focused characteristic and develop hypotheses on their influence on social support provision.

Role Knowledge. Role knowledge reflects satisfaction of an individual's competence needs by providing them with the belief that they know how to contribute to a given set of tasks in an impactful way. Prior work on role knowledge has tended to emphasize the role holder, with the seminal work of Kahn and colleagues (1964) noting that individual performance of a role depends on one's knowledge of (1) expectations of the role, (2) how to best meet these expectations, and (3) how fulfilling the role impacts oneself and others. In the absence of this knowledge (termed role ambiguity by Rizzo et al., 1970), individuals tend to have lower performance of job- and non-job-related functions (Podsakoff et al., 2000; Tubre & Collins, 2000), diminished confidence in one's capabilities (Pearce, 1981) and lower job satisfaction (Jackson & Schuler, 1985). While less scholarship exists that focuses specifically on role knowledge, scholars have spoken to the cognitive benefits of understanding assigned job duties and responsibilities; as individuals have greater familiarity with their role requirements, this lessens the cognitive demands associated with coping with unfamiliarity and makes them more

able to fully enact job-related behaviors (Fried et al., 1998). To understand the support provider's felt competence reflected by role knowledge, I return to Kahn et al.'s (1964) perspective and define role knowledge as *the awareness and familiarity of one's role*, captured by and reflective of the two knowledge components (goal clarity and process clarity) noted by Sawyer (1992) in his extension of Kahn et al.'s work. As my emphasis is on the support provider, I take an other-focused approach that emphasizes the support provider's knowledge of the primary role of the recipient. This reflects the notion that a support provider's drive to help another is likely less driven by how the support provider understands their own role and more by how they understand the support recipient's role. For example, an administrative assistant in a hospital may have high role knowledge of their own role but be very much in the dark in regards to a nurse's role. This lack of role knowledge likely will lead them to eschew helping efforts as they do not want to "get in the way" or do something wrong. Role knowledge may emerge or be acquired in a variety of ways: a support provider may be employed in the same field or perform the same role as the support recipient, thus prompting a higher level of role knowledge due to similarities between their roles (Halbesleben et al., 2010); alternatively, a support provider may discuss the support recipient's role or interact in their workplace or with coworkers (e.g. at company-sponsored events) and thus may gain an increased understanding of what the support recipient does.

This emphasis on understanding another's role has been used within relationship and care-giving research to highlight interpersonal benefits (MacDonald et al., 2010; Pollman & Finkenauer, 2009; Suter et al., 2009). Specifically, feeling that they understand their partner is positively related to relationship well-being and interpersonal responsiveness (Pollmann & Finkenauer, 2009; Reis et al., 2004; Swann & Gill, 1997). Indeed, Reis and colleagues (2017) highlight this understanding of another as a driving factor in relational behavior towards that

individual. In the workplace, individuals with higher knowledge of another's role more frequently seek out other's contributions, respect their roles, and identify overlaps in skills (MacDonald et al., 2010). This likely makes how well a support provider understands the primary role that their "target" performs a crucial component in social support provision as it increases their feelings that they "can do" things to aid in another's role. Indeed, a small amount of research has previously linked role knowledge to supportive behaviors, highlighting that occupational similarity or working in the same organization yields increased supportive behaviors (de Grood & Wallace, 2011; Ferguson et al., 2016; Halbesleben et al., 2010). Further, in research on predictors of work-family supportive coworker behaviors, both knowledge of the coworker's tasks as well as holding similar positions in the organizations were common antecedents of these actions (McMullan et al., 2018). Role knowledge is likely to influence provision of instrumental, informational, and appraisal social support due to the can-do motivation it fosters in the support provider as they engage in social support provision.

Role Knowledge and Instrumental Social Support. Role knowledge should influence provision of instrumental social support due to the task-specific expertise that arises from understanding another's role (Nebus, 2006). Because the support provider feels they understand what the support recipient's role entails, they feel more confident in knowing what specific actions will provide tangible benefits; this confidence can be seen in two ways related to the provision of instrumental social support. First, role knowledge may give the support provider an understanding of the support recipient's tangible needs, increasing provision of instrumental social support because the support provider feels more confident in providing social support as they know what sorts of actions would be helpful. Secondly, role knowledge may increase the support provider's understanding of the support recipient's time demands (Halbesleben et al.,

2010). Instrumental social support frequently provides the support recipient with additional resources in the form of time, money, or energy; understanding the “busy seasons” of another’s life may give the support provider greater insight into needed resources, thus increasing their belief that they can make a difference. Because of this, I expect support providers who have higher knowledge of the support recipient’s role to feel more confident in their ability and motivated to provide tangible support, thus:

Hypothesis 3a: Support provider’s knowledge of the support recipient’s role will be positively related to provision of instrumental social support.

Role Knowledge and Informational Social Support. The relationship between role knowledge and informational social support is also linked to the task-specific expertise arising from role knowledge (Nebus, 2006). While I highlighted how it might energize the support provider to offer tangible resource-boosting social support (instrumental social support), I also expect it to increase the likelihood that the support provider will offer problem-solving or reframing help – informational social support. Knowing another’s role may provide the support provider with intuition that allows them to analyze and solve problems that being completely in the dark about one’s role would not. While this is more likely common in situations where the support provider and support recipient have role overlap, even when a support provider is not engaged in a similar role as the support recipient, their role knowledge may still give them a level of task-specific expertise and feelings of competence that someone with lower role knowledge may not have. When this role knowledge is held, the support provider may be able to contribute informational social support by providing knowledge that is directly applicable to the support recipient or by “talking out” problems the support recipient may be having. Indeed, prior work has suggested that being work-linked (i.e. employed in the same company) increases the

sharing of knowledge and skills between partners (Ferguson et al., 2016; Halbesleben & Wheeler, 2007). For example, a support provider-recipient dyad in which both members are managers provides a context in which each has a high level of role knowledge about the other, thus making them more likely to discuss and diagnose motivational problems among employees. When a support provider believes they have the knowledge or ability to contribute in a problem-solving discussion, this should increase their propensity to do so, thus I expect that:

Hypothesis 3b: Support provider's knowledge of the support recipient's role will be positively related to provision of informational social support.

Role Knowledge and Appraisal Social Support. Lastly, role knowledge may influence how the support provider views the support recipient and provide them with insights into key support recipient attributes or efforts that form the basis for appraisal social support. A support provider who understands the support recipient's role may feel more able to connect the support recipient's traits to their abilities to perform their role and to affirm decisions they may have made in their role. As discussed by MacDonald and colleagues (2010), knowledge of another's role is marked in part by respect for the contributions and expertise of the other. This is shared by the support provider as appraisal social support. As an example, two friends who are both parents may be more willing to provide appraisal social support to each other than a childless friend might; the childless friend may be less able to appreciate the expertise and effort that parents bring into their roles will thus be less likely to offer the encouragement another parent might. Further, they may believe that their efforts to uplift will not be received as genuine due to their lack of experience with the parenting role and will thus stay silent. Thus, role knowledge provides the support provider with additional information and confidence that they can use it to appraise the support recipient, leading me to note:

Hypothesis 3c: Support provider's knowledge of the support recipient's role will be positively related to provision of appraisal social support.

General Self-Efficacy. While role knowledge reflects competence in a very specific area, general self-efficacy highlights a more global sense of confidence in one's faculties. Bandura (1982) notes that "self-appraisal of operative capabilities" (p. 122) may determine how people behave; in this, we see how one's belief in their abilities to accomplish tasks influences how they behave towards those tasks (in terms of effort and persistence in that effort; Bandura, 1977, 1986), both at work and elsewhere (Gist, 1987; Judge & Bono, 2001; Stajkovic & Luthans, 1998). In this research, I emphasize general self-efficacy, defined by Chen et al. (2001) as *internal beliefs about one's abilities to accomplish tasks*. This focus on general self-efficacy is intentional; an individual's perceptions of their skills as well as the self-esteem that may arise from feeling capable overall have been found to influence other helping behaviors. Indeed, prior work on related concepts such as caregiving (Feeney & Collins, 2001), extra-role efforts for improvement (Morrison & Phelps, 1999), and proactive behaviors at work (Raub & Liao, 2012; Speier & Frese, 1997) highlight the importance of self-efficacy in providing cognitive-motivational processes stemming from an individual's perceived capabilities, lending added support to its potential as a support provider characteristic. Further, while social support-specific types of self-efficacy exist (e.g. social support efficacy beliefs; Coyne & Bolger, 1990; Feeney & Collins, 2001; Neff & Karney, 2005), these behavior-based conceptualizations may help with the prediction of overall social support provision but do not provide assistance in predicting specific social support types. Thus, in this research, I examine general self-efficacy in an effort to understand how beliefs in one's overall capabilities influence their provision of social support. Specifically, general self-efficacy helps foster the can-do motivation (Parker et al., 2010) that can

allow the support provider to self-regulate towards helping behaviors (Bandura, 1997). Notably, however, I hypothesize that general self-efficacy's influence on social support is limited to those behaviors that assist with or reflect on the support recipient's task-performance; feelings of general self-efficacy are less likely to activate the relational closeness that is linked to emotional social support (Feeney & Collins, 2003). Below I describe the links between general self-efficacy and the provision of instrumental, informational, and appraisal social support.

General Self-Efficacy and Instrumental Social Support. First, I expect general self-efficacy to be positively related to the provision of instrumental social support. Given that instrumental social support involves tangible actions, individuals who believe that they can accomplish a wide range of tasks is likely to perceive that they are able to engage in such supportive behaviors. Further, individuals with higher general self-efficacy are likely to believe that they have the available and needed time or energy resources necessary for them to engage in instrumental social support. For example, a spouse with higher general self-efficacy may believe that they have the ability to accomplish both their work tasks as well as household tasks that support their partner. Additionally, support providers with higher general self-efficacy are likely to experience a can-do motivation as they believe they can be successful in support provision; they may have greater confidence that the tangible assistance they provide will be helpful, thus driving greater demonstration of instrumental social support. Given this, I expect:

Hypothesis 4a: General self-efficacy will be positively related to provision of instrumental social support.

General Self-Efficacy and Informational Social Support. Individuals who provide informational social support offer insights that help with problem-solving or information to further their target's efforts. It is likely that the feelings of confidence arising from general self-

efficacy will positively influence the support provider's efforts in giving informational social support. This is in line with prior work linking general self-efficacy to voice behavior (e.g. speaking up for improvement in an organization) (Duan et al., 2014). I argue that general self-efficacy provides individuals with the belief that they have knowledge to contribute to a given situation, thus increasing their willingness to offer it. This, again, reflects the can-do motivation driving proactive behaviors, prompting the support provider to act on this motivation feeling that they have information to share and do so. For example, a coworker with high general self-efficacy may feel justified in offering suggestions to another coworker and is likely to do so with greater frequency than a coworker with lower general self-efficacy who is less sure of the information they hold or who devalues the advice they can provide. Thus, given the belief that an individual has information to offer and can make a difference in offering it, I expect:

Hypothesis 4b: General self-efficacy will be positively related to provision of informational social support.

General Self-Efficacy and Appraisal Social Support. While having higher general self-efficacy beliefs may prompt greater levels of the aforementioned action-based social support types, I expect that it may negatively influence a support provider's offering of appraisal social support. General self-efficacy has been linked to increased feelings of self-esteem (Chen et al., 2004; Gardner & Pierce, 1998; Sherer et al., 1982). While it may be natural to assume that individuals with higher self-esteem to "share the wealth" and seek to boost another's self-esteem, extant literature has found that high self-esteem individuals actually tend to "put down" others, while individuals with low self-esteem seek to build them up (Schutz & Tice, 1997; Vohs & Heatherton, 2001). I argue that individuals who have higher levels of general self-efficacy may "look down" on someone who is in need of the assurance fostered by appraisal social support,

perceiving the support recipient as not needing or unworthy of positive appraisals and thus be less likely to offer it. Thus, I expect:

Hypothesis 4c: General self-efficacy will be negatively related to provision of appraisal social support.

Autonomy. Finally, I turn to the impact that feeling a sense of volition in one's activities may have on providing social support. Autonomy emphasizes an individual's desire to initiate their own action and choose activities consistent with their integrated sense of self (Chirkov et al., 2003; Ryan & Connell, 1989); it is felt when one feels the ability to "express and follow [their] own ideas and plans" (Hammond & Overall, 2015, p. 1185). In this perspective, I highlight the support provider's sense of agency, volition, and initiative (Patrick et al., 2007) as reflective of their autonomy. A wealth of studies has highlighted the impact of experienced autonomy on positive and voluntary workplace behaviors. Briefly, when individuals are provided autonomy in the workplace, they tend to be more self-motivated (Deci et al., 1981; Grolnick & Ryan, 1989), to perform at higher levels (Benware & Deci, 1984; Baard et al., 2004), and to be more engaged at work (Baard et al., 2004). At the core of each of these outcomes is the notion that when individuals are able to choose their own path, they tend to demonstrate stronger and more persistent motivation in their given behaviors (Gagne & Deci, 2005).

With regards to providing social support to a colleague or friend, it is important to consider the volitional and proactive nature of this behavior when considering the impact of autonomy on the support provider's likelihood of engaging in it. Prior research has highlighted autonomy as an antecedent of proactive behavior as it fosters a sense of self-determination (Den Hartog & Belschak, 2012; Grant & Ashford, 2008). As individuals feel more in control of their choices, they tend to experience increased motivation (Sheldon et al., 2003). The two support

provider characteristics I have selected to represent the support provider's feeling of autonomy should provide direction for this motivation towards provision of social support. Thus considering an individual's secure attachment orientation and their prosocial identity may provide added insights into how a sense of autonomy may fuel social support provision. Here I review these final two support provider characteristics and relevant hypotheses.

Secure Attachment Orientation. Attachment theory can be traced to the work of Bowlby (1969), who examined how childhood relationships with parents or other caregivers can be characterized and understood as influences of behavior. In this perspective, differential responses by significant others to one's needs can influence subsequent interpersonal relations and affect regulation (Mikulincer et al., 2001), leading to individuals differing in how they perceive security and support from others. For children, when caregivers were dependable, they tend to form secure attachment; when caregivers were unpredictable or standoffish, an insecure attachment forms (Petriglieri & Obodaru, 2019). With regard to this insecure attachment, scholars noted two dimensions: attachment-related avoidance and attachment-related anxiety (Brennen et al., 1998; Mikulincer et al., 2005). The avoidance dimension highlights how an individual trusts/distrusts others, resulting in their maintenance of relational distance from them; the anxiety dimension focuses on how an individual perceives other's availability to help them (Mikulincer et al., 2005). Based on their scores on these dimensions, individuals can be classified as holding an anxious attachment orientation (i.e. they worry that others are unavailable when they need them) or an avoidance attachment orientation (i.e. they distrust the goodwill of others). Finally, individuals with low scores on both dimensions reflect a secure attachment orientation (i.e. they are confident in other's responsiveness and supportiveness).

Later work extended this influence to behaviors during adolescence and adulthood with similar categorizations of attachment (Hazan & Shaver, 1987; Yip et al., 2018). In adulthood, working models about relationships influence individual's motivations and behaviors (Harms, 2011; Littman-Ovadia et al., 2013; Mikulincer & Shaver, 2007). Attachment orientation can serve as a predictor of positive self-conceptions and curiosity (Mikulincer et al., 2005) as well as proactivity and ethical decision making (Chugh et al., 2014; Wu & Parker, 2017; Yip et al., 2018). Specifically related to social support provision, within romantic relationships, attachment orientation has been commonly invoked as a personal characteristics that may drive caregiving and helping behaviors (Collins et al., 2010; Mikulincer & Shaver, 2009; Mikulincer et al., 2005); at work, attachment orientation has been linked to OCBs and instrumental helping behaviors (Geller & Bamberger, 2009; Harms, 2011; Little et al., 2011). While the majority of work in the management literature has tended to emphasis anxious and avoidant attachment styles (e.g. Geller & Bamberger, 2009; Richards & Schat, 2011), doing so overlooks the feelings of autonomy arising from experiencing secure attachment. Thus, I seek to extend the workplace attachment orientation literature by emphasizing secure attachment orientation as reflective of feelings of autonomy in this exploration of social support provision. Individuals who have a secure attachment orientation feel more freedom in their actions and less dependence on or anxiety in relationships to others (Collins & Read, 1994); they tend to have higher levels of self-worth and are able to foster and maintain more positive relationships (Littman-Ovadia et al., 2013). The "secure base" fostered by this view of relationships provides opportunities for individuals to explore their environment and to act with more freedom (Petriglieri & Obodaru, 2019; Yip et al., 2018), thus further supporting the notion that secure attachment fosters feelings of autonomy. I expect secure attachment to be related to provision of instrumental, emotional,

and appraisal social support due to the increased resource availability and heightened empathic capacity developed by a sense of secure attachment (Mikulincer et al., 2005; Simpson et al., 2002). Further arguments for each of these social support types follow.

Secure Attachment Orientation and Instrumental Social Support. Individuals who have a sense of attachment security have less of a need to expend cognitive and behavioral resources worrying about self-protection or self-enhancement (Mikulincer & Shaver, 2005; Mikulincer et al., 2005). Indeed, Mikulincer and colleagues (2005) note that "only a relatively secure person can easily perceive others not only as sources of security and support, but also as suffering human beings who have important needs and therefore deserve support" (p. 818). In other words, when a support provider feels less worry about their own interpersonal needs, they have more energy to expend to meet others' needs. This may be seen in the social support process as individuals with secure attachment orientations draw on their internal resources to provide tangible help to others. Indeed, individuals with a sense of attachment security tend to display higher levels of confidence that others will help them; this perception of resource availability will in turn positively influence the support provider's decision to help (Lin et al., 2017). Thus, because of the coping resources and increased willingness to attend to another's needs prompted by a secure attachment orientation, I expect:

Hypothesis 5a: Secure attachment orientation will be positively related to provision of instrumental social support.

Secure Attachment Orientation and Emotional Social Support. Individuals with secure attachment orientation tend to have more positive views of themselves and others (Brennan et al., 1998; Mikulincer & Shaver, 2015; Yip et al., 2018). One way in which these positive views may emerge is through the provision of emotional social support as individuals are led to share

feelings of closeness and care due to holding those views. Further, as above, having a secure attachment orientation means the support provider does not need to spend as many resources on self-protective behaviors; while this freed up the support provider with physical energy in the case of instrumental social support, this also may allow them to be more responsive and demonstrative of care (i.e. providing emotional social support) to the support recipient (Feeney, 1996; Mikulincer et al., 2001; Reis et al., 2004). Finally, because of their increased ease of experiencing closeness within relationships as well as increased empathic capacity (Main, 1991), support providers who report secure attachment orientation are able to express emotions more easily (Hazan & Shaver, 1987; Mikulincer et al., 2005), which should lead to higher levels of emotional social support. As individuals with secure attachment orientations experience an increase in emotional resources and connectedness with others, I expect:

Hypothesis 5b: Secure attachment orientation will be positively related to provision of emotional social support.

Secure Attachment Orientation and Appraisal Social Support. Finally, I expect support providers with stronger secure attachment orientations to be more likely to offer positive appraisals and affirmation to the support recipient. First, individuals with secure attachment orientations report higher levels of confidence in favorable evaluations from others (Hazan & Shaver, 1990; Richards & Schat, 2011). Feeling positive evaluations from others may spark feelings of reciprocity in which the support provider feels more motivated to share similar favorable evaluations with others. Additionally, as with the provision of emotional social support, individuals with secure attachment orientations frequently hold positive views of themselves and others (Brennan et al., 1998; Yip et al., 2018); when acted upon, these positive views are likely to heighten provision of appraisal social support. Finally, prior work has

highlighted the influence of secure attachment on provision of reassurance during difficult times (Simpson et al., 1992); this assistance was due to increased empathy of another's situation and is a prime example of what happens during appraisal social support. Thus, individuals who have secure attachment orientation are more likely to see others in a positive light and be able to experience empathy that allows for the sharing of encouragement with others leading me to note:

Hypothesis 5c: Secure attachment orientation will be positively related to provision of appraisal social support.

Prosocial Identity. The final support provider characteristic I examine in this work is prosocial identity. While a common assumption within much literature on motivation is the notion that individuals are self-interested and selfish, a wealth of literature has recently commented on the driving force of being other-oriented (Korsgaard et al., 1997). Crucial within this is an individual's identity, often highlighted as their personal answer to the question "who am I?" (Stryker & Burke, 2000). Individuals can answer this question in a variety of ways and through a myriad of lenses (Tajfel & Turner, 1986); because I am focused on a characteristic that may drive individual helping behavior, I highlight prosocial identity, defined as "*the aspect of the self-concept that is concerned with helping*" others (Grant et al., 2009). Individuals who hold a prosocial identity view themselves as giving and caring individuals who focus on helping and benefitting others (Grant et al., 2008; Grant et al., 2009). Identity provides another reflection of met autonomy needs; in this, it is important to note that individuals frequently act to be consistent with their sense of self (Blasi, 1983, 2004). Thus, action stems from an individual's sense of self, rather than any external imposition; this is a core feature of autonomy need satisfaction, reflecting the self-chosen or self-endorsed aspect (Chirkov et al., 2003; Grant, 2008; Hammond & Overall, 2015).

With regards to prosocial identity specifically, I expect support providers for whom a prosocial identity is more salient to engage in the more tangible types of social support – instrumental and informational. Prior work has linked prosocial identity to increased organizational commitment to companies that engage in prosocial behaviors (Grant et al., 2008) as well as to increased OCBs and caring behaviors (Cha et al., 2014; David et al., 2020). Further, prosocial identity has been shown to increase an individual's engagement in volunteer activity (Finkelstein et al., 2005). Given its connection to other helping behaviors, it seems natural that holding a prosocial identity would similarly influence social support provision, as individuals take an other-focused orientation that minimizes their self-interested processing of the costs/benefits of helping (Meglino & Korsgaard, 2004). Indeed, it is possible that such prosocial identity may be a significant influence in this area, as prior research from Grant and colleagues (2008) notes that many employees "describe constructing and maintaining these prosocial identities as one of their most important motives, values, and guiding principles in life" (p. 900). To understand its influence on social support, I draw on the self model of action (Blasi, 1983, 2004). Originally developed to understand moral functioning, one aspect of this model is the notion that central individual identities are rooted into one's being and push individuals to be true to that identity in their actions (Blasi, 1983). This idea has held true for moral identity's influence on moral behavior (Aquino & Reed, 2002; Hardy, 2006), and I believe it will hold for prosocial identity and its influence on instrumental and informational social support provision.

Prosocial Identity and Instrumental Social Support. As noted, individuals who hold higher levels of prosocial identity tend to engage in helping behaviors (e.g. OCBs, caring; Cha et al., 2014). In general, these helping behaviors tend to be more action-focused, giving money to support a cause, lending a hand at work, or volunteering. This drive to benefit others stems from

seeing oneself as a helping or caring person (Grant et al., 2009), thus acting to benefit another is seen as more in line with their personal values and provides reinforcement for this self-image (Miller et al., 2012). With regards to instrumental social support, I expect a similar relationship. When a support provider sees themselves as a caring or giving person, they will seek out ways to confirm and affirm that identity in themselves (Blasi, 1983). Instrumental social support provides a very tangible way for this to happen; because it involves **doing** things that help another individual (e.g. assisting with a situation or providing a tangible item), it offers an instantaneous confirmation of the support provider's prosocial identity. Put more simply, when a support provider has a personal view that they are a helping and caring individual (i.e. holds a prosocial identity), they will act to fulfill this view. Thus, I expect:

Hypothesis 6a: Prosocial identity will be positively related to provision of instrumental social support.

Prosocial Identity and Informational Social Support. In a similar fashion, prosocial identity may increase a support provider's efforts to engage in the other type of action-oriented social support: informational social support. As previously discussed, individuals with prosocial identity want to help to verify their self-concept. While lending a hand or time may be the most directly confirming approach, support providers may also seek to act from their prosocial identity through offering information to their target. Prosocial identity can prompt a more collective view of the world (Lanaj et al., 2016; Lester et al., 2008), thus the support provider may be more likely to view sharing information they hold with another as a beneficial act. As an example, a student who freely shares resources (e.g. found articles, notes) with their fellow classmates confirms their identity as a helping person. Following the identity confirming logic from before, I also expect:

Hypothesis 6b: Prosocial identity will be positively related to provision of informational social support.

Chapter 3: Main Study

Procedure

I recruited participants for this study from four separate populations. Owing to the unique timing of data collection (during the COVID-19 pandemic) as well as the increased numbers needed to ensure matched pairs, approaching these different entities allowed for an appropriate number of participants for data analysis. Additionally, casting a wider net for sample populations yielded a more diverse set of both support providers and support recipients that should help provide results that are more generalizable to a wider population.

The design for this study required responses from pairs of individuals described below – a support recipient and a support provider – and for survey responses from both paired individuals. The support recipients that participated in this study were recruited from the following: a subset of Master of Business Administration (MBA) and Master of Accounting (MAcc) program alumni and students, employees of rural hospitals in the Midwest, and employees of an information technology department at a Midwest university; a summary of organizations and participants contacted can be found in Table 2. The support providers that participated in this study were recruited by asking support recipients to nominate a support provider with whom they work and one outside of work. Participants were compensated $5 in Amazon gift cards for completion of one (support provider) or two (support recipient) surveys.

Organization outreach and participant recruitment was conducted as follows. First, I worked with the MBA and MAcc programs at a public university in the Midwest to recruit recent alumni from their program. Following all waves of data collection and matching of respondents (support providers with their corresponding support recipient), I had 36 matched pairs. A second data collection was conducted following outreach to member organizations of a rural hospital

network in the Midwest. Two organizations (combined n = 287) agreed to participate in this research; after matching, I added an additional 37 observations. Finally, in partnership with human resource administrators at a public university in the Midwest, I surveyed information technology employees (original n = 233); following matching, I had 40 new pairs. In total, initial analyses were conducted with 113 observations.

Data collection occurred through three separate surveys: two for the support recipients and one for the named support providers. Timing for each scale's administration can be found in Table 3; additionally, items for all three surveys can be found in Appendix C. In the first survey, I reached out to support recipients to obtain their consent to participate in this study and to ask for their help in recruiting support providers for this study. I solicited this information using the following statement:

> "In your life, there are likely individuals who support you through their words and/or actions. Please think about an individual outside of work and an individual that you work with who fit this description and respond to the questions below."

Following this prompt, the support recipients completed several questions, including the type and length of relationship they have with the support provider they named and the frequency with which they interact with the support provider. Additionally, I collected demographics regarding employment type, hours worked, education, age, and sex.

Using the contact information provided in the first survey, I reached out to the focal sample for this research: the support providers. This second survey (total n = 272) was distributed one week following the first survey. They were notified that another individual had named them as a supportive individual in their life and asked to complete a survey regarding the

focal support provider characteristics variables for this study. These variables are described in more detail below.

The final survey was distributed to support recipients two weeks following the second survey. To protect the identity of named support providers who did not complete the second survey, I reached out to all individuals who completed the first survey (n = 161). They were reminded of the support providers they named and asked to rate that support provider's provision of social support over the previous month. Additionally, support recipients were asked about their stress over the past month. In total, 143 support recipients provided ratings of a total of 274 support providers. Due to an administrative error, participants in the MBA group did not receive questions regarding emotional social support received. This oversight was corrected in the MAcc group as well as in the subsequent two data collections. Thus, for three of the four social support types (instrumental, appraisal, and informational social support), a total of 274 support providers were rated on their provision; for emotional social support, only 180 support providers were rated.

Following completion of all three surveys, I matched support providers with the support recipient's ratings of their support provision. This provided a total of 113 matched ratings. Of these 113 matches, three were rated on their support provision by more than one support recipient; in other words, there are 110 unique support providers. Given that the support provider characteristics that are dependent on the support recipient (e.g. relationship quality and role knowledge) were collected in reference to all named support recipients (i.e. Sally was asked about her relationship quality with Brent and with Jenna), I kept these data points separated based on corresponding support recipient ratings.

In preliminary analyses of these 113 observations, a miniscule amount of missing data was found. One support provider omitted half of their survey; this response was listwise deleted. Tests for outliers revealed three support recipients who responded with all "Never" or "A great deal" for all survey items related to social support receipt. These three responses were also listwise deleted. The other missing data were judged to be missing at random as no pattern could predict the missing data; each missing variable seemed to result from an overlooked survey question. (These instances do not include the aforementioned emotional social support oversight.) Missing data, excluding the emotional social support items and demographic and qualitative control variables, was imputed using predictive mean matching with the MICE package (version 3.8.0; van Buuren & Groothuis-Oudshoorn, 2011) in R.

Sample

The final sample consisted of 109 support providers working in a variety of industries and reflecting both workplace and non-work relational ties. Support providers were slightly more female than male (56% female), with an average age of 42. Support recipients were also slightly more female than male (54% female), with an average age of 40. Average length of support provider-support recipient relationship was 10.61 years. Support providers reflect a mixture of education levels, with 18% holding either a high school diploma or associates degree, 43% holding a bachelors degree, and 39% holding an advanced degree (masters level or greater).

Support providers were almost evenly divided between work and non-work sources (52% nonwork). T-tests for sex and age differences in these groups were non-significant; significant differences were found between work (M = 4.56, SD = 3.68) and non-work (M = 16.12, SD = 12.47) sources with regards to relationship length, $t(67) = 6.69$, $p < .001$. This finding is unsurprising, given that the average length of time in a support recipient's work role was 4.8

years, providing a much lower upper limit on relationship length than those relationships that were not workplace-situated.

Ratings Sources

Support providers provided ratings of the focal support provider characteristics (relationship quality, perspective taking, role knowledge, general self-efficacy, attachment orientation, and prosocial identity). Each of these influences is best assessed by the *support provider* for various reasons. Perspective taking, general self-efficacy, attachment orientation, and prosocial identity each operate as part of an individual's self-construal, therefore it makes empirical sense to obtain these as self-ratings; further, self-reports still remain one of the most common sources for personality ratings. Regarding role knowledge, given that this research emphasized how role knowledge will predict a support provider's behaviors, it was logical to assess the role knowledge beliefs of the support provider. While this may differ from the support recipient's view of the support provider's knowledge of their role, the perceptions from another person are less likely to influence an individual's behavior in comparison to the focal individual's personal views. Similarly, the perception of relationship quality from another person is unlikely to affect an individual's behavior as much as that specific individual's assessment; further, ratings of relationship quality may differ within a dyad (Helms et al., 2010) so it remains relevant to gather support provider ratings of relationship quality to predict how this will influence their behavior.

Measuring social support can be accomplished in a variety of ways (Haber et al., 2007; however, given my focus on the social support received, I asked the support recipient for ratings of social support. This reliance on the support recipient for ratings is in line with current research on social support (Maisel & Gable, 2009) which notes that individual gains from social support

are most prominent when the support recipient recognizes 1) that they have received social support and 2) that the aid given was indeed supportive. In other words, social support is in the "eye of the receiver" (Coyne & DeLongis, 1986), thus it is more important to highlight and gather an individual's ratings of the social support they received. Additionally, using the support recipient ratings of social support decreases the potential for social desirability bias (Nederhof, 1985; Podsakoff & Organ, 1986) as the support provider may be more likely to overreport their behaviors. Finally, this methodology is similar to that of gathering performance ratings of employees from supervisors (DeNisi & Murphy, 2017). Given that several support recipients rated both an at-work and non-work support provider ($n_{\text{support recipient}} = 30$), I had concerns about intra-rater bias. After reviewing discussions on interrater reliability and agreement (LeBreton et al., 2003; LeBreton & Senter, 2008), I tested for within-source rating similarity by assessing Pearson correlations pairwise within sources. (Calculation of ICC was not feasible given the lack of overlap between raters – Hoyt, 2000). I correlated the paired support recipient ratings for each subscale of social support as well as the overall social support scale; none of the mean correlations exceeded .70, and only 2 exceeded .40. Thus, following LeBreton et al. (2003), I note little support for within-source rating similarity, thus the ratings of all support providers were included within analyses without additional multilevel modelling techniques.

Measures

Relationship Quality

A wide range of instruments attempt to capture relationship quality, particularly within the context of romantic relationships. They vary in length, from short 3-question global scales asking "how satisfied are you with your relationship" (Nichols et al., 1983) to longer, multi-dimensional scales (Brown & Booth, 1996; Hassebrauck & Fehr, 2002) that capture satisfaction

with different aspects of a relationship. Alternatively, Berscheid et al. (1989) examine relational closeness by assessing the frequency, strength, and diversity of impact of relationship partners on one another. Issues abound with any conceptualization and measurement of relationship quality. First, shorter scales commonly focus on satisfaction rather than quality, and they may fail to capture nuanced feelings within the relationship; as Hassebrauck and Fehr (2002) note, "relationship partners could provide the same global evaluation of relationship quality, even though each partner experiences the relationship quite differently" (p. 254). Taken more broadly, this means that across various dyads, global evaluations may be similar, even though they differ at a facet level. This may limit the ability to draw inferences regarding the influence of relationship quality on behavior, as it decreases the variance among dyads regarding relationship quality. The primary issue with multi-dimensional scales is their length and possible perceived intrusion into individual's lives. For example, Brown and Booth's (1996) relationship quality scale examines the frequency of shouting and throwing items within the conflict management subdimension. Similarly, Hassebrauck and Fehr's (2002) relationship quality scale contains 64 items, some of which ask participants to rate sexual harmony and sexual satisfaction. Lastly, although common within relational work, the "Relationship Closeness Inventory" (Berscheid et al., 1989) highlights closeness rather than satisfaction or quality; it emphasizes joint participation in activities, involvement with a partner, and the influence a partner has.

Given the need to examine a wide range of support providers, I focused on assessing relationship factors that would be present in a variety of different relationships. Taking in the strengths and weaknesses of the wide range of measures for relationship quality, I used the Quality of Interpersonal Relationships Scale (QIRS; Philippe et al., 2010; Senecal et al., 1992). This measure has several strengths that make it ideal for this research. First, it captures several

different indicators of relationship quality – enrichment, satisfaction, harmony, and trust. Further, it has been used within both workplace and closer relationship samples, making it relevant for a wide range of support provider-recipient relationships. It is a short (four item) scale, with strong internal reliability (α = .91). In this work, support providers were presented with the name (or names for support providers who were named by multiple support recipients) of the nominating support recipient; they were then asked to indicate to what extent their relationship was enriching/satisfying/harmonious/trust-inspiring. Ratings were collected using a five-point Likert scale ranging from "Not at all" to "Extremely". Cronbach's alpha for this measure was acceptable (α = .84).

Perspective Taking

Fewer scales exist to measure perspective taking (Davis, 1996; Eisenberg & Miller, 1987; Parker & Axtell, 2001). In their review of perspective taking in organizations, Ku et al. (2015) note that the perspective taking subscale of the Interpersonal Reactivity Index (IRI; Davis, 1980) is the most commonly used scale within organizational research. It captures the cognitive aspects of perspective taking without being contaminated with other, empathy-focused items (Clark et al., 2019). This scale provides a measure of concern for other's feelings and reactions (Davis, 1983). Prior empirical work has shown the validity of self-reports of perspective taking, even with a short scale (Davis et al., 1996), and this scale demonstrates acceptable internal (α = .71) and test-retest reliability (α = .61). Further, it is simple and short enough (7 items) for usage within a longer battery of scales. Participants indicated how well statements described them (e.g. "I believe that there are two sides to every question and try to look at them both" and "I sometimes try to understand my friends better by imagining how things look from their

perspective") on a five-point Likert scale ranging from "Not well at all" to "Extremely well". Cronbach's alpha for this measure was acceptable (α = 80).

Role Knowledge

Role knowledge reflects *how well an individual understands the role that they or another person do*. While Rizzo et al.'s (1970) role ambiguity scale is commonly used in relation to individual's experiences with a role, the emphasis of the scale on uncertainty or lack of clarity and/or information regarding a certain role (Ilgen & Hollenbeck, 1991) meant that it lacked assessment of information about the work an individual actually performs. Therefore, even reverse scoring this scale would not yield insights about whether a person understands a role. A better measure for role knowledge emerges from Sawyer (1992). He used Kahn et al.'s (1964) goal clarity and process clarity constructs to develop a scale that captures certainty around a role. This scale asks individuals to indicate their level of certainty regarding a series of statements about aspects of their work role. Initial validation of this scale (Sawyer, 1992) shows acceptable reliability (α = .92 and .90 for goal clarity and process clarity respectively). For this research, I adapted the items in this scale to reflect the support provider's view of the support recipient's role. Thus, an item such as "I am certain how to schedule my work day" became "I am certain how this person schedules his/her day". Support providers were presented with the nominating support recipient's name and asked to indicate their level of agreement regarding statements about that individual's job on a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree". Cronbach's alpha for the two subscales indicated acceptable reliability .86 and .90 for goal clarity and process clarity respectively. Given the desire to understand holistic role knowledge, I combined these two subscales into a formative measure following Whitaker et al.,

2007. Cronbach's alpha for the combined, global role knowledge scale indicated acceptable reliability (α = .89).

General Self-Efficacy

General self-efficacy (Eden, 1988; Judge et al., 1998) was measured using the New General Self-Efficacy (NGSE) Scale (Chen et al., 2001). Several reasons exist to use this scale. First, it provides a measure of the trait-like dimensionality of self-efficacy (general self-efficacy), in contrast to other scales that emphasize self-efficacy with regards to a specific task or role (e.g. Gist & Mitchell, 1992; Lee & Bobko, 1994). Given the emphasis on overall belief in one's abilities, using a more generalized, trait-focused scale is most applicable; specifically, this scale allows for the capture of "differences among individuals in their tendency to view themselves as capable of meeting task demands in a broad array of contexts" (Chen et al., 2001, p. 63). Second, while other scales exist that capture general self-efficacy (e.g. Sherer et al., 1982), the NGSE demonstrates higher predictive and content validity than these other scales (Chen et al., 2001). Finally, the NGSE is short enough (eight items) to not tax participants completing the wide range of measures presented here. Participants were asked to reflect on their feelings about their abilities, then respond to questions (e.g. "I believe that I can succeed at most any endeavor to which I set my mind" and "Even when things are tough, I can perform quite well") on a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree". Cronbach's alpha was in line with previous reliability estimates (α = .90).

Secure Attachment Orientation

In a recent review of attachment theory at work, Yip et al. (2018) provide a summary of common measures of attachment orientation. In general, the most commonly used measure is Brennan et al.'s (1998) Experiences in Close Relationships (ECR) scale. This scale, however,

contains items specifically worded to refer to romantic relationships. Because of this, scholars within the management literature have adapted the ECR by replacing "romantic partners" with generic "others" (Experience in Relationships Scale; Richards & Schat, 2011), providing a 36-item scale. Due to potential issues with scale length, I used a shortened version of the ECR (12 items; Wei et al., 2007) provides adequate validity (α = .77 and .78 for the anxiety and avoidance dimensions respectively), adapting this version in accordance with Richards and Schat (2011) for use within the work, replacing "romantic partners" with "others".

Participants were asked to respond to a series of items in two subscales (anxiety and avoidance) that reflect how people may feel in relationships (e.g. "It helps to turn to others in times of need" and "I try to avoid getting too close to others" – reverse-scored) on a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree". Reliability was acceptable and comparable to previous research for each subscale, with α = .78 and .77 for the anxiety and avoidance dimensions respectively. To calculate scores for secure attachment orientation, I followed Ronen and Zuroff (2017) and Wei et al. (2007) who note that secure attachment orientation is typified by low anxiety and low avoidance. To keep this scale in line with the other scales used here in which high values indicate higher levels of a characteristic, I coded items such that those indicating high anxiety/avoidance attachment orientation indicated low secure attachment orientation; in other words, high scores on the scale indicate stronger secure attachment orientation. Secure attachment orientation was represented by combining the means of these two subscales (α = .70).

Prosocial Identity

Prosocial identity was measured using a scale developed by Grant et al. (2008). This three item scale reflects prosocial identity and is thus helpful for understanding whether this self-

conception influences behaviors. It is short enough for this research, while also reflecting strong internal reliability (α = .84). Participants were presented with the three statements ("I see myself as generous"; "I see myself as caring"; "I regularly go out of my way to help others") and asked to rate their level of agreement with them on a five-point Likert scale ranging from "Strongly disagree" to "Strongly agree". Reliability calculations for this measure were acceptable (α = .76).

Social Support

As mentioned, scholars have taken several approaches to measuring social support (Sarason & (Sarason & Sarason, 1985). In some approaches, social networks serve as a proxy for social support (Caplan, 1974; Cassel, 1974; House & Kahn, 1985); in this, scholars note the presence and strength of various relationship ties as indicators of social support for an individual (Walker et al., 1993). Unfortunately, doing so assumes that the alters within these social networks actually provide social support and overlooks the specific support provided; indeed, researchers have noted that "the mere presence of a tie between two people does not equate with the provision of support" (Walker et al., 1993, p. 72). Alternatively, scholars have looked at a more individually-focused social support, examining perceived and administered (received) social support (Sarason & Sarason, 1985). Perceived social support reflects an individual's perspective that they <u>can</u> receive help when it is needed as well as their satisfaction with the type and amount of support available; received social support highlights <u>actual provision of support</u> (Hobfoll, 2009). Given that the focal point of this study is how individual characteristics of a support provider influence social support, it is most logical to emphasize received social support as this allows for the measurement of actual behaviors on the part of the support provider. Indeed, Sarason et al. (1990) note that "the study of received social support looks at what people get from others" (p. 15). While perceived social support may have little relationship to support

provider characteristics (indeed, it is commonly associated with prior supportive behaviors; Veenstra et al., 2011), assessing received social support should illuminate the influence of differences of support provision among support providers. In determining a measure of received social support, I used four criteria. First, the measure must measure all four aspects of social support (instrumental, emotional, appraisal, and informational). Second, the measure must contain behaviors that a support provider might demonstrate (e.g. performing helpful tasks, boosting self-confidence, providing security). Third, the measure must not be double-barreled; that is, it must only highlight behaviors, not outcomes that the support recipient experiences. Fourth, the latent factors contained within the scale must demonstrate divergent validity, with only moderate correlations between them. (A notable correlation exists between emotional social support and instrumental social support [Morelli et al., 2015], but the social support types remain distinct.) I used prior reviews of social support instruments (Gottlieb & Bergen, 2010; Sarason et al., 1987) to guide my search and considered several potential scales – the Interpersonal Support Evaluation List (ISEL; Cohen et al., 1985), the Inventory of Socially Supportive Behaviors (ISSB; Barrera et al., 1981), the UCLA Social Support Inventory (UCLA-SSI; Dunkel-Schetter et al., 1986), the Social Support Behavior Code (SSBC; Suhr et al., 2004), the Support in Intimate Relationships Rating Scale (SIRRS; Dehle et al., 2001), the Family Social Support scale (FSS; Carlson & Perrewe, 1999), and the Family Support Inventory for Workers (FSIW; King et al., 1995). A comparison of these scales on the criteria listed above appears in

Table 4.

For this research, I adapted the SIRRS, following the example of previous social support scholars (Barry et al., 2009; Brock & Lawrence, 2009). It captures a wide range of supportive behaviors that may be experienced within a relationship. Some adaptation was necessary for two reasons. First, the SIRRS was originally developed to be used within intimate relationships; as such, it contains some items that would likely be unique to an intimate relationship (e.g. "Partner hugged me"; "Partner kissed me"). Because I did not limit this research to intimate relationships due to a desire to generalize the support provider characteristics to workplace and non-work associations, I adapted the emotional social support items to remove the ones deemed to measure more intimate relationship-focused emotional social support. These items were "Partner hugged me or cuddled me", "Partner kissed me", "Partner held my hand", and "Partner patted or stroked me affectionately". Additionally, following Brock and Lawrence (2009), I removed questions regarding network support due to repeated evidence of low internal consistency in prior empirical work. In total, I used 27 items to gauge social support provision – five for instrumental, six for emotional, eight for informational, and eight for appraisal. The second adaptation was made to create a reflective measure of social support; the SIRRS was originally developed to measure support adequacy by sampling support recipients over seven consecutive days (Dehle et al., 2001). This reflective measure adaptation has been done previously (Barry et al., 2009; Brock & Lawrence, 2009) by asking recipients to estimate "the frequencies of specific supportive behaviors provided by their partners over the past month" (p. 187) with adequate reliability (α ranging from .76-.88 for informational, .89-.93 for emotional, .83-.91 for appraisal, and .86-.94 for informational). I followed Brock and Lawrence (2009) and adapted the SIRRS by asking support recipients to reflect on the past month and indicate "how often has [insert support

provider name] engaged in each of the following behaviors". Participants indicated this amount on a five-point Likert scale, from "Never" to "A great deal".

To ensure that the four types of social support were distinct, I conducted a confirmatory factor analysis (CFA) using the three sample sets for which I had data on all four types of social support (the MAcc students, the rural hospital employees, and the information technology employees). Given the limited sample size (n =79) and its potential to undermine model fit in the CFA (Little et al., 2002), I created parcels of the indicator variables using the item-to-construct balance technique, pairing the item with the highest item-scale correlation with the item with the lowest item-scale correlation, and so forth (Little et al., 2002; Little, 2013). Following Brown (2015), I determined acceptable model fit based on the following criteria: root mean square error of approximation (RMSEA) less than 0.10 (as RMSEA may be inflated when the N is small; Hu & Bentler, 1999) and comparative fit indices (CFI) and Tucker-Lewis index (TLI) between .90 and .95. I tested one-, two-, three-, and four-factor structures (see Table 5 for descriptions and fit indices of each model tested); the four-factor structure had the best model fit (χ^2 = 118.142 [df = 71], RMSEA = .094, CFI = .940, TLI = .923), thus providing evidence of four distinct social support types for analysis. As noted, only the four-factor solution demonstrated acceptable model fit. Further, all loadings in the four-factor structure were above .6 and statistically significant ($p <$ 0.001), providing additional evidence of the four-factor structure with the specified loadings (Tabachnick & Fidell, 2007). Reliability for each subscale was acceptable – α = .91 for instrumental, .83 for emotional, .86 for informational, and .88 for appraisal.

Controls

I collected several control variables for potential inclusion in analysis. For the support provider, I collected information on number of children at home (M = 0.97) as this may increase

the amount of responsibilities shared between individuals as well as decrease time or energy available for social support. Additionally, I included role engagement within the primary role held by the support provider; role engagement was measured using a shortened version of the role engagement scale (Crawford et al., 2013). This nine-item scale asked participants to rate their level of agreement with a series of statements referring to their primary role on a five-point Likert scale, from "Strongly disagree" to "Strongly agree". Reliability for this scale was acceptable (α = .85).

From the support recipients, I gathered information on relationship type and relationship duration with the support provider, as each may influence relationship quality (Brown et al., 2017) as well as role knowledge. While a variety of relationship types were included (e.g. dating, married, supervisor, coworker), I collapsed these into work and non-work categories to aid with analysis; this follows previous assessments that dichotomizes support provision between workplace sources (e.g. supervisors/coworkers) and nonwork sources (e.g. family/friends) (Halbesleben, 2006; Madjar et al., 2002). As noted above, these groups did differ in levels of relationship quality; a t-test for differences in role knowledge was not significant ($p > .05$). Additionally, I collected information about stress experienced in the previous month, given the strong correlation between stress and support perception and seeking (Dunkel-Schetter et al., 1987). This was assessed using the Perceived Stress Scale (Cohen et al., 1983) during the third stage of data collection. Participants were asked to reflect on their experiences over the past month and rate the frequency they experienced various feelings (e.g. "How often have you felt that you were unable to control the important things in your life?" and "How often have you found that you could not cope with all the things that you had to do?"). Ratings were made on a five-point Likert scale, ranging from "Never" to "Always". Reliability for this scale was

acceptable (α = .90). Lastly, I collected information regarding frequency of contact between the support provider and the support recipient. Support recipients noted their frequency of contact on a five-point Likert scale, ranging from “Once a month” to “More than once per day”. Given the unique context of this data collection (during a global pandemic in which common day-to-day interactions were upended; Prommegger et al., 2021), this was a more pertinent variable. Additionally, as the social support actions examined here are likely connected to in-person interactions, higher levels of contact would increase the opportunity for and provision of social support.

Finally, I collected information on the sex of both the support provider and the support recipient. The extant research regarding gender differences in social support provision and receipt is not definitive, with some (Neff & Karney, 2005; Roxburgh, 1999; van Daalen et al., 2006) finding no gender differences in social support and others (Blanch & Aluja, 2012; van Daalen et al., 2005) noting gender differences in receipt and subsequent outcomes. Further, scholars have noted gender differences guiding the type of helping behavior individuals engage in (Beach & Gupta, 2006; Eagly, 2009), providing additional impetus for control for the support provider’s gender. Lastly, females also react more positively to social support (Beehr et al., 2003) leading to concerns that males might underreport social support receipt.

Chapter 4: Results

Preliminary Analyses and Descriptive Statistics

Dimensionality

Prior to hypothesis testing, I conducted an additional confirmatory factor analysis using all support provider characteristics to assess the convergent and discriminant validity of the focal variables (e.g. relationship quality, perspective taking, general self-efficacy, prosocial identity, and role engagement). Given that the role knowledge and attachment orientation latent variables are created as formative variables, they are excluded from this CFA (Kline, 2016). As with the social support CFA, given the sample size-item ratio and its potential to undermine model fit (Little et al., 2002), I used the item-to-construct balance technique to create parcels of the indicator variables, pairing the item with the highest item-scale correlation with the item with the lowest item-scale correlation, and so forth (Little et al., 2002; Little, 2013). As can be seen in Table 6, the five-factor solution had the best model fit among a variety of other alternatives (χ^2 = 209.933 [df = 160], RMSEA = .054, CFI = .948, TLI = .938). Thus, I accepted each of these variables as distinct from each other and included them separately in subsequent hypothesis testing.

Descriptive Statistics

Table 7 presents the means and standard deviations of the study variables. Table 8 reports correlations among study variables. As would be expected, the various types of social support are strongly correlated. This is in line with prior work noting that instrumental and emotional social support commonly co-occur (Carver et al., 1989); as previously noted, the confirmatory factor analysis conducted does provide some level of confidence that these constructs are distinct. Additionally, frequency of contact shows correlation with each of the social support types; this is unsurprising given that the social support behaviors measured generally rely on face-to-face interactions. Finally, some of the support provider characteristics variables are moderately correlated; the previously reported confirmatory factor analysis of these variables provides assurance of discriminant validity.

Hypothesis Testing

Hypothesis testing was conducted using structural equation modelling and multiple regression. For the hypotheses focused on instrumental, informational, and appraisal social support, structural equation modelling was possible; including emotional social support in this model would have decreased the *n* below needed levels for structural equation modelling (Tabachnick & Fidell, 2001). Thus, I created a measurement model including the support provider variables, specified control variables, and instrumental, informational, and appraisal social support; the previously established parcels from the CFA models were used in this measurement model. This model demonstrated acceptable fit statistics and was used in subsequent hypothesis testing for these three dependent variables (χ^2 = 1061.323 [df = 812], RMSEA = .053, CFI = .901, TLI = .884). For the testing of hypotheses related to emotional social support, I conducted multiple regression. For ease of interpretation, I report the results of hypothesis testing below sorted by the specific social support types, rather than grouping by

support provider characteristics. Table 9 and Table 10 report the results from the structural equation model hypothesis testing and multiple regression hypothesis testing respectively. Finally, Table 11 provides a summary of hypotheses tested and outcomes.

Instrumental Social Support

I predicted that instrumental social support would be influenced by relationship quality (H1a), role knowledge (H3a), general self-efficacy (H4a), secure attachment orientation (H5a), and prosocial identity (H6a). I tested these hypotheses by adding regression paths between these focal variables, the selected control variables, and instrumental social support in the previously established measurement model. As may be expected, contact frequency between the support provider and support recipient was significantly and positively related to provision of instrumental social support ($\beta = .350$, $p < 0.001$).

Supported Hypotheses. After controlling for role engagement, stress of the support recipient, sex of both individuals, relational role (work or non-work), relationship length, frequency of contact, and number of children for which the support provider cared, the relationship between relationship quality and instrumental social support was significant and positive ($\beta = .267$, $p < 0.05$), such that as relationship quality increased, more instrumental social support was provided. Thus, Hypothesis 1a was supported. Additionally, a similar significant and positive relationship between general self-efficacy and instrumental social support was found ($\beta = .335$, $p < 0.01$). This was one of the strongest relationships in this study, demonstrating that as individuals feel more capable in accomplishing tasks, they engage in higher levels of tangible helping behaviors (instrumental social support). From this, I note that Hypothesis 4a was also supported.

Unsupported Hypotheses. For Hypothesis 3a, while the relationship was significant ($\beta = -.206$, $p < 0.1$), it was in the opposite direction to the stated hypothesis. Thus, this hypothesis for role knowledge predicting instrumental social support was not supported. For Hypotheses 5a and 6a, not only were the relationships not significant, they were also in the opposite direction to the stated hypothesis. Thus, the hypotheses for secure attachment orientation ($\beta = -.141$, $p = 0.121$) and prosocial identity ($\beta = -.137$, $p = 0.315$) were also not supported. Discussion of these and other supported/unsupported hypotheses follows this section.

Emotional Social Support

For emotional social support, I made hypotheses related to relationship quality (H1b), perspective taking (H2a), and secure attachment orientation (H5b). As noted, due to sample size constraints, these hypotheses were tested using multiple regression. In the first step, I entered the control variables; in the second step, I included the hypothesized support provider characteristics. Adding the support provider characteristics in the second step improved the model (*adjusted* $R^2 = .383$; $\Delta R^2 = .096$), demonstrating that these support provider characteristics provide additional explanation above the noted control variables. Among these control variables, the support recipient sex, the work/nonwork source, and frequency of contact variables demonstrated significant relationships with the provision of emotional social support. For the support recipient, sex was negatively related to reporting emotional social support receipt ($\beta = -.307$, $p < 0.01$); in this, I recall Beehr et al.’s (2003) note that males may underreport social support receipt. This notion is confirmed in this data, with males reporting significantly less emotional social support than females. For the work/non-work source, this also displayed a negative relationship with emotional social support provision ($\beta = -.319$, $p < 0.05$). This highlights that support providers whose main relationship with the support recipient is outside of work provide higher levels of

emotional social support than those at work. Finally, regarding contact frequency, this was also positively associated with emotional social support provision (β = .201, $p < 0.1$).

Supported Hypotheses. Analysis of the support provider characteristics with the included control variables revealed that relationship quality was significantly and positively related to provision of emotional social support (β = .384, $p < 0.01$). Similar to instrumental social support, as support providers experienced higher relationship quality with the support recipient, they offer greater levels of emotional social support. Thus, I note support for Hypothesis 1b.

Unsupported Hypotheses. For Hypothesis 2a, regarding perspective taking, this relationship, while in the direction hypothesized, was not significant (β = .008, p = 0.945). Further, for Hypothesis 5b, regarding secure attachment orientation, this relationship was in the opposite direction to the initial hypothesis and the relationship was not significant (β = -.057, p = 0.595). Therefore, I note that the hypotheses for perspective taking and secure attachment orientation were not supported.

Informational Social Support

I predicted that perspective taking (H2b), role knowledge (H3b), general self-efficacy (H4b), and prosocial identity (H6b) would be positively related to informational social support provision. These four hypotheses were tested in the same model as the instrumental social support hypotheses. Regarding the control variables, support recipient sex, group membership of the support provider, and length of relationship between the support provider and the support recipient all emerged as significantly related to provision of informational social support. Support recipient sex (β = -.214 $p < 0.05$) was negatively related to reporting of informational social support receipt. Similar to emotional social support, this reflects prior theorizing that men

report receiving less informational social support than women did. In addition, the length of the support provider-support recipient relationship is inversely related to the amount of informational social support received ($\beta = -.193$, $p < 0.1$). Finally, similar to instrumental social support, the relationship between contact frequency and informational social support was positive ($\beta = .320$, $p < 0.01$); from this we can see that as individuals interact more, they share information more frequently. All other control variable relationships were non-significant with regards to informational social support.

Unsupported Hypotheses. In evaluating the hypotheses related to informational social support provision, while the signs for each of the hypothesized relations were in line with my hypotheses, none of the relationships emerged as significant. Thus, I note that hypotheses related to perspective taking ($\beta = .072$, $p = 0.510$), role knowledge ($\beta = .004$, $p = 0.974$), general self-efficacy ($\beta = .086$, $p = 0.490$), and prosocial identity ($\beta = .004$, $p = 0.977$) were all unsupported.

Appraisal Social Support

Finally, I expected that relationship quality (H1c), perspective taking (H2c), role knowledge (H3c), and secure attachment orientation (H5c) would be positively related to appraisal social support. Additionally, I hypothesized that general self-efficacy (H4c) would be negatively related to appraisal social support. Here, similar to emotional social support, the control variables for support recipient sex and support provider group membership emerged as significant predictors of appraisal social support. For support recipient sex, again, women are associated with higher levels of appraisal social support receipt than men ($\beta = -.249$, $p < 0.05$). Similarly, for support provider group members, non-work support providers were associated with higher levels of appraisal social support than workplace support providers ($\beta = -.257$, $p <$

0.1). Finally, contact frequency was a significant predictor of appraisal social support provision as well ($\beta = .207$, $p < 0.1$).

Unsupported Hypotheses. Regarding support provider characteristics, none of the hypothesized relationships emerged as significant. For Hypothesis 1c, the sign for the relationship was as hypothesized, but the relationship between relationship quality ($\beta = .068$, $p = 0.520$) and appraisal social support were not significant. Thus, I note that Hypothesis 1c was unsupported. Further, for perspective taking ($\beta = -.010$, $p = 0.928$), role knowledge ($\beta = -.063$, $p = 0.569$), general self-efficacy ($\beta = .168$, $p = 0.166$), and secure attachment orientation ($\beta = -.036$, $p = 0.671$), the direction of the relationship was opposite what was hypothesized; additionally, these relationships were all not significant. Thus, Hypothesis 2c, Hypothesis 3c, Hypothesis 4c, and Hypothesis 5c were each not supported.

Supplemental Analyses

Given the paucity of supported hypotheses, I conducted several supplemental analyses, described next. First, I conducted a power analysis to determine the feasibility of my given sample size to detect expected variability in my dependent variables (Cohen, 1988). Using the pwr package in R, I estimated the power of my general model predicting 17% of the variability in social support provision. (Because research examining the influence of support provider characteristics on social support provision is still in its nascent stages, I drew from prior established research in the adjacent construct of OCB. Using Ilies et al. (2009) as a guide, I estimated support provider characteristics to predict 17% of the variability in my models.) In running this power analysis, the current tests have a power of 63%; this reflects an increased risk for a Type II error, likely due to the sample size.

Additionally, I conducted several additional post hoc SEM and regression analyses to examine whether I had overlooked or minimized other significant relationships. The first analysis tested the hypothesized relationships in the absence of my control variables. For the tests regarding instrumental, informational, and appraisal social support, I again used SEM (χ^2 = 364.866 [df = 288], RMSEA = .049, CFI = .951, TLI = .940). Results can be found in Table 12. As can be seen, while the regression coefficient for each relationship changed slightly, no additional significant relationships emerged. A similar outcome was found with the linear regression predicting emotional social support (see Table 13, Model 1).

Next, to test whether I had overlooked any support provider characteristics in my theorizing, I included all support provider characteristics in the prediction of the various social support types. Again, these analyses were conducted initially without the control variables in the model. Table 14 reports the outcomes for the SEM for prediction of instrumental, informational, and appraisal social support (χ^2 = 1061.323 [df = 812], RMSEA = .053, CFI = .901, TLI = .884). Table 13, Model 2 reports the outcomes for the regression model for the prediction of emotional social support. Additionally, Table 15 and Table 13, Model 3 report the outcomes for models including both support provider characteristics and control variables. Several significant relationships emerged that are worth noting. First, relationship quality demonstrated significant moderate relationships with each of the social support types, including informational social support which was not previously hypothesized. Additionally, including informational social support as an outcome variable raised the regression coefficients for each of the other social support types. This seems to highlight prior discussions regarding the cooccurrence of social support types (Morelli et al., 2015) and gave rise to additional post hoc testing described shortly. Secondly, role knowledge showed a significant relationship with emotional social support; this

relationship was negative, and it became non-significant when control variables were added into the model. Thirdly, secure attachment orientation demonstrated significant relationships with both instrumental and appraisal social support. With the addition of control variables, the negative relationship between secure attachment orientation and instrumental social support remained significant; both of these relationships are discussed further below. Finally, prosocial identity emerged as a significant predictor for both emotional and appraisal social support; this runs counter to my prior theorizing about prosocial identity prompting more tangible types of social support. Additionally, this relationship remained significant for appraisal social support even when control variables were added into the model.

Lastly, given the intercorrelations among the various social support types. I created a global social support construct by combining the means of the four types of social support assessed ($M = 3.54$, $SD = 0.67$). I then conducted multiple regression to assess potential relationships; in the first step, I regressed the support provider characteristics on global social support. In the second step, I added the control variables. As can be seen in Table 16, relationship quality and general self-efficacy remained the only support provider characteristics predictive of the global social support construct ($\beta = .345$, $p < 0.001$; $\beta = .208$, $p < 0.1$ respectively). Each of the main analyses as well as the additional supplemental analyses will be discussed in more detail below, with implications for theory and practice to follow.

Chapter 5: Discussion

Given the general benefits of receiving social support, it is of theoretical and practical interest to understand the support provider and the characteristics that influence their provision of social support. Drawing from self-determination theory, I developed a framework of six support provider characteristics likely to be associated with social support provision. Results from the current study (a multi-site data collection with self- and other-ratings) offer insights into the connections between intra- and interpersonal characteristics and social support provision. While prior work has articulated possible influences of support provision within caregiving relationships (Feeney & Collins, 2003), this is one of the first works to 1) articulate a framework to understand support provider need satisfaction towards supportive behaviors and 2) test such relationships.

Primary Findings

As discussed above and can be seen in Table 11, a small number of the initial hypotheses were supported. The major support provider characteristics that emerged as a predictive of social support provision were relationship quality and general self-efficacy. Relationship quality emerged as a particularly powerful variable in predicting provision of instrumental and emotional social support, showing some of the strongest relationships among support provider characteristics and control variables tested. This demonstrates alignment with social exchange theory (Blau, 1964) and the later affect theory of social exchange (Lawler, 2001), highlighting that an individual who feels more connected with another is likely to feel positive feelings when considering that individual, leading to increased provision of helping and affective resources (Lawler et al., 2014). In this case, the helping and affective resources emerge as higher levels of instrumental (helping) and emotional (affective) social support. These findings mirror prior

outcomes in related helping constructs, most notably the impact of team member exchange on OCB (Farmer et al., 2015). Interestingly, these positive relationships between relationship quality and social support provision held even when relationship length was considered; further, the correlation between relationship length and relationship quality was fairly low and not significant. This seems to imply that individuals can experience high quality relationships even after a short period of time and that it is the quality of relationship that influences their helping behaviors rather than length of the relationship. While the instrumental and emotional social support hypotheses were supported, no significant relationship was found between relationship quality and appraisal social support. Given that appraisal social support focuses on affirming the support recipient's abilities or decisions, the lack of relationship is slightly surprising. One possible explanation for this is that individuals who have a positive relationship with another may be more prone to provide feedback (i.e. commentary that can be positive or developmental in nature); because they feel closely connected to the support recipient, the support provider may not "sugar-coat" things, thus leading to the minimal and non-significant relationship with appraisal social support. In further post hoc testing, this relationship did emerge as significant, notably when informational social support was also considered in the model. This likely demonstrates the interrelatedness of the social support types; while they are conceptually and empirically distinct, the correlations among them do seem to imply that they frequently co-occur, as noted by Morelli and colleagues (2015). Additionally, the post hoc testing revealed that relationship quality positively influenced provision of informational social support, further highlighting its relevance as an important variable in the social support equation. This relationship is likely due to similar mechanisms as mentioned before – the increased connection

that higher relationship quality prompts between individuals leads to higher likelihoods of social exchange, including, in this case, provision of information.

In support of Hypothesis 4a, general self-efficacy was a positive and significant antecedent of instrumental social support. As discussed, this may highlight the can-do motivation that general self-efficacy provides individuals. As instrumental social support is the most "action-based" social support, it is logical that individuals with higher levels of general self-efficacy have greater motivation to engage in these supportive actions. Beyond this type of social support, however, the other hypotheses related to general self-efficacy were not supported. While the relationship between general self-efficacy and informational social support was in the hypothesized direction, it was not significant. One reason for this could be the global nature of the general self-efficacy construct. While it seemed reasonable that a higher sense of general self-efficacy would increase an individual's perception that they have information to offer, this linkage appears to be much weaker than expected. Additional research highlighting specific types of self-efficacy might reveal stronger and significant linkages. Equally unexpected was the finding that (although non-significant) general self-efficacy was positively related to appraisal social support; this completely contradicted Hypothesis 4c. This may represent a type of crossover effect (Westman, 2001) in which the support provider feels heightened self-esteem due to positive self-evaluations which crosses over to a target (Neff et al., 2012).

Concerning the set of control variables in this work, several significant predictors emerged that are pertinent to this discussion – the type of relationship held with the support provider, the length of the support provider-support recipient relationship, the contact frequency between support provider and support recipient, and the sex of the support recipient. Relationship type emerged as a significant predictor of both emotional and appraisal social

support. Because I dichotomized this variable, it highlights that non-work support relationships facilitate provision of higher levels of both emotional and appraisal social support than workplace relationships. While the former finding is unsurprising (a workplace is not commonly associated with individuals expressing care for one another), the latter finding regarding appraisal social support is noteworthy. One would expect individuals in a workplace to be better positioned to provide affirmations regarding one's performance; the inverse of this turned out to be true, which may be explained in a similar fashion to relationship quality-appraisal social support outcome described above. Specifically, because coworkers are likely to evaluate each other's performance in light of organizational objectives, their appraisal of a support recipient's abilities and decisions is likely to be both positive and developmental, thus more in line with feedback as commonly conceptualized (Brown et al., 2016).

Additionally, the negative relationship between relationship length and informational social support was also counter-intuitive. One would expect that individuals who have known a support recipient for a longer period of time would know what information is most pertinent to helping their target, however the converse can be seen in the data. This may be due to the information pooling that can happen over the course of a relationship; the support provider and support recipient may have more similar knowledge bases as their relationship continues, leaving less information to be shared. Additional research into how knowledge sharing and knowledge symmetry (i.e. the amount of overlap between individuals in their knowledge bases) evolve over the course of a relationship may shed additional light in this area.

Further, the positive relationship between contact frequency and all four types of social support was generally expected. Given that the aspects of social support examined in this study most easily lend themselves to in-person interaction, it is not surprising that contact frequency

showed positive and significant relationships with social support. This is particularly pertinent for workplaces as they continue to evolve and shift in the level of in-person contact available. Additionally, of particular interest to social support scholars is how social support may be offered in virtual or "distanced" settings; I recommend additions to the social support and other helping scales that examine such spaces.

Finally, the sex of the support recipient emerged as significant in three out of the four social support types examined – emotional, informational, and appraisal – with women reporting more of each social support type than men. This is in line with work showing gender differences in social support receipt (Blanch & Aluja, 2012; van Daalen et al., 2005) that highlight that women are more frequently the recipients of helping behaviors from supervisors and colleagues. Additionally, this highlights Beehr et al.'s (2003) finding that females react more positively to social support than males; because of this positive reaction, females are more likely to 1) note that the social support happened as well as 2) believe the behavior to be supportive. In contrast, the sex of the support provider was not significant in predicting provision of any of the social support types. This extends the work regarding social support behaviors that found no gender differences in social support provision (Neff & Karney, 2005; Roxburgh, 1999; van Daalen et al., 2006).

Additional Insights

While some of the hypotheses focused on relationship quality and general self-efficacy were supported, hypotheses focused on other support provider characteristics did not fare as well. None of the hypotheses related to perspective taking, role knowledge, attachment orientation, or prosocial identity were supported. Taking these in turn, perspective taking had some of the weakest relationships with social support provision; additionally, none were

significant, leading me to reject Hypotheses 2a, 2b, and 2c. Regarding the relationship with informational and appraisal social support, the global nature of the perspective taking construct and measure may have limited these findings. While scholars have noted perspective taking as a cognitive construct that demonstrates within person stability (Ku et al., 2015), much of the empirical work surrounding perspective taking has relied on manipulations that ask the participants to imagine themselves in another person's shoes. In light of this, while the support providers in this study may demonstrate a reasonable amount of perspective taking ability, we do not know if they are engaging in perspective taking with respect to the support recipient. Further, while the retrospective design of this study was intended to allow for the capture of general behaviors of the support provider, perspective taking is often a momentary action that leads to action shortly after it occurs through the creation of empathy in the actor (Coke et al., 1978; Underwood & Moore, 1982). Thus, future research might use experience sampling methodology (Hektner et al., 2007) to examine the pathways through which perspective taking gives rise to support behaviors in the moment, particularly through increased empathy and self-other connection. Additionally, with regard to emotional social support, reviewing the regression coefficients and p-values leads to the conclusion that there is almost no relationship between perspective taking and emotional social support. A primary reason for this could be that increased empathy fully mediates the relationship between perspective taking and subsequent action; in other words, without experiencing empathy, action is unlikely to arise from perspective taking. In keeping with the prior discussions here, future research should examine mediating factors in this relationship. Finally, regarding all three proposed relationships, this study did not assess the accuracy of the perspective taking efforts (Klein, 2019), thus an individual may have

"put on another's shoes" but placed them on the wrong feet or in the wrong direction, leading to misunderstanding what is or is not needed in the situation.

The inclusion of role knowledge in this work seemed very intuitive in that understanding what would make a colleague or close friend successful in their role would increase a support provider's willingness and efforts to help. This was, however, not the case, as Hypotheses 3a, 3b, and 3c were all not supported, with two of the tested relationships being opposite in sign to the hypothesis (3a and 3c). There are two possible reasons for this. First, having knowledge about another's role might counteract their movement to help. In considering this, the support provider may understand the role of their target and, because of this, feel as though they have no support to offer, particularly in a tangible or evaluative sense. Thus, knowing what another's role entails may provide a more realistic appraisal for the support provider in terms of what they are capable of offering, thus potentially diminishing their support efforts. Additional research into how understanding another's role influences one's helping behaviors may provide additional insights here, extending the relational coordination literature (Bolton et al., 2021). The second potential reason for the lack of support pertains to the operationalization of the role knowledge construct itself. While the subscales combined to form a scale with acceptable reliability, they also represent distinct ideas of goal clarity (i.e. understanding the final outcome or aim) and process clarity (i.e. knowing what must be done to achieve goals) (Hu & Liden, 2011). To test whether the distinctiveness of the role knowledge subscales mattered in predicting social support provision, I conducted supplementary analyses in which I included goal clarity and process clarity as separate variables in the prediction of instrumental, informational, and appraisal social support. While the outcomes for instrumental and appraisal social support remained the same (non-significant), goal clarity displayed a significant and positive relationship with informational

social support ($\beta = .278$, $p < .05$); further, although not significant, the process clarity-informational social support relationship was negative ($\beta = -.155$, $p = .168$). Thus, while representing a second-order construct of role knowledge, it seems that these different sub-facets of role knowledge may provide different insight or motivation with regard to social support provision. Specifically, having confidence regarding what a support recipient is working towards (goal clarity) may lead the support provider to try to aid in some way; believing one knows how the support recipient works to achieve a specific goal (process clarity) may actually cause the support provider to stay back as they have a more realistic belief about what is involved in the specific goal-pursuit actions. This goal clarity/process clarity distinction is worth examining further, particularly with regard to effectiveness and adequacy of information provision based on goal clarity versus process clarity.

Secure attachment orientation also had no significant relationships with the hypothesized social support types, leading to the rejection of Hypotheses 5a, 5b, and 5c. Additionally, in subsequent post hoc testing, the significant relationships that emerged for secure attachment orientation were negative with regards to both instrumental and appraisal social support. With regard to the lack of support in the primary analyses, while the majority of research on attachment orientation has highlighted the global and stable nature of the construct (Fraley & Shaver, 2008), more recently, scholars have noted that individuals may develop different attachment orientations towards primary and secondary relationships (Hudson et al., 2015). This means that, while a support provider could report low general attachment security, they may, in fact, view a relational partner (in this case, the support recipient) as a secure base that would not have been reported in the current data collection. Thus, additional research on attachment orientation and social support may prioritize specific referents for the rating of attachment

orientation. Alternatively, if secure attachment orientation is stable across references, another mechanism may be at play influencing the negative relationships found both in the primary analyses (although not significant) and the post hoc analyses. As mentioned, secure attachment reflects an individual's perception of a secure base of operations (Bowlby, 1973; Hazan & Shaver, 1994); in work conducted with children who are classified as being securely attached, they demonstrated significantly more freedom and comfort with exploring and being away from their caregiver. It is possible that this effect is occurring here as well, leading to the negative relationships between secure attachment orientation and instrumental and emotional social support. Specifically, because the support provider does not feel anxious about the relationship, they may be less likely to work to engage in relationship maintenance through provision of social support than those who feel less securely attached.

Finally, both hypotheses for prosocial identity were not supported. This is surprising given prosocial identity's prior link to other helping behaviors (Cha et al., 2014; Grant et al., 2008). It may be that social support provision operates in a relationship maintenance fashion as opposed to an identity confirming fashion. Because social support generally occurs within close relationships (Revenson, 1994), it is possible that social support emerges as a way for the support provider to show that they care about another rather than as a way to confirm their identity. This idea is generally supported by the strong linkages between relationship quality and the two primary social support types (instrumental and emotional). Additionally, social support is generally a momentary occurrence rather than an ongoing set of actions such as volunteering or OCBs; for identity confirmation, ongoing, discretionary helping behaviors are more likely to assist in this fashion (Finkelstein et al., 2005), again explaining to prosocial identity's diminished relationship with social support. One potential way to assess this would be to test for positive

links between prosocial identity and *perceived* social support; this might also demonstrate congruence between self- and other-views of the "helpfulness" of an individual. Surprisingly, in post hoc analyses, prosocial identity emerged as a significant and positive predictor of the two social support types not hypothesized – emotional and appraisal ($\beta = .243$, $p < .05$; $\beta = .256$, $p < .10$ respectively). Given that these are more nurturant support types, I had theoretical reasons for excluding them from my theorizing in that they would not serve to confirm the support provider's identity as a "helpful" person. However, the post hoc analyses reveal an alternative story. It may be the case that the caring feelings fostered by holding a prosocial identity emerge in seeking connection to others through offering warmth and affirmation. Prior work on outcomes of prosocial identity tends to emphasize the practical and tangible, but a more nuanced set of relationships may be at play. As Meglino and Korsgaard (2004) note, an other-focused orientation can arise from a prosocial identity, thus prompting more of this nurturant behavior. Future research into mechanisms through which prosocial identity gives rise to action would be helpful in understanding this further.

Implications for Theory

The results of this study have several implications for advancing our understanding of social support and relationship theory. In particular, I contribute to the social support literature in three ways. First, by placing the primary focus on the support provider, an understudied actor within the social support process. To do so, I drew on self-determination theory, a key theory in understanding voluntary behavior to identify and examine six antecedents of support provision: relationship quality, perspective taking, role knowledge, general self-efficacy, secure attachment orientation, and prosocial identity. These characteristics have appeared in other, adjacent literatures on helping behaviors as well as in theorizing about social support provision in intimate

relationships (Feeney & Collins, 2003), but they have not been assessed thus far in the empirical social support literature. Therefore, these findings extend social support theory by uncovering two particular support provider characteristics that influence social support behaviors: relationship quality and general self-efficacy. Secondly, I provide a clear focus and differentiation among the social support types under investigation here (Jolly et al., 2020). The majority of extant social support research has tended to consider social support as a global construct or, if examining the facets, to emphasize on the instrumental and emotional categories of social support. As such, we lack understanding of inputs to explicit forms of social support. Given the importance of matching the social support type to the need or demand of the support recipient (Cohen & Wills, 1985), emphasizing antecedents of each social support provides a starting point for future research on differential influences on social support provision and impacts. Finally, I examined social support provision from both work and nonwork sources. The findings in this study hold even when the domain of the support provider is considered, highlighting that it is the characteristics of the support provider driving social support rather than role the support provider holds. By examining both support providers at and outside of work, I contribute to our understanding of what influences social support in general, bridging a gap between a psychology literature that emphasizes family and friends as support providers and a management literature that highlights supervisors and coworkers (Jolly et al., 2020).

Second, looking to the theoretical framework at the heart of this study, I note the importance of relatedness and competence in driving voluntary behaviors. While much has been made of the impact of fostering autonomy in employees (Den Hartog & Belschak, 2012; Thompson & Prottas, 2005), satisfaction of relatedness and competence needs has received less focus. Here, however, my results suggest that these two needs are very relevant in social support

provision. Likely all three need satisfactions are important, thus while the six characteristics studied here represent the beginnings of the exploration into antecedents of support provider behaviors, future research should examine these and other inter- and intrapersonal characteristics that link with the tenets of self-determination theory.

Additionally, the significant roles that relationship quality and general self-efficacy play in social support provision demonstrate the potential relevance of Parker et al.'s (2010) model of proactive motivation for understanding social support. Specifically, relationship quality may fuel "reason to" or "energized to" motivation as the support provider seeks to maintain high levels of relationship quality or respond to the goodness of their relationship with a potential support recipient. Separately, general self-efficacy fuels "can do" motivation as the support provider recognizes their capacity to extend a supportive hand. Given that the support provider characteristics and motivations literatures are still in their nascent stages (Bavik et al., 2020), these results point towards a possible integration of the proactive motivation literature with the social support literature to understand how individuals are motivated to behave in a supportive fashion.

Fourth, the findings focused on relationship quality support the relational perspective that high quality connections are a driving force for a wide range of positive outcomes for individuals involved within them (Colbert et al., 2016; Dutton & Heaphy, 2003). Prior research has connected these high quality connections with prosocial behaviors and perspective taking (Grant & Berry, 2011); here I examine and highlight support for an additional, linked outcome by focusing on the social support outcomes of such relationships.

Finally, the findings supporting general self-efficacy's role in instrumental social support provision extend a long line of research linking general self-efficacy to positive outcomes (Judge

et al., 2007; Sadri & Robertson, 1993). While the literature on social support has previously linked task-specific self-efficacy constructs (e.g. social support efficacy beliefs; Coyne & Bolger, 1990; Feeney & Collins, 2001; Neff & Karney, 2005) with social support broadly, this study highlights the impact of generally feeling one is capable of acting and succeeding. By examining the influence of this broader construct and its relationship with four separate social support types, I contribute to a more nuanced understanding of how self-efficacy beliefs can drive support provision.

Implications for Practice

I was inspired to undertake this study because I wanted to help organizations and individuals foster higher levels of a stress-reducing and individual-enhancing behavior. Two major implications for managers and employees emerged through this work. First, the primacy of relationship quality in predicating social support indicates that organizations would do well to foster high quality relationships among their members. A simple way to accomplish this within an organization is through the use of support groups where colleagues can bond in a nonjudgmental environment (see Le Blanc et al., 2007 for a description of these). Additionally, organizations should adopt policies and practices that help their employees maintain positive friendships outside the organization (while minimizing those that hinder relationships). In particular, reducing work-family conflict should increase relationship quality (Fellows et al., 2016), with positive implications for social support provision.

Secondly, given that general self-efficacy was also positively associated with social support provision, hiring employees with higher general self-efficacy or helping employees develop greater levels of self-efficacy could increase social support within an organization. As Bandura (1977) notes, self-efficacy beliefs can emerge from mastery experiences, vicarious

experiences, verbal persuasion, and emotional states. The main ways to accomplish the first two revolve around some form of manipulation, and I agree with Bandura (1997) that doing so might undermine trust. Thus, the latter two processes will likely be healthier for organizations to engage in. Some possible ways that verbal persuasion or emotional states may be used to improve general self-efficacy are through the use of positive coaching practices or by helping individual manage their anxiety. Additionally, placing individuals in the right roles for them (P-J fit; Kristof-Brown et al., 2005) where they can find success should boost their overall sense of self-efficacy, leading to heightened social support contributions.

Study Limitations and Directions for Future Research

There are several strengths to this research that are worth mentioning. First, it used support provider-support recipient pairs in which the social support provision was rated by the recipient rather than the primary actor. This decreased the potential for social desirability bias (Nederhof, 1985; Podsakoff & Organ, 1986) by providing independent ratings of the support provider's actions; further, it follows common practice in social support research to ask the recipient for their perspective on social support provision (Maisel & Gable, 2009). An additional strength of this study is the breadth of the sample. While the global pandemic necessitated working with a variety of organizations to achieve adequate participation numbers, this had the added benefit of broadening the support provider and support recipient sample pools and increasing variance in characteristics. Thus, the sample of both support providers and support recipients is more representative of a broader body of employees – from managers to healthcare employees to support and information technology staff. Further, because support recipients were asked to nominate support providers from at work and outside of work, the focal actors in this study reflect a wide range of experiences and interaction levels with the support recipient.

As with any research activity, there are a few limitations that must be noted. First of all, the research was conducted during a historic event – a global pandemic caused by the Covid-19 virus that shifted the context of data collection dramatically (Promegger et al., 2021). This impacted the research in several ways. First, although data collection was scheduled to begin in mid-March of 2020 with healthcare workers, the incredible strain placed on the healthcare system necessitated pausing that data collection. Outreach to healthcare workers began in late summer after the coordinating organization noted a slowdown in caseload. In addition to the time delay, as of this writing, the pandemic and its implications for remote work has still not fully subsided (Kniffin et al., 2020). As such, support providers may have been limited in their interactions with the support recipients; I worked to control this by including contact frequency as a control variable within the models. This highlights an ongoing limitation of the in-person nature of much of the received social support literature – because social support measures center actions that are most easily and readily accomplished in face-to-face interactions, it overlooks other social support that may be provided. Thus, I encourage exploration into how social support may be provided at a distance, especially through virtual means; this is particularly relevant as remote work continues to change the interaction among coworkers and as friendships are conducted more and more in a digital space. Further, the pandemic loomed heavily in much of the world's consciousness during the data collection timeframe. As such, participants may have experienced latent stress that was higher than normal. To control for this, I gathered global stress perceptions from the support recipients to include in the model. Given social support's relationship to stressors and strain, this is good practice for any research in this avenue, but certainly necessitated by the research context. Similarly, distractions or psychological strains for the support providers may have limited their ability and desire to provide support to another; as

Hobfoll and colleagues (2018) note, when individuals feel personal resources are threatened, they are more likely to enter a protective and conservation-focused stance during which social support provision is less likely. Future research could explore the implications of stressful situations on potential support providers to determine what intra- and interpersonal attributes enable an individual to "push through" the resource threat and offer social support to another going through a similar situation. This is particularly relevant in workplaces where pressures and stresses ramp up for all employees at the same time (e.g. accounting/tax firms, retailers during holiday seasons, or teachers at the end of a school year or semester). Finally, as noted by my power analysis, the difficulty in gaining and retaining participants for this study may have limited my ability to find additional significant relationships.

A second limitation of this study is the use of support recipient-nominated support providers. While this ensured that there was received support to actually report, it may have elevated certain support provider characteristics (e.g. relationship quality) or created an elevated or range-restricted report of received social support. An alternative approach to this could be to gather characteristics from all employees within an organization, then ask them to provide ratings of social support receipt from each of their colleagues. Practically, this would likely be a taxing task for the participants; however, it may provide insights into network positions of key support providers. Through this, particularly if a small group of individuals emerge as unusually supportive, research can identify if support provision is relational (as this current research seems to imply) or emergent from other personal characteristics. Further, it may provide additional insights into the oft-proposed reciprocal nature of social support and other helping behaviors (Bowling et al., 2005).

Additionally, while a strength of this work is the use of other-ratings for social support behaviors, this may have resulted in certain support behaviors being overlooked and underreported by the support recipient. As Zee and Bolger (2019) note, invisible social support often results in more positive outcomes for the recipient, because the lack of awareness regarding its provision minimizes the self-esteem threat that can be experienced from visible social support. It may be the case, as well, that more skilled support providers (Rafaeli & Gleason, 2009) are able to provide support in such a way that the support recipient does not recognize it as such. Alternatively, the support provider's actions may not have been seen as supportive by the support recipient and thus not included in their responses. While this was the intent of this study (to capture antecedents of received social support), future research examining antecedents of social support provision efforts (whether or not they are recognized as such by the support recipient) may shed light on different inter- and intrapersonal antecedents as well as motivational factors driving support efforts.

Finally, the social support instrument used, while appropriate for this study, is not without issues. In a recent review, Jolly and colleagues (2020) called for better specificity and attention to the social support under consideration. I reviewed the myriad of received social support scales using relevant criteria for this work. The SIRRS instrument (Barry et al., 2009; Dehle et al., 2001), adapted for retrospective sampling, certainly fit the needs of this work, however given its reliance on behavioral descriptors (e.g. "said good things about me" or "expressed confidence in my ability to handle a situation"), some behaviors that likely would be captured or reported as social support may have gone unreported in this work. Additionally, as mentioned, the majority of social support scales were developed without consideration of virtual interactions. Thus, while the measure was able to capture in-person interactions, the

encouragement or check-ins that happen through email or text may have been missed. Thus, I again encourage the development of virtual or distance-appropriate social support measures.

This research begins what I hope is a longer-stream of literature focused on the support provider. Because many of the support provider characteristics proposed in this work had limited relationships with reported received social support, there are still unanswered questions regarding the actor and their motivations behind this beneficial action. Given the influence of relationship quality on several of the different types of social support, additional research examining how this process occurs may be enlightening. Relationship quality may heighten the support provider's willingness and ability to engage in perspective taking or have empathy; alternatively, it could deepen feelings of social exchange with a potential social support target. Regarding general self-efficacy, does the "can-do" attitude prompted by this assessment indicate the presence of available resources for helping? It may also simply drive a higher level of need to achieve or make a difference (Lindgren, 1976). These possible mechanisms offer only a few reasons for *why* these support provider characteristics lead to supportive behaviors; a wide open range of explanatory mechanisms exists with great potential to explore, following the notion that the support provider's characteristics likely influence and inspire their motivations for providing social support (Feeney & Collins, 2003). Additionally, future research should examine the motivating factors emergent from either other personal characteristics or goals. It would be useful to examine how reciprocity and community-related motives play into a decision to help (Mills & Clark, 1994; Park et al., 2011). Further, regulatory mode has been highlighted as a factor impacting support tailoring (Cavallo et al., 2016); examining possible support provider characteristics that influence one motivational orientation or another may shed further light on the choices a support provider makes.

Moving to the other end of the social support process, although the literature has extensively highlighted benefits (and some drawbacks) for the support recipient (Bavik et al., 2020; Jolly et al., 2020), the outcomes for the support provider are underexamined. Two possible avenues are worth mentioning here. First, does the support provider receive any personal gains from their efforts? Here we might examine performance or knowledge gains, a possibly deeper relationship with the support recipient, or subsequent reciprocal social support. This research has begun in a more general fashion (Lanaj et al., 2016), highlighting the impact of helping on regulatory resources. Future research should examine the momentary and longitudinal gains from helping. Additionally, future research should examine whether these gains are in line with the social support offered (i.e. if emotional social support increases feelings of connectedness to the support recipient). Conversely, as Lanaj and colleagues (2016) noted, helping does come at a cost. Especially given social support's ties to stress relief, the support provider may be negatively impacted in their support by experienced increased stress due to crossover (Westman, 2001). Further, social support does take time and energy, thus the support provider may report resource depletion as a result of their support efforts. Lastly, depending on the success of their efforts, the support provider could experience negative affect due to support that was ineffective or poorly received.

Conclusion

In this dissertation, I sought to understand a frequently overlooked participant in the social support process – the support provider. This study highlighted that holding trust-filled, harmonious, and satisfying relationships matters for the provision of social support. This is important for organizations to note as they craft teams and promote connections among their employees. Additionally, it is important for individuals to remember as they interact with their

colleagues and friends; while I do not encourage building relationships just so an individual has a potential source of social support, this research does show that fostering good, healthy relationships with others "pays off". The implications of building high quality relationships with others were seen even in the process of gathering participants for this study, and I am excited at the implications it has for personal, relational, and organizational health moving forward.

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Appendix A: Figures

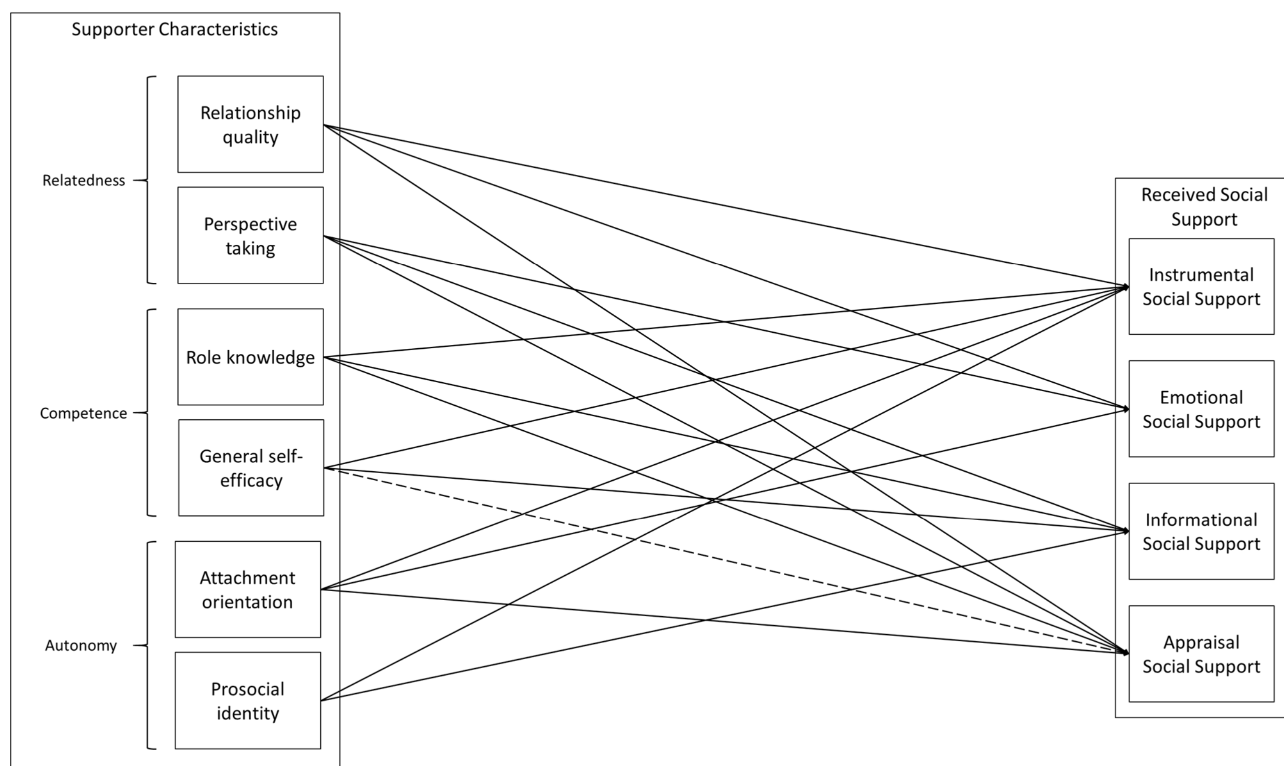

Figure 1: Proposed research model

Note: Solid arrows depict hypothesized positive relationships; dashed arrows depict hypothesized negative relationships.

Appendix B: Tables

Table 1: Social support types, definitions, and examples

Type	Definition	Example(s)
Instrumental Social Support	Behaviors intended to yield additional physical/tangible resources for the recipient	Supporter brings the recipient coffee when they're working late on a project
Emotional Social Support	Behaviors intended to provide feelings of caring, empathy, love, and/or trust	Supporter listens to the recipient discuss a rough day or problem at work
Informational Social Support	Behaviors intended to provide information that the recipient can use to help themselves	Supporter shares the contact information of a potential new client for the recipient
Appraisal Social Support	Behaviors intended to provide the recipient with information relevant to self-evaluation	Supporter tells the recipient that they are good at specific things related to their role

Note: from definitions from House, 1981

Table 2: Summary of organizations and participants contacted

Recruitment Source	Initially Contacted	(Time 1) Total number of supporter contacts provided [Number of recipient participants]	(Time 2) Supporter Responses	(Time 3) Recipient ratings of supporters [Number of recipient participants]	Matched Pairs
MBA/MAcc	561	110 [61]	45	98 [52]	36
Rural Hospitals	287	98 [51]	47	89 [46]	37
University Information Technology Department	233	64 [49]	40	87 [45]	40
Total	1081	272 [161]	132	274 [143]	113

Table 3: Summary of survey administration

Survey	Scale	Participant completing
Survey 1	- Demographics - Support provider(s) and contact information - Contact frequency with support provider - Relationship type - Relationship length	Support recipient
Survey 2	- Demographics - Relationship quality - Perspective taking - Role knowledge - General self-efficacy - Attachment orientation - Prosocial identity - Role engagement	Support provider
Survey 3	- Received social support - Perceived stress	Support recipient

Table 4: Comparison of social support scales

Scale	Four aspects present	Supporter-focused behaviors	Not double-barreled	Demonstrates adequate validity
ISEL	No (missing emotional support)	No	Yes	Yes
ISSB	No (three – instrumental, emotional, and informational)	Yes	Yes	Yes
UCLA-SSI	No (three – informational, instrumental, and emotional)	Yes	Yes	Unsure
SSBC	Yes (with additional "negative behaviors" variable)	Yes	Yes	Yes
SIRRS	Yes (with additional "network support" variable)	Yes	Yes	Yes
FSS	Yes	No	Yes	Unsure
FSIW	No (Instrumental and Emotional)	Yes	Questions vary	Yes

Table 5: Confirmatory factor analysis of one, two, three, and four-factor models of social support

Model	χ^2	df	RMSEA	CFI	TLI
One-Factor (a one-dimensional model)	272.393	77	.184	.751	.705
Two-Factor (combining Emotional/Appraisal and Informational/Instrumental)	228.022	76	.163	.806	.768
Two-Factor (combining Emotional/Instrumental and Appraisal/Informational)	207.738	76	.152	.832	.799
Two-Factor (combining Emotional/Informational and Appraisal/Instrumental)	271.728	76	.185	.750	.701
Three-Factor (combining Emotional and Appraisal)	151.083	74	.118	.902	.879
Three-Factor (combining Emotional and Informational)	179.861	74	.138	.865	.834
Three-Factor (combining Emotional and Instrumental)	185.394	74	.142	.858	.825
Three-Factor (combining Appraisal and Informational)	150.707	74	.118	.902	.880
Three-Factor (combining Appraisal and Instrumental)	211.286	74	.157	.825	.784
Three-Factor (combining Informational and Instrumental)	206.217	74	.154	.831	.792
Four-Factor	118.142	71	.094	.940	.923

Table 6: Confirmatory factor analysis of support provider characteristics

Model	χ^2	df	RMSEA	CFI	TLI
One-Factor (a one-dimensional model)	798.435	170	.184	.641	.264
Two-Factor (all support provider characteristics combined; role engagement separate)	736.855	169	.176	.405	.331
Four-Factor (based on self-determination categories; role engagement separate)	363.913	164	.106	.790	.757
Five-Factor	209.933	160	.054	.948	.938

Table 7: Descriptive Statistics - Means, Standard Deviations, Source

Variable	*M*	*SD*
Support Provider		
1. Relationship Quality	4.60	0.46
2. Perspective Taking	3.80	0.60
3. Role Knowledge	4.20	0.67
4. General Self-Efficacy	4.39	0.58
5. Secure Attachment Orientation	3.69	0.52
6. Prosocial Identity	4.35	0.57
7. Children at Home	0.97	1.40
8. Role Engagement	4.14	0.58
9. Relationship Type	0.48	0.50
10. Sex	0.44	0.50
Support Recipient		
1. Instrumental Social Support	3.52	0.93
2. Emotional Social Support	3.27	0.84
3. Informational Social Support	3.49	0.75
4. Appraisal Social Support	3.77	0.66
5. Relationship Length	10.61	11.59
6. Contact Frequency	4.07	1.03
7. Stress	2.50	0.60
8. Sex	0.46	0.50

Note: Relationship Type: 0 = non-work, 1 = work; Sex: 0 = female, 1 = male; Contact Frequency: 1 = lowest amount, 5 = highest amount

Table 8: Correlations between study variables

Variable	1	2	3	4	5	6	7	8
1. Relationship Quality	(0.84)							
2. Perspective Taking	.08	(0.80)						
3. Role Knowledge	.03	.19*	(0.89)					
4. General Self-Efficacy	-.11	.27**	.42***	(0.90)				
5. Secure Attachment Orientation	.16	.22*	.20*	.24*	(0.70)			
6. Prosocial Identity	-.14	.28**	.03	.26**	.26**	(0.76)		
7. Instrumental SS	.23**	.00	-.01	.18	-.02	.01	(0.91)	
8. Emotional SS	.46***	.03	-.15	-.04	-.01	.14	.66***	(0.83)
9. Informational SS	21*	.06	.07	.14	.00	.08	.60***	.53***
10. Appraisal SS	.25**	.01	-.02	.10	-.05	.11	.56***	.74***
11. Children at Home	-.17	.02	.05	-.15	-.15	.04	-.09	.02
12. Role Engagement	-.10	.28**	.24*	.11	-.01	.39***	-.06	.15
13. Relationship Type	-.37***	.21*	.19*	.22*	.18	.15	-.07	-.47***
14. Relationship Length	.16	-.17	.01	-.14	-.01	.07	-.07	.23*
15. Stress	-.05	-.08	-.12	.05	-.01	-.10	.16	-.02
16. Contact Frequency	.04	-.18	.04	.10	-.04	.00	.34***	.24*
17. Sex (SP)	-.03	-.04	.08	.17	-.08	-.20*	.08	-.14
18. Sex (SR)	-.11	-.07	-.03	.01	-.12	-.13	-.04	-.36**

Variable	9	10	11	12	13	14	15	16	17	18
9. Informational SS	(0.86)									
10. Appraisal SS	.68***	(0.88)								
11. Children at Home	-.11	-.02	--							
12. Role Engagement	.01	.02	.17	(0.85)						
13. Relationship Type	-.11	-.26**	-.05	.04	--					
14. Relationship Length	-.14	-.01	.10	.13	-.53***	--				
15. Stress	.20*	.07	-.10	-.08	.02	-.18	(0.90)			
16. Contact Frequency	.37***	.31**	-.04	.08	-.33***	.01	.13	--		
17. Sex (SP)	.13	.09	-.08	-.09	.11	-.16	.14	.17	--	
18. Sex (SR)	-.18	-.24*	-.03	-.05	.08	-.14	-.04	.04	.04	--

Note: SS = social support; SP = support provider; SR = support recipient; Cronbach's alpha is presented in parentheses on the diagonal; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; Sex: 0 = female, 1 = male; Group: 0 = non-work, 1 = work; Contact Frequency: 1 = lowest amount, 5 = highest

Table 9: Structural equation modelling results - instrumental, informational, and appraisal social support

Variable	Instrumental SS		Informational SS		Appraisal SS	
	β	se	*β*	se	*β*	se
Controls						
Children at Home	-.020	.106	-.084	.107	.002	.111
Role Engagement	.020	.147	-.008	.148	.072	.134
Relationship Type	.089	.155	-.174	.142	-.257+	.157
Relationship Length	.033	.127	-.193+	.135	-.146	.136
Stress	.125	.110	.160	.114	-.011	.115
Contact Frequency	.350***	.127	.320**	.125	.207+	.128
Sex (SP)	-.068	.110	.033	.113	.072	.111
Sex (SR)	-.112	.110	-.214*	.108	-.249*	.112
Main Variables						
Relationship Quality	.267*	.130	-----	-----	.068	.122
Perspective Taking	-----	-----	.072	.128	-.010	.133
Role Knowledge	-.206+	.134	.004	.132	-.063	.127
General Self-Efficacy	.335**	.146	.086	.144	.168	.140
Secure Attachment Orientation	-.141	.108	-----	-----	-.036	.097
Prosocial Identity	-.137	.161	.004	.148	-----	-----

+$p < 0.10$ *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 10: Regression analysis - emotional social support

Variable	**Emotional Social Support**	
	Model 1	**Model 2**
Children at Home	-.029	.062
Role Engagement	.147	.098
Relationship Type	-.499***	-.319*
Relationship Length	-.113	-.079
Stress	.037	-.032
Contact Frequency	.106	.201+
Sex (SP)	-.062	-.052
Sex (SR)	-.287**	-.307**
Relationship Quality		.384**
Perspective Taking		-.008
Secure Attachment Orientation		-.057
R^2	.287	.383
ΔR^2	.287	.096
Δdf		3

+$p < 0.10$ *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 11: Summary of tested hypotheses and results

Support Provider Characteristic	Hypothesis	Result
Relationship Quality	1a. Positively related to instrumental social support 1b. Positively related to emotional social support 1c. Positively related to appraisal social support	**Supported** ($p < 0.05$) **Supported** ($p < 0.01$) Not supported ($p = .520$)
Perspective Taking	2a. Positively related to emotional social support 2b. Positively related to informational social support 2c. Positively related to appraisal social support	Not supported ($p = .945$) Not supported ($p = .510$) Not supported ($p = .928$)
Role Knowledge	3a. Positively related to instrumental social support 3b. Positively related to informational social support 3c. Positively related to appraisal social support	Not supported (opposite sign) ($p < 0.1$) Not supported ($p = .974$) Not supported ($p = .569$)
General Self-Efficacy	4a. Positively related to instrumental social support 4b. Positively related to informational social support 4c. Negatively related to appraisal social support	**Supported** ($p < 0.01$) Not supported ($p = .490$) Not supported ($p = .166$)
Secure Attachment Orientation	5a. Positively related to instrumental social support 5b. Positively related to emotional social support 5c. Positively related to appraisal social support	Not supported ($p = .121$) Not supported ($p = .595$) Not supported (opposite sign) ($p = .671$)
Prosocial Identity	6a. Positively related to instrumental social support 6b. Positively related to informational social support	Not supported ($p = .315$) Not supported ($p = .977$)

Table 12: Supplemental analysis – Instrumental, informational, and appraisal social support relationships without control variables

Variable	Instrumental SS		Informational SS		Appraisal SS	
	β	se	*β*	se	*β*	se
Relationship Quality	.215*	.100	-----	-----	.143	.093
Perspective Taking	-----	-----	.040	.103	-.001	.106
Role Knowledge	-.202+	.115	-.064	.117	-.068	.118
General Self-Efficacy	.352**	.092	.178	.130	.177	.132
Secure Attachment Orientation	-.131	.110	-----	-----	-.097	.085
Prosocial Identity	-.138	.110	-.093	.101	-----	-----

+$p < 0.10$ *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 13: Supplemental analysis – Emotional social support relationships

Variable	Emotional Social Support		
	Model 1	**Model 2**	**Model 3**
Relationship Quality	.490***	.533***	.416***
Perspective Taking	-.043	-.054	.016
Role Knowledge	------	-.200+	-.188
General Self-Efficacy	------	.100	.163
Secure Attachment Orientation	-.095	-.143	-.115
Prosocial Identity	------	.243*	.171
Children at Home	-------	-------	.117
Role Engagement	-------	-------	.061
Relationship Type	-------	-------	-.331*
Relationship Length	-------	-------	-.088
Stress	-------	-------	.004
Contact Frequency	-------	-------	.142
Sex (SP)	-------	-------	-.016
Sex (SR)	-------	-------	-.272**
R^2	.195	.248	.417
ΔR^2	.195	.053	.169
Δdf		3	8

$+p < 0.10$ $*p < 0.05$; $**p < 0.01$; $***p < 0.001$

Table 14: Supplemental analysis – Instrumental, informational, and appraisal social support relationships with all support provider characteristics

Variable	**Instrumental SS**		**Informational SS**		**Appraisal SS**	
	β	se	*β*	se	*B*	se
Relationship Quality	.401***	.123	.344**	.125	.390**	.134
Perspective Taking	-.072	.135	-.065	.135	-.099	.144
Role Knowledge	-.182+	.117	-.047	.120	-.036	.124
General Self-Efficacy	.349**	.137	.194	.137	.160	.142
Secure Attachment Orientation	-.220+	.114	-.115	.117	-.195+	.124
Prosocial Identity	.019	.138	.139	.143	.256+	.155

+$p < 0.10$ *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 15: Supplemental analysis – Instrumental, informational, and appraisal social support with all variables in model

Variable	Instrumental SS		Informational SS		Appraisal SS	
	β	se	*β*	se	*B*	se
Controls						
Children at Home	-.002	.107	-.049	.112	.026	.115
Role Engagement	-.065	.168	-.093	.175	-.073	.181
Relationship Type	.149	.162	-.038	.163	-.182	.170
Relationship Length	.037	.132	-.191+	.141	-.156	.144
Stress	.142	.112	.188*	.118	.017	.118
Contact Frequency	.350***	.135	.315**	.130	.201+	.134
Sex (SP)	-.052	.111	.051	.120	.113	.124
Sex (SR)	-.091	.111	-.176*	.111	-.213*	.115
Main Variables						
Relationship Quality	.406***	.156	.303**	.156	.274*	.163
Perspective Taking	.013	.156	.009	.162	-.045	.169
Role Knowledge	-.165	.139	.043	.147	.017	.149
General Self-Efficacy	.354*	.155	.059	.157	.089	.163
Secure Attachment Orientation	-.230*	.129	-.148	.134	-.172	.138
Prosocial Identity	.029	.192	.243	.208	.315+	.218

+$p < 0.10$ *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 16: Supplemental analysis - Global social support

Variable	Global Social Support	
	Model 1	**Model 2**
Relationship Quality	.397***	.345***
Perspective Taking	-.057	.047
Role Knowledge	-.096	-.095
General Self-Efficacy	.238*	.208+
Secure Attachment Orientation	-.144	-.126
Prosocial Identity	.143	.145
Children at Home	-------	-.006
Role Engagement	-------	-.001
Relationship Type	-------	-.111
Relationship Length	-------	-.133
Stress	-------	.100
Contact Frequency	-------	.306**
Sex (SP)	-------	.053
Sex (SR)	-------	-.125
R^2	.128	.272
ΔR^2	.128	.144
Δdf		8

+$p < 0.10$ *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Appendix C: Survey Items

Relationship quality (Philippe et al., 2010)

Thinking about your relationship with the individual who identified you as a supporter, to what extent would you consider it to be:

1) Enriching (5-point Likert: 1 = not at all, 5 = extremely)
2) Satisfying
3) Harmonious
4) Trust-inspiring

Perspective taking (Davis, 1980)

1) I believe that there are two sides to every question and try to look at them both (1 = does not describe me well; 5 = describes me very well)
2) When I'm upset at someone, I usually try to "put myself in his shoes" for a while
3) I try to look at everybody's side of a disagreement before I make a decision
4) I sometimes find it difficult to see things from the "other guy's" point of view (r)
5) Before criticizing somebody, I try to image how I would feel if I were in their place
6) If I'm sure I'm right about something, I don't waste much time listening to other people's arguments (r)
7) I sometimes try to understand my friends better by imagining how things look from their perspective

Role knowledge (adapted from Sawyer, 1992)

Thinking about the person who noted you as a supporter, please rate your level of certainty regarding the following aspects of their role:

1) I am certain of their duties and responsibilities (1 = very uncertain; 5 = very certain)
2) I am sure of the goals and objectives for this individual's role
3) I understand how this individual's role relates to the overall objectives of their organization
4) I am clear about the expected results of this person's role

5) I know which aspects of this individual's role are most likely to lead to positive evaluations

6) I understand how this person divides their time among the tasks required of their role

7) I am certain of how this person schedules their day

8) I know how they decide to approach their tasks

9) I am clear on whether this individual does their role in a correct and proper manner

10) I am sure that I understand the best ways for this person to approach their tasks

General self-efficacy (Chen et al., 2001)

1) I will be able to achieve most of the goals that I have set for myself (1 = strongly disagree; 5 = strongly agree)

2) When facing difficult tasks, I am certain that I will accomplish them

3) In general, I think that I can obtain outcomes that are important to me

4) I believe that I can succeed at most any endeavor to which I set my mind

5) I will be able to successfully overcome many challenges

6) I am confident that I can perform effectively on many different tasks

7) Compared to other people, I can do most tasks very well

8) Even when things are tough, I can perform quite well

Secure attachment orientation (Wei et al., 2007)

Please rate how each of the following statements describes your typical feelings regarding relationships/friendships.

1) It helps to turn to others in times of need (1 = strongly disagree; 5 = strongly agree)

2) I need a lot of reassurance that I am cared about by others (r)

3) I want to get close to others, but I keep pulling back (r)

4) I find that others don't want to get as close as I would like (r)

5) I turn to others for many things, including comfort and reassurance

6) My desire to be very close sometimes scares people away (r)

7) I try to avoid getting too close to others (r)
8) I do not often worry about being abandoned
9) I usually discuss my problems and concerns with others
10) I get frustrated if others are not available when I need them (r)
11) I am nervous when others get too close to me (r)
12) I worry that others won't care about me as much as I care about them (r)

Prosocial identity (Grant et al., 2008)

1) I see myself as caring (1 = strongly disagree; 5 = strongly agree)
2) I see myself as generous
3) I regularly go out of my way to help others

Social support (Dehle et al., 2001)

Thinking about the past month, how often has *indicated support provider* engaged in each of the following behaviors?

1) Instrumental
    a. offered to do something to help directly (with a situation) (1 = never; 5 = a great deal)
    b. did something to help me directly (with a situation)
    c. offered to help me indirectly (with a situation)
    d. did something to help me indirectly (with a situation)
    e. offered to do something with me to help me feel better
2) Emotional
    a. let me know that they were available to help
    b. said they felt close to me
    c. said they were sorry a situation had occurred

d. said they understood how I felt about a situation
e. cried with me about a situation
f. asked how I was doing or feeling

3) Informational
a. gave me suggestions about how to handle a situation
b. told me what to do to solve a problem or deal with a situation
c. helped me think about a situation in a new way
d. taught me or showed me how to do something
e. shared facts or information with me about a situation I was facing
f. shared a personal experience that was similar to my situation
g. restated what I had told them about a situation
h. inferred how I was feeling in a situation

4) Appraisal
a. told me everything would be OK
b. said they thought I handled a situation well
c. expressed confidence in my ability to handle a situation
d. said good things about me
e. said it was OK to feel the way I was feeling
f. took my side when discussing a situation
g. said they would feel the same way in my situation
h. said I was not at fault for my situation

Role engagement (Crawford et al., 2013)

Thinking about what you consider to be your primary role (this could be an employee, a spouse/partner, or other things), please rate your level of agreement with each of the following statements:

1) I work with high intensity in my role (1 = strongly disagree; 5 = strongly agree)
2) I exert my full energy
3) I devote a lot of my energy
4) I put my emotions into what I do
5) I am emotionally connected
6) I put my feelings into my work
7) I give my full attention to my job
8) I concentrate completely
9) My mind is focused on the work that I do

Perceived stress (Cohen et al., 1983)

Thinking about the past month…

1) How often have you been upset because of something that happened unexpectedly? (1 = Never; 5 = Almost Always)
2) How often have you felt that you were unable to control the important things in your life?
3) How often have you felt nervous and "stressed"?
4) How often have you dealt successfully with irritating life hassles? (r)
5) How often have you felt that you were effectively coping with important changes that were occurring in your life? (r)
6) How often have you felt confident about your ability to handle your personal problems? (r)
7) How often have you felt that things were going your way? (r)

8) How often have you found that you could not cope with all the things that you had to do?
9) How often have you been able to control irritations in your life? (r)
10) How often have you felt that you were on top of things? (r)
11) How often have you been angered because of things that were outside of your control?
12) How often have you found yourself thinking about things that you have to accomplish?
13) How often have you been able to control the way you spend your time? (r)
14) How often have you felt difficulties were piling up so high that you could not overcome them?