

## Becoming One's Own Helmsman: Multi-Level Drivers of Individual Self-Leadership

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### Abstract

In the context of the new economy characterized by informatization, digitalization, and intelligentization, self-leadership holds greater positive value for both organizations and individuals. However, existing concepts and research on self-leadership are confined to control theory, empirical investigations are mostly limited to a single level, and have failed to fully reveal the driving mechanisms of self-leadership. This research first expands the conceptual connotation of self-leadership and develops new measurement instruments. On this basis, it respectively constructs cross-level driving mechanisms and a multi-level trickle-down model of individual self-leadership, and attempts to explore the influences of individual characteristics, leadership factors, organizational contextual factors, and job characteristics on individual self-leadership. Consequently, this is expected to provide richer, more accurate, and updated connotations and measurements for self-leadership, deepen understanding of the driving mechanisms and boundary conditions for the formation of individual self-leadership, and also facilitate the effective activation of self-leadership in organizational practice.

### Full Text

#### Introduction

In today's rapidly changing organizational landscape, individuals increasingly emphasize their own values and goal aspirations, seeking platforms both within and outside organizations to fully unleash their potential and influence (Long Lirong et al., 2021). During the 2021 Henan floods, a college student in Shanghai spontaneously created an online shared document for rescue information, which was accessed over 2.5 million times within 24 hours, providing timely information support for precise rescue coordination. In this incident, neither the initiator nor the numerous participants acted under the direction of any organization or leader; instead, they practiced self-leadership through concrete actions. Similarly, in internal entrepreneurship initiatives encouraged by companies such

as JD.com, Vanke, and Haier, employees need to adopt a self-leadership spirit to explore creative domains. Digital and intelligent work modes like telecommuting and remote collaboration, accelerated by the pandemic, also pose new challenges and demands for individual self-leadership (Müller & Niessen, 2019; Zhang & Parker, 2019). Against the backdrop of the digital and intelligent economic era, individual self-leadership is becoming an increasingly important topic in organizational management (Knotts et al., 2022; Larson & DeChurch, 2020; Zhang Zhixue et al., 2021).

However, self-leadership is not an entirely new topic (Stewart et al., 2011; Cao Weilin et al., 2009; Zhao Guoxiang & Liang Hanzhong, 2011). Rather, the dramatic changes in the current era and work environment have both highlighted the possibilities and necessities for self-leadership to play a role and raised new research needs for expanding its connotation and theoretical development. In existing research, the basic connotation of self-leadership emphasizes a process of self-influence and control, where individuals primarily rely on intrinsic motivation to drive themselves to complete tasks and achieve goals through self-influence (Manz, 1986; Neck et al., 2019). This definition is closely related to early control theory and involves a dynamic cycle of perceiving environmental changes, comparing them with set goals and standards, adopting action strategies to narrow gaps, and ultimately influencing the environment (Carver & Scheier, 1982; Stewart et al., 2011, 2019). Previous studies have found that individual self-leadership can lead to more positive work performance, work behaviors, work attitudes, innovative behaviors, and career development (Bakker et al., in press; Cranmer et al., 2019; DiLiello & Houghton, 2006; Harari et al., 2021; Marques-Quinteiro et al., 2019; Prussia et al., 1998; Wang Haijiang et al., 2021; Zhang Hongqi et al., 2012). Regarding how to enhance and strengthen individual self-leadership, scholars have identified that individual personality traits, natural rewards of work, cognitive factors, emotion regulation abilities, employee training, and external leader behaviors all influence the formation of self-leadership to varying degrees (Stewart et al., 2011, 2019; Zhao Guoxiang & Liang Hanzhong, 2011).

Nevertheless, existing research has revealed several notable limitations. First, the conceptual connotation of self-leadership remains overly broad, particularly in its inability to reflect new content under new economic conditions. The widely adopted conceptualization of self-leadership in current research primarily derives from control theory (Carver & Scheier, 1982). While control theory offers good universality, it is too broad and not specific or clear enough in understanding the content of self-leadership. Moreover, in emerging organizational and work contexts, the connotation of self-leadership may present a series of new dimensions. For example, a recent study by Xu Minya et al. (2021) shows that salespeople's self-leadership behaviors using digital platforms are partially manifested in information seeking and internal social networking. It can be said that the specific connotation and characteristics of self-leadership in the new economic context remain unanswered questions. Second, research on employee self-leadership has focused solely on a single level, lacking systematic multi-level

investigation. For instance, factors driving individual self-leadership include both individual and team factors, yet whether cross-level influences and interaction effects exist between them has not been adequately addressed. Individual self-leadership is undoubtedly influenced by individual personality, cognitive characteristics, and motivational factors, but it is also contextually affected by organizational environment, management practices, and cultural atmosphere. Finally, when examining antecedents of individual self-leadership, existing research has failed to fully reveal the underlying motivational processes. As the definition of self-leadership reveals, it is a behavioral process imbued with motivational drive. However, influenced by the relatively mechanical calibration perspective in classical control theory, although existing research has identified a series of internal and external antecedents of self-leadership, few studies have uncovered the motivational processes through which these factors promote self-leadership.

Based on these considerations, this study aims to address the core research question of “how individual self-leadership is formed” through the following research efforts: First, we seek to clarify and expand the conceptual connotation of individual self-leadership and lay the foundation for developing corresponding measurement tools. In the current context of informatization, intelligence, digitization, and networking, the connotation of self-leadership differs from when the theory was first proposed. Therefore, it is necessary to ground ourselves in management practice and provide tools for clearly and specifically understanding and measuring self-leadership in the new economic context through qualitative interviews and rigorous scale development. Second, based on work motivation theories, we aim to reveal the motivational activation process of individual self-leadership. Although self-leadership is operationalized as a set of cognitive and behavioral strategies, its essence lies in a self-influence process driven by intrinsic motivation, characterized by self-regulation and control, and aimed at achieving meaningful goals or standards (Manz, 1986; Stewart et al., 2019). Thus, how individual personality traits or cognitive styles promote the formation of self-leadership cannot be separated from the participation and mobilization of relevant motivational forces. At the same time, self-leadership does not exclude or reject external influences; contextual factors from external leaders, teams, or the entire organization also affect motivational forces in individuals’ psychological world to varying degrees, thereby influencing self-leadership levels. To this end, this study intends to advance theoretical construction of the formation mechanism of individual self-leadership by introducing and integrating Self-Determination Theory (Ryan & Deci, 2000) and Goal Theory (Dweck & Leggett, 1988; Moskowitz & Grant, 2009; Zhang Kai, 2014). Finally, adopting a multi-level analytical perspective, we construct a cross-level integrated mechanism model. By examining the multi-level influences of team leadership behavior, team self-leadership, team work modes, and individual-level cognitive belief characteristics on individual self-leadership, this study aims to construct a multi-level driving mechanism model for the formation of individual self-leadership. Based on the above work, this study is expected to expand

the new connotation of individual self-leadership in the new economic context, deepen the multi-level motivational process of self-leadership formation, and clarify boundary conditions in these formation mechanisms, thereby laying a foundation for developing a more integrated, multi-level self-leadership theoretical framework and offering insights for organizations to cultivate and stimulate individual self-leadership.

## Literature Review

### Team-Level Antecedents of Self-Leadership

At the team level, antecedents of self-leadership can be analyzed from both internal and external perspectives. Internal factors primarily reflect the team's composition characteristics and certain states formed during team development, while external factors include external leadership characteristics, organizational management policies and evaluation-reward systems, and broader socio-cultural features.

First, among internal work team factors, an important characteristic affecting team self-leadership is the general cognitive ability of team members—that is, whether members can generally handle complex work tasks and problems independently, which is also an important prerequisite for achieving team self-leadership (Bell, 2007; Stewart, 2006). Similarly, the average level and variance of team members' personality traits (such as conscientiousness and agreeableness) also influence team self-leadership (Bell, 2007; Humphrey et al., 2007). Generally, higher consistency among team members on these personality traits makes it more likely to avoid internal conflicts and contradictions, thereby truly achieving self-leadership from within. Second, the task characteristics facing the team also affect the formation of team self-leadership. Stewart and Barrick (2000) found that team self-leadership achieves higher performance levels when facing conceptual tasks rather than behavioral tasks. Third, team cognitive states formed by internal members (such as collective cognition, shared mental models, and team transactive memory systems) represent members' shared cognitive styles and affect how team members perceive and conduct team work. When facing challenging team tasks, shared cognitive states can better help members respond and adapt based on these consensus, thereby promoting team self-leadership formation (Druskat & Pescosolido, 2002). Finally, as two important states in team development, team cohesion and team conflict also influence team self-leadership formation. On the one hand, team cohesion promotes team self-leadership through mechanisms of mutual cooperation, self-reinforcement, mutual monitoring, and social identification (Beal et al., 2003; Millikin et al., 2010). On the other hand, the effect of team conflict on team self-leadership is more complex: when task conflict within the team can be resolved through constructive discussion among members, it enhances team self-leadership (Behfar et al., 2008); when conflict cannot be resolved or is resolved through one party yielding to another, it may harm the formation and effectiveness of team self-leadership.

Among external factors influencing team self-leadership, external leadership characteristics are the most prominent and have received considerable research attention (Stewart & Manz, 1995). For leaders external to self-leading teams, their primary roles are to promote internal self-leadership within the team and to help the team interact more effectively with other teams and the external environment. Therefore, the better external leaders can fulfill these roles, the higher the degree of team self-leadership (Carte et al., 2006; Mathieu et al., 2006; Wageman, 2001). Second, the performance evaluation and reward systems established by the organization also affect team self-leadership. Although team self-leadership conceptually emphasizes internal team motivation, different ways of measuring team performance still influence the degree of team self-leadership. For example, when organizations adopt group performance-based pay, internal self-control, mutual cooperation, and self-leadership within work teams are most effectively enhanced (DeMatteo et al., 1998). Additionally, adopting peer evaluation systems within teams has also been found to effectively promote team self-leadership formation (Stewart et al., 2012). Third, different attributes of organizational structure and culture also affect team self-leadership. When formalization and centralization in organizational structure are lower, team self-leadership is more likely to form and function (Tata & Prasad, 2004). Whether the organization has formed a management atmosphere and organizational culture characterized by empowerment, support, participation, and cooperation also directly affects the possibility of team self-leadership emergence. Finally, from a more external perspective, the national cultural characteristics where the organization is located also play a role in team self-leadership formation. For example, in collectivist cultures, employees may more easily accept the concept of team self-leadership, while employees in individualist cultures may lean more toward individual self-leadership (Kirkman & Shapiro, 2001).

### Research Gaps

From the above literature review, it is evident that self-leadership theory has received widespread attention from scholars since its proposal, with existing research conducting a series of theoretical and empirical work on the emergence of self-leadership. Synthesizing the above review of self-leadership antecedents, this study identifies three areas with significant room for further development.

First, the existing connotation of self-leadership needs updating and struggles to reflect the changed work context. As previously mentioned, the theoretical connotation of self-leadership mainly originates from control theory, emphasizing that individuals or teams primarily rely on themselves for goal setting and control guidance to bridge the gap between current conditions and established goals. Based on this, Manz and Neck and other scholars have operationalized self-leadership into three major categories: behavior-focused strategies (emphasizing behavior), natural reward strategies (emphasizing motivation), and constructive thought pattern strategies (emphasizing cognition) (Neck et al., 2019; Neck & Houghton, 2006). Related empirical research has also mostly used these

three strategies or parts thereof as measurement tools. While the above theoretical definition and measurement content have good universality, they appear inadequately adapted to the current changing work context. With the accelerated advancement of the new round of information technology revolution, the basic operating environment and mode of current workplaces have undergone tremendous changes, with organizational characteristics, individual needs, work methods and content, human-technology relationships, work-family boundaries, and online-offline collaboration all presenting a series of new changes and challenges. Against this backdrop of new changes, it is necessary to re-examine, update, and expand the connotation of self-leadership (Xu Minya et al., 2021).

Second, research examining the formation of self-leadership has mostly been limited to single levels, lacking more systematic multi-level studies. Scholars have conducted numerous studies on the causes of individual and team self-leadership from different angles. However, current research overwhelmingly tends to conduct self-leadership studies at a single level (individual or team), with fewer cross-level studies. In particular, when the team as a whole has higher self-leadership levels, will individuals within the team also exhibit correspondingly higher levels of self-leadership? Can factors that promote team self-leadership also positively influence individual self-leadership? Beyond individual and team factors, will organizational-level leadership and management practices, organizational culture, and atmosphere also have top-down effects on employee self-leadership? These questions currently lack clear and direct answers and urgently require further multi-level investigation.

Third, insufficient attention has been paid to the dynamic motivational activation process of self-leadership, manifested as a lack of research exploring the mechanisms of its antecedents. From the conceptual connotation of self-leadership, it is evident that intrinsic motivation plays an especially important role in its emergence and maintenance. Understanding the formation of self-leadership requires us to clarify from a motivational activation perspective how internal and external factors affect individual and team psychological motivation. For example, among antecedents of individual self-leadership, both conscious training in self-leadership strategies and individual cognitive styles have received extensive research attention, yet the intrinsic motivational processes linking them to self-leadership have rarely been examined. Similarly, at both individual and team levels, external leadership behavior and style are key external factors affecting self-leadership (Manz & Sims, 1987; Yun et al., 2006). How do leader behaviors (such as empowerment and support) influence the psychological motivational processes of individuals and teams to promote self-leadership? Will there be interaction effects between leader factors and internal psychological characteristics of individuals or teams (such as cognitive styles) on self-leadership? These questions have not received sufficiently clear and comprehensive answers in current research.

## Research Framework

This study focuses on the core concept of individual self-leadership, aiming to clearly identify multi-level antecedents of individual self-leadership and reveal the psychological mechanisms and boundary conditions of its formation. To achieve these research objectives, we propose three research components: Study 1 focuses on expanding the concept of individual self-leadership and developing corresponding measurement tools; Study 2 examines factors influencing individual self-leadership at both team and individual levels and their driving mechanisms; Study 3 attempts to construct and test a multi-level trickle-down model affecting individual self-leadership from organizational, team, and individual levels.

### Study 2: Cross-Level Effects of Leadership and Individual Beliefs

Previous research on self-leadership antecedents has shown that enhancing individual self-leadership is a typical motivational process, making it crucial to understand the motivational factors behind why employees engage in self-leadership (Stewart et al., 2019). Specifically, in the complex social interaction relationship between employees and leaders, employee self-leadership is influenced both internally by individual factors and externally by contextual factors such as leader behavior styles. Both internal and external factors further affect the motivational system in employees' psychological world, thereby enhancing or inhibiting employee self-leadership. Therefore, this study simultaneously examines the effects of team leader behavior and employee individual factors on self-leadership and their cross-level mechanisms. Specifically, for internal employee factors, we focus on whether and how employees' Beliefs in the Co-Production of Leadership (Carsten & Uhl-Bien, 2012, 2013; Carsten et al., 2018) affect their self-leadership; for the external factor of team leaders, we focus on empowering leadership behavior. Meanwhile, these two types of factors may also have cross-level interactive relationships.

[Figure 1: see original paper]

### Employee Leadership Co-Production Beliefs and Self-Leadership

First, employee self-leadership is essentially self-regulatory behavior driven by intrinsic motivation. An important reason that motivates employees to demonstrate and maintain a self-leadership behavioral style is that such behaviors align with their fundamental beliefs about how to perform in the workplace. When individual employees believe certain behaviors are more consistent with their basic beliefs and values in their cognitive world, the motivational force to exhibit corresponding behaviors is strengthened, making them more likely to display expected behaviors (Stewart et al., 2019). In this study, we examine the promoting effect of employees' leadership co-production beliefs on self-leadership. The concept of leadership co-production beliefs was first proposed by Carsten and Uhl-Bien (2012) and has gained more attention in the evolving followership research (Uhl-Bien et al., 2014; Luo Wenhao et al., 2021).

According to their research, employees playing follower roles in organizations hold different views on how leadership is formed. Some more traditional employees believe leadership is primarily shaped by leaders, with subordinates mainly playing compliant roles; other employees believe leadership is not solely determined by leaders but is co-created by leaders and followers during the leadership process. Therefore, the concept of leadership co-production beliefs reflects the extent to which followers or subordinates believe they are in a cooperative relationship with leaders, including in their role cognition the identification of strengths and weaknesses in work processes, discovering and solving work problems, and innovating to improve efficiency (Carsten & Uhl-Bien, 2012). When employees hold stronger leadership co-production beliefs, they do not merely see themselves as passive subordinates but as subjects who co-create the leadership process, expecting to play more active roles in work processes and interactions with leaders. A series of empirical studies by Carsten and collaborators (Carsten & Uhl-Bien, 2012, 2013; Carsten et al., 2018) also show that subordinates' leadership co-production beliefs are positively related to more proactive upward communication strategies, voice behavior, upward empowerment, and contributions to goal achievement, while negatively related to blind obedience to leaders.

Based on this, we predict that when employees hold stronger leadership co-production beliefs, they believe they are indispensable participants in the leadership process, have greater motivation to proactively fulfill job responsibilities and partially hold themselves to leader role requirements, and are thus more likely to demonstrate higher levels of self-leadership. Therefore, this study proposes:

**Proposition 1:** Employees with stronger leadership co-production beliefs are more likely to exhibit self-leadership.

Further, how does employees' leadership co-production beliefs, as a cognitive pattern, stimulate their intrinsic motivation for self-leadership? To clarify this psychological mechanism, we introduce "Personal Goal Strivings" (Emmons, 1986; Ng & Lucianetti, 2016) as a mediator between leadership co-production beliefs and self-leadership, based on goal theory. Personal goal striving represents the outcomes individuals expect to achieve through their own behavioral efforts, reflecting the deeper meaning behind individuals' efforts to pursue specific goals (Emmons, 1986). Psychological research on goals shows that goals, as desired future states or outcomes, have motivational properties that can stimulate and organize individual behavior directed toward goal achievement (Monzani et al., 2015; Zhang Kai, 2014) and bring about personality growth, meaning in life, and well-being (Brunstein, 1993; Sheldon & Elliot, 1999). Since self-leadership is essentially an intrinsic goal-driven self-regulatory process, it is closely related to individuals' pursuit of desired goals. However, in the interactive relationship between leaders and employees in work contexts, the sources of employees' pursued goals are diverse, including goals from leaders, from the self, from the organization, or even from external sources.

Employees' leadership co-production beliefs, as a cognitive structure and pattern, define employees' internal behavioral models about the leadership process and their own roles (Carsten & Uhl-Bien, 2012). As such, these cognitive beliefs have the function of driving behavior and can guide individuals to strive in directions consistent with their role cognition (Carsten et al., 2018). Specifically, for leadership co-production beliefs, this means individuals believe the leadership process is co-created by leaders and followers, so subsequent behavior guidance should consider both leaders' and followers' goals. In other words, employees' leadership co-production beliefs have the effect of activating personal goal pursuit. When employees hold higher leadership co-production beliefs, they no longer merely accept and obey goals from leaders or the organization but see themselves as important subjects in leadership activities, thus having greater possibility to pursue self-set, transcendent, and meaningful future goals. Further, when employees have higher intensity of personal goal pursuit, they are more likely to drive and organize self-regulatory processes based on goals to be achieved, thereby exhibiting more self-leadership behaviors. Therefore, this study proposes:

**Proposition 2:** Employees' leadership co-production beliefs can achieve higher levels of self-leadership by stimulating personal goal pursuit.

**Team Leadership Behavior and Employee Self-Leadership** From the perspective of analyzing motivational forces that stimulate individual self-leadership, besides the aforementioned individual cognitive factors, whether external contextual factors allow or encourage employees to actively seek autonomous control is another important force (Houghton & Yoho, 2005; Stewart et al., 2019). For employees in work teams, team leaders have a critical impact on team operation modes, and their leadership behavior is also an important antecedent of individual self-leadership.

Empowering leadership behavior emphasizes power sharing, helps improve employee enthusiasm and work engagement, and is considered an effective leadership behavior for stimulating employee spontaneous behavior in the new economic context (Sharma & Kirkman, 2015). Conger and Kanungo (1988) believe empowering leadership is mainly manifested in four aspects: expressing trust and high performance expectations to subordinates, providing opportunities for subordinates to participate in decision-making, granting subordinates autonomy free from bureaucratic constraints, and setting motivating or meaningful goals for subordinates. Ahearne et al. (2005) further refined these four aspects into four dimensions of empowering leadership: emphasizing work meaning, conveying confidence in performance, promoting participative decision-making, and providing autonomy to reduce bureaucratic constraints. Previous research has shown that leaders' empowering behavior can create conditions that give employees more opportunities, motivation, and ability to carry out work by encouraging decision participation and delegating authority to subordinates (Lee et al., 2018). From the connotation of empowering leadership, this type of

leadership behavior can give employees more autonomy and self-drive, making self-regulation more likely and thus more likely to motivate employees to practice self-leadership (Amundsen & Martinsen, 2015; Manz & Sims, 1987; Yun et al., 2006; Chen et al., 2020).

Building on the recognized positive relationship between empowering leadership behavior and individual self-leadership, this study further analyzes the internal mechanism of this relationship based on self-determination theory. Lee et al.'s (2018) review of empowering leadership research found that the positive impact of empowering leadership on employee work outcomes cannot be separated from the generation and strengthening of work motivation in employees' psychological world, such as feeling higher levels of psychological empowerment or experiencing work meaning. As an intrinsic goal-driven self-regulatory behavior, individual self-leadership particularly requires employees to generate corresponding motivational forces from within, rather than simply receiving empowerment from leaders. Among the three basic psychological needs identified in self-determination theory, autonomy need is most closely connected to empowering behavior and self-leadership (Chiniara & Bentein, 2016). Therefore, we preliminarily infer that whether empowering leadership behavior can stimulate higher levels of self-leadership depends on whether empowerment better satisfies employees' inner autonomy needs.

**Proposition 3:** Team leaders' empowering leadership behavior stimulates employees' self-leadership by satisfying their autonomy needs.

Moreover, team-level leadership behavior can cross-level influence individual employees' psychological perceptions and behavioral patterns, thereby forming interactive relationships with individual factors. In this study's theoretical model, team leadership behavior serves as an external contextual constraint, representing the behavioral patterns leaders may exhibit when facing team members. Employees' varying levels of leadership co-production beliefs represent their general cognitive patterns regarding the question of "who should create leadership," which is relatively independent of the specific leadership situations they face. Employees' pursuit of personal goals and the subsequent self-leadership behavior depend not only on their general beliefs but also on their perception and judgment of the social context of their team. As previously stated, employees' leadership co-production beliefs have the potential to activate personal goal pursuit, thereby guiding individual behavior toward directions consistent with their cognitive beliefs (Carsten et al., 2018). In this process, whether the external social context facilitates the guiding function of individuals' cognitive beliefs also plays an important role. Specifically, when team leaders exhibit more empowering behavior that encourages power sharing, this external contextual factor is highly consistent with and matches the expectations of leadership co-production beliefs, thus playing a motivational role in guiding corresponding behavior from individual leadership co-production beliefs. In other words, when facing empowering leadership behavior, employees with stronger leadership co-production beliefs will feel even more "in their element," being more likely to

stimulate their active pursuit of personal goals and consequently practice higher levels of self-leadership.

Further, team leaders' empowering behavior is also expected to strengthen the indirect effect of personal goal pursuit. Specifically, empowering behavior is expected to enhance the indirect effect of personal goal pursuit; that is, when empowering behavior is higher, the indirect effect of employees' leadership co-production beliefs on self-leadership through stimulating personal goal pursuit will also be stronger. Based on the above analysis, this study preliminarily proposes the following theoretical propositions:

**Proposition 4:** When team leaders exhibit empowering leadership behavior, employees' leadership co-production beliefs are more likely to stimulate personal goal pursuit.

**Proposition 5:** When team leaders exhibit empowering leadership behavior, employees' leadership co-production beliefs are more likely to enhance self-leadership by stimulating personal goal pursuit.

### Study 3: A Three-Level Trickle-Down Model

**Organizational Factors and Team Self-Leadership** Team self-leadership indicates that the team has strong internal regulation and control mechanisms, enabling it to autonomously determine what work needs to be done, what performance standards to set, why to undertake this work, and how to specifically carry out the work (Stewart et al., 2011). In current research on factors influencing team self-leadership, besides internal factors such as team member composition characteristics, team task characteristics, team cognition, and team psychological processes, more important factors are organizational-level influences such as organizational structure, organizational culture, and organizational performance and reward systems. Obviously, the emergence and continuation of team self-leadership in organizations require a favorable organizational management context, such as a relatively loose management style, lower formalization and centralization, and group-based performance pay design (DeMatteo et al., 1998; Tata & Prasad, 2004).

Based on existing research findings, a key mechanism through which organizational-level factors influence team self-leadership lies in autonomy assurance. In other words, when senior managers empower work teams with sufficient decision-making autonomy through a series of mechanisms and policy designs and provide adequate support during team work processes, the possibility of these teams achieving self-leadership greatly increases. In this study, we first focus on the influence of organizational autonomy supportive climate on team self-leadership. An autonomy supportive climate in the organization means that the entire organization has reached a shared consensus on encouraging and supporting autonomy and can create opportunities and realize corresponding functions through a series of management practices. Based on self-determination theory, a strong autonomy supportive climate in

the organization is highly motivating, enabling teams and their members to feel more intrinsic rather than extrinsic motivation at work (Gagné, 2003) and encouraging them to work harder to achieve goals (Kenny et al., 2010). Even for work that is not inherently motivating, autonomy support can motivate teams and employees to participate more actively in these tasks (Deci et al., 1994). In this study, we also speculate that organizational autonomy supportive climate can promote team self-leadership.

Further, from the connotation of self-leading teams, we find that autonomy supportive climate assurance does not always promote team self-leadership. In enterprise management practice, even in organizations with relatively strong autonomy supportive climates, some work teams still have no intention to practice team self-leadership. Considering that team self-leadership is essentially an intrinsic motivation-driven self-influence process, we believe that at the organizational level, besides ensuring internal team autonomy through autonomy supportive climate, it is more important to effectively activate and guide the team's intrinsic motivation, enabling work teams to clarify the direction and driving force of self-leadership. According to goal dynamics theoretical research (Zhang Kai, 2014), motivation is driven by goals, and the direction and intensity of goals affect the direction and strength of work motivation. Thus, we infer that when work teams' goals maintain alignment and sharing relationships with organizational development goals, these teams are more likely to stimulate strong internal work motivation and thus more likely to practice team self-leadership. Case studies on Haier Group's autonomous business entity management practice have also shown (Zhang Kai et al., 2014) that when teams and individuals in the organization have higher goal fusion with the organization and more consistent understanding of future development goals and value source concepts, teams and individuals will demonstrate more self-management practices.

Based on the above theoretical analysis, this study further examines whether organizational-level "organizational vision sharing" has corresponding effects on team self-leadership. Vision represents the organization's conception and mental schema of future development states, used to persuade and influence others to work toward realizing this future vision (Van Knippenberg & Stam, 2014). The inspiring role of organizational vision has been fully emphasized in theories such as transformational leadership and charismatic leadership (Stam et al., 2014). Besides emphasizing future orientation, vision needs to be widely shared among organizational members to better exert its positive influence on team and individual work effectiveness. It can be said that shared organizational vision means that teams and members in the organization have higher levels of identification with this vision and are willing to take actions to achieve it. Based on understanding the shared vision, work teams in the organization can more clearly define team effort directions and the internal meaning and value of their work for overall organizational development, which on the one hand helps teams cope with uncertainty in work processes, and more importantly, on the other hand, enhances internal motivation for vision-related work (Kohles et al., 2012). Thus, vision sharing can help work teams concentrate effort di-

reactions and assign relevant meaning to work tasks, which can promote team self-leadership formation to a certain extent. Therefore, this study also preliminarily speculates that the level of organizational vision sharing can enhance team self-leadership.

When organizations both widely share visions to 凝聚 team consensus and clarify work effort directions, and provide space for teams to make autonomous decisions and actions around work goals through autonomy supportive climates, the internal motivation level in teams is relatively higher, and the possibility of self-regulation and self-influence based on intrinsic motivation to achieve shared visions also increases accordingly. Therefore, this study preliminarily speculates that when both organizational vision sharing and autonomy supportive climate are high, their combined effect has a stronger promoting effect on team self-leadership.

**Proposition 6:** Both organizational vision sharing and autonomy supportive climate can enhance team self-leadership, and their combined effect has a stronger enhancing effect on team self-leadership.

[Figure 2: see original paper]

**The Trickle-Down Effect of Team Self-Leadership** Although the concept of self-leadership was originally positioned only at the individual level (Manz, 1986), subsequent research development has continuously emphasized the necessity of understanding self-leadership at the team level, and related research on team self-leadership has been carried out (Stewart et al., 2011, 2019). Conceptually, team self-leadership and individual self-leadership undoubtedly have extremely close connections, both emphasizing the subject's (team or individual) intrinsic motivation-driven self-control and self-influence process. However, by reviewing existing literature, we find no research has directly conducted theoretical analysis and empirical testing on the connection between team self-leadership and individual self-leadership. Nevertheless, existing research shows that external leadership behavior faced by individuals significantly affects individual self-leadership, and these external leaders are usually team leaders. In Stewart et al.'s (2019) discussion and outlook, they also point out that self-leadership may have both close direct connections and some dialectically contradictory characteristics between team and individual levels. In this study, we first infer that team self-leadership can positively influence team members within it, promoting them to practice more individual self-leadership.

**Proposition 7:** Team self-leadership can promote individual self-leadership.

Further, considering that both teams and individuals are deeply embedded in corresponding organizational contexts, and the organizational-level factors this study focuses on—organizational vision sharing and autonomy supportive climate—both exert certain influences on various work teams and employees in the organization from their connotation analysis, we infer that self-leadership may have a top-down trickle-down effect across levels. According to Wang Zhen

et al.'s (2015) review, the downward transmission effect in leadership research means “the process by which leaders’ characteristics and behaviors in organizations are transmitted top-down through vertical management levels, ultimately triggering the same characteristics and behaviors in subordinates and teams.” In the content of this study, both team self-leadership and employee individual self-leadership are sets of cognition and behavioral strategies characterized by self-influence and control. Employees exhibiting specific types of cognition and behavioral strategies in organizational contexts cannot be separated from their observation, understanding, and processing of situational features and information cues in the organization, which is also a typical social learning and social information processing process (Bandura, 1986; Salancik & Pfeffer, 1978). Specifically, organizational-level vision sharing and autonomy supportive climate undoubtedly also affect employees’ motivation, cognition, and behavioral patterns. They will also seek to connect their current work with organizational vision (Kohles et al., 2012) and hope to have more autonomy in their work processes. In this process, employees observe and process information about their directly contacted teams. When employees’ teams exhibit higher self-leadership levels, employees are more likely to learn and imitate their team’s behavioral patterns, thereby achieving individual self-leadership. Conversely, if employees’ teams do not advocate self-leadership or even form strong group normative forces against it, the possibility of employee individual self-leadership will correspondingly decrease. Based on this, this study preliminarily proposes the following proposition:

**Proposition 8:** The combined effect of organizational vision sharing and autonomy supportive climate can further enhance individual self-leadership by promoting team self-leadership.

**Boundary Conditions of Task Characteristics** As mentioned above, while we speculate that team self-leadership can positively promote employee individual self-leadership, it is still necessary to examine the boundary conditions of this direct effect. As Stewart et al. (2011) analyzed, there are still certain contingent factors between team self-leadership and individual self-leadership. In particular, high-level team self-leadership may strengthen its control over internal members, thereby suppressing employees’ self-leadership space in certain situations (Langfred, 2007). Examining the contextual conditions of the relationship between team self-leadership and individual self-leadership can in fact further promote understanding of the paradoxical nature of self-leadership (Stewart et al., 2019). In this study, we focus on two types of work task characteristics—task interdependence and remote work—as moderators of the cross-level self-leadership effect.

On the one hand, the specific work tasks performed by different members in self-leading teams vary in task interdependence. Task interdependence indicates the extent to which different work tasks depend on each other, that is, the completion of one task depends on the completion of other tasks, including

knowledge and resource dependencies (Bailey et al., 2010). Previous research has found that task interdependence, as an important contextual factor, can moderate the relationship between leader behavior and employee behavior (Vid-yarthi et al., 2014; Liu Ying et al., 2012). When employees face higher task interdependence, it means they need to maintain higher levels and frequency of interaction and cooperation with other team members, and employees need to adjust themselves to better adapt to the entire team's collaborative work mode (Langfred, 2005). Conversely, when the task interdependence employees face is relatively low, meaning they mainly work independently to complete relevant tasks, the possibility that their work strategies are influenced by the team or other team members decreases. At this time, employees may still engage in self-leadership driven by their own factors, but the effect of team self-leadership on individual self-leadership will correspondingly weaken.

On the other hand, the way team members complete work tasks also affects their degree of individual self-leadership. In this study, we focus on the on-line remote work mode that has received more attention from enterprises and organizations in recent years. Remote work means employees complete tasks in locations other than the primary workplace (such as home or other spaces) and mainly interact with others inside and outside the organization through electronic information media (Gajendran & Harrison, 2007; Huo Weiwei et al., 2020). When employees adopt remote work more frequently, they can arrange their own work time and location more flexibly and autonomously, which enhances employees' sense of control and competence over their work (Mazmanian et al., 2013). Thus, remote work on the one hand provides employees with higher self-control and autonomy, and on the other hand, due to the relative absence of external leadership, requires individuals to engage in more self-leadership and control. Compared with employees who rarely adopt remote work, employees in teams who practice remote work more frequently may demonstrate higher individual self-leadership. Based on the above analysis, this study preliminarily proposes the following propositions:

**Proposition 9:** When employees' work task interdependence is higher, team self-leadership is more likely to promote employees' individual self-leadership.

**Proposition 10:** When employees adopt remote work to a greater degree, team self-leadership is more likely to promote employees' individual self-leadership.

## Theoretical Integration and Contributions

Based on the above discussion of construct relationships, the three research components included in this article, besides identifying the connotation and structure of employee individual self-leadership in the new context, focus more on answering what factors may influence employee individual self-leadership. Accordingly, the theoretical model this study intends to construct is shown in Figure 3 [Figure 3: see original paper].

[Figure 3: see original paper]

First, this theoretical model adopts an integrated multi-level research perspective, constructing and testing a multi-level driving mechanism model of individual self-leadership from organizational, team, and individual levels, and examining cross-level interactions and top-down influences across levels, providing theoretical and practical guidance for more systematically understanding and enhancing individual self-leadership. For individual employees in organizations, whether and to what extent they exhibit self-leadership behavior depends not only on internal factors such as individual characteristics and psychological systems but also on external factors such as contextual conditions (e.g., organizational and team characteristics). This study examines these comprehensive and complex influences in two parts. On the one hand, we examine the interaction between team leadership behavior and individual cognitive foundations. Starting from the basic cognitive assumption of “leadership co-production beliefs,” this study analyzes and proposes how employees’ individual leadership co-production beliefs (future research can also extend to other individual value beliefs) affect self-leadership through motivational activation processes. Meanwhile, the leadership style (empowerment) presented by team leaders may directly affect individual motivational forces and may also promote or inhibit the transformation of individual cognitive beliefs into motivational forces for achieving self-leadership. On the other hand, this study examines the organizational-team-individual top-down influence process. Self-leadership research has already made the leap from individual to team levels, but research conclusions on the effects of team self-leadership are inconsistent, and the question of whether team self-leadership can promote individual self-leadership has not received a clear response (Stewart et al., 2019). In view of this, this study introduces two prerequisite conditions at the organizational level that stimulate team self-leadership: shared vision within the organization and the formation of an autonomy supportive organizational climate. Further, when proposing the theoretical hypothesis that team self-leadership promotes individual self-leadership, we additionally point out that individual work task characteristics (task interdependence and remote work degree) will strengthen the direct relationship from team to individual. Integrating the above two aspects, the theoretical model proposed in this study attempts to integrate organizational-level management practices, team-level leadership styles and self-leadership, and individual-level personal cognitive characteristics, motivational factors, and work task characteristics, thereby providing a more comprehensive theoretical understanding of the formation mechanism of individual self-leadership.

Second, this theoretical model highlights the motivational activation process of employee self-leadership formation. As mentioned earlier, enhancing individual self-leadership is a typical motivational process, and understanding the motivational factors behind why employees engage in more self-leadership is crucial (Stewart et al., 2019), which is also a significant deficiency in existing research. Therefore, when constructing the theoretical model and understanding relationships between variables at various levels, this study consistently introduces relevant ideas from motivational theories. For example, in understanding

how team leadership behavior and individual cognitive beliefs affect employee self-leadership, this study attempts to explore changes in employees' motivational systems by integrating Self-Determination Theory (Ryan & Deci, 2000) and Goal Theory (Dweck & Leggett, 1988; Zhang Kai, 2014). The three basic needs theory in self-determination theory points out that the activation of employees' intrinsic motivation is inseparable from the satisfaction of three basic needs: autonomy, competence, and relatedness. This theory can effectively explain how external contextual factors affect individuals' intrinsic motivational systems. For self-leadership, a behavior mainly motivated by internal motivation, autonomy need plays an especially direct and important role. Whether employees can feel sufficient autonomy support in their interactions with leaders is a key link in stimulating them to enhance self-leadership. Therefore, self-determination theory helps us understand how leadership style, as an external contextual factor, drives employees to achieve self-leadership by satisfying their autonomy needs. Meanwhile, research around goal theory emphasizes that individuals' pursuit of meaningful future goals is an important mechanism for stimulating, guiding, and organizing their corresponding behaviors. The motivational mechanism of goal pursuit emphasized in goal theory can effectively integrate cognitive and motivational forces in individuals' psychological world to explain subsequent behaviors, thus helping to understand the driving mechanism of individual internal psychological factors (Zhang Kai et al., 2020). Therefore, Study 2 aims to integrate two complementary driving mechanisms—"need satisfaction" and "goal pursuit"—corresponding to the influence paths of external leader factors and internal individual psychological factors, respectively, thereby more completely revealing the motivational activation process of employee self-leadership. In Study 3's organizational-team-individual top-down influence process, although specific changes in individual motivational factors are not examined, the motivational perspective is consistently incorporated when constructing organizational-level influencing factors. Specifically, vision sharing within the organization itself is a process of organizational goal communication and transmission. The reason vision can unite people and motivate employees lies in its ability to mobilize people's work motivation by pointing to beautiful future images (Kohles et al., 2012; Stam et al., 2014). Vision communication and sharing at the organizational level are closely related to individuals' future goal pursuit. Meanwhile, autonomy supportive climate, as another prerequisite for stimulating team self-leadership, also has internal consistency with the autonomy need satisfaction emphasized in self-determination theory. A higher level of autonomy supportive climate in the organization can stimulate higher levels of work motivation, especially intrinsic motivation, among team members. In summary, the theoretical model proposed in this article aims to reveal the internal psychological mechanism of individual self-leadership formation from a motivational activation perspective.

Finally, through multi-level exploration of the formation mechanism of individual self-leadership, this study further deepens the paradoxical features of self-leadership. In classical leadership theory, the dyadic relationship between

leaders and followers (or subordinates) is a fundamental starting point for understanding leadership processes and leadership. Following this view, the concept of self-leadership seems “neither fish nor fowl.” Furthermore, both in past theoretical and empirical research and in the theoretical model discussed in this article, leadership behavior styles are regarded as important factors that stimulate employee self-leadership. That is, employees must both achieve “self-leadership” and accept “other-leadership” from external leaders, and “other-leadership” may also promote (or of course harm) “self-leadership.” These diverse relationships further reveal that the concept, theory, and practice of self-leadership are more complex and variable. In view of this, Stewart et al. (2019) proposed the paradoxical features of self-leadership and called on subsequent scholars to pay attention to this issue. Combining this article with relevant theoretical research, we believe the paradoxical features of self-leadership include at least three aspects: (1) The paradoxical relationship between self-leadership and external leaders. For this dialectical relationship, our research shows that while self-leadership is naturally influenced by individual cognition and motivational factors, it does not exclude or reject external influences. External leaders’ leadership behavior and style are important contextual factors affecting individual self-leadership and can either promote or inhibit employee self-leadership. This study only examines empowering leadership behavior; future research can further examine some leadership behavior styles with epochal significance, such as platform leadership, shared leadership, and virtual leadership. (2) The paradoxical relationship between team self-leadership and individual self-leadership. This study believes that although team self-leadership may stimulate higher levels of individual self-leadership through social learning effects, this relationship does not always hold. To examine the contingent relationship between the two, this study introduces two types of work task characteristics (task interdependence and remote work degree) as contextual variables. Future research can further examine the influence of team self-leadership on individual self-leadership by combining other individual and task characteristics, especially the potential inhibitory effect of team self-leadership on individual self-leadership. (3) The paradoxical consequences of self-leadership. That is, does self-leadership always have positive effects on individuals, teams, and organizations? Can self-leadership produce certain negative effects? These questions are not within the scope of this article’s discussion but are likely part of the paradoxical features of self-leadership. Future research can combine this article’s discussion of the formation mechanism of self-leadership to further consider and study the positive and negative effects of self-leadership in organizational management activities. In summary, this study further responds to scholars’ advocacy for studying the paradoxical features of self-leadership and helps deepen more comprehensive understanding of self-leadership.

In conclusion, this study attempts to rethink and reconstruct the core concept of individual self-leadership, which has both theoretical value and practical significance in the new era and management context (Zhang Zhixue et al., 2021). On this basis, we further explore from a motivational perspective the internal mecha-

nisms and boundary conditions of relevant influencing factors at organizational, team, and individual levels that drive individual self-leadership, and construct a preliminary integrated theoretical model. Of course, it should be noted that although this theoretical model proposes some possible variables and propositions based on relevant research and theoretical foundations, most of them are still at the stage of theoretical thinking and currently lack more sufficient empirical evidence. The main purpose of this study in proposing this theoretical model is not to reveal hypothetical relationships among various variables in the model but to promote an integrated understanding of the formation mechanism (especially the dynamic activation process) of individual self-leadership. Future research can completely test, expand, update, and improve all or part of the above theoretical model from different perspectives or different construct selection angles, thereby better promoting relevant research on self-leadership. More importantly, in the current continuously changing digital intelligence environment, future research can and should combine newer management contexts such as digital transformation, AI-driven human-machine collaboration to further consider research questions such as how individual self-leadership emerges and how it functions.

## References

- Cao Weilin, Chen Yuanyong, & Guo Jiangping. (2009). Analysis of the frontier of self-leadership research and prospects for future hotspots. *Foreign Economics & Management*, 7(31), 59–64.
- Chen Chen, Qin Xin, Tan Ling, Lu Hailing, Zhou Hansen, & Song Bodi. (2020). The effect of empowering leadership-subordinate self-leadership fit on subordinate emotional exhaustion and job performance. *Journal of Management World*, 36(12), 145–162.
- Huo Weiwei, Gong Jingya, Li Xianmiao, & Nie Jing. (2020). A review and prospect of research on the impact of online remote work in active and passive modes. *Human Resources Development of China*, 37(8), 6–21.
- Liu Ying, Zhang Zhengtang, & Wang Yabei. (2012). An experimental study on the effects of team pay distribution process and task interdependence on member cooperation. *Economic Science*, (5), 92–103.
- Long Lirong, Liang Jiajia, & Dong Jingni. (2021). Human resource management of platform gig workers: Challenges and countermeasures. *Human Resources Development of China*, 38(10), 6–19.
- Luo Wenhao, Liu Dong, & Zhang Kai. (2021). The evolution of followership research and exploration of its development path in the Chinese context. *Nankai Business Review*, 2, 214–224.
- Wang Haijiang, Zou Haoyun, Pan Jin, & Liu Wenxing. (2021). Inward or outward development? The impact of organizational change on self-career management. *Human Resources Development of China*, 38(5), 45–57.

- Wang Zhen, Xu Haoying, & Du Chenduo. (2015). The downward transmission effect in leadership research: Manifestations, mechanisms, and conditions. *Advances in Psychological Science*, 23(6), 1079–1094.
- Xu Minya, Ma Li, & Wang Weijiu. (2021). The impact of salesperson self-leadership behavior on turnover in the digital age. *Foreign Economics & Management*, 43(11), 26–40.
- Zhan Xiaojun, & Zhu Yanghao. (2020). Research on the formation mechanism of job crafting behavior from the perspective of self-leadership theory. *Contemporary Finance & Economics*, (8), 78–88.
- Zhang Hongqi, Lu Ruoyu, & Jiang Yang. (2012). Research on the influence of service enterprise employees' self-leadership on innovative behavior—With self-efficacy as mediator. *R&D Management*, 24(2), 94–103.
- Zhang Zhixue, Zhao Shuming, Lian Huiwen, & Xie Xiaoyun. (2021). Self-management and self-leadership in the digital intelligence era: Current status and future. *Foreign Economics & Management*, 43(11), 3–.
- Zhang Kai, Li Pengbo, Luo Wenhao, Zhang Qinghong, & Cao Yangfeng. (2014). Strategies for organizational-employee goal fusion—A case study based on Haier's autonomous business entity management. *Journal of Management World*, (4), 124–145.
- Zhang Kai. (2014). *Goal Dynamics*. Beijing: Social Sciences Academic Press.
- Zhang Kai, Shi Jinjing, & Luo Wenhao. (2020). How voice adoption promotes employee voice: An integrated mechanism based on goal self-organization perspective. *Acta Psychologica Sinica*, 52(2), 229–.
- Zhao Guoxiang, & Liang Hanzhong. (2011). A review of foreign self-leadership research. *Advances in Psychological Science*, 19(4), 589–598.
- Zheng Zhan, & Zhang Jian. (2016). From general to higher: A review of self-leadership theory research. *Human Resources Development of China*, 33(17), 40–47.
- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology*, 90(5), 945–955.
- Alves, J. C., Lovelace, K. J., Manz, C. C., Matsypura, D., Toyasaki, F., & Ke, K. (2006). A cross-cultural perspective of self-leadership. *Journal of Managerial Psychology*, 21(4), 338–359.
- Amundsen, S., & Martinsen, Ø. L. (2015). Linking empowering leadership to job satisfaction, work effort, and creativity: The role of self-leadership and psychological empowerment. *Journal of Leadership & Organizational Studies*, 22(3), 304–326.

- Andressen, P., Konradt, U., & Neck, C. P. (2012). The relation between self-leadership and transformational leadership: Competing models and the moderating role of virtuality. *Journal of Leadership & Organizational Studies*, 19(1), 68–82.
- Bailey, D. E., Leonardi, P. M., & Chong, J. (2010). Minding the gaps: Understanding technology interdependence and coordination in knowledge work. *Organization Science*, 21(3), 713–730.
- Bakker, A. B., Breevaart, K., Scharp, Y. S., & de Vries, J. D. (in press). Daily self-leadership and playful work design: Proactive approaches of work in times of crisis. *The Journal of Applied Behavioral Science*. DOI:10.1177/00218863211060453.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bastardo, N., & Van Vugt, M. (2019). The nature of followership: Evolutionary analysis and review. *The Leadership Quarterly*, 30(1), 81–95.
- Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology*, 88(6), 989–1004.
- Behfar, K. J., Peterson, R. S., Mannix, E. A., & Trochim, W. M. K. (2008). The critical role of conflict resolution in teams: A close look at the links between conflict type, conflict management strategies, and team outcomes. *Journal of Applied Psychology*, 93(1), 170–188.
- Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: a meta-analysis. *Journal of Applied Psychology*, 92(3), 595–615.
- Bindl, U. K., Unsworth, K. L., Gibson, C. B., & Stride, C. B. (2019). Job crafting revisited: Implications of an extended framework for active changes at work. *Journal of Applied Psychology*, 104(5), 605–628.
- Brunstein, J. C. (1993). Personal goals and subjective well-being: a longitudinal study. *Journal of Personality and Social Psychology*, 65(5), 1061–1070.
- Carsten, M. K., & Uhl-Bien, M. (2013). Ethical followership: An examination of followership beliefs and crimes of obedience. *Journal of Leadership & Organizational Studies*, 20(1), 49–61.
- Carsten, M. K., Uhl-Bien, M., & Huang, L. (2018). Leader perceptions and motivation as outcomes of followership role orientation and behavior. *Leadership*, 14(6), 731–756.
- Carsten, M.K. & Uhl-Bien, M. (2012). Follower beliefs in the co-production of leadership. *Zeitschrift für Psychologie*, 220(4), 241–253.
- Carte, T. A., Chidambaram, L., & Becker, A. (2006). Emergent leadership in self-managed virtual teams. *Group Decision and Negotiation*, 15(4), 323–343.

- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality–social, clinical, and health psychology. *Psychological Bulletin*, 92(1), 111–135.
- Chiniara, M., & Bentein, K. (2016). Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction. *The Leadership Quarterly*, 27(1), 124–141.
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3), 471–482.
- Cranmer, G., Goldman, Z., & Houghton, J. (2019). I’ll do it myself: Self-leadership, proactivity, and socialization. *Leadership & Organization Development Journal*, 40(6), 684–698.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, 62(1), 119–142.
- DeMatteo, J. S., Eby, L. T., & Sundstrom, E. (1998). Team-based rewards: Current empirical evidence. *Research in Organizational Behavior*, 20, 141–183.
- DiLiello, T. C., & Houghton, J. D. (2006). Maximizing organizational leadership capacity for the future: Toward a model of self-leadership, innovation and creativity. *Journal of Managerial Psychology*, 21(4), 319–337.
- Druskat, V. U., & Pescosolido, A. T. (2002). The content of effective teamwork mental models in self-managing teams: Ownership, learning and heedful interrelating. *Human Relations*, 55(3), 283–314.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256–273.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51(5), 1058–1068.
- Frayne, C. A., & Geringer, J. M. (2000). Self-management training for improving job performance: A field experiment involving salespeople. *Journal of Applied Psychology*, 85(3), 361–372.
- Furtner, M. R., & Rauthmann, J. F. (2010). Relations between self-leadership and scores on the big five. *Psychological Reports*, 107(2), 339–353.
- Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion*, 27(3), 199–223.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524–1541.

- Harari, M. B., Williams, E. A., Castro, S. L., & Brant, K. K. (2021). Self-leadership: A meta-analysis of over two decades of research. *Journal of Occupational and Organizational Psychology*, 94(4), 890–923.
- Ho, J., & Nesbit, P. L. (2009). A refinement and extension of the self-leadership scale for the Chinese context. *Journal of Managerial Psychology*, 24(5), 450–476.
- Houghton, J. D., Bonham, T. W., Neck, C. P., & Singh, K. (2004). The relationship between self-leadership and personality: a comparison of hierarchical factor structures. *Journal of Managerial Psychology*, 19(4), 427–441.
- Houghton, J. D., Dawley, D., & DiLiello, T. C. (2012). The abbreviated self-leadership questionnaire (ASLQ): A more concise measure of self-leadership. *International Journal of Leadership Studies*, 7(2), 216–232.
- Houghton, J. D., & Neck, C. P. (2002). The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership. *Journal of Managerial Psychology*, 17(8), 672–691.
- Houghton, J. D., Wu, J., Godwin, J. L., Neck, C. P., & Manz, C. C. (2012). Effective stress management: A model of emotional intelligence, self-leadership, and student stress coping. *Journal of Management Education*, 36(2), 220–238.
- Houghton, J. D., & Yoho, S. K. (2005). Toward a contingency model of leadership and psychological empowerment: When should self-leadership be encouraged?. *Journal of Leadership & Organizational Studies*, 11(4), 65–83.
- Humphrey, S. E., Hollenbeck, J. R., Meyer, C. J., & Ilgen, D. R. (2007). Trait configurations in self-managed teams: A conceptual examination of the use of seeding for maximizing and minimizing trait variance in teams. *Journal of Applied Psychology*, 92(3), 885–892.
- Kenny, M. E., Walsh-Blair, L. Y., Blustein, D. L., Bempechat, J., & Seltzer, J. (2010). Achievement motivation among urban adolescents: Work hope, autonomy support, and achievement-related beliefs. *Journal of Vocational Behavior*, 77(2), 215–224.
- Kirkman, B. L., & Shapiro, D. L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy of Management Journal*, 44(3), 557–569.
- Knotts, K., Houghton, J. D., Pearce, C. L., Chen, H., Stewart, G. L., & Manz, C. C. (2022). Leading from the inside out: a meta-analysis of how, when, and why self-leadership affects individual outcomes. *European Journal of Work and Organizational Psychology*, 31(2), 273–291.
- Kohles, J. C., Bligh, M. C., & Carsten, M. K. (2012). A follower-centric approach to the vision integration process. *The Leadership Quarterly*, 23(3), 476–487.

- Langfred, C. W. (2005). Autonomy and performance in teams: The multilevel moderating effect of task interdependence. *Journal of Management*, 31(4), 513–529.
- Langfred, C. W. (2007). The downside of self-management: A longitudinal study of the effects of conflict on trust, autonomy, and task interdependence in self-managing teams. *Academy of Management Journal*, 50(4), 885–900.
- Larson, L., & DeChurch, L. (2020). Leading teams in the digital age: Four perspectives on technology and what they mean for leading teams. *The Leadership Quarterly*, 31(1), 101377.
- Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, 39(3), 306–325.
- Manz, C. C. (1986). Self-leadership: Toward an expanded theory of self-influence processes in organizations. *Academy of Management Review*, 11(3), 585–600.
- Manz, C. C., Houghton, J. D., Neck, C. P., Fugate, M., & Pearce, C. (2016). Whistle while you work: Toward a model of emotional self-leadership. *Journal of Leadership and Organizational Studies*, 23(4), 374–386.
- Manz, C. C., & Sims Jr, H. P. (1987). Leading workers to lead themselves: The external leadership of self-managing work teams. *Administrative Science Quarterly*, 32(1), 106–129.
- Marques-Quinteiro, P., Vargas, R., Eifler, N., & Cural, L. (2019). Employee adaptive performance and job satisfaction during organizational crisis: the role of self-leadership. *European Journal of Work and Organizational Psychology*, 28(1), 85–98.
- Mathieu, J. E., Gilson, L. L., & Ruddy, T. M. (2006). Empowerment and team effectiveness: an empirical test of an integrated model. *Journal of Applied Psychology*, 91(1), 97–108.
- Mazmanian, M., Orlikowski, W. J., & Yates, J. (2013). The autonomy paradox: The implications of mobile email devices for knowledge professionals. *Organization Science*, 24(5), 1337–1357.
- Millikin, J. P., Hom, P. W., & Manz, C. C. (2010). Self-management competencies in self-managing teams: Their impact on multi-team system productivity. *The Leadership Quarterly*, 21(5), 687–702.
- Monzani, D., Steca, P., Greco, A., D’Addario, M., Pancani, L., & Cappelletti, E. (2015). Effective pursuit of personal goals: The fostering effect of dispositional optimism on goal commitment and goal progress. *Personality and Individual Differences*, 82, 203–214.
- Moskowitz, G. B., & Grant, H. (Eds.). (2009). *The psychology of goals*. New York, NY: Guilford press.

- Müller, T., & Niessen, C. (2019). Self-leadership in the context of part-time teleworking. *Journal of Organizational Behavior*, 40(8), 883–898.
- Neck, C. P., & Houghton, J. D. (2006). Two decades of self-leadership theory and research: Past developments, present trends, and future possibilities. *Journal of Managerial Psychology*, 21(4), 270–295.
- Neck, C. P., & Manz, C. C. (1992). Thought self-leadership: The influence of self-talk and mental imagery on performance. *Journal of Organizational Behavior*, 13(7), 681–699.
- Neck, C. P., & Manz, C. C. (1996). Thought self-leadership: the impact of mental strategies training on employee cognition, behavior, and affect. *Journal of Organizational Behavior*, 17(5), 445–467.
- Neck, C. P., & Manz, C. C. (2010). *Mastering self-leadership: Empowering yourself for personal excellence*. Upper Saddle River, NJ: Prentice Hall.
- Neck, C. P., Manz, C. C., & Houghton, J. D. (2019). *Self-leadership: The definitive guide to personal excellence*. Thousand Oaks, CA: SAGE Publications.
- Nesbit, P. L. (2012). The role of self-reflection, emotional management of feedback, and self-regulation processes in self-directed leadership development. *Human Resource Development Review*, 11(2), 203–226.
- Neubert, M. J., & Wu, J. C. (2006). An investigation of the generalizability of the Houghton and Neck revised self-leadership questionnaire to a Chinese context. *Journal of Managerial Psychology*, 21(4), 360–373.
- Ng, T. W., & Lucianetti, L. (2016). Goal striving, idiosyncratic deals, and job behavior. *Journal of Organizational Behavior*, 37(1), 41–60.
- Pearce, C. L., Manz, C. C., & Sims Jr, H. P. (2008). The roles of vertical and shared leadership in the enactment of executive corruption: Implications for research and practice. *The Leadership Quarterly*, 19(3), 353–359.
- Prussia, G. E., Anderson, J. S., & Manz, C. C. (1998). Self-leadership and performance outcomes: the mediating influence of self-efficacy. *Journal of Organizational Behavior*, 19(5), 523–538.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23(2), 224–253.
- Sharma, P. N., & Kirkman, B. L. (2015). Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group & Organization Management*, 40(2), 193–237.

- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: the self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482–497.
- Stam, D., Lord, R. G., Knippenberg, D. V., & Wisse, B. (2014). An image of who we might become: Vision communication, possible selves, and vision pursuit. *Organization Science*, 25(4), 1172–1194.
- Stewart, G. L. (2006). A meta-analytic review of relationships between team design features and team performance. *Journal of Management*, 32(1), 29–55.
- Stewart, G. L., & Barrick, M. R. (2000). Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type. *Academy of Management Journal*, 43(2), 135–148.
- Stewart, G. L., & Manz, C. C. (1995). Leadership for self-managing work teams: A typology and integrative model. *Human Relations*, 48(7), 747–770.
- Stewart, G. L., Carson, K. P., & Cardy, R. L. (1996). The joint effects of conscientiousness and self-leadership training on employee self-directed behavior in a service setting. *Personnel Psychology*, 49(1), 143–164.
- Stewart, G. L., Courtright, S. H., & Barrick, M. R. (2012). Peer-based control in self-managing teams: Linking rational and normative influence with individual and group performance. *Journal of Applied Psychology*, 97(2), 435–447.
- Stewart, G. L., Courtright, S. H., & Manz, C. C. (2011). Self-leadership: A multilevel review. *Journal of Management*, 37(1), 185–222.
- Stewart, G. L., Courtright, S. H., & Manz, C. C. (2019). Self-leadership: A paradoxical core of organizational behavior. *Annual Review of Organizational Psychology and Organizational Behavior*, 6, 47–67.
- Tata, J., & Prasad, S. (2004). Team self-management, organizational structure, and judgments of team effectiveness. *Journal of Managerial Issues*, 16(2), 248–265.
- Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014). Followership theory: A review and research agenda. *The Leadership Quarterly*, 25(1), 83–104.
- Van Knippenberg, D., & Stam, D. (2014). Visionary leadership. In D. V. Day, (ed.), *The Oxford handbook of leadership and organizations* (pp.241–259). New York: Oxford University Press.
- Vidyarthi, P. R., Anand, S., & Liden, R. C. (2014). Do emotionally perceptive leaders motivate higher employee performance? The moderating role of task interdependence and power distance. *The Leadership Quarterly*, 25(2), 232–244.
- Wageman, R. (2001). How leaders foster self-managing team effectiveness: Design choices versus hands-on coaching. *Organization Science*, 12(5), 559–577.

Yun, S., Cox, J., & Sims Jr, H. P. (2006). The forgotten follower: A contingency model of leadership and follower self-leadership. *Journal of Managerial Psychology*, 21(4), 374–388.

Zhang, F., & Parker, S. K. (2019). Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. *Journal of Organizational Behavior*, 40(2), 126–146.

*Note: Figure translations are in progress. See original paper for figures.*

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