Promoting employee responsibility-taking: An examination of the situational and individual antecedents of responsibility-taking behaviors

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Submitted in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy
under the Executive Committee
of the Graduate School of Arts and Sciences

COLUMBIA UNIVERSITY

2025

Abstract

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This dissertation examines the individual and situational antecedents of employee responsibility-taking behaviors. Despite their importance for work performance, little research has explored the factors that encourage employees to self-regulate these demanding behaviors, which require fulfilling existing commitments and proactively taking ownership for emerging tasks. Drawing on self-determination theory, this dissertation investigates the impact of leadership style on responsibility-taking. Additionally, drawing regulatory mode theory, the effects of goal pursuit strategies were examined, both as stable individual dispositions and as situationally-induced motivational states.

Across two studies, including a cross-sectional survey of full-time workers and a randomized experiment, we found that autonomy-supportive leadership promoted responsibility-taking, while controlling leadership did not. Furthermore, our findings showed that this effect was mediated by employees' perceptions that their leader satisfied their core psychological needs for competence and connection. In addition, these benefits were most pronounced for individuals primed to work with urgency, who were less willing to take responsibility when leaders failed to provide a compelling rationale for the work's importance. By contrast, leadership style did not significantly affect participants' willingness to engage in responsibility-taking behavior among those primed for deliberative, careful work. These findings highlight key motivational

mechanisms underlying responsibility-taking and clarify the conditions under which leadership support is most influential.

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Acknowledgements

First, I'd like to express my sincere gratitude to my committee members, Bill Pasmore, Caryn Block, Gina Buontempo, Archie Bates, and Joel Brockner. Your thoughtful feedback and consistent encouragement elevated my research and made this work possible. Beyond our academic collaboration, I genuinely enjoyed spending time with each of you. I'd like to express a special thank you to Bill with whom I've had the pleasure of collaborating with since my first year as a doctoral student. Bill, I'm grateful for your unwavering support over the years as my advisor. Your career as a true scholar-practitioner inspires me, and I hope to carry that spirit forward as I chart my own path.

I'd also like to thank the Social-Organizational Psychology program community for being such a supportive and kind group of colleagues. To my doctoral cohort – Lan and Evi– I'm grateful to have shared so many program milestones together. My Ph.D. journey wouldn't have been the same without our many writing sessions and hangouts, from across the country during the pandemic to right here in Manhattan at Metro Diner. I'm also extremely thankful to Nilima, Nick, and Elisabeth, with whom I had the privilege of collaborating extensively on research and applied work throughout my doctoral studies. Each of you was a source of guidance, inspiration, and friendship in those endeavors. To the broader SOP community – from those I had the pleasure of taking courses with to everyone I spent time with in the Cube – you all added meaning to such an important chapter in my life. Without our conversations and my opportunities to learn from you all, the Ph.D. journey would have felt far more solitary. I look forward to continuing our collaboration as we move forward into our careers.

To my parents, I truly wouldn’t have gotten to this point without your love, encouragement, and lifelong sacrifices. Thank you for instilling in me the values of education and hard work, as well as the importance of living a well-rounded life filled with family and friends. I’ve watched you balance these values with such grace, leading successful careers while keeping loved ones at the center of it all. Mom, our countless hours talking research over the years inspired me to follow in your footsteps and pursue this path. And Dad, your insatiable curiosity rubbed off on me—a gift that has made learning a joy and has opened up the world to me. I love you both so much.

Lastly, to my wife Areta, I am so grateful to have had you by my side throughout these last five years. You have been my rock, my best friend, and the most incredible partner one could ask for. I will always be thankful for your support and understanding in spite of the countless late nights and weekend sacrifices that these past five years have demanded from us both. We did it! I am so lucky to have you, and I love you very much.

Here’s to you all!

Chapter 1 – Introduction

Global trends are impacting the nature of work in profound ways, creating new expectations for employees (Culshaw, 2023; Fraccaroli et al., 2024). Two key macro trends driving these changes are uncertainty and interdependence. Uncertainty, largely precipitated by the rapid pace of technological disruption, has made it increasingly difficult for organizations to predetermine tasks and the skills needed to perform them (Bititci et al., 2012). As a result, employees are expected to take a more active role in defining and carrying out work tasks and priorities (Grant & Rothbard, 2013; Parker et al., 2006). Additionally, the growing need for team-based and collaborative work in knowledge-intensive service sectors has led to increased interdependence between individuals and colleagues (Chen & Kanfer, 2006), complicating the traditional boundaries of tasks. Employees across industries rely now on others to access resources and input that are necessary to complete their own work (Chen & Kanfer, 2024).

In light of these trends, leaders across the business and civil sectors are emphasizing the critical role of individual responsibility-taking for organizational survival in the 21st Century (Ahir et al., 2022; Lin, 2012). Specifically, given the rise of uncertainty, leaders are eager to understand what motivates employees to not only meet their current obligations, but also to proactively take responsibility for emerging tasks (Carucci, 2020; Grant & Ashford, 2008; Wang et al., 2024). Without a focus on fulfilling existing obligations, leaders fear that priorities will be lost in constantly-changing work environments (Lin, 2012). At the same time, without assuming responsibilities for emerging tasks, there is concern that teams will struggle to innovate and adapt (Sonnentag & Spychala, 2012). Compounding these issues, as organizations become increasingly reliant on teams (Chen & Kanfer, 2024), employees are pressured to be responsbile for more in environments that are highly collaborative, which obscure traditional boundaries of task ownership. In short, employees are now required to demonstrated a higher degree of ownership and self-initiative over their work in environments that are uncertain and highly collaborative (Gagné et al., 2022).

Research has identified several employee behavioral competencies that are deemed vital for organizational success in today's uncertain and highly collaborative work environments. For example, organizational citizenship behaviors (OCB; Smith et al., 1983) are voluntary, discretionary actions that go beyond formal job requirements and are aimed at benefitting the organization (Dalal, 2005). OCBs include helping coworkers, volunteering for extra-role activities, and upholding workplace norms (Organ & Ryan, 1995). Another behavioral competency vital in today's workplace is proactive work behavior (Grant & Ashford, 2008; Parker et al., 2010), which consists of prosocial and adaptive behaviors that actively improve work practices or processes such as challenging the status quo or implementing solutions to faulty procedures (Grant et al., 2011). Both of these behaviors have been linked through meta-analyses to positive individual outcomes such as favorable managerial ratings, task and overall job performance, as well as to beneficial organizational-level outcomes, including reduced costs, increased productivity, newcomer socialization, and customer sastisfaction (Dalal, 2005; Gonzalez-Mulé et al., 2014; Thomas et al., 2010; Zhao et al., 2023). While these competencies are invaluable for navigating uncertainty and interdependence, we argue that they do not fully capture the breadth of what is now expected of employees. For instance, OCBs focus on efforts that benefit others or the organization *in general* but do not address task-specific responsibilities. Moreover, proactive behaviors are oriented toward future and change-related tasks, yet are largely silent on employees' accountability towards their existing obligations.

Given these gaps and the call for greater personal responsibility-taking, research is needed to develop an understanding of the factors that promote employee responsibility-taking (Bolino & Klotz, 2022; Carucci, 2020). As a first step in responding to this call, recent research conducted by Ajaikumar et al. (2024) defined the responsibility-taking behavior (RTB) construct for work settings and validated an associated measure. Their construct points to the specific activities that are required of employees to account for existing and future task-related responsibilities while accommodating for uncertainty and interdependence. Based on findings from multiple studies, Ajaikumar et al. (2024) demonstrated that their measure of responsibility-taking was positively related to job performance, conscientiousness, and OCB, providing initial evidence for its importance in organizational settings. However, while the outcomes of engaging in responsibility-taking behavior are clear, we have yet to understand what motivates employees to engage in these behaviors. Therefore, this dissertation seeks to identify the individual and situational factors that promote employee responsibility-taking behaviors.

We accomplish these aims as follows. First, through literature review, we develop theoretically-grounded hypotheses of the individual and situational factors that promote responsibility-taking behaviors. Specifically, we draw on self-determination theory (Deci & Ryan, 1985a, 2000) and regulatory mode theory (Higgins et al., 2003; Kruglanski et al., 2000) to explain the factors that would be expected to promote responsibility-taking behaviors. Second, the research hypotheses are tested across two studies using separate methodologies. In the first study, we explored whether our hypothesized relationships exist in organizational settings through a cross-sectional survey of full-time workers across various industries and professions in the United States (U.S.). Then, in study two, we conducted a randomized experiment to isolate our hypothesized relationships and examine whether they can be manipulated. Finally, we discuss findings with a particular focus on developing an actionable set of recommendations for practitioners who seek to cultivate responsibility-taking behaviors within their organizations.

Chapter 2 – Literature Review

2.1 The New Demands of Work: How Uncertainty and Interdependence Shape Responsibility-Taking

Global trends like increases in inter-firm competitiveness and the speed of technological advancement have accelerated the pace of change in organizations today, significantly affecting how employees approach their work (Cappelli et al., 2017; Pasmore, 2015; Qureshi & Woo, 2022). Researchers characterize these global trends as 'VUCA', referring to the volatile, uncertain, complex, and ambiguous conditions impacting organizations (Baran & Woznyj, 2021). Two aspects of VUCA environments that significantly impact employees' ability to complete work tasks are uncertainty and interdependence (Gagné et al., 2022). Each pose implications for the extent to which an individual may take and demonstrate responsibility for work tasks.

Uncertainty caused by the rapid nature of technological developments and changes in global supply chains make work tasks less predictable (Ahir et al., 2022; Griffin et al., 2007). Under such conditions, employees are expected to be more proactive and deliberative in executing tasks. Specific behaviors such as taking initiative and relying on personal discretion in planning and executing work tasks are seen as invaluable against the backdrop of uncertainty (Fuller et al., 2006; Grant & Ashford, 2008; Parker, 1998; Sonnentag & Spychala, 2012). As an example, illustrating the impact of uncertainty on medical professionals, Gardner (2007) states:

> "While the core responsibility of medicine – to provide quality patient care – has not changed, the field of medicine is changing so rapidly that individual physicians must

> figure out for themselves how to best uphold the core professional responsibility…many face tensions in their daily work that force them to negotiate where to focus their attention" (pg. 253).

As Gardner (2007) describes, the pace of change and uncertainty impacting the medical industry demand unprecedented levels of personal discretion for physicians in carrying out their responsibilities.

In addition to uncertainty, the rise in interdependence places further strain on work tasks, blurring the boundaries of task ownership. In many industries, the interdependence of tasks has emerged as a result of the global shift away from routinized manual labor to knowledge-intensive service economies (Parker et al., 2001; Qureshi & Woo, 2022; Raveendran et al., 2020). Such work requires more complex arrangements of teams and areas of expertise than was historically required for rote, mechanized labor. Whereas employees were once responsible for discrete tasks assigned them individually, tasks now involve multiple dependencies on the work of others (Chen & Kanfer, 2006). This shift requires employees to be more team-oriented and prosocial, even when it comes to fulfilling their own responsibilities. Additionally, interdependence has been shown to lead to other challenges that are unique to working with others. For example, *diffusion of responsibility* (Whyte, 1991) – a phenomenon in which individuals are less inclined to take responsibility when others are present – is expected to further constrain individuals' ability to fulfill prior obligations or take on role related-tasks (Lin, 2012).

Given the clear challenges they pose, uncertainty and interdependence have sparked discussion on the importance of responsibility-taking in organizational settings (Griffin et al., 2007). In response, scholars and leaders alike have emphasized the need to better understand the specific behaviors employees must engage in to take on responsibilities in the absence of clearly-defined tasks or clearly-demarcated task ownership (Raveendran et al., 2020).

2.2 A New Era of Responsibility

In organizations and beyond, leaders have noted how uncertainty and interdependence have created an imperative for individual responsibility-taking behaviors. For example, during his tenure at Apple, Steve Jobs introduced the *Directly Responsible Individual* (DRI) initiative to address the challenges associated with fast-growth and complex, cross-functional work that has been critical to the company's success (Lee, 2011). The DRI initiative required that each project be assigned a "directly responsible individual" who is accountable for the progress or failure of the work. Speaking to the success of the initiative, a former Apple employee noted, "In a fast-growing company with tons of activity, important things get left on the table not because people are irresponsible, but because they're really busy" (Lin, 2012, p. 2). Reflecting on the importance of the DRI initiative, it has recently been credited as a key component of Apple's approach to management, helping the company keep pace with rapid technological change while delivering products through highly-complex, collaborative work (Filloux, 2011; Lee, 2011).

Additionally, in the popular press, publications like *Forbes* and *Harvard Business Review* have documented the rise of the workplace phenomena associated with employees failing to take responsibility, further underscoring a timely interest in understanding the factors that promote or inhibit responsibility-taking. For example, trends like "quiet quitting" – where employees disengage from tasks requiring personal initiative (Bolino & Klotz, 2022) – and the "somebody syndrome", where individuals quickly assign responsibility to others while overlooking their own accountability (Hurst, 2023), are viewed as responses to the stress and pressure generated by increasing uncertainty and complexity at work.

Finally, civil sector leaders have noted how the macro trends of uncertainty and interdependence shape daily life in the 21st Century. For example, in a keynote address given in the months just before the outbreak of the COVID-19 pandemic, managing director of the International Monetary Fund, Kristalina Georgieva presciently noted, “If I had to identify a theme at the outset of the new decade it would be increasing uncertainty” (Ahir et al., 2022). Sharing this sentiment more than a decade earlier, Barack Obama highlighted how uncertainty and interdependence shape daily life in the 21st Century. In particular, citing the uncertainty of financial markets and the challenges of working with others from different backgrounds in a globalized world, Obama stated in his 2009 inaugural address that what is required of individuals is:

> “a new era of responsibility – a recognition that we have duties to ourselves, our nation, and the world; duties that we do not grudgingly accept, but rather seize gladly, firm in the knowledge that there is nothing so satisfying… than giving our all to a difficult task” (p. 5).

Therefore, given the premise that individuals face uncertainty and increased interdependence in their work and lives, the question becomes: what drives individuals to take responsibility? Specifically, in organizations, what conditions can leaders and managers create that motivate employees to ‘seize’ responsibility? This is the central aim of this research – to examine the factors that promote employee responsibility-taking behavior.

Before exploring the factors that promote employee responsibility-taking, we first illustrate the construct in greater detail by exploring how employee responsibility-taking has been conceptualized in organizational scholarship over time.

2.3 Brief History of Conceptualization of Employee Responsibility-Taking Behaviors

A review of organizational scholarship on responsibility-taking reveals that there are three periods in which the concept of employee responsibility-taking has been shaped. Specifically, expectations about what employees ought to take responsibility for has evolved during three paradigms in organizational scholarship, each of which reflect key assumptions about the role that employees were expected to play in completing work tasks. Consistent with similar reviews (Fuller et al., 2006; Griffin et al., 2007), our account, summarized in Figure 1, describes evolution of the concept of employee responsibility-taking as follows.

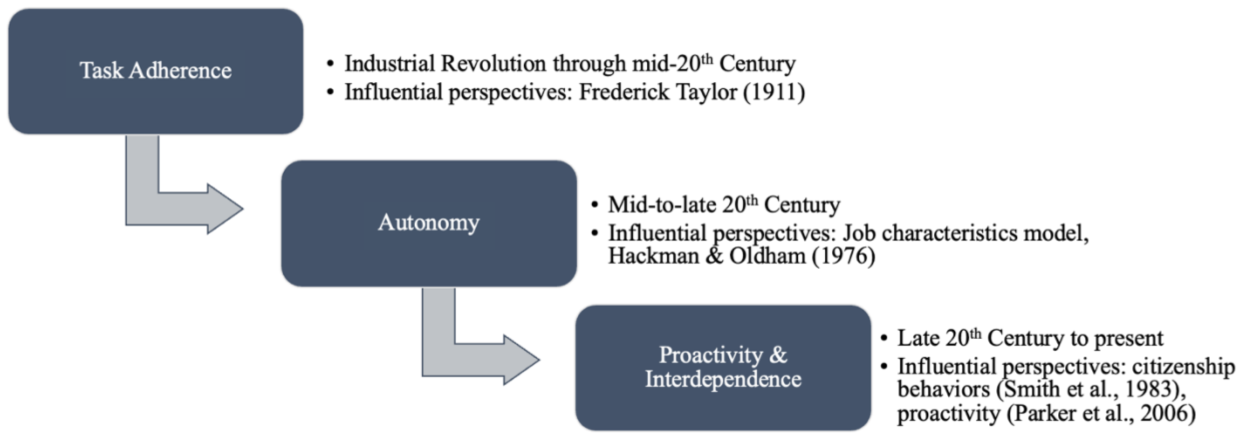


Figure 1: Evolution of Concept of Employee Responsibility

Taylorism and Task Adherence

Beginning in the years following the Industrial Revolution, Early 20th-Century views on employee responsibility were strongly influenced by Frederick Taylor's *Principles of Scientific Management* (Taylor, 1911). In *Principles*, employee responsibility was conceptualized as adhering to, and efficiently completing, prescribed tasks. While this aspect of responsibility appears obvious today, Taylor's work was groundbreaking at the time because organizations struggled with clearly delineating responsibilities. One of the key recommendations advanced in *Principles* was for organizations to enhance the division of labor between management and staff, separating planning (management) from execution (labor) functions. Taylor aimed to create work environments in which employees possessed a precise understanding of the specific tasks in which they were responsible. Illustrating the mechanistic nature in which Taylor viewed employee responsibility, he states:

> Perhaps the most prominent single element in modern scientific management is the task idea. The work of every workman is fully planned out by the management at least one day in advance, and each man receives in most cases complete written instructions, describing the task which he is to accomplish, as well as the means to be used in doing the work (Taylor, 1911, p. 39).

In the years that followed the publication of *Principles*, Taylor's ideas were widely adopted, leading to early conceptions of responsible workplace behavior being largely mechanistic with a strong emphasis on adherence to prescribed tasks (Oldham & Fried, 2016).

Job Design and the Role of Autonomy

The mid-20th Century marked a pivotal period in the evolution of responsibility, largely as a response to the overly mechanistic nature of work that had emerged from the Taylorist approach to management. This era saw a growing recognition that work had become too repetitive and boring, leading to significant issues like absenteeism and falling productivity (Hackman & Oldham, 1980; Humphrey et al., 2007). In response, Hackman & Oldham (1976, 1980) developed the job characteristics model, which emphasized autonomy and the sense of ownership over one's work as key means of regaining both morale and productivity.

Hackman and Oldham (1980) argued that when employees experienced increased autonomy – "discretion in scheduling and determining the procedures used to carry out the work", they would feel more personally responsible for their successes and failures of their work (p. 79). Thus, personal discretion came to be viewed as a new dimension that employees could, and should, be viewed as taking responsibility. As a result, managers took steps to redesign the characteristics of one's job to expand workers' decisional autonomy, hoping to increase workers' sense of ownership over – and felt responsibility toward – one's work.

Proactivity and Interdependence as Responsibility-Taking

Finally, the late 20th century brought another significant shift in the understanding of employee responsibility, driven by the rapid pace of organizational change and market uncertainties (Cappelli et al., 2017). During this period, researchers began to recognize that the job design perspective, with its focus on adjusting static characteristics of jobs, failed to address the dynamic nature of modern work environments (Sonnentag & Spychala, 2012). Organizations increasingly viewed their success as contingent on personal initiative and internal collaboration (Axtell & Parker, 2003; Grant et al., 2009; Griffin et al., 2007). Further, to keep up with the pace of organizational change, managing others became less about assigning clearly delineated tasks and more focused on empowering employees to become self-directed (Parker & Strauss, 2014). The pace of change in organizations was such that it had become increasingly challenging for organizations and leaders to predetermine tasks and skills expected of subordinates (Bititci et al., 2012).

As a response to these pressures, research on concepts such as organizational citizenship behaviors and taking charge became prominent (Smith et al., 1983; Morrison & Phelps, 1999). These behaviors were seen as going beyond formalized role descriptions, reflecting the growing expectation that employees not only fulfill the tasks laid out in their job descriptions but also take initiative and be self-directing (Griffin et al., 2007; Parker et al., 2006). In terms of impact of the importance of personal initiative, employees became viewed as being responsible for the tasks they had previously agreed to perform while, at the same time, assuming responsibility for future achievement (Fuller et al., 2006). Specifically, as Fuller et al. (2006) explains, the retrospective and prospective aspects of responsibility came into focus at this time. "Feelings of responsibility can result from either *looking back* over past behavior or events one has caused, or *foreseeing future* behaviors of events one may cause" (Fuller et al., 2006, pg. 1091). In effect, the inability for organizations to delegate all possible work tasks opened up the possibility for responsibility to signify the willingness of an individual to take *after-the-fact* accountability for existing obligations as well as *before-the-fact* accountability for future achievement[1].

Also in the late 20th Century, because of the growing awareness of the interdependence of work tasks, employees experienced growing pressure to cooperate and help others even if the link between such behaviors and their own task performance was less direct (Griffin et al., 2007). Thus, the late 20th Century marked a period in which scholarship and practice emphasized the proactive aspects of responsibility-taking as well as the socially-situated nature of work, accounting for the increasing interdependence of one's tasks on those of others.

Summary of Key Developments in Conceptualization of Employee Responsibility-Taking

As depicted in Figure 1, our historical account reveals that the notion of what employees are responsible for has changed over time alongside major changes in organizational environments. Summarizing this shift in responsibility, Griffin et al. (2007) note that research on task and role performance has evolved from a sole focus on task adherence to behaviors related to also include proactively *taking-on* tasks, relying on increased personal discretion, and collaborating with others. Therefore, consistent with Griffin et al. (2007), we assert that the

[1] This past and future-oriented quality of responsibility-taking articulated by Fuller et al. (2006) draws on similar conceptualizations of employee responsibility-taking such as (Culbert, 1974)'s after-the-fact accountability and before-the-fact-consciousness, and (Graham, 1986)'s *assigned* and *assumed* responsibility for work tasks.

pressures on employees that uncertainty and interdependence have created have led to an expanded range of behaviors necessary for performance.

2.4 Interdisciplinary Conceptualizations of Responsibility-Taking

This broadened view of employee responsibility-taking is consistent with recent theorizing on individual responsibility in separate disciplines outside of organizational scholarship. For instance, similar to Fuller et al. (2006)'s work on felt responsibility in organizations, sociologists Dwyer & Minnegal (2012) argue that individual responsibility-taking in everyday life possesses both retrospective and prospective orientations. Specifically, Dwyer & Minnegal (2012) suggest that responsibility is characterized by an individual's accountability towards prior obligations and future duties. These concurrent, sometimes conflicting, orientations of responsibility-taking highlight its complexity. In organizational literature, similar behaviors to responsibility-taking like citizenship and proactive work behaviors, emphasize *what else* employees can do or how they can change their environments (Parker et al., 2010; Smith et al., 1983). While these future-oriented behaviors are vital for organizational survival (Podsakoff et al., 2009), and while they characterize aspects of responsibility-taking, they do not account for employee efforts directed toward fulfilling existing obligations. This is an issue because given the rise of uncertainty in today's fast-paced organizational climates, focusing on obligations is equally important, as employees are often challenged by competing priorities and the need to balance multiple demands (Skousen et al., 2021).

In addition to its past and future orientation, scholars in other disciplines have also noted the social and discretionary qualities of responsibility-taking, which also appear in the organizational literature. For instance, philosopher John Rundell defines responsibility as "an outcome that is exercised by social actors who have a capacity to make rational, reflexive decisions" (2012, pg. 77). According to this definition given by Rundell, responsibility-taking involves both social consideration – understanding how one's actions impact others – and personal discretion – determining whether or not doing so will be worth the effort, risk, or reward.

Together, these sociological and philosophical perspectives align with the aforementioned qualities of responsibility-taking that emerged within organizational scholarship. Collectively, scholarship on the concept of responsibility-taking suggests that it represents the ability to demonstrate i) accountability for prior agreements, ii) proactive accountability for role-related tasks, iii) the use of personal discretion in planning and executing tasks, and, iv) the ability to work interdependently.

The behaviors that enable employees to address these demands are vital for work performance in the 21st Century (Griffin et al., 2007). However, despite the proliferation of research on the ways in which employees respond to these job demands, we argue that separate constructs in organizational research address some – but not all – of these demands. The two constructs that come closest to addressing each of these demands are organizational citizenship behavior (Smith et al., 1983) and proactive behavior (Crant, 2000; Grant & Ashford, 2008).

2.5 Constructs Related to Employee Responsibility-Taking Behavior

Research on citizenship and proactive behaviors share the premise with responsibility-taking that employees are not merely passive respondents reacting to their context but, instead, play an integral role in shaping and determining work outcomes (Parker et al., 2010). However, as discussed below, OCB and proactivity differ from responsibility-taking in key ways.

Organizational Citizenship Behavior (OCB)

OCBs describe employee behaviors aimed at helping co-workers or benefitting overall organizational functioning (Dalal, 2005; Rioux & Penner, 2001). Additionally, OCBs are viewed as discretionary; the underlying behaviors are not formally prescribed by one's job requirements but are valued for their positive contribution to organizational functioning (Chiaburu et al., 2022; Schnake, 1991). OCBs therefore require personal initiative and autonomy, like responsibility-taking. However, unlike responsibility-taking, OCBs do not focus on task. Instead, OCBs are conceptualized as *generally* benefitting others or the organization as opposed to carrying out role-related tasks (Moorman & Blakely, 1995; Smith et al., 1983). In contrast, responsibility-taking is driven by a sense of accountability to and the fulfillment of role-related tasks (Pasmore et al., 2021).

Proactivity

Proactivity is another closely related construct to responsibility-taking. Proactivity is described as anticipatory, self-directed action that employees take to benefit themselves or their organizations (Frese et al., 1996; Parker et al., 2006). Examples of proactivity include seeking feedback, taking initiative, and implementing new ideas (Grant & Ashford, 2008). The emergence of research on proactive behaviors is associated with the growing recognition of the importance of employees' agency and ownership over work processes in uncertain and interdependent systems (Grant & Rothbard, 2013). These qualities – personal initiative and the sense of sense of ownership over ones' work outcomes – connect responsibility-taking and proactivity (Griffin et al., 2007; Pasmore et al., 2021). However, unlike responsibility-taking, the primary emphases of proactive behavior concerns involvement in future and change-oriented activities (Parker et al., 2010). Underscoring this central thrust in the original definition of proactive behaviors, Crant (2000), defines the construct as "taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions" (pg. 436). That is, proactive work behaviors focus on improving faulty processes or addressing organizational issues. In contrast, responsibility-taking also requires a focus on the commitment to, and fulfillment of, prior obligations (Ajaikumar et al., 2024). In sum, there is a goal striving nature to both concepts but proactivity only focuses on future-oriented changes that are less task-specific whereas responsibility-taking also emphasizes a commitment to existing obligations.

Given these gaps associated with the citizenship and proactive behaviors constructs, Ajaikumar et al. (2024) recently proposed and demonstrated initial validation of a measure of employee responsibility-taking behavior. The following section briefly introduces the measure before shifting to the core focus of this research, which is to identify potential antecedents of responsibility-taking.

2.6 The Responsibility-Taking Behavior Construct

Responsibility-taking behavior (RTB) was recently defined by Ajaikumar et al. (2024) as the "*extent to which an individual demonstrates adaptability, ownership, and the propensity to assume accountability for work tasks in ambiguous and interconnected environments. Individuals who demonstrate [responsibility-taking] display initiative, ownership, adaptivity, and perceptiveness to the interconnectedness of colleagues, challenges, and change that is inherent in today's organizational climate*." (pg. 4-5). Empirical research to date has identified that the RTB construct is represented by four dimensions: accountability, peer encouragement, furtherance, and ownership mentality (Pasmore et al., 2021). Definitions and example behaviors associated with each dimension are presented in Table 1 and are detailed as follows.

RTB Dimensions

Accountability. Pasmore et al. (2021) defined *accountability* as the efforts taken by an employee to be held to account for one's performance. Individuals demonstrating high accountability seek feedback on their task performance and take steps to address gaps between what is expected of them and their current results. As such, accountability behaviors enable the retrospective and prospective aspects of responsibility-taking; they enable an employee to hold themselves to account for previously negotiated responsibilities while also proactively managing future responsibilities by expectation-setting and gaining feedback. Accountability is similar to the concept of *felt responsibility* in Hackman & Oldham's job characteristics model which describes the extent to which an individual feels "personally accountable for the results of the work that he or she does" (pg. 162; Hackman & Oldham, 1976).

Peer Engagement. The second dimension, *peer engagement*, is defined as the extent to which an individual makes efforts to influence the performance of team members or stakeholders who have dependencies on their assignments. Unlike OCB, which focuses on prosocial efforts demonstrated to generally benefit others (Dalal, 2005; Smith et al., 1983), peer engagement behaviors are the prosocial activities that are required to carry out one's tasks under work conditions requiring high interdependence. In essence, peer engagement behaviors are not intended to merely help others but to accomplish one's own responsibilities alongside others. The demand for peer engagement coincides with the rise of team-based and knowledge-intensive work in post-industrial economies (Chen & Kanfer, 2006). Specifically, organizations have turned to teams to accomplish complex goals that require the coordination of tasks across many organizational specialties (Chen & Kanfer, 2024). Where scholarship and practice have historically focused on managing and motivating individuals, research has now, in response, emphasized the role that individuals play in actively participating in, and shaping, work processes in team-based structures (Grant & Ashford, 2008). Peer engagement underscores how responsibility-taking fits into these social dimensions.

Furtherance. *Furtherance* describes an employee's focus on continuous improvement in task completion and in role-related skillset acquisition. Examples of furtherance include pursuing learning opportunities related to one's role. Furtherance is closely linked to research on proactivity at work (Grant & Ashford, 2008), which highlights the anticipatory actions that employees take to benefit their work or the broader organization. Furtherance contributes to the future-oriented aspects of responsibility-taking, such as an individual's ability to carry out subsequent work tasks that satisfy performance expectations. Furtherance shares this quality with RTB's accountability dimension, although furtherance behaviors fulfill an individual's commitment to task improvement while accountability fulfills a sense of duty to role-related tasks overall.

Ownership Mentality. Finally, the *ownership mentality* dimension of RTB captures behaviors that foster a sense of congruence between one's personal responsibilities and the espoused values of one's organization. Ownership mentality is similar to constructs that describe the extent to which individuals take steps to integrate the espoused values into one's own work. For example, the process of internalization from self-determination theory (Deci et al., 2017; Deci & Ryan, 1985b) and duty orientation (Hannah et al., 2014) similarly explain how an individual's connection to their organization's or team's values can guide behavior and reinforce a broader sense of responsibility and a proclivity to be self-directed. Furthermore, unlike OCB, which often emphasizes discretionary efforts to benefit the organization as a whole, ownership mentality reflects a responsibility to regulate one's own work in alignment with the organization’s broader goals or mission. Examples of these behaviors from the RTB measure include actively integrating the organization’s long-term objectives into one’s work and staying informed about major change initiatives to ensure alignment with evolving priorities.

Table 1: RTB Dimension Definitions and Examples

RSB Dimension	Definition & Description	Example	Primary associated job demand
1. Accountability	Accountability is defined as the efforts an employee demonstrates to hold oneself accountable for one’s responsibilities. Individuals that demonstrate high accountability strive to deliver their best possible effort on work tasks and persevere through setbacks that would hinder task completion.	*I ask questions if my goals are not clear*	Uncertainty
2. Peer Engagement	Peer engagement is defined as the extent to which an individual makes efforts to influence the performance of team members or stakeholders who have dependencies on their assignments. Individuals who demonstrate high levels of peer encouragement seek ways to support colleagues that may be unintentionally hindering team performance or are underperforming. These individuals are willing to take joint responsibility for tasks to ensure high-quality work unit output.	*I proactively share any resources, tools, or skills I have that could help a peer with their work*	Interdependence
3. Furtherance	Furtherance is defined as efforts related to improving the outcomes of one’s work assignments. Individuals who demonstrate high levels of furtherance focus on acquiring new skills that improve the quality of their work output. These individuals are also expected to take part in change initiatives and seek out opportunities to experiment with novel ways of working.	*When I see something that can be improved, I do something about it* *I strive to keep on top of changes taking place in the broader organization*	Uncertainty
4. Ownership Mentality	Ownership mentality is defined as behaviors related to an employee’s sense of commitment toward the long-term success of their organization.	*I keep on top of changes taking place in the broader organization*	Uncertainty/ Interdependence

	Individuals who demonstrate high levels of ownership mentality stay informed of development occurring within the organization, take steps to integrate the organization's strategic goals in their own work, and steward organizational resources as they would their own.		

Note: Adapted from Ajaikumar et al. (2024)

2.7 Existing Research on Responsibility-Taking Behavior

In addition to demonstrating initial validity for the RTB measure's factor structure, Ajaikumar et al. (2024) demonstrated that RTB is positively and moderately related to job performance. In particular, Ajaikumar et al. (2024) showed that RTB predicted leader ratings of trainees' job performance at the end of a 10-week military training camp. In terms of the relevance of these findings to non-military settings, the trainees' performance evaluation was determined based on their task effort and completion on highly collaborative tasks, mirroring the high degree of interdependence in organizational life. Further, the tasks that trainees were presented with were novel to them for learning purposes, mirroring the demand for employees to adapt to new or evolving business environments, and acquire new skills, under conditions of pronounced uncertainty. Lastly, the same researchers found that the RTB-performance relationship held while controlling for conscientiousness, which is notable given that conscientiousness is the strongest and most consistent personality predictor of job performance (Barrick & Mount, 1991; Dudley et al., 2006; Salgado, 1997). Together, these findings highlight the importance of RTB as a critical set of behaviors for performance. Additionally, given the research setting, the results provide initial evidence in support of the assumption that RTB enable performance under conditions involving high interdependence and task novelty.

2.8 Current Study

Antecedents of Responsibility-Taking Behavior

Despite initial evidence that RTB positively relates to job performance, it is unclear what individual and situational factors promote responsibility-taking. While there is a demand for more individual responsibility-taking from leaders in the business and civil sectors alike (Carucci, 2020; Hurst, 2023; Obama, 2009), the potential barriers to demonstrating responsibility-taking are numerous. For example, the willingness to hold oneself to account for prior obligations and one's quality of work require effort, humility, and confidence that the consequences of doing so will not outweigh the benefits. Similarly, the behaviors underlying the peer engagement dimension demand a lot of employees. For instance, taking joint accountability for team errors might be perceived by peers as controlling, while requesting help on large tasks could be viewed as social loafing. These social risks involved with responsibility-taking parallel known challenges associated with related behaviors such as proactive helping (Chi et al., 2023) and voice behaviors, which include discretionary expression of constructive concerns intended to improve organizational functioning (Detert & Burris, 2007; Liang et al., 2012). These literatures point to the important role that unique social contexts play in determining whether an individual will feel permitted to – or prohibited from – engaging in socially-risky behaviors.

Therefore, given the potential barriers to responsibility-taking behavior, research is needed to identify the factors that would give rise to responsibility-taking. To do so, we draw on two theories that individually offer compelling and complementary rationale about the individual and situational factors that would be expected to promote employee responsibility-taking behavior. Specifically, we argue that self-determination theory (Deci & Ryan, 1985b, 2000) explains a 'reason to' motivation while regulatory mode theory (Higgins et al., 2003) articulates a 'can do' explanation for RTB. We draw on each theory to develop theoretically-grounded hypotheses as to why certain individual and situational factors highlighted by each of these theories, such as leadership styles and goal pursuit strategies, would be expected to promote employee responsibility-taking.

2.9 Self-Determination Theory (SDT)

Self-determination theory is a theory of motivation that highlights the social-contextual factors that promote individuals willingness to be self-driven, proactive, and responsible (Deci et al., 2017; Deci & Ryan, 2000). The theory states that that humans have three basic psychological needs that are essential for motivation and optimal functioning – autonomy, competence, and relatedness (with others) (Deci & Ryan, 2012). Autonomy refers to an individual's desire to possess a sense of ownership over one's actions, competence refers to an individual's need to feel effective and capable, and relatedness describes an individual's need to feel connected to others and to belong to a group (Deci & Ryan, 2000).

SDT posits that the extent to which these basic needs are satisfied in the workplace has significant implications for employees' motivation to be proactive and self-directed. Furthermore, the theory states that work environments can either support or thwart these basic psychological needs. When employees experience autonomy, competence, and relatedness satisfaction, they are more likely to be "agentic and inspired, striving to learn; extend themselves; master new skills and apply their talents responsibly" (Deci & Ryan, 2000, p. 68). Moreover, SDT explains that the satisfaction of basic needs accomplishes these desirable ends because they provide meaningful rationale for tasks, competence-promoting feedback, and a sense of obligation to others (Deci & Ryan, 1985b). That is, the satisfaction of basic needs promotes *internalization*, the process whereby individuals experience stronger alignment between work behaviors and their own values even when the behaviors may not be intrinsically rewarding on their own. In contrast, environments that frustrate these basic psychological needs can lead to low motivation and disengagement (Deci et al., 2017). As Deci & Ryan (2000) note, needs-thwarting environments provide little reason for employees to perform work behaviors, leading to low motivation and negative outcomes. Illustrating this negative impact of needs-thwarting environments on individual responsibility-taking in particular, Deci & Ryan (2000) state that needs-thwarting environments lead individuals to:

> "…reject growth and responsibility. Regardless of social strata or cultural origin, examples of both children and adults who are apathetic, alienated, and irresponsible are abundant. Such non-optimal human functioning can be observed among millions who…wait listlessly for the weekend as they go about their jobs. The persistent, proactive, and positive tendencies of human nature are clearly not invariantly apparent" (p. 68).

Thus, the extent to which individuals' basic psychological needs are satisfied is presumed to play a pivotal role in motivating responsibility-taking. However, because need fulfillment is shaped by the broader work environment (Deci & Ryan, 2000), leadership is also presumed to play a particularly influential role in fostering conditions that encourage—or discourage—responsibility-taking. Specifically, research has shown that needs-supporting leadership styles have been shown to be crucial external factor that facilitate basic need satisfaction and, in turn, behaviors associated with RTB such as being proactive and self-directed (Slemp et al., 2018). Therefore, summarizing these relationships, the following review of empirical research suggests that the satisfaction of basic needs serve as proximal influences on responsibility-taking. Additionally, findings suggest that the satisfaction of basic needs serve as mediators that explain the more distal connection between autonomy-supportive leadership and responsibility-taking.

Basic Need Satisfaction as Motivational Pathways to Responsibility-Taking

One of the primary ways in which basic needs satisfaction (BNS) promotes responsibility-taking is through its influence on motivation. When individuals experience autonomy, competence, and relatedness satisfaction, they are more likely to develop autonomous motivation—a state in which they engage in work behaviors because they align with personal values and identities (Gagné & Deci, 2005). Supporting this assumption, meta-analytic evidence has identified the positive link between BNS and identified motivation, a more self-determined form of motivation that supports sustained engagement with work tasks (Slemp et al., 2018; Van den Broeck et al., 2016).

In contrast, when employees experience controlled motivation—where behaviors are externally regulated by rewards or punishments—they are less likely to self-initiate and willingly take responsibility. Supporting this assumption, research has shown that controlled motivation undermines proactive behavior and discretionary effort (Ryan et al., 2022). Given that responsibility-taking often involves discretionary actions beyond formal job requirements, it is expected to be more prevalent when employees are autonomously motivated.

Taken together, these findings on the positive relationship between BNS and autonomous motivation are crucial to developing an explanation as to why SDT basic needs satisfaction would be expected to promote responsibility-taking. For instance, while it is possible that employees could temporarily demonstrate responsibility-taking behaviors to seek reward or avoid punishment (external regulation), responsibility-taking is concerned to a larger extent with the behaviors that individuals take upon themselves in lieu of clear orders or priorities such as under conditions of uncertainty. Therefore, individuals would be expected to demonstrate responsibility-taking behavior when their basic needs are satisfied, enabling them to more strongly identifying with the value of responsibility-taking, regarding doing so as useful, worthwhile, or personally important (Hardré & Reeve, 2009).

The Unique Contributions of Each Basic Need

While the satisfaction of all three basic needs is expected to contribute to responsibility-taking, each is expected to play a distinct role in shaping how employees engage with their work responsibilities and offer unique rationale for RTB motives.

BNS Autonomy. The basic need for autonomy is defined as individuals' need to possess a sense of ownership over activities and feel psychologically free (Deci & Ryan, 2000). According to SDT, autonomy represents the experience of volition and choice rather than being controlled by external forces (Deci et al., 1994). Further, autonomy is not simply about having unrestricted freedom, as is implied by independence. Instead, autonomy refers to feeling in control of one's behavior and acting in alignment with one's values and interests (Gagné & Hewett, 2024). Illustrating this distinction, Van den Broeck et al. (2010) suggest that an employee who follows a supervisor's request is not acting independently in the strictest sense but experiences autonomy when the supervisor provides meaningful rationale for the request and enables follower to choose how to carry out the task. This is an important distinction when considering why autonomy would be expected to support RTB. Responsibility-taking requires both a proactive initiative-taking element as well as a sense of accountably for previously negotiated tasks. Thus, a sense of autonomy in choosing how to enact one's responsibilities – not mere freedom from all constraints – is expected to be crucial for employee RTB.

Research findings suggest on the outcomes associated with satisfaction of individuals' need for autonomy support this assumption. For instance, in a meta-analysis, Van den Broeck et al. (2016) found that autonomy BNS positively and uniquely related work commitment and proactivity, both of which are assumed to be necessary for performing RTB. In a separate study, (Gagné, 2003) found that autonomy BNS positively predicted volunteer hours whereas lower perceived work autonomy predicated higher rates of volunteer turnover at a volunteer organization. These findings suggest that when individuals possess a sense of choice and ownership over their behavior at work and are not excessively pressured by external rewards or punishments, they may be more likely to take on additional responsibilities while remaining effortfully committed to tasks that they previously agreed to.

H1a. BNS autonomy will positively relate to responsibility-taking behaviors.

BNS Competence. In addition to the satisfaction of the need for autonomy, fulfilling an individual's need for competence is also expected to be related to RTB. The need for competence refers to an individual's innate desire to feel effective in their actions, attain desired outcomes, and succeed in difficult tasks (Gagné, 2014; Slemp et al., 2018). According to SDT, individuals are motivated by opportunities that allow them to apply their acquired skills and abilities. Moreover, SDT suggests that such opportunities help individuals develop confidence and a sense of self-efficacy in carrying out their responsibilities at work (Deci & Ryan, 1985b).

Research findings suggest that when an individual's need for competence is met, they are more likely to engage in RTB at work. For instance, in Van den Broeck et al. (2016)'s meta-analysis, the researchers found that, across studies and cultures, the need for competence is positively and uniquely associated with behaviors and outcomes integral to responsibility-taking such as proactivity, task performance, and effort. These findings therefore suggest that when individuals have greater confidence in their ability to accomplish their work and access needed resources, they would feel more confident in their ability to exert control over their work priorities, which is believed to be essential for responsibility-taking.

H2a. BNS competence will positively relate to responsibility-taking behaviors.

BNS Relatedness. In addition to needs for autonomy and competence, the need for relatedness is also expected to be positively associated with responsibility-taking. The need for relatedness concerns an individuals' desire to be meaningfully connected with others (Deci et al., 2017). In their meta-analysis, Van den Broeck et al. (2016) showed that the need for relatedness satisfaction was positively related to proactivity and commitment, when controlling for the other basic SDT needs. Their findings suggest that relatedness captures an important social dimension of motivation at work. Individuals who experience meaningful connection are more likely to be effortfully involved and committed to their responsibilities, possibly through a sense of obligation to maintain positive social relationships and reciprocal exchange with others.

H3a. BNS relatedness will positively relate to responsibility-taking behaviors.

Autonomy-Supportive vs. Controlling Leadership

While the satisfaction of basic psychological needs serves as a direct mechanism for fostering responsibility-taking behavior, SDT argues that the extent to which these needs are fulfilled is shaped by the broader work environment (Deci et al., 2017; Deci & Ryan, 2000). Among situational factors, leadership style plays a crucial role in either supporting or thwarting employees basic psychological needs (Deci & Ryan, 2000). Within the SDT domain, researchers have examined clusters of leadership behaviors as either 'autonomy-supportive' or controlling. Autonomy-supportive leadership (here forth, 'ASL') is characterized by leaders' ability to encourage followers' sense of autonomy, enable opportunities for follower choice, and take interest in followers' perspectives (Baard et al., 2004; Hardré & Reeve, 2009). In contrast, researchers have characterized needs-thwarting leadership behaviors as controlling, describing this style of leadership as one in which leaders exert strong pressures to follow prescribed tasks, afford minimal autonomy, and employ reward strategies that emphasize adherence (Deci et al., 1999, 2017). The controlling leadership style aligns with traditional management theories like agency theory, which views employees as primarily self-interested and rational, responding to external controls such as rules and performance-based incentives (Gagné & Hewett, 2025). From this perspective, management can only align employee goals with organizational objective though control mechanisms like monitoring, regulations, and reward systems (Gagné & Hewett, 2024). While external controls and managerial oversight may prompt short-term responsibility-taking, SDT suggests that such conditions do not foster the internalization of organizational goals or cultivation of a sense of autonomy and self-initiative. As a result, controlling leadership is unlikely to sustain or reliably predict RTB in the long run.

Empirical findings support these assumptions. ASL is an antecedent to employee basic needs satisfaction and positive outcomes. For instance, in their meta-analysis, Slemp et al. (2018) found that ASL was consistently related to the satisfaction of basic need and, in turn, proactive and prosocial work behaviors. Similarly, Baard et al. (2004) explored the relationship between employees' *perceptions* of their manager's leadership style on their own work performance. Baard et al. (2004) found that perceived ASL was positively related to needs satisfaction and positively related to actual managerial-rated performance evaluations. Finally, examining the role of different motivational communication strategies, Reeve et al. (2002) conducted an experiment on the effects of ASL versus controlling leadership task instructions on follower behavior. Specifically, Reeve et al. (2002) showed that when task instructions were delivered with adequate rationale and concern for the participant in line with ASL, participants were more likely to identify with the personal value of the task which, in turn, explained their increased effort on the task. In contrast, Reeve et al. (2002) showed that when instructions were communicated in controlling manner, participants experienced significantly less personal value in the experimental task and demonstrated less effort as a result. The controlling leadership style did not include the rationale and expressed support for the participant as was shown in the ASL condition, and instead utilized words like ‘should’, ‘must’, and ‘ought’ (Reeve et al., 2002).

Collectively, these results from meta-analysis and experimental studies indicate that ASL is a key contextual factor supporting employee self-determination (Ryan et al., 2022). Therefore, in line with research findings, we propose that ASL will be positively related to basic psychological needs satisfaction. Further, given existing findings, ASL is expected to be positively related to responsibility-taking behavior.

H1b. *ASL will positively relate to BNS autonomy*.

H2b. *ASL will positively relate to BNS competence.*

H3b. *ASL will positively relate to BNS relatedness*.

H4. *Autonomy-supportive leadership will be positively related to responsibility-taking behavior.*

The Mediating role of BNS in the Leadership-RTB Relationship

Finally, SDT posits that the link between supportive leadership and positive follower outcomes is explained by leadership’s role in nurturing and fulfilling basic psychological needs. Existing research substantiates this assumption. For instance, Leroy et al., (2015) found that the satisfaction of followers’ basic needs significantly mediated the relationship between leadership and work performance. Likewise, Kovjanic et al. (2012) demonstrated that the satisfaction of each basic need differentially mediated the relationships between leadership style and various employee outcomes. Specifically, they showed that need satisfaction for relatedness explained the positive relationship between leadership and affective commitment, and the satisfaction of all three needs mediated the relationship between leadership and job satisfaction. Together, these findings support the assumption that the beneficial impact of supportive leadership on follower behavior is largely attributable to its role in satisfying basic psychological needs. Therefore, we propose the following in the context of the current study, where each BNS is expected to positively mediate the relationship between ASL and RTB.

H1c. BNS autonomy will mediate the relationship between ASL and RTB such that when ASL increases, BNS autonomy increases, which, in turn, leads to higher levels of RTB.

H2c. BNS competence will mediate the relationship between ASL and RTB such that when ASL increases, BNS competence increases, which, in turn, leads to higher levels of RTB.

H3c. BNS relatedness will mediate the relationship between ASL and RTB such that when ASL increases, BNS relatedness increases, which, in turn, leads to higher levels of RTB.

2.10 Regulatory Mode Theory

In addition, the needs-based explanations that SDT offers, Regulatory Mode Theory (RMT) shows how differences in individuals' goal pursuit strategies lead them to prioritize different activities, offering an alternative explanatory framework for understanding the motives underlying RTB. The theory posits that goal pursuit involves two distinct functions, locomotion and assessment, which characterize the motivations to *get things done* versus *think things through*, respectively (Higgins et al., 2003; Kruglanski et al., 2000). A close examination of these separate goal pursuit strategies is warranted in the context of RTB as it is yet unclear which – if either – of these two pursuits would be expected to be predominantly influential for RTB. On the surface, it appears that RTB requires a mix of both. For instance, RTB describes individuals' efforts to be proactive – which may relate to a '*getting it done'* goal pursuit – as well as feedback-seeking efforts – which may relate to a '*thinking it through'* goal pursuit. Drawing on RMT below, and its supporting empirical research, we argue how these goal pursuit strategies would be expected to give rise to RTB.

Furthermore, we provide rationale for the integration of RMT and SDT for understanding employee RTB in our review. We argue that SDT highlights a "reason to" motivation for RTB.

Namely, the satisfaction of core psychological needs, such as feeling socially connected with others or personally invested in, provide individuals with a compelling rationale for engaging in RTB. Separately, RMT highlights a “can do” motivation or RTB by explaining differences in goal pursuit strategies that drive individuals to take on and accomplish the complex, demanding tasks associated with RTB. While both theories have vast literatures, relatively few studies have tested their predictions alongside one another[2]. This presents an opportunity to explore the relative contributions of these "reason to" and "can do" motivations and whether their combined effects offer a more comprehensive, additive explanation of RTB.

RMT Overview

Regulatory mode theory proposes that individuals can be motivated to pursue action taking via two different goal pursuit strategies – locomotion and assessment (Pierro et al., 2011). Locomotion is concerned with moving from task to task while assessment is concerned with evaluating different goals and different means to pursue them (Higgins et al., 2003). When individuals are motivated by locomotion orientation, they are concerned with taking initiative and maintaining progress (Kruglanski et al., 2000). As a result, they are less inclined to deliberate over multiple alternatives, focusing instead on swift and seamless action (Kanze et al., 2021). Colloquially, locomotion is characterized by a desire to “get on with it” and “make something happen” (Higgins et al., 2003). Separately, when individuals are motivated by an assessment orientation, they are concerned with critically evaluating competing priorities or goals and determining their relative quality (Kruglanski et al., 2000). As a result, they are more likely to expend effort on planning out the best course of action. Individuals operating under an

[2] A literature search on Web of Science database revealed that, at the time of writing, only two empirical studies have tested research hypotheses that draw from both SDT and RMT within the same study, Pierro et al. (2009) and Sok et al. (2016).

assessment orientation are motivated to, and rewarded when, they have had a chance to carefully evaluate different goal pursuits, dedicating the necessary time and effort before reaching a decision (Kanze et al., 2021). Colloquially, assessment is characterized striving to "get it right" (Higgins et al., 2003).

Furthermore, RMT posits that locomotion and assessment are both 'trait-like' and 'state-like' (Higgins et al., 2003). Regarding their trait-like quality, studies have shown that each mode can be reliably measured as an individual difference variable, wherein individuals vary in the extent to which they rely on one or both of these goal pursuit orientations in their everyday life (Kruglanski et al., 2000). Regarding their state-like quality, research has shown that each mode can be situationally induced (Pierro et al., 2009). Specifically, research has shown that situational influences on employee behavior, such as corporate mission statements or leadership communication styles, prime individuals to pursue tasks under a locomotion or assessment orientation (Kanze et al., 2021). This state-like quality of regulatory mode poses opportunities for designing interventions to enhance RTB, which we will discuss.

Summary of Relevant RMT Findings

While it is possible that RTB requires a combination locomotion (e.g. "getting things done") and assessment (e.g. "getting it right") as previously suggested, findings from research on regulatory mode suggest that RTB is more likely to be related to locomotion than assessment orientation. There are three areas of research findings that support this assumption. First, locomotion has been shown to relate to key measures of task orientation and effort that are thought to be essential for responsibility-taking. For example, Kruglanski et al. (2000) demonstrated that locomotion was positively related to tasks persistence and inversely related to fear of failure. Similarly, Pierro et al. (2006b) showed that locomotion was positively related to employee task involvement and task commitment across multiple organizational samples.

Additionally, Pierro et al. (2006a) demonstrated that locomotion was positively related to employee effort, job involvement, and subsequent job performance. In contrast, findings from show that assessment orientation tends to undermine task focus and effort (Kruglanski et al., 2000; Pierro et al., 2006b).

Offering theoretical rationale for these findings, Pierro et al. (2006b) explain that while assessment orientation may be instrumental for evaluating amongst a range of competing tasks, it can delay individuals' ability to 'get on with it' compared to locomotion. As a result, locomotors tend to accomplish more tasks and rise more readily to challenges. In contrast, assessors accomplish less and often require external justification for effort expenditure (Higgins et al., 2003). Considering these tendencies, while some degree of these assessments' emphasis on appraisal and planning would be useful for RTB, the majority of the behaviors outlined by responsibility-taking construct favor those driven by personal initiative and persisting through setbacks. That is, the core thrust of RTB is about the willingness of the individual to self-regulate. In sum, the task-oriented nature of responsibility-taking and the effort required of employees to demonstrate the underlying behaviors, we suggest that locomotion would positively relate to RTB.

A second reason why locomotion would be expected to promote responsibility-taking is that locomotion has been shown to prompt decisiveness (Higgins et al., 2003). Decisiveness would be expected to provide crucial support for qualities of responsibility-taking, such as one's willingness to be proactive and rely on their own personal discretion. For example, Kruglanski et al. (2000) showed that when individuals were induced to adopt a locomotion orientation, they spent less time on predecisional considerations before taking action. Conversely, separate studies have shown that assessment positively relates to procrastination and higher levels of stress when having to make decisions at work (Chen et al., 2018; Pierro et al., 2011). One explanation for the differences in deliberation and procrastination tendencies between regulatory modes is that assessors desire to have certainty about competing priorities that they are evaluating, leading to more time spent making comparisons and less time taking action (Higgins et al., 2003). Further, assessment is associated with higher discomfort with ambiguity (Taylor & Higgins, 2002). These findings suggest that under conditions of uncertainty, assessment orientation is likely to prompt an increased emphasis on striving to reduce ambiguity by evaluating all possible courses of information. These aspects of assessment orientation would likely be detrimental to an individual's willingness to demonstrate responsibility-taking, which requires taking action under uncertain conditions without prior knowledge of the outcome.

Third, research has shown that locomotion and assessment relate to different goal orientations, which also poses implications for responsibility-taking. In the goal orientations literature, performance goals emphasize gaining favorable judgments from others while learning goals involve developing one's competence (Dweck & Yeager, 2019). Applied to regulatory mode, research has shown that locomotion is associated with learning orientation, where individuals are open to approaching new challenges and acquiring new skills (Kruglanski et al., 2000; Pierro et al., 2009; Taylor & Higgins, 2002). In contrast, research has shown that assessment is related to a performance orientation, which involves the desire to display competence, attempting to do better than others in social comparison, and believing that one's skills and abilities are fixed (Dweck & Leggett, 1998; Higgins et al., 2003).

These findings are somewhat counterintuitive. For instance, seem that a "get it done" attitude associated with moving from task to task could preclude personal investment in learning, whereas assessment, with its emphasis on identifying the best approach, would seem more conducive to learning. However, Higgins et al. (2003) explain that regulatory mode influences learning orientation based on differences in underlying goals. Assessors aim to acquire skills to meet external performance standards, however this focus can heighten fear of failure, ultimately discouraging learning. Offering evidence in line with this, Taylor and Higgins (2002) found that assessment is associated with the belief that individuals cannot fundamentally change who they are, reflecting a less optimistic view of personal growth.

These findings suggest that locomotion is more likely to foster responsibility-taking from a learning and growth-oriented perspective. In contrast, assessment may weaken this relationship, as individuals high in assessment may see themselves as less capable of adapting to new challenges or overcoming fear of failure.

In summary, these findings suggest that due to the relationship between locomotion and task performance, decisiveness, and learning orientation, locomotion is also expected to be related to responsibility-taking. Additionally, due to the relationship between assessment and procrastination and fear of ambiguity, assessment is not expected to be related to responsibility-taking behavior. Therefore, based on the review of findings from previous research on locomotion and assessment, we propose the following hypotheses.

H5. *Locomotion will be positively related to RTB.*

H6. *Assessment will not be related to RTB.*

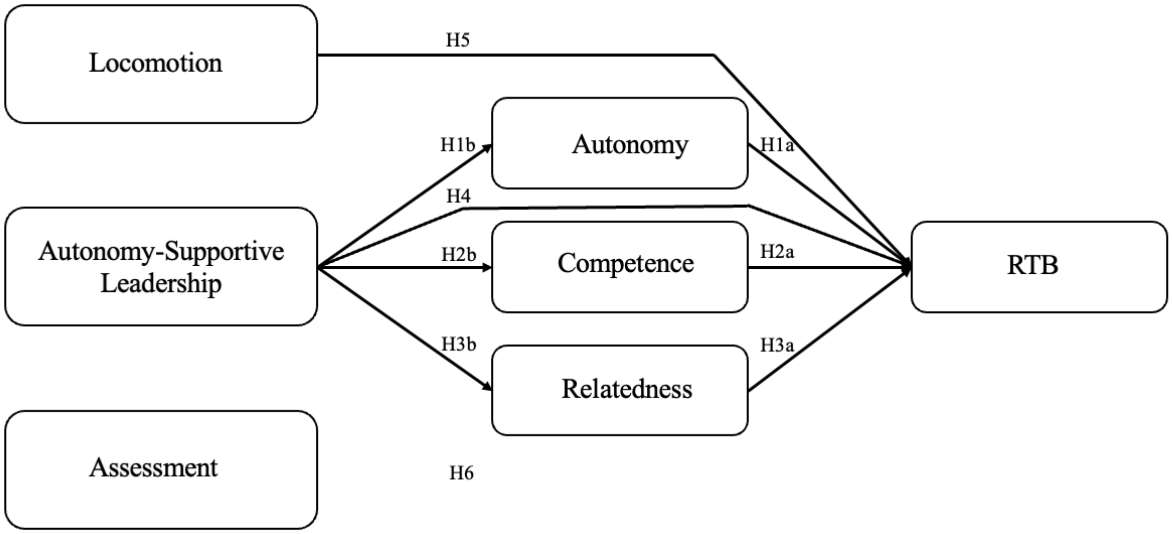


Figure 2: Summary of research hypotheses. Mediation hypotheses (H1c, H2c, and H3c) are not explicitly shown but will be tested. H6 specifies no relationship between assessment and RTB.

Possible Interaction between RMT and SDT

Finally, the relative paucity of research that has simultaneously explored predictions from RMT and SDT present an important opportunity for this research to contribute to such a gap. However, several theoretical questions arise when considering the possible interaction between these theories.

First, it is unclear how strong the hypothesized main effect of locomotion on RTB will be when accounting for the effects of supportive leadership. While locomotion is expected to promote RTB by fostering a proactive, task-focused approach, it is also possible that needs-supportive leadership enhances assessment orientation in a way that similarly encourages RTB. Specifically, under autonomy-supportive leadership (e.g. *my manager listens to how I would like to do things* and *My manager tries to understand how I see things before suggesting a new way to do things),* it is possible that assessors are more readily satisfied in their pursuit identifying the ‘right thing to do’, affording greater focus on accomplishing the tasks themselves. If this is the case, assessors may not only engage in RTBs that align naturally with their tendency to seek clarity (e.g., asking questions when goals are unclear) but also demonstrate greater self-initiated effort, a core characteristic of RTB.

However, existing findings from a relevant study on the interaction between regulatory mode and transformational leadership raise other possibilities. Specifically, Benjamin & Flynn (2006) found that locomotors and assessors were both motivated by transformational leadership, but that this positive effect was more pronounced for locomotors than assessors. This finding is relevant to the current context examining in that ASL and transformational leaderships share similarities. Transformational leaders inspire optimism and articulate a vision for achieving desirable end states (Bono & Judge, 2004). Thus, it could be that the positive effect of ASL on RTB is even stronger for locomotors than it is for assessors. Additionally, Benjamin & Flynn (2006) studied the interaction between regulatory mode and transactional leadership, a style of leadership characterized by an emphasis on contingent rewards and corrective action. The researchers found that locomotors experienced a stronger ‘misfit’ to transactional leadership, marked by a significant decline in motivation, compared to assessors. Collectively, these findings suggest that locomotion may be more sensitive to leadership style than assessment.

Despite the relevance of these findings to the current research questions, Benjamin and Flynn (2006) were primarily interested in motivation within the transformational leadership paradigm, which emphasizes how leaders inspire individuals to exceed standard performance expectations. While RTB is challenging and complex, and motivation to go beyond day-to-day responsibilities plays a role, our focus on SDT and ASL is specifically concerned with the conditions that foster employees' internal drive to perform RTB, particularly when no one is looking or without formal instruction.

Therefore, it is unclear whether the same joint effect of locomotion and ASL would promote RTB in the same way that transformational leadership and locomotion jointly fostered general motivation in previous research. Thus, in Study 1, we first examine the direct effects of regulatory mode and leadership style on RTB, controlling for the influence of the other. Then, in Study 2, we explore both their main and interaction effects on RTB to examine whether the relationship is more nuanced.

Chapter 3 – Empirical Studies

Based on a review of the latest literature, the previous chapter outlined situational and dispositional motives underlying employee RTB. In the current chapter, these hypothesized relationships are tested across two studies leveraging separate methodologies. Study-specific discussions and results summaries are presented in the current chapter, while overall takeaways based on the results of both studies are reserved for the subsequent chapter.

3.1 Study 1

The primary goal of Study 1 was to examine whether the hypothesized motives underlying RTB were present among full-time employees across various professions and industries. To achieve this, we conducted a cross-sectional online survey of working professionals. This initial naturalistic exploration served as a crucial first step in assessing the extent to which these motivational antecedents relate to RTB which subsequently could be used to inform potential interventions to promote these behaviors.

3.2 Study 1 Method

Sample Size

Prior to data collection, an *a priori* power analysis was conducted to determine the sample size needed to test the hypothesized model in Figure 2 with structural equation modeling (SEM). Following recommendations from Wang & Rhemtulla (2021), and using their accompanying online for SEM power analysis program[3], results identified a sample size of 530 participants needed to achieve power of .80 for parameter estimates. The estimated power for parameter estimates was based on 1,000 Monte Carlo simulations, assuming .30 effect sizes for

[3] https://yilinandrewang.shinyapps.io/pwrSEM/

direct effects and .09 for indirect effects. In alignment with guidance from Wang & Rhemtulla (2011), these assumed parameter effects that were entered into the power analysis software were selected from previously demonstrated effect sizes reported in Ajaikumar et al. (2024). Additionally, the final sample size recommendation of 530 participants aligns with separate heuristics for sample size requirements reported in the SEM literature, such as have a minimum five-respondents-per-item ratio (Bentler & Chou, 1987).

Participants and Design

Following power analysis, an initial sample size of 572 participants was recruited to ensure minimum sample size requirements were met while accounting for potential data removal during data quality inspection. Participants were recruited to complete the survey on Prolific, an online data collection platform (Palan & Schitter, 2018). Using available sampling filters, all participants were required to be adults and full-time employees living in the United States. The survey questionnaire that was administered on Prolific was developed in Qualtrics and contained measures of basic psychological needs, leadership style, regulatory mode, and responsibility-taking behavior.

A final sample of 535 participants was retained after data inspection checks (see results). Of these, 48% were men (n = 256), 51% were women (n = 258), and 1% identified as non-binary (n = 5). The racial composition of the sample was 66% White (n = 355), 5% Asian (n = 25), 27% Black (n = 145), 0% Latino (n = 0), and 2% who selected "Other" (n = 10). Regarding age distribution, 9% of participants were between 18 and 24 years old (n = 47), 40% were 25-34 years old, 29% were 35-44 years old (n = 80), 6% were 55-64 years old (n = 30), and 1% were 65 years or older (n = 6). Finally, all participants were full-time employees. Complete demographic statistics for Study 1 are presented in Table 4.

Common Method Bias

Because survey responses were collected cross-sectionally, steps were taken to address the concern of common method bias, which can artificially inflate or deflate relationships between variables when measured cross-sectionally. Following recommendations from Podsakoff et al. (2003) and Fuller et al. (2016), Harman's single-factor test was conducted to assess the extent to which common method bias may have impacted study results (see results).

Study 1 Measures

To minimize cognitive effort and survey fatigue, all scales were administered on a 7-point Likert scale. A complete list of survey items presented in Appendix A. Scale reliabilities are presented below and in Table 7.

Satisfaction of Needs for Autonomy, Competence, and Relatedness. Basic psychological needs satisfaction was measured using the Work-related Basic Need Satisfaction Scale (W-BNS; Van den Broeck et al., 2010). Each basic need scale was measured by three items. An example item for the satisfaction of the need for autonomy includes, "I feel free to express my ideas and opinions in this job" ($\alpha = .59$). An example item for the satisfaction of the need for competence includes, "I doubt whether I am able to execute my job properly" [reverse-coded] ($\alpha = .79$). Finally, an example item for the satisfaction of the need for relatedness includes, "I often feel alone when I am with my colleagues" [reverse-coded] ($\alpha = .79$).

Autonomy-Supportive Leadership. Autonomy-supportive leadership was measured by 6-items adapted from Williams & Deci (1996). Participants were instructed that the questions in this scale referred to the primary manager or leaders to whom they report directly. An example item includes, "I feel that my manager provides me choices and options" ($\alpha = .90$).

Regulatory Mode. Locomotion and assessment orientations from regulatory mode were measured by 4-items each selected from by Kruglanski et al. (2000). An example locomotion item includes, "By the time I accomplish a task, I already have the next one in mind" (α = .78). An example assessment item includes, "I often feel that I am being evaluated by others" (α = .74).

Responsibility-Taking Behavior (RTB). RTB was measured by participant responses to a previously-validated 30-item scale developed by Ajaikumar et al. (2024) (α = .94). RTB is comprised of four dimensions. An example item from the accountability dimension includes, "I ask questions if my goals are not clear" (α = .79). An example item from the furtherance dimension includes, "I stay on top of industry trends to ensure my work is current" (α = .80). An example item from the ownership mentality dimension includes, "I build towards the long-term goals of our organization in any work that I do" (α = .85). Finally, an example item from the peer engagement dimension includes, "I am comfortable taking joint accountability if an error occurs in our teamwork" (α = .87).

Covariates: Proactive Personality and Conscientiousness. Proactive personality and conscientiousness scales were also included in the Study 1 questionnaire as covariates to control for their relationship with RTB. Proactive personality was measured with 4-items were adapted from Detert & Burris (2007). An example proactive personality item includes, "If I see something I don't like, I fix it." (α = .81). Additionally, conscientiousness was measured with 3-items were adapted from the previously-validated Mini-International Personality Item Pool (Donnellan et al., 2006). An example conscientiousness item includes, "I make a mess of things." [reverse-coded] (α = .60).

Attention Check. One attention check item was included to verify that participants were carefully reading through the survey questions. The question stated, "If you are reading this question, select answer 3".

Demographic Variables. Finally, standard demographic questions were administered at the end of the questionnaire. Participants were invited to voluntarily offer their responses to seven questions asking them about their age, race, gender, education level, employment status, professional industry, and work role. A detailed breakdown of the sample's demographic characteristics is presented in Table 2.

3.2 Study 1 Results

Preliminary Analyses

Several preliminary analyses were conducted to investigate data quality before conducting hypothesis testing. First, data were screened for quality responses including survey completion time, responses to an attention check question, and potential outliers on the RTB outcome variable. Second, the data were inspected for common method bias. Third, means, standard and correlations for all study variables were inspected. Finally, response distributions were assessed for univariate and multivariate normality.

Data Screening

To ensure data quality, we applied several data screening steps to an initial sample of 572 participants. First, three respondents did not consent to the study and were removed. Second, responses to the attention check item were reviewed, and all participants passed. Next, 20 outliers were removed due to completion time following recommendations from Meade & Craig (2012). Specifically, 14 participants took more than three standard deviations longer than the sample mean (*M* = 9.8 minutes, *SD* = 6.6 minutes), while six completed the survey in under three minutes, suggesting careless responses.

Response data were also screened for potential 'fraudster' bot responses. Researchers point out that the recent rise in artificial intelligence-powered bots that are designed to take online studies, pose an issue for the scientific integrity of online research (Pinzón et al., 2024). Therefore, following recommendations from Teitcher et al. (2015), Qualtrics' built-in CAPTCHA technology was utilized to provide a post-hoc report on responses that were deemed to be attributable to bots[4]. Qualtrics' bot detection capability identified 6 respondents as being potentially delivered by bots and these responses were therefore removed.

Finally, we screened for outliers on the dependent variable, RTB, following Kline's (2016) recommendations. Four responses were more than three standard deviations below the mean RTB score (*M* = 5.65, *SD* = .68) and were removed to prevent distorted parameter estimates in SEM.

After applying these data screening steps, the final sample size for Study 1 was 535 participants.

Common method variance

Next, the responses to Study 1 were inspected for common method variance. As previously discussed in the Method section, common method variance is an issue that can arise when data are collected cross-sectionally, leading to artificially inflated or deflated the relationships between variables. Therefore, following recommendations Podsakoff et al. (2003) and Fuller et al. (2016), Harman's single-factor test was performed to assess the potential influence of common method bias. The test indicates that if common method bias were present,

[4] https://www.qualtrics.com/support/survey-platform/survey-module/survey-checker/fraud-detection/

one factor would explain more than 50% of the total variance in the response data (Harman, 1967).

Harman's single-factor test was conducted using an exploratory factor analysis on all of the study's variables including covariates. The results reported in Table 5 indicated that a single factor explained 26.85% of the variance, which is below the critical threshold of 50%. Therefore, common method bias was not considered to be a significant concern in this study.

Means, standard deviations, and correlations

Means, standard deviations, and correlations for all study variables are reported in Table 8. The average overall RTB response for survey participants was 5.78, which is relatively high on a 7-point response scale, indicating generally positive self-reports for individuals' willingness to demonstrate RTB. Moreover, the overall variability in RTB responses ($SD = .68$) was slightly lower than a standard normal distribution of 1 (Allen & Yen, 1979), further indicating that the majority of participants self-reported RTB clustered on the higher end of the response spectrum, a phenomenon that has been observed in previous research on RTB (Ajaikumar et al., 2024).

Next, inspection of the correlations reported between RTB and study variables, provided initial support for research hypotheses (Table 8). Specifically, a moderate positive correlation between RTB and ASL was observed ($r = .46$, $p < .01$). Additionally, regarding basic needs satisfaction variables, a small statistically significant correlation between RTB and satisfaction of need for autonomy was observed ($r = .20$, $p < .01$) while moderately strong correlations were observed between satisfaction of the needs for competence ($r = .56$, $p < .01$) and relatedness ($r = .42$, $p < .01$). Further in-line with study hypotheses, locomotion was moderately strongly related to RTB ($r = .64$, $p < .01$), while assessment was not related to RTB ($r = -.02$, $p = .57$).

Finally, correlations among study variables aligned with expectations from the study's two theoretical frameworks. For instance, supporting self-determination theory, ASL and all basic needs satisfaction variables were significantly positively correlated. Additionally, intercorrelations between the BNS variables were moderately positively correlated, ranging from $r = .26$ to $r = .39$. That these coefficients were not overly high lend support to recommendations from research in SDT that each basic need represents meaningfully different criteria in an individual's experience of their work context and should not be averaged into a single composite (Van den Broeck et al., 2016). Likewise, consistent with regulatory mode theory, locomotion and assessment orientation showed a zero correlation in the sample data, providing support for the theory's claim that the two regulatory mode orientations are orthogonal (Higgins et al., 2003; Kruglanski et al., 2000).

Univariate and Multivariate Normality

Finally, before proceeding to hypothesis testing, the sample data were inspected for univariate and multivariate normality as violations of these assumptions pose implications for the recommended estimation technique used for SEM as well implications for model fit indices (Bandalos, 2002; Finch et al., 1997).

Following recommendations from Kline (2016), variable response distributions were assessed for univariate and multivariate normality. According to Kline (2016), severe non-normality reported in SEM literature entails absolute values of skew greater than 3 and kurtosis greater than 8. Skew and kurtosis for all study variables are reported in Table 6. Results show that skew and kurtosis did not provide evidence of severe non-normality. However, a Shapiro-Wilk test conducted on the RTB distribution indicated a significant departure from normality, W

= .982 , p <.01. That being said, RTB's skew was -.42 and kurtosis, .00, indicating that this departure was small.

Next, Mardia's test was conducted on all study variables to assess multivariate normality, a key assumption required for maximum likelihood estimation in SEM. Results from Mardia's test indicated that the assumption of multivariate normality was not met for overall skewness (p < .01) and kurtosis (p <.01).

Kline (2016) reports that, like other significance testing, slight departures from univariate and multivariate normality can reach statistical significance without being severe, which appears to be the case in the current study. However, to ensure robustness, SEM was estimated using robust maximum likelihood estimation, which corrects biased standard errors under non-normality (Finch et al., 1997).

Study 1 Main Analyses

All study hypotheses (Figure 2), including the hypothesized mediation paths, were tested using SEM in the following steps. First, model fit statistics for the hypothesized model were examined. Specifically, following Kline (2024), SEM fit was evaluated in two parts. First, global model fit indices were evaluated, providing an overall assessment of the hypothesized model's correspondence with the data. Then, local fit indices were evaluated, which provide information about specific paths or restrictions within the model's larger system where misfit between the observed and model-implied covariances were detected. Next, model comparisons were conducted to determine whether alternative specifications provided a better fit to the observed data. Finally, direct and indirect effects were analyzed for the model retained after model comparisons. SEM was conducted in R using the lavaan package (Rosseel, 2012).

Global Fit Results

Global fit indices for the hypothesized model, as well as for the rival models used for model comparisons, are reported in Table 9. Regarding the hypothesized model, global fit indices were mixed $X^2(1{,}305, 535) = 2{,}661.21$, $p < .01$, TLI = .87, CFI = .86, RMSEA = .04, SRMR = .07. Specifically, two of the fit indices, CFI and TLI, were below the recommended cut-off of .95 (Hu & Bentler, 1999). Next, local fit was inspected to identify specific differences between predicted and observed values that may be reflected in these global fit results.

Local Fit Results

Following Kline (2024), correlated residuals for each pair of measured variables were calculated using the lavaan package in R and are presented in Table 11. Individual item residuals represent variance specific to the item (e.g. random or systematic error), controlling for that same item's shared variance with its respective scale counterparts. Correlated residuals near zero indicate that the specified model closely aligns with the observed data, while large absolute values suggest areas where the hypothesized model conflicts with observed covariances. Specifically, large residuals may indicate a missing path that should be included or a restricted path that would be supported if the assumption were relaxed (Kline, 2024). Additionally, correlated residuals may point to the influence of an external common cause that accounted for by the model (Landis et al., 2008).

Inspection of the largest correlated residuals presented in Table 11 indicated that there were two study scales in particular wherein their hypothesized relationships were misfit to the sample data. First, two items from the need for relatedness scale exhibited relatively large correlated residuals with items from other study scales, including need for autonomy and RTB. According to Maydeu-Olivares (2017), one way to qualify the relative size of correlated residuals in a given sample is to calculate the average correlated residual. The average correlated residual for all study items was .02. By comparison, the correlated residuals between the need for relatedness items with items in the need for autonomy and RTB scales were between .27 and .30. These values underscore the magnitude of local misfit in the model's specification, namely the loading of these need for relatedness items onto only the need for relatedness latent factor and not autonomy or RTB.

Regarding the RTB-specific items, need for relatedness demonstrated correlated residuals with items from the peer encouragement and ownership mentality dimensions. These correlated residuals may suggest that, in addition to the influence of each item's respective latent factor and the direct relationship between satisfaction of the need for relatedness and RTB, there exists an additional, omitted common influence between need for relatedness and RTB, which future research could investigate.

Model Comparisons

Next, model comparisons were conducted to test the extent to which rival SEM specifications fit the data better than the hypothesized model. Researchers recommend conducting model comparisons, testing competing alternative structures, to retain the model that maximizes goodness-of-fit while maintaining parsimony (Lin et al., 2017). In the current study, the following three alternative models were specified, which are shown in Figure 3. Model A in Figure 3 did not include the mediational paths from autonomy-supportive leadership through the satisfaction of basic psychological needs to RTB. Instead, this model challenges the assumption derived from self-determination theory, that leadership is a needs-satisfying antecedent. Instead, Model A merely accounted for the direct effects of all endogenous variables on RTB. Model B depicted in Figure 3 removed basic psychological needs variables, challenging the current study's argument that they are important antecedents to RTB. Finally, Model C in Figure 3 expanded on the hypothesized model by incorporating the effects of conscientiousness, a known covariate with RTB (Ajaikumar et al., 2024), and proactive personality, which is also believed to positively related to RTB.

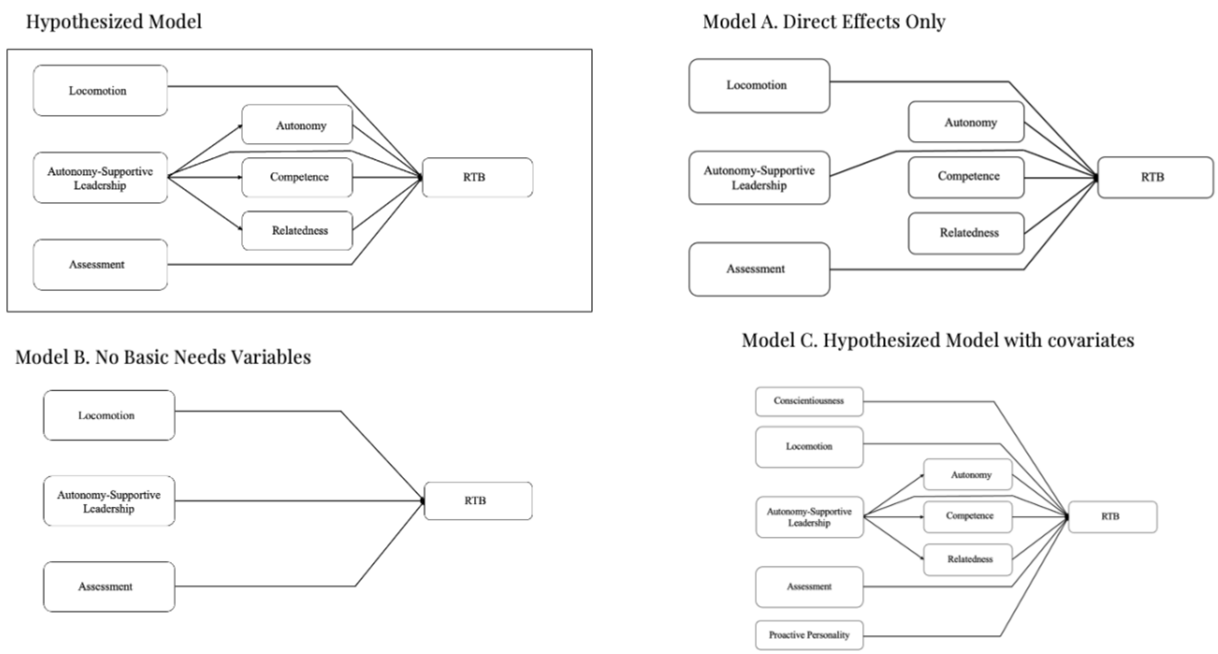


Figure 3: Hypothesized and Alternative Model Specifications.

Following Anderson & Gerbing Anderson & Gerbing (1988), a series of chi-square likelihood ratio tests were used to statistically compare the goodness-of-fit for rival models nested within the hypothesized model. Models that are said to be ‘nested’ contain the same study variables but impose different restrictions. Results from the likelihood ratio test can either indicate that there is no difference between the rival models’ goodness-of-fit, and that the more parsimonious model should be retained or that one of the rival model fits better than the other and should therefore be retained, assuming the added complexity is valuable for theoretical development (Merkle et al., 2016).

Nested model comparisons. Results from likelihood ratio test reported in Table 9 revealed that the model with direct effects only (Model A, Figure 3) fit the data less well than the hypothesized model ($\Delta\chi^2 = 193.4$, $p < .01$). These results do not support mediation per se, which is instead determined by the statistical significance of the parameter estimates for the indirect paths from leadership to RTB through each mediator (below). However, that the hypothesized model fit the data better than the model with direct effects provides support for the SDT-derived assumption that autonomy-supportive leadership is a significant antecedent to the satisfaction of basic psychological needs. Next, a likelihood ratio test conducted for the comparison of the hypothesized model and the model without the basic psychological needs variables (Model B, Figure 3) revealed that the model without the basic psychological needs variables fit the sample data significantly worse than the hypothesized model ($\Delta\chi^2 = 222.91$, $p < .01$). Results from this model comparison provide support that the inclusion of the basic psychological need variables captured useful explanatory value in the sample data. Again, these findings do not support mediational hypotheses per se but provide initial support for the decision to measure basic psychological needs in the context of studying employees' willingness to demonstrate RTB.

Non-nested model comparison. Finally, since the chi-square likelihood ratio test cannot be used for non-nested models which do not contain the same set of variables (Merkle et al., 2016), model Akaike's Information Criterion (AIC) and Bayesian Information Criterion (BIC) values were interpreted to compare the hypothesized model with the covariates model (Model C, Figure 3). Lower values for AIC and BIC indicate models that better balance the trade-off of goodness-of-fit and model complexity (Kline, 2016). Results reported in Table 9 revealed that the AIC and BIC values were lower for the hypothesized model than for the covariates model. These results suggest that the hypothesized model achieved better fit to the data while maintaining overall complexity. While the rival model that included conscientiousness and proactive personality did increase R^2 accounted for in RTB as expected, the results of model comparisons justify retaining the hypothesized model for subsequent analyses. Following model comparisons, direct and indirect effects were interpreted based on the hypothesized model.

Direct Effects

Direct effects for the hypothesized model were calculated with the lavaan package in R. Standardized parameter estimates and bootstrapped 95% confidence intervals are presented in Table 10 and visually depicted in Figure 4. Results provided mixed support for the study hypotheses.

First, in-line with self-determination theory, the direct effect of autonomy-supportive leadership on the satisfaction of basic psychological needs was moderately to strongly positive and significant, providing support for hypotheses (H1b, H2b, and H3b). In particular, the positive effect of autonomy-supportive leadership on basic psychological needs satisfaction ranged from $B = .38$, on satisfaction of need for competence, to $B = .74$, on satisfaction of need for relatedness. Second, two of the three direct effects of BNS on RTB were positive and significant. Specifically, the relationship between BNS competence and RTB was small to moderate ($B = .17$, $p <.01$) and the relationship between BNS relatedness and RTB was small ($B = .04$, $p < .01$). These findings provided support for Hypotheses H2a and H3a. Regarding the relationship between BNS autonomy and RTB, we did not find support for Hypothesis H1a. In particular, while the simple bivariate correlation between BNS autonomy and RTB was positive and significant ($r =.20$, $p < .01$), the relationship was no longer significant while controlling for the unique effects of all other variables in the SEM framework.

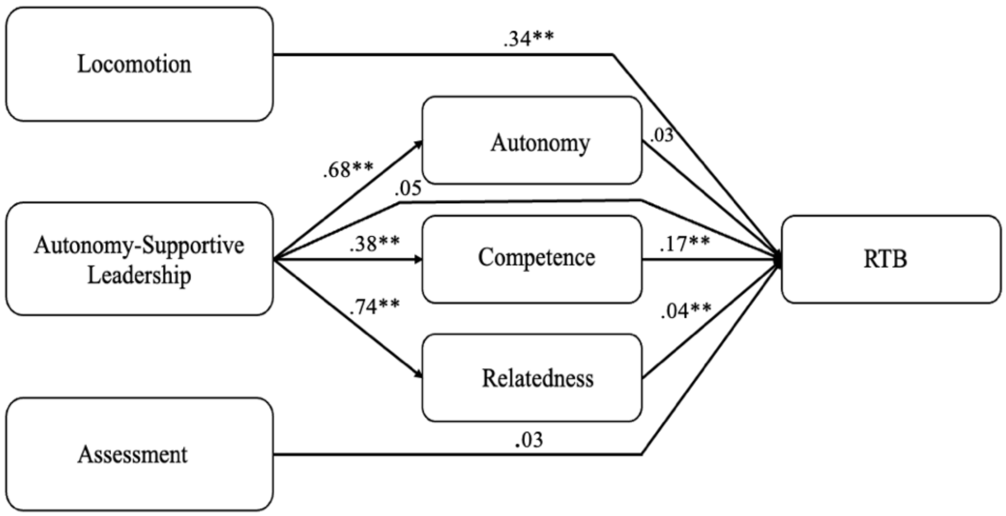


Figure 4: Standardized direct effects for hypothesized SEM. Indirect effects provided in Table 10.

Second, the direct effect of autonomy-supportive leadership (ASL) on RTB 'over and above' BNS was estimated. Results indicated that, despite the moderately strong positive correlation between ASL and RTB (r =.46, p <. 01), the effect was no longer significant after controlling for the other hypothesized relationships.

Third, direct effects for locomotion and assessment orientation were estimated. Results demonstrated that locomotion was positively and moderately related to RTB (B = .34, p < .01), providing support for Hypothesis H5. Additionally, the direct effect of assessment on RTB was not significant (B = .03) with its 95% confidence interval containing zero. These results provide support for Hypothesis H6 that assessment would not be related to RTB.

Indirect Effects

The final main analyses conducted in Study 1 concerned indirect effect of ASL on RTB through BNS as mediators. Indirect effects were estimated alongside all other relationships in the hypothesized model. Results presented in Table 10 revealed that none of the indirect effects were significant with standardized effects ranging from $B = .02$ to $B = .04$ and all bootstrapped 95% confidence intervals containing zero. Thus, there was no evidence in Study 1 to support Hypotheses H1c, H2c and H3c concerning the mediating role of BNS.

3.3 Study 1 Discussion

Overall, results from Study 1 revealed several main takeaways. First, in-line with research hypotheses derived from self-determination theory, findings supported argument that satisfaction of individuals' need to feel competent in their work, and meaningfully related to others, relates to higher levels of willingness to take responsibility at work. These findings suggest that individuals' need to feel both competent and related to others at work are integral to elevated levels of RTB. Moreover, results suggest that these needs are complementary. The satisfaction of each relatedness and competence uniquely, and additively, related to greater willingness for responsibility-taking while controlling for the other as well as other key antecedents such as one's dispositional regulatory mode.

Study 1 also revealed that locomotion orientation, but not assessment orientation, was positively related to RTB. As hypothesized drawing on regulatory mode theory, one explanation for these results are individuals who move more freely from task-to-task at work (locomote) experience fewer barriers to RTB, such as the social consequences of holding others accountable or maintaining momentum.

Despite these findings, there were several limitations specific to the cross-sectional design that were responded to with experimental design in the subsequent study. First, the data obtained were observational, limiting the ability to draw causal inferences on the relationships between the presumed motivational influences of RTB that were highlighted. Similarly, the correlational design was not effective in minimizing the influence of omitted influences over RTB that could confound the relationships observed.

In addition, there were a few theory-specific limitations in Study 1 posed by the cross-sectional design or measurement choices. For instance, regarding self-determination theory, we did not find evidence to support the supposed mediating role of BNS on leadership and employee outcomes like RTB willingness. This is despite strong empirical support from existing research on the mediating role that basic needs satisfaction plays in explaining the connection between leadership and follower outcomes (Baard et al., 2004; Deci et al., 2001, 2017; Leroy et al., 2015). One explanation for this lack of finding from simulation research shows that, despite the prevalence of testing for mediation in cross-sectional designs, the failure to establish temporal precedence in mediational pathways can bias estimates making it more difficult to detect indirect effects (Maxwell & Cole, 2007). In light of this issue, Maxwell & Cole (2007) raise concerns about drawing conclusions from processes that are presumed to be longitudinal in nature but that were tested on cross-sectional data. As one remedy, Maxwell & Cole (2007) recommend experimental designs for tests of mediation as such designs establish temporal precedence and control for omitted common causes through randomization.

Similarly, there were several theory-specific limitations identified regarding regulatory mode theory in Study 1. For instance, while we found evidence supporting the hypothesized relationship between locomotion and RTB, the connection between regulatory mode and leadership may be more nuanced. As discussed in our literature review, previous studies like Benjamin and Flynn (2006) have found evidence of an interaction between regulatory mode and transformational leadership on general work motivation, an employee outcome related to RTB. Such results suggest that there may be a similar interaction between leadership style and regulatory mode. Although this interaction could be tested within a SEM framework, fitting latent interaction terms requires substantially larger sample sizes to produce unbiased estimates (Klein & Moosbrugger, 2000; Kline, 2016). Given that this interaction was not part of our formal hypotheses, our *a priori* power analysis was conducted accordingly, prioritizing the primary relationships of interest. Therefore, an additional benefit to retesting the research hypotheses using a 2 x 2 experiment is to inspect for the possible interaction, which a factorial design readily lends itself. Another limitation associated with the exploration of regulatory mode hypotheses in Study 1 concerns the content breadth of each regulatory mode construct that was examined. Specifically, it is possible that the four items used to measure each regulatory mode did not capture the full content breadth of each construct, possibly attenuating the relationships under examination. For instance, the assessment items (Appendix A) targeted the self-evaluative aspect of the construct but did not address other key characteristics identified in the literature, such as attention to detail and evaluating alternatives prior to taking action (Kanze et al., 2021).

To address this limitation, Study 2 employed experimental manipulations adapted from prior research that better reflected the full content breadth established in the original scale validation (Kruglanski et al., 2000).

Study 2

In Study 2, we re-tested our hypotheses using a randomized experimental design to isolate the effects of leadership style and regulatory mode, controlling for potential confounds and strengthening the internal validity of the conclusions drawn in Study 1.

3.4 Study 2 Methods

Sample Size

Before recruiting participants, an *a prior* power analysis in G*Power (Erdfelder et al., 2007) was conducted to determine the minimum sample size needed to test for main and interaction effects using a 2x2 factorial design assuming medium effect sizes. Results from the power analysis indicated that a minimum sample size of 128 participants, or 32 per cell, was needed for a sufficient test of our hypothesized main and interaction effects. However, recent recommendations suggest sample sizes closer to 50 participants per experimental cell for 2 x 2 designs (Brysbaert, 2019). Therefore, the target minimum sample size for the current study was 200 participants.

Participants

Participants were recruited to take part in the experiment using Prolific. An initial sample size of 220 participants was recruited to ensure minimum sample size requirements were met while accounting for potential data removal during data quality inspection. The same sampling filters utilized in the previous study were applied to the current study. Namely, all participants in the experiment were required to be adults, working full-time, and living in the U.S. Additionally, individuals who participated in the previous study were not able to take part in the current study.

A final sample of 209 participants was retained after data inspection checks (see results). The average sample size per cell was 52.5 participants. Among the participants, 53% were men (n =111), 46% were women (n = 97), and 2% identified as non-binary (n = 2). The racial composition of the sample was 67% White (n = 141), 9% Asian (n = 19), 19% Black (n = 40), 0% Latino (n = 0) and 3% who selected "Other" (n = 6). Regarding age distribution, 8% of participants were between 18 and 24 years old (n = 17), 39% were 25-34 years old (n = 81), 60% were 35-44 years old (n = 33), 7% were 55-64 years old (n = 15), and 1% were 65 years or older (n = 3) Finally, all participants were full-time employees.

Research Design

The study was a 2 x 2 between-subjects randomized online experiment. Leadership style (autonomy-supportive leadership vs. controlling leadership) and regulatory mode (locomotion vs. assessment) were treated as independent variables and participant responses to the same previously-validated RTB scale used in the previous study were collected as the dependent variable. Additionally, participant responses to manipulation checks and additional scale measures were collected to test the robustness of our experimental manipulations and our mediation hypotheses, respectively.

Procedure

Participants were first presented with informed consent and told that they would be taking part in a vignette-based study involving a fictional consulting firm. Participants were instructed that their role in the study would involve imaging themselves as an employee at a firm presented to them. They were told their participation entailed reading general overview materials about the firm, reviewing a brief work scenario, and responding to a questionnaire about their imagined experience at the firm.

After agreeing to the informed consent, participants were randomly assigned to one of four conditions. Participants in all conditions were instructed to read a brief overview page about the firm including the consulting services it provides and its clients' industries (see appendix B). Next, participants were prompted to read a team overview for the consulting practice that they were asked to imagine themselves on. The team overview messaging manipulated regulatory mode (see Table 11below and appendix C). Then, participants were prompted to read a brief work scenario in which they received an email from their direct manager. The email messaging manipulated leadership style (see Table 12 below and appendix C). Finally, the participants were instructed to respond to a survey questionnaire about the company, which contained manipulation checks, mediators, and the dependent variable (appendices D and E).

Regulatory mode manipulation

Regulatory mode was manipulated by varying the motivational messaging in the team overview that participants were assigned to. The manipulation was adapted from Kanze et al. (2021), who developed company mission statements that utilized exclusively locomotion or assessment word choice. As shown in Table 11, the predominant locomotion team overview statement contained 10 locomotion words and no assessment words whereas the predominant assessment team overview statement contained 11 assessment words and no locomotion words. Further, following Kanze et al. (2021)'s recommendations to maintain parity in the overview statements besides the regulatory mode manipulations, word lengths were identical (e.g. 68 words) and statement objectives besides regulatory mode were equivalent. Besides the difference in regulatory mode messaging, both overviews outlined the team's primary objective being to serve its clients and conveyed the qualities sought in prospective team members.

Table 11: Regulatory mode team overview statements

Locomotion	Assessment
A little about ourselves: • We pride ourselves on being doers in a hurry who are eager to deliver results to our clients. • Our team focuses on maintaining high momentum, always ready to mobilize quickly to meet client needs. • We make it our goal to remove business obstacles that clients face. • We value making impactful changes in retail consulting and encourage our associates to take initiative and drive results.	A little about ourselves: • We pride ourselves on being accurate and thorough when delivering results to our clients. • Our team focused on evaluating every possible alternative to ensure our clients receive exhaustive recommendations. • We are committed to considering all aspects of a problem, taking the time to review each solution carefully. • We value associates who are methodical and have a critical eye, bringing meticulous thought to every project.

Autonomy-supportive leadership manipulation

After being exposed to the regulatory mode manipulations, participants progressed through the vignette and read material containing additional information about their role at the firm and their manager. Then, participants read through a work scenario, previously developed by Yu (2024) and Yu & Block (2024), where they received an email from their manager about a recent presentation that they delivered to a client. The email messaging manipulated leadership style by adapting previous manipulations from Reeve et al. (2002). In their experiment, Reeve et al. (2002) manipulated autonomy-supportive leadership by communicating task importance to a participant engaged in a learning exercise. Specifically, their autonomy-supportive leadership condition articulated how the task was an opportunity to gain a new skill that the participant could use in the future and communicated task importance using non-controlling language. In contrast, the controlling condition did not provide the participant with a rationale for doing the task and utilized controlling language (e.g.'must', 'ought'). Both emails are presented Table 12.

Table 12: Autonomy-Supportive and Controlling Leadership Manipulations

Autonomy-supportive leadership	
Hi there, I heard the client meeting didn't go well last Friday, so I'd like to check in with you tomorrow. For your next presentation, try exploring a few ways to make your points clear and impactful. Finding a style that works best for you is important, especially as you develop your skills. I'm here to support you and am confident you'll find an approach that feels natural. See you soon. Best, Bill	Hi there, I heard the client meeting didn't go well last Friday, so I'd like to check in with you tomorrow. For your next presentation, it is essential that you follow the standard methods to make your points clear and impactful. Using the required approach is important and crucial to meet our firm's standards. Moving forward, I will expect you to align with these methods. See you soon. Best, Bill

Besides manipulating leadership type, we maintained parity between the manipulations by imposing identical word counts in each email (e.g. 65 words) and maintaining the same exact words across both emails besides the SDT-specific manipulations. Additionally, manipulation checks were administered in the study's questionnaire to ensure that the manipulation of leadership communication had the intended effect (appendix D).

Measures

Following experimental manipulations, all participants responded to the measures outlined below, which were administered via survey questionnaire. The questionnaire contained our manipulation checks, mediating variables, and the dependent variable, RTB. Before responding to the questionnaire, participants were instructed to respond to the questions in the survey by rating the extent to which the following would be true for them at the fictional consulting firm based on the vignette.

Responsibility-Taking Behavior (RTB). RTB was assessed using participant responses to the same previously-validated RTB scale administered in the previous study (α = .95). A sample item includes, "I would ask questions if my goals were not clear".

Satisfaction of Needs for Autonomy, Competence, and Relatedness.

Basic psychological needs satisfaction was measured using the Work-related Basic Need Satisfaction Scale (W-BNS; Van den Broeck et al., 2010), which was the same scale administered in the previous study. Each basic need scale was measured by three items. An example item for the satisfaction of the need for autonomy includes, "I would feel free to express my ideas and opinions in this job" (α = .66). An example item for the satisfaction of the need for competence includes, "I would doubt whether I would be able to execute by job properly" [reverse-coded] (α = .85). Finally, an example item for the satisfaction of the need for relatedness includes, "I would feel like I could really talk about things that really matter to me" (α = .58).

Regulatory Mode Checks. Next, to test the robustness of the experimental manipulations, two questions were administered in the questionnaire for each independent variable. Starting with the regulatory manipulation, the first manipulation check asked participants what the team overview emphasized and offered a fixed-choice between two response options. The response options included, “Being doers in a hurry” or “Being accurate and thorough”. The second manipulation check for regulatory mode asked participants to provide their response to a statement, ranging on a 5-point Likert scale, from ‘Strongly disagree’ to ‘Strongly Agree’. The statement was worded, “The team overview emphasized maintaining high momentum more than carefully thinking things through”.

Leadership Style Manipulation Checks. Similar to the regulatory mode manipulation checks, the first manipulation check administered to assesses the robustness of the leadership manipulation asked participants to respond to a forced choice question. The question asked, “What did your manager emphasize in their email to you?”, and response options were either “Finding a style that feels natural” or “Following the standard methods required by the firm”. In addition, the second manipulation check assessing the leadership style manipulation was a 5-point Likert item ranging from “Strongly disagree” to “Strongly agree”. The items stated, “The manager offered encouragement to develop your own approach and offered support”.

Attention Check. To ensure participants were paying attention and responding to the survey questionnaire effortfully, the same attention check item administered in the previous study was included in the current study’s questionnaire. While it could be argued that the manipulation checks already capture a measure of the extent to which a participant is taking part in the experiment and questionnaire effortfully, the attention check was included nonetheless as an added precaution and to maintain consistency with the previous study. The attention check stated, “If you are reading this question, answer 3”, and the response options ranged from the numbers 1 to 5.

Demographic Variables. Finally, the same standard demographic questions that were administered in the previous study were presented at the end of the current study's questionnaire. Participants were invited to voluntarily offer their responses to seven questions asking them about their age, race, gender, education level, employment status, professional industry, and work role. A detailed breakdown of the sample's demographic characteristics is presented in Table 12.

3.5 Study 2 Results

Preliminary Analysis

Similar to Study 1, several preliminary analyses were conducted to investigate data quality before conducting hypothesis testing. First, data quality were inspected by reviewing survey completion time, responses to an attention check, and potential outliers on the RTB outcome variable. Second, participant responses to the manipulation check questions were statistically analyzed to test the robustness of the experimental manipulations. Third, means, standard and correlations for all study variables were inspected. Finally, several statistical assumptions were assessed to inform the primary analyses.

Data Screening

To ensure data quality, the same data screening steps demonstrated in Study 1 were applied to a sample size of 220 participants. First, inspection of participant responses indicated that all participants consented to the study, completed it in its entirety, and passed the attention check. Next, 4 outliers were removed due to completion time. Their responses were more than three standard deviations greater than the mean response time (M = 11.48 minutes, SD = 6.63), indicating potential quality issues with these participants' responses such as being distracted

(Meade & Craig, 2012). Next, the data were screened for bot responses using the same Qualtrics CAPTCHA screening capability reported in Study 1. The CAPTCHA method flagged 3 responses as having an elevated likelihood of being attributable to a bot, and these responses were therefore removed. Next, there were no outliers identified on the response variable, RTB, and lastly three participants were not full-time workers and were removed from the sample. Following these data screening measures, the final sample size was 209 participants, allowing for an average sample size of 52.5 participants per experimental cell, which aligned with our intended sample size.

Manipulation Checks

Next, a series of statistical tests were conducted to test the robustness of the experimental manipulations. Results indicated that the experimental operationalizations for both independent variables were successfully manipulated. Regarding the regulatory mode manipulation, a chi-square test of independence revealed that there was a significant difference between the regulatory mode condition that participants were assigned to and their responses to the forced choice manipulation check ($X^2(1, N = 213) = 97.56, p < .01$). Additionally, a one-way analysis of variance (ANOVA) revealed that regulatory mode assignment was significantly related to the responses to the second manipulation check, ($F\ (1,207) = 97.9, p < .01$). Further, inspection of group differences confirmed that these significant group differences were in the expected direction across both manipulation checks. In particular, participants assigned to the locomotion condition perceived the fictional team that they were assigned to as emphasizing fast task completion and maintaining high momentum. In contrast, participants assigned to the assessment condition perceived their team as emphasizing meticulousness and thoughtfulness.

Similarly, results indicated that leadership style was successfully manipulated. Specifically, a chi-square test of independence revealed that the leadership condition was significantly related to responses to the forced-choice manipulation check, $X^2(1, N = 213) = 158.18, p < .01$). As anticipated, the proportion of respondents in the autonomy-supportive condition suggested that their leader was encouraging and suggested finding as style in working with clients that suits them personally. In contrast, participants assigned to controlling leadership condition reported that the leader emphasized following the standard practices of the firm. These results were further supported by a one-way ANOVA, which revealed a significant effect of leadership condition on responses to the second manipulation check, (F (1,211) = 350.70, $p < .01$). Once again, inspection of group difference confirmed that participants assigned to the autonomy-supportive leadership condition perceived their manager as offering the encouragement to develop one's own approach whereas the group assigned to the controlling leader perceived their leader was discouraging the development of their own unique style in their client-facing work. Thus, results from the analysis of all manipulation check items indicated that both independent variables successfully manipulated the intended construct.

Means, standard deviations, and correlations

Means, standard deviations, and correlations for all study variables are reported in Table 14. Regarding RTB, results indicated that the mean was relatively high on a 7-point Likert scale ($M = 5.67$, $SD = .79$), suggesting a majority of positive responses to the RTB scale. These characteristics align with the findings from Study 1 as well as findings from previous RTB research (Ajaikumar et al., 2024). Means and standard deviations for the BNS variables were more moderate, ranging from $M = 3.88$ (autonomy) to $M = 5.33$ (competence) with somewhat higher variability, $SD = .77$ (autonomy) to $SD = 1.37$ (relatedness).

In addition, correlations were consistent with the results in Study 1. In particular, RTB was moderately to strongly positively related to each of the BNS variables, ranging from autonomy (r =.35 , p <.01), competence (r =.70 , p <.01), and relatedness (r =.66 , p <.01). Additionally, intercorrelations between the BNS variables were also moderately to positively correlated, ranging from r = .38 to r = .68.

Main Analysis

A two-way ANOVA was conducted in order to test the hypotheses corresponding with the direct effects of leadership style and regulatory mode on RTB. The overall ANOVA results are reported in Table 15, mean comparisons for main effects are reported in Table 16 and 17, and results from pairwise comparisons to interpret the interaction effect are reported in Tables 19 and 20.

Results reported in Table 15 indicated that there were two main effects and a significant interaction effect. First, results from the two-way ANOVA indicated that there was a significant main effect of leadership style on RTB, F (1, 205) = 20.87, p < .01. Inspection of group means indicated that participants assigned to the autonomy-supportive leadership conditions reported greater willingness to demonstrate RTB (M = 5.90, SD = .58) than participants assigned to the controlling leadership condition, (M = 5.43, SD = .91). Additionally, results demonstrated that the magnitude of this main effect of leadership style on RTB was moderate, η^2_p = .09. These results indicated that, as hypothesized, exposure to an autonomy-supportive leadership style promote followers' RTB whereas a controlling leadership style does not.

Next, the ANOVA revealed that the main effect of regulatory mode on RTB was also significant, F (1, 205) = 6.12, p < .05, with a small effect size, η^2_p = .03. Inspection of the group means indicated that, on average, participants assigned to the assessment group reported higher willingness to demonstrate RTB ($M = 5.79$, $SD = .66$) than the locomotion participants assigned to the locomotion conditions ($M = 5.54$, $SD = .89$). These results were contrary to our hypothesis that locomotion, not assessment, would be related to RTB. The effect size for this main effect was small, $\eta^2_p = .03$.

Finally, ANOVA results indicated that the interaction between leadership style and regulatory mode was significant, $F(1, 205) = 6.19$, $p < .05$. To interpret the interaction, Tukey's HSD tests were conducted for pairwise comparisons and Bonferroni corrections were applied to control for Type I error rate. Results from the first set of pairwise comparisons reported in Table 19 revealed that under autonomy-supportive leadership, there was no difference in RTB by regulatory mode with both groups exhibiting an equivalent mean response ($M = 5.90$). However, RTB significantly varied by regulatory mode under the controlling leadership condition. Specifically, under controlling leadership, participants assigned to the locomotion group reported significantly lower RTB ($M = 5.18$) than participants assigned to the assessment group (M $=5.68$), $p < .01$. This interaction is visually demonstrated by the non-parallel lines in interaction plot in Figure 5.

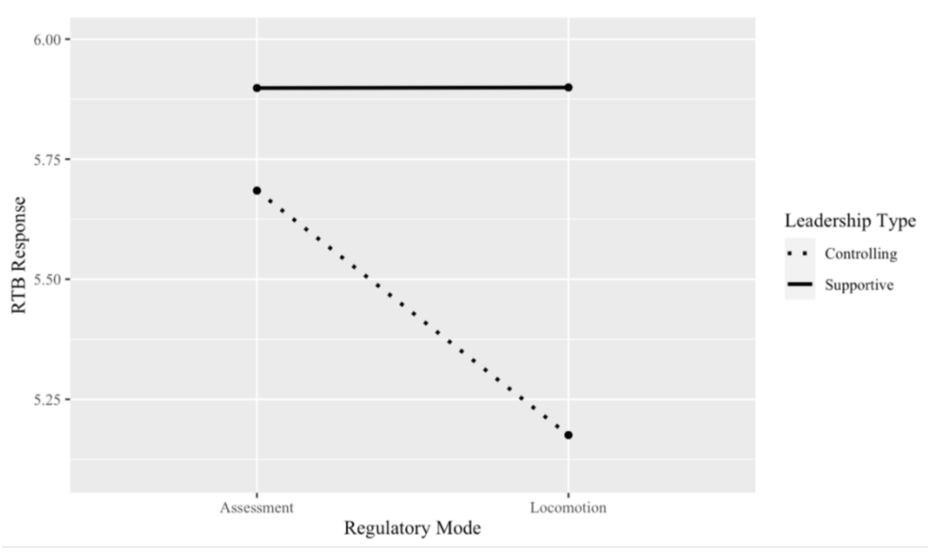


Figure 5: Interaction Plot. Effect of regulatory mode on RTB under different leadership styles shown.

Further, inspection of the interaction plot in Figure 5 indicates that, conditioning on the assessment group, there was a relatively small difference in RTB between leadership type. Reviewing this difference, pairwise comparisons reported in Table 20 indicated that this difference was not significant, revealing that for participants assigned to assessment messaging condition, there was no difference in RTB between controlling leadership (M =5.68 , SD = .71) and ASL (M = 5.90 , SD = .61).

Collectively, these results suggest that the interaction between leadership style and regulatory mode on RTB is driven largely by variability in the locomotion condition, where leadership style had a pronounced effect. Namely, leadership style mattered significantly for participants that received the locomotion condition whereas leadership style did not matter for participants assigned to the assessment condition. Additionally, the moderate effect size of the main effect of leadership style indicates that, when averaged across regulatory modes, leadership style accounts for a substantial and non-trivial portion of the variance in RTB.

Mediation

Finally, mediation analysis was conducted to examine the hypothesized relationship between leadership style and RTB through the satisfaction of basic needs. Mediation analysis was conducted in PROCESS Macro (Preacher & Hayes, 2004). Since a significant interaction between leadership style and regulatory mode was detected in the previous ANOVA, an interaction term was included in the mediation analysis to condition the direct effect of leadership on RTB while accounting for the significant interaction demonstrated in the ANOVA results. However, the mediation paths were not assumed to be moderated by regulatory mode as no prior research hypotheses were developed regarding how the mediating role of BNS on the leadership-RTB relationship could vary under different levels of regulatory mode[5]. Results from mediation analysis are reported in Table 21 and are provided visually in Figure 6 in path diagram form.

Results indicated two of the three hypothesized mediational paths from leadership style to RTB through BNS were significant. Specifically, results demonstrated that the indirect effect of ASL on RTB through BNS competence was significant (b = .24, 95% CI = .16 to .47). This finding indicates that autonomy-supportive leadership was positively associated with participants' satisfaction of need for competence, which in turn led to higher RTB. Additionally, results indicated that there was a significant indirect effect of ASL on RTB through satisfaction of the need for relatedness (b = .21, 95% CI = .15 to .41). Autonomy-supportive leadership was positively associated with participants' satisfaction of need for relatedness, which in turn led to higher RTB. Finally, results did not find support for the hypothesized indirect effect of ASL on RTB through satisfaction of the need for autonomy (b = .02 , 95% CI = -.03, .07).

Collectively, these relationships, including the significant interaction term between leadership style and regulatory mode that was previously demonstrated in an ANOVA framework, accounted for 57% of variance explained in participants' RTB responses.

[5] Model 5 in PROCESS Macro.

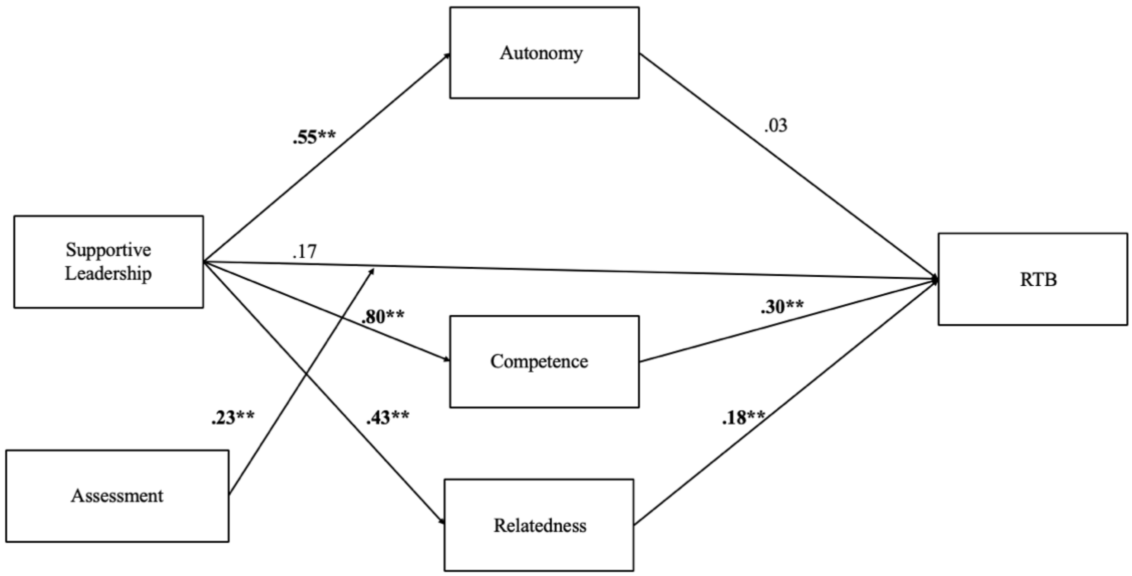


Figure 6: Mediation Model. Unstandardized parameter estimates for mediation model in Study 2. Indirect effects reported in Table 21.

3.6 Study 2 Discussion

The purpose of this study was to experimentally test the hypothesized effects of leadership, BNS, and regulatory mode on RTB. Study 2 contributed to the current research and expanded on Study 1 in several ways.

First, we found support for several of our hypotheses. Regarding the influence of leadership style, we found that autonomy-supportive leadership promoted RTB as hypothesized. Further supporting our hypotheses, controlling leadership style led to lower levels of participants' willingness to demonstrate RTB.

Second, we found support for two of the three hypothesized mediating roles of BNS which contributed to a deeper understanding of the leadership-RTB relationship. Specifically, the significant mediating roles of relatedness and competence highlight the multifaceted impact of autonomy-supportive leadership on RTB. These relationships suggest that key drivers of RTB include a social dimension, such as feeling a sense of belonging and meaningful connection to others, and a self-efficacy dimension, such as possessing confidence in one's ability to carry out one's responsibilities and access necessary resources. Furthermore, these findings underscore autonomy-supportive leadership as a critical factor in satisfying these fundamental needs for RTB.

Additionally, we found a significant interaction between leadership style and regulatory mode, leading to an additional set of takeaways. We found that when participants were primed by assessment messaging – emphasizing carefulness and meticulousness – their willingness to demonstrate RTB was not significantly affected by leadership type. However, when participants were primed by locomotion messaging – emphasizing urgency – RTB varied significantly based on leadership style. Specifically, the results indicated that the joint presence of locomotion messaging with controlling leadership style led to significantly lower RTB responses than assessment messaging with controlling leadership. Additionally, we found no difference between the regulatory mode groups under autonomy-supportive leadership. These findings are consistent with one particular finding from the previously-discussed study by Benjamin & Flynn (2006), who found that locomotors were more sensitive to, and less motivated by, transactional leaders than assessors. One possible explanation for these findings is offered by the 'regulatory fit' hypothesis expressed in research on regulatory mode (Higgins, 2000). The hypothesis suggests that when an individuals' regulatory mode orientation is consistent with other motivational forces, such as leadership, individuals not only feel that their goal pursuit is correct but they derive more value from the goal pursuit, experiencing the pursuit as rewarding, meaningful, and important (Higgins, 2002). In the context of the current study, the regulatory fit hypothesis suggests that one possible reason why there was no difference in RTB scores between leadership styles for participants in the assessment group is that the controlling leaders achieved some degree of consistency with assessment group's goal pursuit, which was to identify a correct way to do things. Namely, the controlling leadership instructed to the participants to "follow the standard methods and procedures of the firm", satisfying the assessment orientation's drive to identify a correct way of presenting to the client. In contrast, the significantly lower RTB scores in the locomotion-controlling group suggest that the leader's demand to strictly follow standard procedures may have hindered locomotors' ability to pursue their goals in their own way. As a result, they may have struggled to see the value in their goal pursuit strategy, making them less willing to exert additional effort, as required by RTB.

Finally, we did not find evidence of need for autonomy's mediating role in the relationship, which may be accounted for by a few possible explanations. First, from a measurement perspective, the reliability of the BNS autonomy scale was poor which may have attenuated its relationship with RTB and its role as a mediator. Another explanation is that autonomy, in itself, may not be a key driver of RTB. While RTB involves initiative-taking and proactive behaviors, simply having autonomy may not inherently encourage these behaviors in the same way that feeling connected to others or having confidence in one's abilities does. A similar pattern emerged with locomotion, which is interesting considering that both constructs capture a sense of being self-directed. The fact that locomotion was not more influential in promoting RTB under supportive conditions suggests that RTB may be driven more social effects, such as the sense of connection with others (relatedness), and self-efficacy-like effects (competence), than by the perception that one possesses volition and momentum; merely possessing autonomy or a sense of agency is necessary but insufficient to initiate acting upon it.

A third explanation for the lack of observed relationship between autonomy and responsibility is that the relationship may operate in the reverse direction than was tested. According to Spitzmuller & Van Dyne (2013) individuals may engage in proactive behaviors to satisfy a need for autonomy. Specifically, this 'self-benefitting' hypothesis described by Spitzmuller & Van Dyne (2013) suggests that individuals may engage in proactive behaviors as a way of enhancing their sense of volition and control over their work environment. Supporting this idea, Chi et al. (2023) found that prior proactive helping behaviors increased individuals' sense of autonomy, which in turn predicted further proactive behavior over time. Applied to RTB, these findings suggest that taking on responsibilities may not be driven by autonomy itself but rather serve as a way for individuals to cultivate a stronger sense of ownership and control over their work. Alternatively, autonomy may be unrelated or even negatively related to responsibility-taking. For instance, research on the "dark side" of job autonomy has shown that high levels of job autonomy led individuals to feel unconstrained by rules which, in turn, promoted unethical behaviors (Lu et al., 2017). These findings challenge the assumption that autonomy necessarily fosters responsibility-taking. If this effect were present in our study, it is possible that we would have observed a negative correlation between BNS autonomy and responsibility-taking behavior. However, Lu et al. (2017) also found that the negative relationship between autonomy and ethical behavior was less pronounced when individuals valued the importance of job autonomy. Thus, it is possible that in our study, the effect of autonomy-supportive leadership, which offered followers a rationale for developing their own agency and volition, may have 'washed out' any negative effects of autonomy in the overall study data, even if such effects were present under controlling leadership conditions. Future research should further examine the relationship between autonomy and responsibility-taking.

3.7 Post-Hoc Analysis for Study 1

Finally, given that the interaction between regulatory mode and leadership style was not initially hypothesized but emerged as significant in Study 2, it was important to assess whether a similar pattern could be observed in Study 1 for consistency. Thus, to explore the robustness of the locomotion-leadership style interaction, we conducted a follow-up analysis on the Study 1 data to examine whether the same effect was present. Regression was used to test for the presence of an interaction between locomotion and autonomy-supportive leadership that was observed in Study 2. In particular, a multiple regression model was fit containing the main effects of ASL, locomotion, and assessment on RTB as well as an interaction term between ASL and both assessment and locomotion. These were the same main and interaction terms assessed in the Study 2 ANOVA.

Results from the regression reported in Table 22 indicated that ASL and locomotion positively interacted in the Study 1 data, ($\beta = .09$, $p < .01$), demonstrating consistency with the results from Study 2. Additionally, the main effect of locomotion was no longer significant, ($\beta = -.03$, $p = .83$), which was also observed in Study 2. Together, these results suggest that locomotion alone does not significantly relate to RTB. Rather, these post-hoc analyses revealed that for individuals primarily driven by a locomotion orientation, autonomy-supportive leadership plays a crucial role in their willingness to demonstrate RTB.

Additionally, demonstrating further consistency with the experimental results, regression results revealed that the interaction between assessment and ASL was not significant, ($\beta = -.01$, $p = .54$). These results indicated that for individuals for whom assessment orientation is predominant, their RTB was not affected by the style of leadership. The same pattern was observed in the experiment in Study 2, where there was no significant difference in assessors' RTB by leadership style.

Together, these results provide a more nuanced interpretation of the relationship between leadership and regulatory mode than were originally hypothesized. These findings support the conclusions drawn from our experiment, which showed that individuals operating with high urgency are likely to engage in RTB only if they are led by managers who provide rationale for the work and articulate the importance of the work for one's personal growth. Without such leadership, such urgency – as characterized by locomotion orientation – does not encourage RTB, as was originally assumed. By conducting this post-hoc analysis, we lend further support to the interaction observed in our experimental results, and greater generalizability around the conditions under which particular leadership styles matter most for RTB.

Chapter 4 – General Discussion

In response to calls to better understand personal responsibility-taking in the workplace, the purpose of the current research was to identify the motivational antecedents of employee responsibility-taking behavior. While responsibility has been a core component of theoretical frameworks on employee productivity and job satisfaction (Hackman & Oldham, 1976; Taylor, 1911), responsibility-taking as a behavioral construct has received little attention. This is an issue because now more than ever, there is a need to understand employee responsibility-taking behaviors as uncertainty and the complexity of work unprecedented (Griffin et al., 2007). In such environments, traditional top-down planning is less feasible, requiring employees to be more self-directed in identifying what their roles demand (Grant & Rothbard, 2013). Additionally, as economies shift toward service and knowledge-intensive sectors, work has become more complex, requiring employees to coordinate with others, not just for a collective benefit but because individual performance is now deeply tied to collaboration (Chen & Kanfer, 2024).

Responding to these expanded set of expectations incumbent on employees, Ajaikumar et al. (2024) presented a construct definition and initial validation for a measure of individual responsibility-taking. Their empirical results showed these behaviors were positively linked to job performance as expected. However, their work also conceptually expressed the challenges and complexities believed to be associated with these behaviors, such as RTB's dual focus on fulfilling existing commitments while proactively taking ownership for emerging, role-related tasks.

In light of the challenges and complexities that RTB asks of individuals, the current research aimed to better understand what factors promote this behavior and why. To do so, we drew on self-determination theory (Deci & Ryan, 2000) and regulatory mode theory (Kruglanski et al., 2000). Specifically, we investigated differences in leadership style as a situational influence on follower motivation. We also examined basic psychological needs satisfaction as an indicator of how well one's environment provides the essential conditions for motivation and self-direction, and regulatory mode orientations—both as chronic individual differences in goal pursuit strategies and as team-level motivational messaging that shapes situational influences on goal pursuit.

There were three main areas of findings that revealed key insights about the motives associated with employee responsibility-taking and the consequent implications for practice that they offer. The first area of insight concerns the relationship between basic psychological needs and RTB. Across both studies, we found that the satisfaction of individuals' universal needs for competence (feeling confident and capable in their work) and relatedness (feeling meaningfully connected to others) promoted responsibility-taking. Additionally, contrary to expectations, satisfaction of the need for autonomy was not associated with RTB. This challenges the assumption that a sense of autonomy motivates responsibility-taking, which is surprising given the self-initiating nature of the behaviors underlying the RTB construct.

As previously discussed, one interpretation of these findings is that autonomy alone does not inherently drive RTB. Autonomy may be necessary but insufficient, particularly when controlling for competence and relatedness. Alternatively, it's possible that the relationship between autonomy and RTB is more nuanced and complex. The 'self-benefiting' hypothesis (Spitzmuller & Van Dyne, 2013), for example, posits that a primary reason why individuals engage in proactive behaviors, such as responsibility-taking, is to achieve a sense of autonomy and control over one's work environment. Likewise, there may be other self-benefitting outcomes that an individual hopes to attain through RTB, such as improving one's self-image within an organization.

The second key finding concerns the importance of leadership style for RTB. We found that autonomy-supportive leadership was consistently positive positively correlated with responsibility taken behavior across both studies. Further, when incorporating the effects of basic psychological needs, our experimental results showed that the autonomy-supportive leadership led to an increase in basic psychological needs satisfaction with which, in turn, promoted willingness to engage in RTB. These results aligned with previous research, which has shown that autonomy supportive leadership positively promotes individuals' willingness to be self-directed (Ryan et al., 2022; Slemp et al., 2020). According to SDT, these findings suggest that autonomy-supportive leadership, through its positive impact on basic needs satisfaction, promote a greater degree of self-determination in goal striving, making individuals feel more in control of their behavior (Slemp et al., 2018). Our findings also supported the anticipated negative effects of controlling leadership. Unlike autonomy-supportive leadership, which promotes followers' sense of self-determination and choice, controlling leadership neglects these values. In particular, our experimental results showed that, on average, controlling leadership led participants to report lower levels of willingness to engage in RTB.

Finally, by examining regulatory mode orientation, our findings also revealed specific instances in which leadership style mattered most for employee responsibility-taking. Specifically, our experimental results demonstrated that leadership style mattered most for RTB when individuals were primed with motivational messaging that emphasized urgency and individual initiative-taking. For individuals experiencing this locomotion messaging, autonomy-supportive leadership significantly promoted their willingness to perform RTB. Whereas for individuals experiencing the same locomotion messaging, controlling leadership produced a significant decline in willingness to engage in RTB. These results suggest that, in terms of promoting RTB, supportive leadership is most necessary when teams encourage espouse getting things done quickly and encourage individual initiative. These are crucial insights because the recent demand for responsibility-taking emerges from a macro landscape in which organizational uncertainty and the speed of technological change are pronounced (Gagné et al., 2022). Our results suggest that under these conditions supportive leadership is essential for RTB.

Additionally, the same pronounced difference by leadership style was not observed for individuals exposed to assessment messaging. Individuals who experienced the assessment messaging – which emphasized being careful and detail-oriented – experienced no significant boost or decline in willingness to engage in RTB as a function of leadership style. While this interaction between leadership style and regulatory mode was not hypothesized, post-hoc exploratory analysis demonstrated consistency in these results in both studies.

4.1 Practical Implications

There are several key implications for practitioners stemming from our research findings. One clear implication is that leaders should align their managerial style with the principles of autonomy-supportive leadership, as outlined in SDT, to encourage RTB among employees. Specifically, leaders can adopt behaviors and strategies identified in the SDT literature to foster an environment that supports employees' sense of self-determination, competence, and relatedness. Beyond leadership style, managers should actively assess whether employees' psychological needs for competence and relatedness are being met, as the satisfaction of these needs were found to mediate the relationship between leadership and RTB. For example, leaders can evaluate whether employees feel confident in their ability to accomplish difficult tasks, master their responsibilities, and demonstrate general self-efficacy in their roles. Similarly, leaders can assess the extent to which employees feel a sense of meaningful connection with their colleagues, perceive themselves as part of a team, and have opportunities for social interaction. By leveraging SDT, organizations have access to well-established measurement tools for articulating leadership competencies and diagnosing these psychological needs to address gaps.

From an employee's perspective, our findings highlight how supportive leadership and need satisfaction contribute to RTB. Understanding these relationships can help job seekers identify the organizational conditions that would support them for success. While many organizations emphasize a desire for "self-starters" and comfort with ambiguity, our findings suggest that the willingness of an employee to take responsibility under such conditions crucially depends on leadership quality. Ironically, when teams promote a sense of urgency but lack supportive leadership, individuals are less likely to self-initiate RTBs. Therefore, job seekers should be mindful of potential instances of misalignment between an organization's expectations and its leadership support. During interviews, special attention should be given to identifying any conflicting signals between an emphasis on locomoting, such as maintaining urgency, and the actual leadership climate.

4.2 Limitations and Future Research

As highlighted earlier, one interesting finding was the absence of a relationship between autonomy satisfaction and RTB. Prior research suggests that some proactive behaviors are pursued for self-serving purposes, such as increasing one's sense of autonomy or enhancing one's image within the organization (Chi et al., 2023; Spitzmuller & Van Dyne, 2013). These findings imply that a separate set of motives may also drive responsibility-taking beyond the factors identified in the current study. One promising framework for uncovering these motives is regulatory focus theory (Higgins, 1997), which is separate from regulatory mode theory. Regulatory focus theory proposes that individuals can be motivated toward promotion – engaging in activities that afford gain – or prevention – engaging in activities that minimize loss (Higgins, 1998). Although RTB might seem primarily oriented toward prevention such as avoiding instances of failing to follow through on prior commitments, the theory suggests that the way in which RTB is construed is highly context-dependent. Factors such as leadership behavior, organizational culture, and company messaging can differentially activate promotion or prevention foci. For example, Brockner and Higgins (2001) highlight that employees can interpret workplace expectations in two fundamentally different ways: as an aspirational ideal ("this is what we would like you to do") or as an obligation ("this is what you ought to do"). In turn, these construals may lead to different sets of reasons why individuals engage in RTB.

Since leadership and motivational messaging played an important role and promoting RTB in the current research, a natural extension of our research would then be to understand how certain situations shape an employee's construal of RTB being primarily an opportunity for either prevention or promotion, and what the implications of these different foci would be for the employee. For instance, when RTB is approached with a promotion focus, employees may view it as an opportunity to exercise autonomy, develop leadership qualities, and foster social connections. This perspective could help them move toward their idealized self, leading to positive emotional experiences such as confidence and job satisfaction. In contrast, a prevention-oriented approach to RTB may center on avoiding mistakes or negative consequences, potentially resulting in heightened stress or burnout. Thus, research examining how different regulatory foci relate to RTB could not only uncover distinct sets of reasons for engaging in responsibility-taking but also reveal divergent outcomes depending on whether their RTB is pursued from promotion or prevention orientation.

Another related avenue that future research could more closely examine is the key assumption that SDT makes regarding the role that value internalization plays in individuals' behavioral self-regulation. SDT posits that need-supportive environments foster the internalization of an organization's prevailing values, aligning personal values with those of the workplace and thereby exerting a strong self-regulatory effect on behavior (Deci & Ryan, 1985b). Prior studies have measured the degree of internalization to test hypotheses about the conditions that promote value integration (Ryan & Connell, 1989). Similar research would be valuable for investigating responsibility-taking behavior. Although our results are aligned with SDT's assumption that need-supportive environments enhance internalization, we did not directly measure value internalization or person-organization value congruence. Consequently, we cannot determine the extent to which the positive effects of supportive leadership and need satisfaction on responsibility-taking are driven by the employees' sense that their personal values are congruent with salient values in their work environment such those of their organization, their immediate team, or their direct supervisor. Clarifying the extent to which leadership and need support promote value congruence would help predict the longevity of these positive effects on employee responsibility-taking.

Finally, in addition to examining motivational differences attributable to goal construals and value alignment, researchers and practitioners alike may wonder about other organizational conditions that affect employee RTB. In particular, more research is needed to identify specific boundary conditions that would be expected to amplify or attenuate the leadership-RTB relationship studied in the current dissertation for example, or the RTB-performance relationship studied in previous research (Ajaikumar et al., 2024). Two frameworks that would be useful for identifying such boundary conditions are the work design (Humphrey et al., 2007) and relational job design (Grant, 2007) perspectives. For instance, job characteristics explored from a work design perspective like job complexity would provide a useful starting point. Job complexity refers to the degree to which a job cognitively demanding and multifaceted (Humphrey et al., 2007). Future research could explore, for example, whether the effect of autonomy-supportive leadership on RTB is more pronounced under high job complexity. It is possible to imagine that followers who are led by autonomy-supportive leaders may feel more authorized to navigate challenges associated with complex work, such as ambiguity and increased reliance on personal discretion, promoting RTB in turn. Alternatively, it is also possible to imagine that there might be a curvilinear relationship between high levels of autonomy-supportive leadership and follower RTB under high job complexity. Specifically, at extremely high levels of job complexity, followers may look to their leader for more targeted guidance and prioritization than an autonomy-supportive leadership style offers. In addition to addressing such questions, explicitly measuring job complexity would be a meaningful contribution to the broader RTB research agenda. A key assumption underlying our research, though not yet directly tested, is that work across industries and professions is becoming increasingly complex, and thus RTB behaviors are more valuable. By adopting a work design perspective and incorporating measures of job complexity to test boundary conditions, future research could offer more specific insights into the types of work environments and scenarios in which RTB is especially critical.

Likewise, task interdependence, which is commonly explored in the relational job design literature, offers another fruitful characteristic to explore boundary conditions. Task interdependence refers to the degree to which a job requires reliance on others for task completion (Doden et al., 2024). As a moderator, variation in task interdependence may amplify or attenuate the effects of ASL-RTB relationship examined in the current research. For instance, under conditions of low task interdependence, where individuals are relatively isolated in their roles and do not depend on others' contributions to carry out their responsibilities, the positive effect of ASL on RTB may be diminished. In such contexts, the motivating effect of ASL on follower RTB through the satisfaction of relatedness may be weaker as these employees have fewer opportunities to collaborate or coordinate their work with others. In contrast, under high task interdependence, ASL may be especially effective because of its ability to socialize followers, generating alignment with the social demands of the work. Identifying such boundary conditions would not only help pinpoint the types of roles or organizational contexts where leadership is most critical for RTB, but would also address another key assumption underlying the RTB research agenda, that RTB are valuable in a world of work where traditional task boundaries are increasingly blurred.

4.3 Conclusion

In conclusion, our findings demonstrate that supportive leadership, along with employees' need to feel confident and meaningfully connected to others at work, promote their willingness to engage in responsibility-taking behavior. These effects were particularly pronounced for individuals that were part of teams that emphasized a strong urgency and striving to get a lot done at a fast pace. Additionally, we found that simply emphasizing urgency does not, on its own, promote responsibility-taking. From a self-determination theory perspective, urgency alone fails to convey the personal importance of these behaviors in the same way autonomy-supportive leadership does. Specifically, by enhancing followers' sense of competence and relatedness, we found that autonomy-supportive leadership provided stronger motivation for responsibility-taking.

The results of this research warrant future investigation into other sets of responsibility-taking motives, such as potential benefits to the individual that are growth-related, such as demonstrating leadership potential, or self-serving, such as improving one's social image. Additionally, future research is needed to identify the job and relational characteristics of work that further clarify the situations under which employees choose to take responsibility.

References

Ahir, H., Bloom, N., & Furceri, D. (2022). The World Uncertainty Index. In *NBER Working Papers Series*.

Ajaikumar, N., Zlupko, G., Bates, A., Woodruff, T., & Pasmore, W. A. (2024). Adapting to the Future of Work: The Importance of Responsibility-Seeking Behavior. *39th Annual Society for Industrial and Organizational Psychology (SIOP)*, 1–42.

Allen, M. J., & Yen, W. M. (1979). Introduction to measurement theory. In *Google Scholar*. Waveland Press.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423. https://doi.org/10.1037//0033-2909.103.3.411

Axtell, C. M., & Parker, S. K. (2003). Promoting role breadth self-efficacy through involvement, work redesign and training. *Human Relations*, *56*(1), 113–131. https://doi.org/10.1177/0018726703056001452

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*(10), 2045–2068. https://doi.org/10.1111/j.1559-1816.2004.tb02690.x

Bandalos, D. L. (2002). The effects of item parceling on goodness-of-fit and parameter estimate bias in structural equation modeling. *Structural Equation Modeling*, *9*(1), 78–102. https://doi.org/10.1207/S15328007SEM0901_5

Baran, B. E., & Woznyj, H. M. (2021). Managing VUCA: The human dynamics of agility. *Organizational Dynamics*, *50*(2), 100787. https://doi.org/10.1016/j.orgdyn.2020.100787

Barrick, M. R., & Mount, M. K. (1991). the Big Five Personality Dimensions and Job

Performance: a Meta-Analysis. *Personnel Psychology*, *44*(1), 1–26. https://doi.org/10.1111/j.1744-6570.1991.tb00688.x

Benjamin, L., & Flynn, F. J. (2006). Leadership style and regulatory mode: Value from fit? *Organizational Behavior and Human Decision Processes*, *100*(2), 216–230. https://doi.org/10.1016/j.obhdp.2006.01.008

Bentler, P. M., & Chou, C.-P. (1987). Practical Issues in structural equation modelinlg. *Sociological Methods & Research*, *16*(1), 78–117.

Bititci, U., Garengo, P., Dörfler, V., & Nudurupati, S. (2012). Performance Measurement: Challenges for Tomorrow. *International Journal of Management Reviews*, *14*(3), 305–327. https://doi.org/10.1111/j.1468-2370.2011.00318.x

Bolino, M. C., & Klotz, A. C. (2022). When Quiet Quitting Is Worse Than the Real Thing. *Harvard Business Review*, 1–6.

Bono, J. E., & Judge, T. A. (2004). Personality and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Applied Psychology*, *89*(5), 901–910. https://doi.org/10.1037/0021-9010.89.5.901

Brysbaert, M. (2019). How many participants do we have to include in properly powered experiments? A tutorial of power analysis with some simple guidelines. *Journal of Cognition*, *2*(1), 1–38.

Cappelli, P., Bassi, L., Katz, H., Knoke, D., Osterman, P., & Useem, M. (2017). *Change at work*. Oxford University Press .

Carucci, R. (2020). How to actually encourage employee accountability. *Harvard Business Review*, *98*(6), 1–7. https://hbr.org/2020/11/how-to-actually-encourage-employee-accountability?ab=hero-main-text

Chen, C. Y., Rossignac-Milon, M., & Higgins, E. T. (2018). Feeling distressed from making decisions: Assessors' need to be right. *Journal of Personality and Social Psychology*, *115*(4), 743–761. https://doi.org/10.1037/pspp0000181

Chen, G., & Kanfer, R. (2006). Toward a Systems Theory of Motivated Behavior in Work Teams. *Research in Organizational Behavior*, *27*(06), 223–267. https://doi.org/10.1016/S0191-3085(06)27006-0

Chen, G., & Kanfer, R. (2024). The Future of Motivation in and of Teams. *Annual Review of Organizational Psychology and Organizational Behavior*, *11*, 93–112. https://doi.org/10.1146/annurev-orgpsych-111821-031621

Chi, N. W., Tu, M. H., & Wu, I. H. (Ray). (2023). Why and when proactive helping does not lead to future help: The roles of psychological need satisfaction and interpersonal competence. *Journal of Vocational Behavior*, *140*(November 2022), 103824. https://doi.org/10.1016/j.jvb.2022.103824

Chiaburu, D. S., Oh, I. S., Stoverink, A. C., Park, H. (Hailey), Bradley, C., & Barros-Rivera, B. A. (2022). Happy to help, happy to change? A meta-analysis of major predictors of affiliative and change-oriented organizational citizenship behaviors. *Journal of Vocational Behavior*, *132*(November 2021), 103664. https://doi.org/10.1016/j.jvb.2021.103664

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, *26*(3), 435–462. https://doi.org/10.1177/014920630002600304

Culbert, S. (1974). *The organization trap and how to get out of it*. Basic Books.

Culshaw, S. P. (2023). Ready for Anything. *Harvard Business Review*.

Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology*, *90*(6), 1241–1255. https://doi.org/10.1037/0021-9010.90.6.1241

Deci, E. L., Eghrarl, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating Internatlization: The Self-Determinatlon Theory Perspective. *Journal of Personality*, *62*(March 1994), 119–142.

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-Determination Theory in Work Organizations: The State of a Science. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

Deci, E. L., & Ryan, R. M. (1985a). Intrinsic Motivation and Self-Determination in Human Behavior. In *Intrinsic Motivation and Self-Determination in Human Behavior*. https://doi.org/10.1007/978-1-4899-2271-7

Deci, E. L., & Ryan, R. M. (1985b). Toward an Organismic Integration Theory. *Intrinsic Motivation and Self-Determination in Human Behavior*, 113–148. https://doi.org/10.1007/978-1-4899-2271-7_5

Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation. *American Psychologist*, *55*(1), 68–78. http://doi.apa.org/getdoi.cfm?doi=10.1037/0003-066X.55.1.68

Deci, E. L., & Ryan, R. M. (2012). Self-Determination Theory. In P. A. M. Van Lange, T. E. Higgins, & A. W. Kruglanski (Eds.), *Handbook of Theories of Social Psychology: Volume 1* (pp. 416–459). Sage Publications Inc.

Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, *27*(8), 930–942. https://doi.org/10.1177/0146167201278002

Deci, E. L., Ryan, R. M., & Koestner, R. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, *125*(6), 627–668. https://doi.org/10.1037/0033-2909.125.6.627

Detert, J. R., & Burris, E. (2007). Leadership Behavior and Employee Voice: Is the Door Really Open. *The Academy of Management Journal*, *50*(4), 869–884.

Doden, W., Bindl, U., & Unger, D. (2024). Does it take two to tango? Combined effects of relational job crafting and job design on energy and performance. *Journal of Organizational Behavior*, *November 2022*, 1189–1207. https://doi.org/10.1002/job.2820

Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The Mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, *18*(2), 192–203. https://doi.org/10.1037/1040-3590.18.2.192

Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. (2006). A meta-analytic investigation of conscientiousness in the prediction of job performance: Examining the intercorrelations and the incremental validity of narrow traits. *Journal of Applied Psychology*, *91*(1), 40–57. https://doi.org/10.1037/0021-9010.91.1.40

Dweck, C. S., & Leggett, E. (1998). A Social-Cognitive Approach to Motivation and Personality. *Psychological Review*, *95*(2), 256–273.

Dweck, C. S., & Yeager, D. S. (2019). Mindsets: A View From Two Eras. *Perspectives on Psychological Science*, *14*(3), 481–496. https://doi.org/10.1177/1745691618804166

Dwyer, P. D., & Minnegal, M. (2012). Who is Watching? Context, blame and responsibility. In *Responsibility* (pp. 37–41). Melbourne University Press.

Erdfelder, E., Faul, F., & Buchner, A. (2007). G*Power3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods,* *Instruments, and Computers*, *39*(2), 175–191. https://doi.org/10.3758/BF03203630

Filloux, F. (2011). Steve Jobs: Seven lessons from Apple's founder. *The Guardian*, 1–5.

Finch, J. F., West, S. G., & MacKinnon, D. P. (1997). Effects of sample size and nonnormality on the estimation of mediated effects in latent variable models. *Structural Equation Modeling*, *4*(2), 87–107. https://doi.org/10.1080/10705519709540063

Fraccaroli, F., Zaniboni, S., & Truxillo, D. M. (2024). Challenges in the New Economy: A New Era for Work Design. *Annual Review of Organizational Psychology and Organizational Behavior*, *11*, 307–335. https://doi.org/10.1146/annurev-orgpsych-081722-053704

Frese, M., Kring, W., Soose, A., & Zempel, J. (1996). Personal initiative at work: Differences between East and West Germany. *Academy Management Journal*, *39*(1), 37–63.

Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, *69*(8), 3192–3198. https://doi.org/10.1016/j.jbusres.2015.12.008

Fuller, J. B., Marler, L. E., & Hester, K. (2006). Promoting felt responsibility for constructive change and proactive behavior: exploring aspects of an elaborated model of work design. *Journal of Organizational Behavior*, *27*(8), i–ii. https://doi.org/10.1002/job.425

Gagné, M. (2003). The Role of Autonomy Support and Autonomy Orientation in Prosocial Behavior Engagement. *Motivation and Emotion*, *27*(3), 199–223. https://doi.org/10.1023/A:1025007614869

Gagné, M. (2014). *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory*. Oxford University Press.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331–362. https://doi.org/10.1002/job.322

Gagné, M., & Hewett, R. (2024). Assumptions about Human Motivation have Consequences for Practice. *Journal of Management Studies*. https://doi.org/10.1111/joms.13092

Gagné, M., & Hewett, R. (2025). What leaders get wrong about employee motivation. *MIT Sloan Management Review*, 1–12.

Gagné, M., Parker, S. K., Griffin, M. A., Dunlop, P. D., Knight, C., Klonek, F. E., & Parent-Rocheleau, X. (2022). Understanding and shaping the future of work with self-determination theory. *Nature Reviews Psychology*, *1*(7), 378–392. https://doi.org/10.1038/s44159-022-00056-w

Gardner, H. (2007). *Responsibility at work: How leading professionals act (or don't act) responsibly*. Jossey-Bass.

Gonzalez-Mulé, E., Mount, M. K., & Oh, I. S. (2014). A meta-analysis of the relationship between general mental ability and nontask performance. *Journal of Applied Psychology*, *99*(6), 1222–1243. https://doi.org/10.1037/a0037547

Graham, J. (1986). Principled organizational dissent: A theoretical essay. In *Research in organizational behavior* (pp. 1–52). JAI Press.

Grant, A. M. (2007). Relational Job Design and the Motivation to Make a Prosocial Difference. *Academy of Management Review*, *32*(2), 393–417.

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, *28*, 3–34. https://doi.org/10.1016/j.riob.2008.04.002

Grant, A. M., Gino, F., & Hofmann, D. A. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy of Management Journal*, *54*(3), 528–550. https://doi.org/10.5465/AMJ.2011.61968043

Grant, A. M., Parker, S., & Collins, C. (2009). Getting credit for proactive behavior:supervisor reactions depend on what you value and how you feel. *Personnel Psychology*, *62*(1), 31–55. https://doi.org/10.1111/j.1744-6570.2008.01128.x

Grant, A. M., & Rothbard, N. P. (2013). When in doubt, seize the day? Security values, prosocial values, and proactivity under ambiguity. *Journal of Applied Psychology*, *98*(5), 810–819. https://doi.org/10.1037/a0032873

Griffin, M. A., Parker, S. K., & Neil, A. (2007). A New Model of Work Role Performance: Positive Behavior in Uncertain and Interdependent Contexts. *Academy of Management Journal*, *50*(2), 327–347. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.331.689&rep=rep1&type=pdf

Hackman, R., & Oldham, G. (1976). Motivation through the design of work: test of a theory. *Organizational Behavior and Human Performance*, *16*(2). https://doi.org/10.1016/0030-5073(76)90016-7

Hackman, R., & Oldham, G. (1980). *Work Redesign*. Addison-Wesley Publishing Company .

Hannah, S. T., Jennings, P. L., Bluhm, D., Peng, A. C., & Schaubroeck, J. M. (2014). Duty orientation: Theoretical development and preliminary construct testing. *Organizational Behavior and Human Decision Processes*, *123*(2), 220–238. https://doi.org/10.1016/j.obhdp.2013.10.007

Hardré, P. L., & Reeve, J. (2009). Training corporate managers to adopt a more autonomy-supportive motivating style toward employees: An intervention study. *International Journal of Training and Development*, *13*(3), 165–184. https://doi.org/10.1111/j.1468-2419.2009.00325.x

Harman, D. (1967). A single factor test of common method variance. *Journal of Psychology*, *35*(1967).

Higgins, E. T. (1997). Beyond Pleasure and Pain. *American Psychologist*, *52*(12), 1280–1300.

Higgins, E. T. (1998). Promotion and Prevention: Regulatory Focus as A Motivational Principle. *Advances in Experimental Social Psychology*, *30*(C), 1–46. https://doi.org/10.1016/S0065-2601(08)60381-0

Higgins, E. T. (2002). How self-regulation creates distinct values: The case of promotion and prevention decision making. *Journal of Consumer Psychology*, *12*(3), 177–191. https://doi.org/10.1207/153276602760335031

Higgins, E. T., Kruglanski, A. W., & Pierro, A. (2003). Regulatory Mode: Locomotion and Assessment as Distinct Orientations. *Advances in Experimental Social Psychology*, *35*, 293–344. https://doi.org/10.1016/S0065-2601(03)01005-0

Higgins, T. E. (2000). Making a good decision: Value from fit. *American Psychologist*, *30*(November), 1217–1230.

Higgins, T. E., Kruglanski, A. W., & Pierro, A. (2003). Regulatory mode: Locomotion and assessment as distinct orientations. *Advances in Experimental Social Psychology*, *35*(3), 293–344. https://doi.org/10.1016/S0934-8840(98)80125-4

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating Motivational, Social, and Contextual Work Design Features: A Meta-Analytic Summary and Theoretical Extension of the Work Design Literature. *Journal of Applied Psychology*, *92*(5), 1332–1356. https://doi.org/10.1037/0021-9010.92.5.1332

Hurst, R. N. (2023). Somebody Syndrome : How To Encourage Employees To Take

Responsibility. *Forbes*, 1–5.

Kanze, D., Conley, M. A., & Higgins, E. T. (2021). The motivation of mission statements: How regulatory mode influences workplace discrimination. *Organizational Behavior and Human Decision Processes*, *166*, 84–103. https://doi.org/10.1016/j.obhdp.2019.04.002

Klein, A., & Moosbrugger, H. (2000). Maximum likelihood estimation of latent interaction effects with the LMS method. *Psychometrika*, *65*(4), 457–474. https://doi.org/10.1007/BF02296338

Kline, R. (2016). Principles and practice of structural equation modelling. In *Guilford Press* (4th ed.). Guildford Press.

Kline, R. (2024). How to evaluate local fit (residuals) in large structural equation models. *International Journal of Psychology*, *59*(6), 1293–1306. https://doi.org/10.1002/ijop.13252

Kovjanic, S., Schuh, S., Jonas, K., Van Quaquebeke, N., & Van Dick, R. (2012). How do transformational leaders foster positive employee outcomes? A self-determination-based analysis of employees' needs as mediating links. *Journal of Organizational Behavior*, *33*, 1031–1052. https://doi.org/10.1002/job

Kruglanski, A. W., Thompson, E. P., Higgins, E. T., Atash, M. N., Pierro, A., Shah, J. Y., & Spiegel, S. (2000). To "do the right thing" or to "just do it": Locomotion and assessment as distinct self-regulatory imperatives. *Journal of Personality and Social Psychology*, *79*(5), 793–815. https://doi.org/10.4324/9781315175867

Landis, R. S., Edwards, B. D., & Cortina, J. M. (2008). On the Practice of Allowing Correlated Residuals Among Indicators in Structural Equation Models. In *Statistical and Methodological Myths and Urban Legends: Doctrine, Verity and Fable in the Organizational and Social Sciences* (1st ed., pp. 193–215). Routledge.

https://doi.org/10.4324/9780203867266-16

Lee, B. (2011). The Hidden Legacy of Steve Jobs. *Harvard Business Review*, 1–3.

Leroy, H., Anseel, F., Gardner, W. L., & Sels, L. (2015). Authentic Leadership, Authentic Followership, Basic Need Satisfaction, and Work Role Performance: A Cross-Level Study. *Journal of Management*, *41*(6), 1677–1697. https://doi.org/10.1177/0149206312457822

Liang, J., Farh, C., & Farh, J.-L. (2012). Psychological Antecedents of Promotive and Prohibitive Voice: A two-wave examination. *Academy of Management Journal*, *55*(1), 71–92.

Lin, G. (2012). How Well Does Apple's Directly Responsible Individual (DRI) Model Work In Practice? *Forbes*, 40–42. https://www.forbes.com/sites/quora/2012/10/02/how-well-does-apples-directly-responsible-individual-dri-model-work-in-practice/?sh=3f9b1e2c194c%0Ahttps://www.forbes.com/sites/quora/2012/10/02/how-well-does-apples-directly-responsible-individual-dri-model-w

Lin, L. C., Huang, P. H., & Weng, L. J. (2017). Selecting Path Models in SEM: A Comparison of Model Selection Criteria. *Structural Equation Modeling*, *24*(6), 855–869. https://doi.org/10.1080/10705511.2017.1363652

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, *12*(1), 23–44. https://doi.org/10.1037/1082-989X.12.1.23

Maydeu-Olivares, A. (2017). Assessing the Size of Model Misfit in Structural Equation Models. *Psychometrika*, *82*(3), 533–558. https://doi.org/10.1007/s11336-016-9552-7

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, *17*(3), 437–455. https://doi.org/10.1037/a0028085

Merkle, E. C., You, D., & Preacher, K. J. (2016). Testing nonnested structural equation models.

Psychological Methods, *21*(2), 151–163. https://doi.org/10.1037/met0000038

Moorman, R. H., & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior*, *16*(2), 127–142. https://doi.org/10.1002/job.4030160204

Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, *42*(4). https://doi.org/10.2307/257011

Obama, B. (2009). *Inaugural address*. https://obamawhitehouse.archives.gov/blog/2009/01/21/president-Barack-obamas-inaugural-address

Oldham, G. R., & Fried, Y. (2016). Job design research and theory: Past, present and future. *Organizational Behavior and Human Decision Processes*, *136*, 20–35. https://doi.org/10.1016/j.obhdp.2016.05.002

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, *48*(4), 775–802. https://doi.org/10.1111/j.1744-6570.1995.tb01781.x

Palan, S., & Schitter, C. (2018). Prolific.ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, *17*, 22–27. https://doi.org/10.1016/j.jbef.2017.12.004

Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, *83*(6), 835.

Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, *36*(4), 827–856. https://doi.org/10.1177/0149206310363732

Parker, S. K., & Strauss, K. (2014). Effective and Sustained Proactivity in the Workplace: A Self-Determination Theory Perspective. In M. Gagné (Ed.), *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory*. Oxford University Press .

Parker, S. K., Wall, T. D., & Cordery, J. L. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology*, *74*(4). https://doi.org/10.1348/096317901167460

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, *91*(3), 636–652. https://doi.org/10.1037/0021-9010.91.3.636

Pasmore, W. A. (2015). *Leading continuous change*. Berrett-Koehler Publishers, Inc. .

Pasmore, W. A., Zlupko, G., Ajaikumar, N., Garcia, M., & Sinha-Chowdhury, S. (2021). Responsibility-taking Behavior: Validation of a Measure. *Academy of Management Proceedings*, *2021*(1), 13836. https://doi.org/10.5465/ambpp.2021.13836abstract

Pierro, A., Giacomantonio, M., Kruglanski, A. W., & Higgins, E. T. (2011). On the Psychology of Time in Action : Regulatory Mode Orientations and Procrastination. *Journal of Personality and Social Psychology*, *101*(6), 1317–1331. https://doi.org/10.1037/a0025943

Pierro, A., Kruglanski, A. W., & Higgins, E. T. (2006a). Progress takes work: Effects of the locomotion dimension on job involvement, effort investment, and task performance in organizations. *Journal of Applied Social Psychology*, *36*(7), 1723–1743. https://doi.org/10.1111/j.0021-9029.2006.00078.x

Pierro, A., Kruglanski, A. W., & Higgins, E. T. (2006b). Regulatory mode and the joys of doing: Effects of "locomotion" and "assessment" on intrinsic and extrinsic task-motivation. *European Journal of Personality*, *20*(5), 355–375. https://doi.org/10.1002/per.600

Pierro, A., Presaghi, F., Higgins, T. E., & Kruglanski, A. W. (2009). Regulatory mode preferences for autonomy supporting versus controlling instructional styles. *British Journal of Educational Psychology*, *79*(4), 599–615. https://doi.org/10.1348/978185409X412444

Pinzón, N., Koundinya, V., Galt, R. E., Dowling, W. O., Baukloh, M., Taku-Forchu, N. C., Schohr, T., Roche, L. M., Ikendi, S., Cooper, M. H., Parker, L. E., & Pathak, T. B. (2024). AI-powered fraud and the erosion of online survey integrity: An analysis of 31 fraud detection strategies. *SocArXiv*.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and Organizational-Level Consequences of Organizational Citizenship Behaviors: A Meta-Analysis. *Journal of Applied Psychology*, *94*(1), 122–141. https://doi.org/10.1037/a0013079

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods*, *36*(3), 717–731. https://doi.org/10.1002/jcp.28952

Qureshi, Z., & Woo, C. (2022). *Shifting Paradigms: Growth, Finance, Jobs, and Inequality in the Digital Economy*. Brookings Institution Press .

Raveendran, M., Silvestri, L., & Gulati, R. (2020). The role of interdependence in the micro-foundations of organization design: Task, goal, and knowledge interdependence. *Academy of Management Annals*, *14*(2), 828–868. https://doi.org/10.5465/annals.2018.0015

Reeve, J., Jang, H., Hardre, P., & Omura, M. (2002). Providing a rationale in an autonomy-supportive way as a strategy to motivate others during an uninteresting activity. *Motivation and Emotion*, *26*(3), 183–207. https://doi.org/10.1023/A:1021711629417

Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: A motivational analysis. *Journal of Applied Psychology*, *86*(6), 1306–1314. https://doi.org/10.1037/0021-9010.86.6.1306

Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, *48*. https://doi.org/10.18637/jss.v048.i02

Rundell, J. (2012). Beyond Control or Compassion : Towards an Ontology of Responsibilities. In *Responsibility*. Melbourne University Press.

Ryan, R. M., & Connell, J. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, *57*(5), 749–761. https://doi.org/10.1002/zfch.19880280417

Ryan, R. M., Duineveld, J. J., Domenico, S. I. Di, Ryan, W. S., Steward, B. A., & Bradshaw, E. L. (2022). We Know This Much Is (Meta-Analytically) True: A Meta-Review of Meta-Analytic Findings Evaluating Self-Determination Theory. *Psychological Bulletin*, *148*, 813–842. https://doi.org/10.1037/bul0000385.supp

Salgado, J. E. (1997). The Five Factor Model of Personality and Job Performance in the European Community. *Journal of Applied Psychology*, *82*, 30–43.

Schnake, M. (1991). Organizational citizenship: A review, proposed model, and research agenda. *Human Relations*, *44*(7), 735–759.

Skousen, T., Ames, J., & Gaskin, J. (2021). Task adherence: an agentic perspective on task-focused dedication in an interrupting work environment. *Journal of Organizational Effectiveness*, *8*(3), 300–322. https://doi.org/10.1108/JOEPP-07-2020-0132

Slemp, G. R., Field, J. G., & Cho, A. S. H. (2020). A meta-analysis of autonomous and controlled forms of teacher motivation. *Journal of Vocational Behavior*, *121*(October 2019), 103459. https://doi.org/10.1016/j.jvb.2020.103459

Slemp, G. R., Kern, M. L., Patrick, K. J., & Ryan, R. M. (2018). Leader autonomy support in the workplace: A meta-analytic review. *Motivation and Emotion*, *42*(5), 706–724. https://doi.org/10.1007/s11031-018-9698-y

Smith, A., Organ, W. D., & Near, J. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, *68*(4), 653–663.

Sonnentag, S., & Spychala, A. (2012). Job Control and Job Stressors as Predictors of Proactive Work Behavior: Is Role Breadth Self-Efficacy the Link? *Human Performance*, *25*(5), 412–431. https://doi.org/10.1080/08959285.2012.721830

Spitzmuller, M., & Van Dyne, L. (2013). Proactive and reactive helping: Contrasting the positive consequences of different forms of helping. *Journal of Organizational Behavior*, *34*(1), 560–580. https://doi.org/10.1002/job

Taylor, A., & Higgins, E. T. (2002). *Regulatory mode and activity orientations*.

Taylor, F. (1911). *Principles of Scientific Management* . Harper & Brothers Publishers .

Teitcher, J. E. F., Bockting, W. O., Bauermeister, J. A., Hoefer, C. J., Miner, M. H., & Klitzman, R. L. (2015). Detecting, Preventing, and Responding to “Fraudsters” in Internet Research: Ethics and Tradeoffs. *Journal of Law, Medicine, & Ethics*.

Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology*, *83*(2), 275–300. https://doi.org/10.1348/096317910X502359

Van den Broeck, A., Ferris, D. L., Chang, C. H., & Rosen, C. C. (2016). A Review of Self-Determination Theory's Basic Psychological Needs at Work. *Journal of Management*, *42*(5), 1195–1229. https://doi.org/10.1177/0149206316632058

Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology*, *83*(4), 981–1002. https://doi.org/10.1348/096317909X481382

Wang, J., Kim, T. Y., Bateman, T. S., Jiang, Y., & Tang, G. (2024). A paradox theory lens on proactivity, individual ambidexterity, and creativity: An empirical look. *Journal of Organizational Behavior*, *February*, 896–911. https://doi.org/10.1002/job.2786

Wang, Y. A., & Rhemtulla, M. (2021). Power Analysis for Parameter Estimation in Structural Equation Modeling: A Discussion and Tutorial. *Advances in Methods and Practices in Psychological Science*, *4*(1). https://doi.org/10.1177/2515245920918253

Whyte, G. (1991). Diffusion of responsibility: Effects on the escalation tendency. *Journal of Applied Psychology*, *76*(3), 408–415. https://doi.org/10.1037//0021-9010.76.3.408

Williams, G. C., & Deci, E. L. (1996). Internalization of Biopsychosocial Values by Medical Students: A Test of Self-Determination Theory Geoffrey. *Personality Processes and Individual Differences*, *4*, 767–779. https://doi.org/10.1007/978-94-007-0753-5_103737

Yu, H. (2024). *An Examination of the Effects of Prescriptive Stereotype Violations about Competence on East Asians Ratings of Leadership Potential*. Columbia University.

Yu, H., & Block, C. (2024). An Examination of Prescriptive Stereotypes of East Asians and Whites. *Annual Meeting of the Society for Industrial & Organizational 67 Psychology*.

Zhao, T., Liu, J., Zawacki, A. M., Michel, J. S., & Li, H. (2023). The effects of newcomer proactive behaviours on socialization outcomes: A meta-analysis. *Journal of Occupational and Organizational Psychology*, *96*(1), 1–32. https://doi.org/10.1111/joop.12407

Tables

Table 4

Study 1 Demographics Characteristics of Sample

Demographic	*n*	%
Gender		
Female	268	51%
Male	256	48%
Non-binary / third gender	5	1%
Prefer to self-describe	1	<1%
Race		
Asian	25	5%
Black	145	27%
Other	10	2%
White	355	66%
Age		
18-24 years old	47	9%
25-34 years old	212	40%
35-44 years old	155	29%
45-54 years old	80	15%
55-64 years old	30	6%
65+ years old	6	1%
Education Level		
Some high school or less	1	<1%
High school diploma or GED	44	8%
Associates or technical degree	39	7%
Some college, but no degree	71	13%
Bachelor's degree	240	45%
Graduate or professional degree	134	25%
Work Role/Function		
Administrative, Office Support	62	13%

Customer Service	57	12%
Engineering	33	7%
Executive	24	5%
Finance	46	10%
Human Resources	16	3%
Information Technology	63	13%
Legal	13	3%
Marketing	25	5%
Operations	39	8%
Project Management	25	5%
Quality Assurance	10	2%
Research and Development	14	3%
Sales	23	5%
Education	30	6%

Note: Sample sizes for demographic categories range from n = 480 to n = 535 as demographic responses were not forced choice.

Table 5

Study 1 Exploratory factor analysis results for Harman's single-factor test

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.107	26.845	26.845	16.107	26.845	26.845
2	3.894	6.490	33.334	3.894	6.490	33.334
3	3.006	5.010	38.344	3.006	5.010	38.344
4	2.269	3.781	42.125	2.269	3.781	42.125
5	2.011	3.351	45.476	2.011	3.351	45.476

Table 6

Study 1 Descriptive Statistics – Univariate Distributions

	N	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
RTB	535	3.67	7.00	5.65	.68	-.42	.00
Accountability	535	1.00	7.00	5.78	.67	-.98	4.67
Furtherance	535	3.33	7.00	5.64	.76	-.46	.01
Ownership Mentality	535	1.83	7.00	5.38	1.02	-.81	.46
Peer Encouragement	535	3.30	7.00	5.71	.74	-.61	.26
ASL	535	1.00	7.00	5.64	1.00	-1.18	1.87
Autonomy	535	1.00	7.00	4.35	1.11	.02	-.02
Competence	535	1.00	7.00	6.03	.82	-1.42	3.93
Relatedness	535	1.00	7.00	5.04	1.40	-.51	-.49
Locomotion	535	2.00	7.00	5.67	.89	-.96	1.32
Assessment	535	1.00	7.00	4.84	1.25	-.58	.18
Proactive Personality	535	2.75	7.00	5.77	.79	-.55	.06
Conscientiounsess	535	1.67	7.00	5.27	1.14	-.53	-.24

RTB = Responsibility-Taking Behavior; ASL = Autonomy-Supportive Leadership

	N	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
RTB	535	3.67	7.00	5.65	.68	-.42	.00
Accountability	535	1.00	7.00	5.78	.67	-.98	4.67
Furtherance	535	3.33	7.00	5.64	.76	-.46	.01
Ownership Mentality	535	1.83	7.00	5.38	1.02	-.81	.46
Peer Encouragement	535	3.30	7.00	5.71	.74	-.61	.26
ASL	535	1.00	7.00	5.64	1.00	-1.18	1.87
Autonomy	535	1.00	7.00	4.35	1.11	.02	-.02
Competence	535	1.00	7.00	6.03	.82	-1.42	3.93
Relatedness	535	1.00	7.00	5.04	1.40	-.51	-.49
Locomotion	535	2.00	7.00	5.67	.89	-.96	1.32
Assessment	535	1.00	7.00	4.84	1.25	-.58	.18
Proactive Personality	535	2.75	7.00	5.77	.79	-.55	.06
Conscientiounsess	535	1.67	7.00	5.27	1.14	-.53	-.24

RTB = Responsibility-Taking Behavior; ASL = Autonomy-Supportive Leadership

Table 7

Study 1 Scale Reliability

Scale	Reliability
RTB (Overall)	.94
Accountability	.79
Furtherance	.80
Ownership Mentality	.85
Peer Encouragement	.87
Autonomy-Supportive Leadership	.90

Competence	.79
Autonomy	.59
Relatedness	.79
Locomotion	.78
Assessment	.74
Proactive Personality	.81
Conscientiousness	.60

Table 8

Study 1 Means, standard deviations, and correlations

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. RTB	5.65	.68	--												
2. Accountability	5.78	.67	.80**	--											
3. Furtherance	5.64	.76	.89**	.67**	--										
4. Ownership Mentality	5.38	1.02	.87**	.53**	.75**	--									
5. Peer Engagement	5.71	.74	.90**	.63**	.70**	.71**	--								
6. ASL	5.64	1.00	.46**	.37**	.35**	.41**	.43**	--							
7. Autonomy	4.35	1.11	.20**	.15**	.17**	.21**	.17**	.45**	--						
8. Competence	6.03	.82	.56**	.55**	.47**	.42**	.49**	.37**	.26**	--					
9. Relatedness	5.04	1.40	.42**	.31**	.31**	.38**	.41**	.41**	.39**	.33**	--				
10. Locomotion	5.67	.89	.64**	.54**	.55**	.55**	.57**	.30**	.17**	.46**	.31**	--			
11. Assessment	4.84	1.25	-.02	-.16**	.03	.03	.01	-.03	-.27**	-.17**	-.26**	.00	--		
12. Proactive Personality	5.77	.79	.67**	.60**	.65**	.50**	.59**	.26**	.12**	.49**	.27**	.61**	.02	--	
13. Conscientiousness	5.27	1.14	.38**	.36**	.30**	.31**	.33**	.11*	.06	.24**	.26**	.34**	-.10*	.36**	--

N = 535. **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed); RTB = Responsibility-Taking Behavior; ASL = Autonomy-Supportive Leadership

Table 9

Study 1 Structural Equation Model Fit Indices for Hypothesized and Alternative Models

Model	$\chi 2$	*df*	$\Delta\ \chi 2$	Δ *df*	CFI	TLI	SRMR	RMSEA	R^2	ΔR^2	AIC	BIC
Measurement Model	2739.63**	1,300	-	-	.86	.85	.07	.05	-	-	80,112.25	80,673.22
Hypothesized Model	**2661.21****	**1,305**	**-**	**-**	**.87**	**.86**	**.07**	**.04**	**.65**	**-**	**80,005.02**	**80,544.59**
Alternative Model A: Direct Effects Only	2996.72**	1,309	193.4**	4	.83	.82	.12	.05	.60	-.05	80,420.19	80,942.63
Alternative Model B: No Basic Needs Satisfaction	3048.91**	1,312	222.91**	7	.82	.81	.13	.05	.59	-.06	80,485.95	80,995.54
Alternative Model C: Hypothesized Model with Covariates	3668.54**	1,686	-	-	.83	.82	.08	.05	.75	.10	90,868.50	91,485.14

R^2 values represent percentage of variance in RTB. ΔR^2 represent difference in R^2 from hypothesized model. Covariate model is non-nested.

Table 10

Study 1 Parameter Estimates for Direct and Indirect Effects for Hypothesized Model

Effect	*B*	*SE*	95% CIs [LL, UL]
Direct Effect			
ASL → Autonomy	.68**	.10	.44, .83
ASL → Competence	.38**	.07	.25, .52
ASL → Relatedness	.74**	.10	.55, .96
ASL → RTB	.05	.05	-.05, .16
Autonomy → RTB	.03	.07	-.13, .13
Competence → RTB	.17**	.05	.09, .27
Relatedness → RTB	.04**	.02	.02, .08
Locomotion → RTB	.34**	.05	.24, .46
Assessment → RTB	.03	.02	.00, .08
Indirect Effect			
ASL → Autonomy → RTB	.04	.04	-.04, .10
ASL → Competence → RTB	.02	.02	-.02, .06
ASL → Relatedness → RTB	.04	.04	-.04, .12

Note: Significance based on 95% confidence intervals not spanning zero. SEs based on 500 bootstrapped samples. ASL = Autonomy-Supportive Leadership. B = standardized coefficients. R-square = .66.

Table 11

Study 1 Correlation Residuals for Hypothesized Model

Item Pairs	Correlation Residuals
1. Rel3, Aut3	.31
2. Rel2, RTB16	.30
3. Assessment2, Aut2	-.30
4. Rel2, RTB17	.28
5. Rel2, RTB27	.27
6. Rel2, RTB18	.26
7. Rel2, RTB19	.25
8. Loc1, Rel2	.25
9. RTB23, Rel2	.25
10. RTB28, Rel2	.25

Note: Rel = Need for Relatedness; Aut = Need for Autonomy; Loc = Locomotion; RTB = Responsibility-Taking Behavior

Table 12

Study 2 Sample Demographic Characteristics

Demographic	*n*	%
Gender		
Female	96	46%
Male	111	53%
Non-binary / third gender	2	1%
Race		
Asian	19	9%
Black	40	19%
Other	6	3%
White	141	67%
Age		
18-24 years old	17	8%
25-34 years old	81	39%
35-44 years old	60	29%
45-54 years old	33	16%
55-64 years old	15	7%
65+ years old	3	1%
Education Level		
Some high school or less	0	0%
High school diploma or GED	18	9%
Associates or technical degree	22	11%
Some college, but no degree	28	13%
Bachelor's degree	94	45%
Graduate or professional degree	46	22%
Work Role/Function		
Administrative, Office Support	24	11%

Customer Service	28	13%
Engineering	8	4%
Executive	7	3%
Finance	22	11%
Human Resources	6	3%
Information Technology	24	11%
Legal	4	2%
Marketing	12	6%
Operations	9	4%
Project Management	6	3%
Quality Assurance	5	2%
Research and Development	3	1%
Sales	14	7%
Education	11	5%

Note: Sample sizes for demographic categories range from n = 183 to n = 209 as demographics were not required

Table 13

Study 2 Scale Reliability

Scale	Cronbach's Alpha
RTB (Overall)	.95
Accountability	.84
Furtherance	.85
Ownership Mentality	.88
Peer Encouragement	.91
Competence	.85
Autonomy	.66
Relatedness	.58

Table 14

Means, Standard Deviations, and Correlations for Study 2

Variable	*Mean*	*SD*	1	2	3	4	5	6	7	8
1. RTB	5.67	0.79	--							
2. Accountability	5.65	0.90	.90**	--						
3. Furtherance	5.84	0.87	.87**	.76**	--					
4. Ownership Mentality	5.51	1.02	.88**	.72**	.71**	--				
5. Peer Encouragement	5.69	0.82	.90**	.70**	.70**	.73**	--			
6. Autonomy	3.88	0.77	.35**	.43**	.29**	.28**	.25**	--		
7. Competence	5.33	1.27	.70**	.66**	.57**	.70**	.60**	.38**	--	
8. Relatedness	4.64	1.37	.66**	.64**	.55**	.60**	.54**	.42**	.68**	--

Table 15

Two-way ANOVA Results for Study 2

Tests of Between-Subjects Effects

Variables	*df*	Mean Square	*F*	*p*	η^2
Regulatory Mode	1	3.362	6.124	.01	.03
Leadership	1	11.460	20.872	.00	.09
Leadership x Regulatory Mode	1	3.397	6.187	.01	.03

N = 209. R Squared = .135

Table 16

Means and Standard Deviations by Leadership Style

			95% Confidence Interval	
Leadership Style	*M*	*SD*	Lower Bound	Upper Bound
Controlling	5.43	.91	5.29	5.57
Autonomy Supportive	5.90	.58	5.76	6.04

Table 17

Means and standard errors by regulatory mode

			95% Confidence Interval	
Regulatory Mode	*M*	*SD*	Lower Bound	Upper Bound
Assessment	5.79	.66	5.65	5.93
Locomotion	5.54	.89	5.39	5.68

Table 18

Means and standard deviations for RTB as a function of 2 (Leadership Style) x 2 (Regulatory Mode)

Leadership	Regulatory Mode	*M*	*SD*	*N*
Controlling	Assessment	5.68	.71	54
	Locomotion	5.18	1.03	49
Autonomy-Supportive	Assessment	5.90	.61	52
	Locomotion	5.90	.55	54

Table 19

Pairwise Comparisons for Regulatory Mode under Leadership Style

Leadership Type	(I) Regulatory Mode	(J) Regulatory Mode	Mean Difference (I-J)	*SE*	*p*	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Controlling	Assessment	Locomotion	.51*	.15	.00	.22	.80
	Locomotion	Assessment	-.51*	.15	.00	-.79	-.22
Autonomy-Supportive	Assessment	Locomotion	.00	.14	.99	-.28	.28
	Locomotion	Assessment	.00	.14	.99	-.28	.29

Based on estimated marginal means. * The mean difference is significant at the .05 level. Adjustment for multiple comparisons: Bonferroni.

Table 20

Pairwise Comparisons for Leadership Style under Regulatory Mode

Pairwise Comparisons

Regulatory Mode	(I) Leadership Type	(J) Leadership Type	Mean Difference (I-J)	*SE*	*p*	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Assessment	Controlling	Supportive	-.21	.14	.14	-.49	.07
	Supportive	Controlling	.21	.14	.14	-.07	.50
Locomotion	Controlling	Supportive	-.72*	.15	.00	-1.01	-.43
	Supportive	Controlling	.72*	.15	.00	.44	1.01

Based on estimated marginal means. *. The mean difference is significant at the 0.05 level. Adjustment for multiple comparisons: Bonferroni.

Table 21

Mediation Results for Study 2

Effect	*b*	*SE*	95% CI Lower	95% CI Upper
Direct				
ASL → RTB	-.19	.11	-.40	.02
ASL → Autonomy	.55**	.07	.35	.75
ASL → Competence	.80**	.17	.47	1.13
ASL → Relatedness	.43**	.17	.85	1.52
Autonomy → RTB	.03	.05	-.07	.14
Competence → RTB	.30**	.04	.22	.37
Relatedness → RTB	.18**	.04	.10	.26
Locomotion → RTB	-.23**	.11	-.43	-.02
ASL*Locomotion → RTB	.36**	.15	.07	.64
Indirect				
ASL → Autonomy → RTB	.02	.03	-.03	.07
ASL → Competence → RTB	.24**	.08	.16	.47
ASL → Relatedness →RTB	.21**	.07	.15	.41

Note: **indicates significance at the .01 level. 5,000 bootstrapped confidence intervals (CIs); ASL = 'Autonomy Supportive Leadership'; *b* = unstandardized coefficients. R^2 = .57. Standardized parameter estimates not available for moderated mediation models in PROCESS Macro.

Table 22

Post-Hoc Regression Analysis Study 1

Effect	β	*SE*	*p*
Intercept		.85	<.01
ASL	-.23	.15	.29
Locomotion	-.03	.11	.83
Assessment	.14	.09	.40
Autonomy	-.09	.02	<.01
Competence	.27	.03	<.01
Relatedness	.16	.01	<.01
ASL*Locomotion	.09	.02	<.01
ASL*Assessment	-.01	.02	.54

Note: 'ASL' = Autonomy-Supportive Leadership; R^2 = .56. β indicates standardized regression coefficients

Appendix A: Study 1 Measures

Responsibility-Taking Behavior (*adapted from Ajaikumar et al., 2024*)

Please rate the extent to which the following is true for you in your current role at work.

RSB Dimension	Item
Accountability	I am creative in overcoming barriers
	I am proactive in terms of acquiring the required skills to perform the job to the best of my abilities
	I know what skills I need to learn to improve my performance at work
	I ask questions if my goals are not clear
	I value constructive feedback
	If the task is too large for me to accomplish, I feel comfortable seeking help from others at work
	Once I agree to a goal, I see it as my duty to accomplish the goal no matter what happens.
	I am not flustered by hurdles when trying to accomplish my goals
Peer Encouragement	It is important to me that peers feel comfortable to have open conversations with me
	I proactively share any resources, tools, or skills I have that could help a peer with their work
	I typically ensure I reach out to new team members to help them settle in
	I seek input from other subject matter experts when I am faced with challenges beyond the scope of my expertise, to ensure the best possible outcome
	I am comfortable taking joint accountability if an error occurs in our teamwork
	I consider others' needs as I do my job
Furtherance	When I see something that can be improved, I do something about it

	It is important for me to constantly learn new skills
	I strive to keep on top of changes taking place in the broader organization
	I stay on top of industry trends to ensure my work is current
	I try and foresee challenges that will hinder success
	I make a concentrated effort from time to time
Ownership Mentality	I give the organization's resources the same consideration as I would my own
	I am invested in the success of the organization as if it were my own
	I build towards the long-term goals of our organization in any work I do
	I feel personally responsible for the organization meeting its goals
	I speak to people outside my immediate team on a regular basis
	I strive to set examples of high-quality products or services for team members

Autonomy-Supportive Leadership (ASL) (*Adapted from Williams & Deci (1996)*
Response options: Strongly Disagree (1) to Strongly Agree (7)

The following questions are about your manager. Please consider your immediate manager or supervisor—the person who directly oversees your day-to-day work activities and with whom you have the most frequent work interactions.

1. I feel that my manager provides me choices and options
2. I feel understood by my manager.
3. My manager has conveyed confidence in my ability to do well at my organization.
4. My manager encouraged me to ask questions.
5. My manager listens to how I would like to do things.
6. My manager tries to understand how I see things before suggesting a new way to do things.

Regulatory Mode (*adapted from Kruglanski et al., 2000)*

Response options: Strongly Disagree (1) to Strongly Agree (7)

Locomotion

1. I don't mind doing things even if they involve extra effort.
2. I enjoy actively doing things, more than just watching and observing.
3. I am a "doer."
4. By the time I accomplish a task, I already have the next one in mind.

Assessment

1. I often compare myself with other people.
2. I often feel that I am being evaluated by others.
3. I am a critical person.
4. I am very self-critical and self-conscious about what I am saying.

Satisfaction of Basic Psychological Needs Work Climate (*Adapted from Van den Broeck et al. 2010)*

Response options: Strongly Disagree (1) to Strongly Agree (7)

Need for Autonomy
1. At work, I often feel like I have to follow other people's commands (R)
2. If I could choose, I would do things at work differently (R)
3. I feel free to do my job the way I think it could best be done

Need for Competence
1. I feel competent at my job
2. I am good at the things I do in my job
3. I have the feeling that I can even accomplish the most difficult tasks at work

Need for relatedness
1. I don't really feel connected with other people at my job (R)
2. At work, I feel part of a group
3. I often feel alone when I am with my colleagues (R)

Attention Check

If you are reading this question, answer 3.

- 1
- 2
- 3
- 4
- 5

Demographic Questions

Please provide some demographic information about yourself.

1. Please indicate your gender
   - Male
   - Female
   - Other

2. Please indicate your race/ethnicity
   - African American or Black
   - Asian or Asian American
   - Hispanic or Latino
   - White
   - American Indian or Alaska Native
   - Native Hawaiian or other Pacific Islander
   - Other

3. Please indicate your country of residence
   - U.S.
   - Outside of U.S.

4. Which category below includes your age?
   - 17 or younger
   - 18-20
   - 21-29
   - 30-39
   - 40-49
   - 50-59
   - 60 or older

5. What is the highest level of school you have completed or the highest degree you have received?
   - Less than high school degree
   - High school degree or equivalent (e.g., GED)

- Some college but no degree
- Associate degree
- Bachelor degree
- Graduate degree
- Other

6. Which of the following categories best describes your employment status?
   - Employed, working 1-39 hours per week
   - Employed, working 40 or more hours per week
   - Not employed, looking for work
   - Not employed, NOT looking for work
   - Retired
   - Disabled, not able to work

7. In what industry do you work? [Drop-down]:
   - Accommodation and Food Services
   - Administrative and Support Services
   - Agriculture, Forestry, Fishing, and Hunting
   - Arts, Entertainment, and Recreation
   - Construction
   - Educational Services
   - Finance and Insurance
   - Government
   - Health Care and Social Assistance
   - Information
   - Management of Companies and Enterprises
   - Manufacturing
   - Mining, Quarrying, and Oil and Gas Extraction
   - Other Services (Except Public Administration)
   - Professional, Scientific, and Technical Services
   - Real Estate and Rental and Leasing
   - Retail Trade
   - Transportation and Warehousing
   - Utilities
   - Wholesale Trade

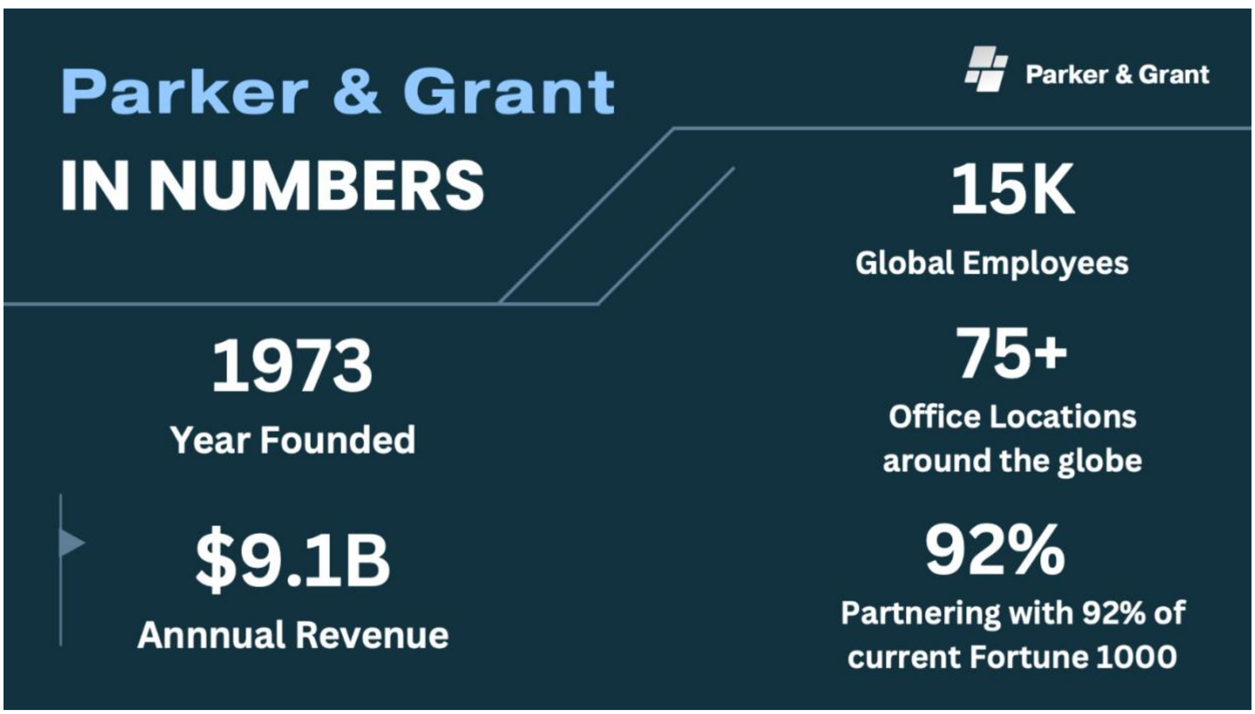
Appendix B: Study 2 Background & Context

Part 1. *Participants were instructed that their role in the study would involve imaging themselves as an employee at a the firm presented to them.*

• In this study, you'll be presented with a scenario where you are asked to imagine yourself in the role of an employee interacting with their direct manager. Try to envision yourself in this scenario as vividly as possible.

• The next pages contain background information, including details about the organization you work for and your manager.


Parker & Grant Consulting
OUR EXPERTISE
INDUSTRIES
Automotive
Consumer
Energy
Finance
Healthcare
Industrial
Retail
Technology
CAPABILITIES
Customer Experience
Business Turnaround
Corporate Finance
Customer Experience
Mergers & Acquisitions
Learning & Development
Operations
People & Organization

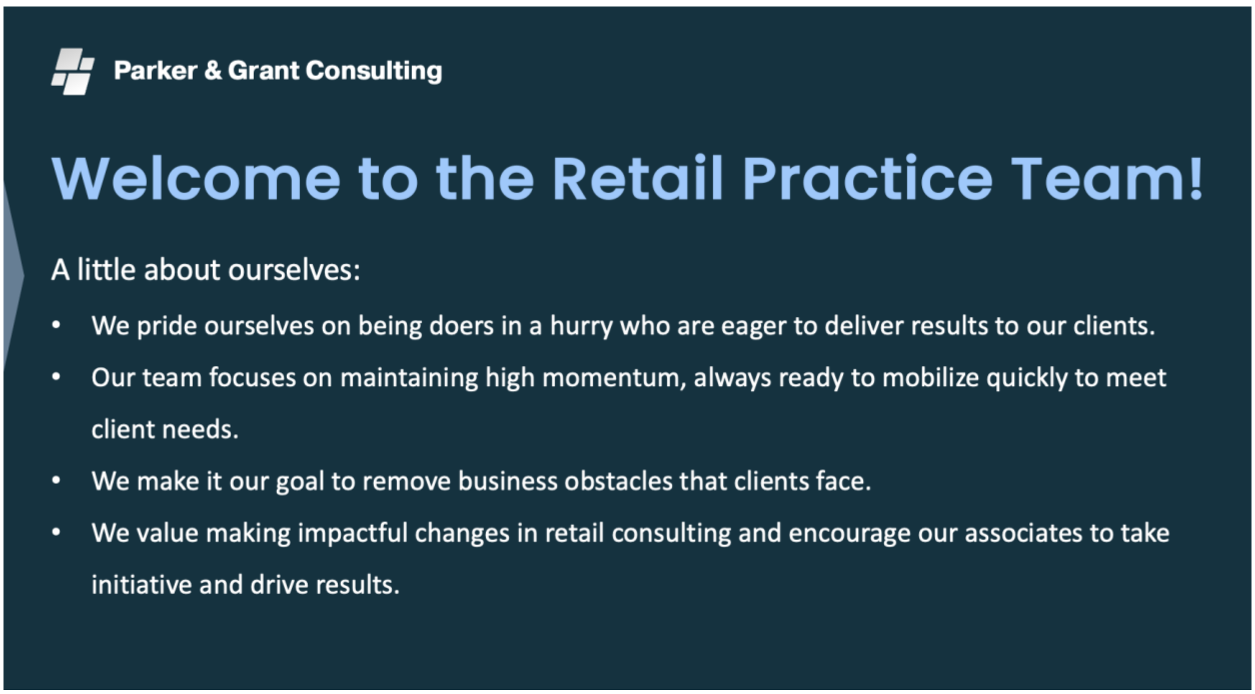

Parker & Grant
IN NUMBERS
Parker & Grant
15K
Global Employees
1973
Year Founded
75+
Office Locations around the globe
$9.1B
Annnual Revenue
92%
Partnering with 92% of current Fortune 1000

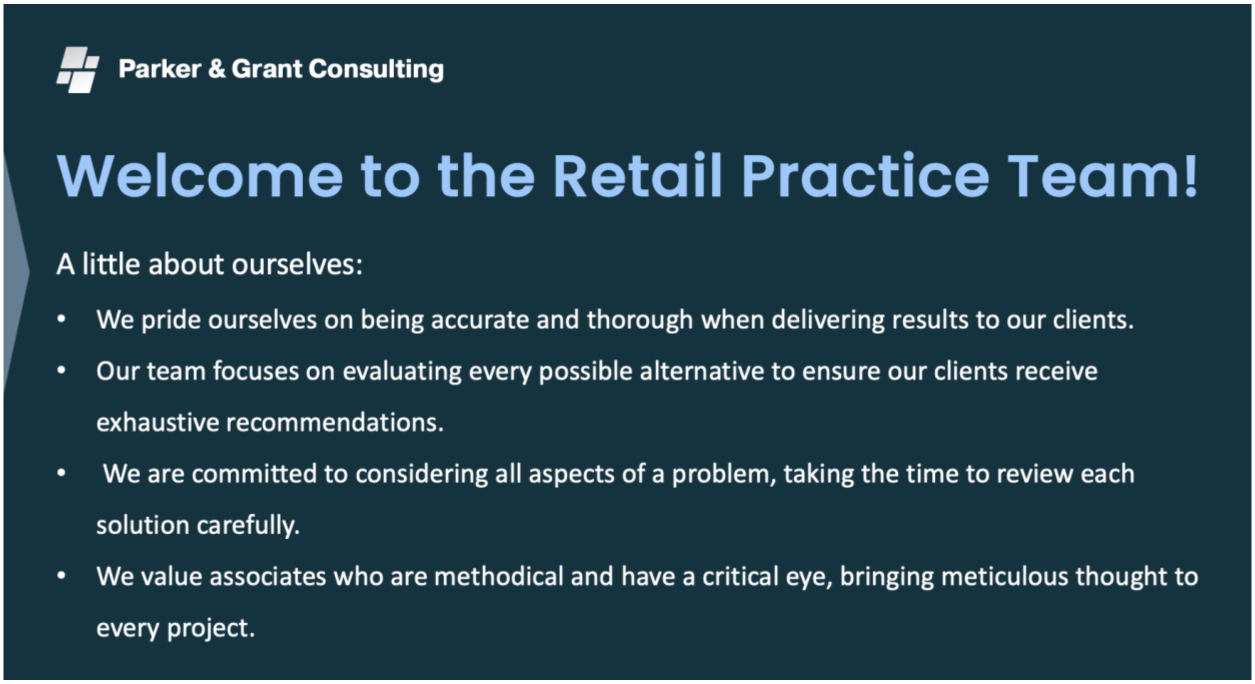
Appendix C: Study 2 Experimental Manipulations

Part 2. *Next, participants were prompted to read a team overview for the consulting practice that they were asked to imagine themselves on.*

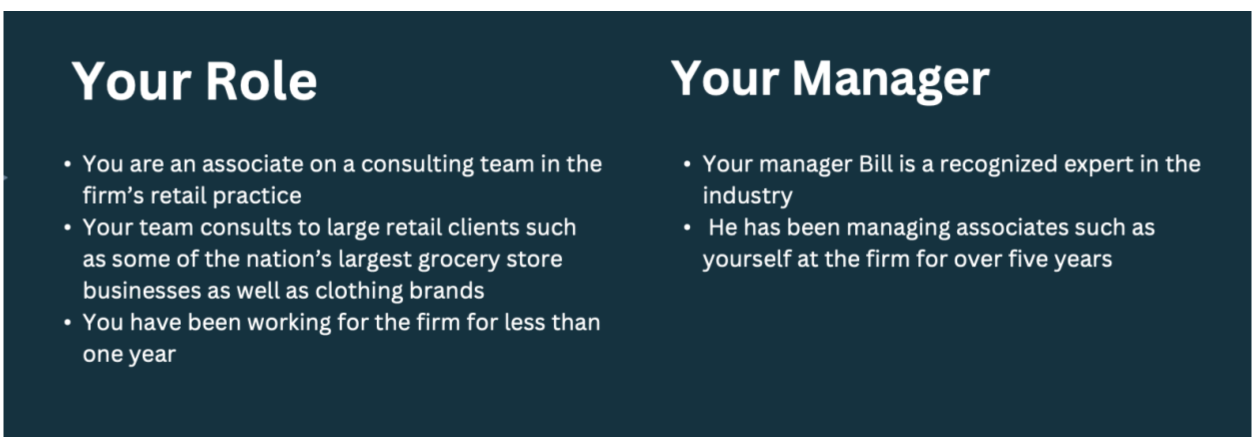
Next, you are going to learn about the culture of the team that you work for at Parker & Grant Consulting. Read through the following bullet points to get a sense of the team culture.

Regulatory Mode (adapted from *Kanze et al. 2021*)





Part 4. *After the regulatory mode manipulations, the participants were then provided more information about their role on the team, their manager, and a recent scenario. The mistake at work scenario was adapted from Yu & Block, 2024.*



The Scenario

- Last Friday, you made a mistake delivering a presentation to a client
- You don't know how your manager, Bill, is going to handle it and you are nervous
- You know that delivering client presentations is challenging and you value doing well in your role as an associate
- You received an email from Bill to schedule a feedback meeting about the presentation.
- Click to the next page to see the email

Autonomy-Supportive and Controlling Leadership (adapted from *Reeve et al. 2002*)

Subject: Feedback Meeting Tomorrow
Date: May 25, 2020
Time: 9:54 AM

Hi there,

I heard the client meeting didn't go well last Friday, so I'd like to check in with you tomorrow.

For your next presentation, it is essential that you follow the standard methods to make your points clear and impactful. Using the required approach is important and crucial to meet our firm's standards. Moving forward, I will expect you to align with these methods.

See you soon.

Best,
Bill
--
Bill Gordon
Manager, Retail Consulting Practice
Parker & Grant Consulting LLP
10 East 40th Street, 18th Floor, New York, NY 10016
william.gordon@pgconsulting.com

Parker & Grant

Subject: Feedback Meeting Tomorrow
Date: May 25, 2020
Time: 9:54 AM

Hi there,

I heard the client meeting didn't go well last Friday, so I'd like to check in with you tomorrow.

For your next presentation, try exploring a few ways to make your points clear and impactful. Finding a style that works best for you is important, especially as you develop your skills. I'm here to support you and am confident you'll find an approach that feels natural.

See you soon.

Best,
Bill
--
Bill Gordon
Manager, Retail Consulting Practice
Parker & Grant Consulting LLP
10 East 40th Street, 18th Floor, New York, NY 10016
william.gordon@pgconsulting.com

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Appendix D: Study 2 Manipulation Checks

Regulatory Mode Manipulation Checks

Please respond to the following questions about the team overview and interaction with your manager that you read.

What did the team overview emphasize?

- Being doers in a hurry.
- Being accurate and thorough.

The team overview emphasized maintaining high momentum more than carefully thinking things through.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Leadership Style Manipulation Checks

What did your manager emphasize in their email to you?

- Finding a style that feels natural to you
- Following the standard methods required by the firm

The manager offered encouragement to develop your own approach and offered support

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Appendix E: Study 2 Measures

Responsibility-Taking Behavior (*adapted from* Ajaikumar et al. 2024)

Next, based on the scenario you just read, please rate the extent to which the following would be true for you in your role at Parker & Grant Consulting.

Response options: Strongly Disagree (1) to Strongly Agree (7)

- I would be creative in overcoming barriers
- I would be proactive in terms of acquiring the required skills to perform the job to the best of my abilities
- I would know what skills I need to learn to improve my performance at work
- I would ask questions if my goals are not clear
- I would value constructive feedback
- If the task is too large for me to accomplish, I would feel comfortable seeking help from others at work
- Once I agree to a goal, I would see it as my duty to accomplish the goal no matter what happens.
- I would not be flustered by hurdles when trying to accomplish my goals
- It would be important to me that peers feel comfortable to have open conversations with me
- I would proactively share any resources, tools, or skills I have that could help a peer with their work
- I would typically ensure I reach out to new team members to help them settle in
- I would seek input from other subject matter experts when I am faced with challenges beyond the scope of my expertise, to ensure the best possible outcome
- I would be comfortable taking joint accountability if an error occurs in our teamwork
- I would consider others' needs as I do my job
- I would make correction when my peers are not meeting standards
- I would help teammates meet their team obligations if they are struggling
- I would communicate expectations and requirements to team members
- I would speak up to peers to raise their performance and meet team expectations
- If I saw something that could be improved, I would do something about it
- It would be important for me to constantly learn new skills
- I would strive to keep on top of changes taking place in the broader organization
- I would stay on top of industry trends to ensure my work is current
- I would try and foresee challenges that would hinder success
- I would make a concentrated effort from time to time
- I would give the organization’s resources the same consideration as I would my own

- I would be invested in the success of the organization as if it were my own
- I would build towards the long-term goals of our organization in any work I do
- I would feel personally responsible for the organization meeting its goals
- I would speak to people outside my immediate team on a regular basis
- I would strive to set examples of high-quality products or services for team members

Attention Check

If you are reading this question, answer 3.

- 1
- 2
- 3
- 4
- 5

Satisfaction of Basic Psychological Needs Work Climate (*Adapted from Van den Broeck et al. 2010)*

Response options: Strongly Disagree (1) to Strongly Agree (7)

Need for Autonomy
1. I would feel like I have to follow other people's commands (R)
2. I would feel free to do my job the way I think it could best be done

Need for Competence
1. I would be able to really master my tasks at the firm
2. I have the feeling that I can even accomplish the most difficult tasks at work

Need for relatedness
1. I would not really feel connected with other people at the firm (R)
2. I would feel like I could talk about things that really matter to me

Demographic Questions

Please provide some demographic information about yourself.

8. Please indicate your gender
    - Male
    - Female
    - Other

9. Please indicate your race/ethnicity

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- Asian or Asian American
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- White
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