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TOO FUTILE TO SPEAK UP? HOW VOICE IMPLEMENTATION CAN INCREASE EMPLOYEE PERCEIVED EFFICACY OF VOICE

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Too Futile to Speak Up? How Leaders Can Increase Employee Perceived Efficacy of Voice

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A thesis submitted in partial fulfilment of the requirements for the degree of Master of Philosophy

May, 2021

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ABSTRACT

Although efficacy judgment has been recognized as one key factor leading to employees' voice behavior, little is known about how to help enhance employee perceived efficacy of voice. This dissertation aims to give insights to the above questions and explore how leaders can improve employee perceived efficacy of voice. Based on social cognitive theory, I argue that voice implementation resulted in previous voice episodes plays an important role in shaping employees' consequent perceived efficacy of voice and thus affect their further engagement in voice behavior. I also theorize the moderating role of perceived implementation rule clarity (i.e., whether voicers perceive that leaders' implementation decision rules are clear and explicit) in the path of past voice implementation—efficacy further voice. In a survey study, I collected data from 32 health care teams in a hospital in China, by tracking nurses' voice proposed in monthly team meetings and their efficacy perception and further voice behavior following leaders' voice implementation. The result indicated that not all voice implementation produced efficacy benefits for the focal nurses. Voicers experienced efficacy increase and conducted more voice behavior only when they perceived leader's implementation rule as explicit and clear.

Keywords:

Voice implementation; perceived efficacy of voice; perceived implementation rule clarity; voice behavior

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Employee voice, the discretionary expression of constructive opinions, ideas and suggestions about work-related problems or issues (Van Dyne, Ang, & Botero, 2003; Van Dyne & LePine, 1998), can help improve team or organizational effectiveness and ensure competitive advantages (Edmondson, 2003; Floyd & Wooldridge., 1996; MacKenzie, Podsakoff, & Podsakoff, 2011; Nemeth, 1997; Weick & Sutcliffe, 2001). However, employees often "keep their mouth shut" because they regard voice as futile or perceive the proposed voice will not lead to effective outcomes (Milliken, Morrison, & Hewlin, 2003; Morrison, 2011, 2014; Morrison & Milliken, 2000; Van Dyne et al., 2003). Given the significance of employee voice, it is theoretically meaningful and practically valuable to investigate how to shape employees' *perceived efficacy of voice*, the agentic beliefs that the proposed voice can receive leaders' appropriate treatment (Morrison, 2011, 2014; Wei, Zhang, & Chen, 2015).

A few research has made some progress in understanding the role of employees' perceived efficacy of voice in promoting voice behavior, and have identified employee characteristics (e.g., self-efficacy, Duan, Kwan, & Ling, 2014) and leadership styles (e.g., supervisory delegation, Wei et al., 2015) as important predictors of such agentic perceptions. In voice literature, some scholars have also explored some efficacy-related cognitions (i.e., personal control, Frese & Fay, 2001; Tangirala & Ramanujam, 2008; Tangirala & Ramanujam, 2012) and identified various contextual factors that can help predict employee

efficacy-related perceptions (Frazier & Fainshmidt, 2012; Lam & Mayer, 2014; Tangirala & Ramanujam, 2008, 2012; Venkataramani & Tangirala, 2010). This line of research has provided valuable insights into why some employees have higher/lower efficacy beliefs than others by identifying their relatively stable antecedents. In the meanwhile, however, given the same employee, how leaders can help to increase his/her perceived efficacy of voice has almost been neglected.

In reality, given leaders' resource and energy is limited, they may treat employee voice differently according to the quality of voice content, voicers' influence ability, and other situational considerations (Burris, 2012; Fast, Burris, & Bartel, 2014; Howell, Harrison, Burris, & Detert, 2015; Whiting, Maynes, Podsakoff, & Podsakoff, 2012). Even with consistent general supportive value towards voice, leaders may still be more likely to allocate resources to address some voice than others. Some prior papers have suggested that employees' perceived efficacy of voice should has its roots in leaders' prior treatments (Morrison, 2011, 2014). Recent scholars also supported that employee voice behavior may vary as a function of contextual factors in dynamic and future-oriented ways (Bolino, Harvey, & Bachrach, 2012). To better understand how voice behavior changes over time, it is urgent an helpful to take an intra-person perspective and explore the possible fluctuations of employee perceived efficacy of voice following leader different treatments on his/her voiced issues. In this paper, I consider one important issue-based factor, past voice implementation (i.e., the extent to which the focal employee's voiced issues in last voice episode were took into action by leader, Baer, 2012; He, Han, Hu, Liu, Yang, & Chen, 2019; Satterstrom,

Kerrissey, & DiBenigno, 2020), and aim to explore how it may influence the focal employee's perceived efficacy of voice and their further voice behavior.

1.2 Research Needs and Thesis Overview

Taking past voice implementation as a key predictor of efficacy variances here is for both practical and theoretical reasons. Practically, employees closely monitor how leaders respond to their input to predict the effectiveness of action in the future (Milliken et al., 2003; Withey & Cooper, 1989). Satisfied experience can act as one reason for believing the possible efficacy of action. Theoretically, social cognitive theory has suggested that individuals pay particular attention to performance cues to regulate consequent cognition and behavior (Bandura, 1997, 2001, 2006). As voice implementation directly demonstrates employees' success of realizing the original aim of voice (He et al., 2019; Satterstrom et al., 2020) and provide direct evidence of employees' capability to voice effectively, I expect that leader voice implementation towards issues proposed in last voice episode importantly influence the focal employees' perceived efficacy of voice. Thus, the first purpose of this thesis is to examine whether past voice implementation influences employee perceived efficacy of voice by considering voice episodes in consecutive processes. Specifically, I conceptualize one voice episode as a leader-subordinate interaction process in which employees propose constructive suggestions and ideas and make efforts to influence leaders to exert intermediate efforts and make things happen.

More importantly, I also aim to explore when employees can "learn" more and experience more efficacy increases from past voice implementation. Morrison (2011) suggested that, in voice literature, although leaders' openness-fostering behavior was often

encouraged, rigorous theory building related to leaders' specific behavior was rare, leaving leaders' certain subtle or unconscious behavioral patterns (i.e., direct eye gaze) that might promote/inhibit the effect of their behavior heavily underexplored. Answering this call, I further explore whether leaders' specific implementation pattern may, in conjunction with past voice implementation, influence perceived efficacy of voice. Drawing on social cognitive theory (Bandura, 1997), efficacy benefits generated from past successful experience is largely affected by situational cues which can be used to diagnose whether one can use strategies and capabilities learnt or tested in previous experience to achieve success consistently and effectively (Bandura, 1997). Applying this tenet to voice context, I propose one key implementation pattern that may play a moderating role between the positive relationship between past voice implementation and employee further voice behavior through perceived efficacy of voice—employee perceived implementation rule clarity (i.e., whether employee perceives leader implementation rules as clear and explicit, Lippman and Rumelt, 1982: 420). This factor describes determines whether employees can have a clear picture of the causal path between their capabilities and final implementation outcomes (Joseph & Gaba, 2015; King & Zeithaml, 2001; Lippman & Rumelt, 1982), affecting employees agency perception from past voice implementation. I propose that, only when employees perceive leader implementation rule clarity as clear and explicit, they can get better efficacy benefits from past voice implementation.

1.3 Research Objectives and Contributions

By conducting this research, I aim to contribute to literature in several ways.

Firstly, the few previous research that examined the antecedents of employees' efficacy beliefs regarding voice has taken a between-individual approach by focusing on stable predictors (e.g., Duan et al., 2014; Wei et al., 2015), ignoring that employees may experience efficacy changes following leaders' different treatments towards varying voiced issues. This ignorance is unfortunate, which leave us uncertain about how employee voice changes over time (i.e., across voice episodes or events). By considering issue-based voice episodes in consecutive processes, this study not only captures the hitherto missing efficacy variances following different voice episodes, but also advances prior voice research by providing new issue-based predictors of perceived efficacy of voice and voice behavior.

Secondly, in prior voice literature, while openness-fostering behavior is assumed to be beneficial to promote employee efficacy cognitions and voice behavior, little effort has been paid to exploring the effect of leaders' specific behavior and potential boundary conditions. By integrating social cognitive theory (Bandura, 1997), this thesis advances voice literature by exploring how leaders can enhance employee perceived efficacy of voice through specific behaviors (i.e., voice implementation). Moreover, by theorizing that perceived leaders implementation rule clarity, in conjunction with voice implementation, influence employee perceived efficacy of voice, this thesis unveils the important boundary conditions of the assumed effect.

In addition, although social cognitive theory (Bandura, 1997) suggested the important role of situational cues in affecting the formation of efficacy beliefs, empirical studies seldom tested the richly contextualized characteristic of efficacy beliefs (Bandura, 2012). By exploring how different situational perceptions (i.e., perceived leader implementation rule

clarity) may affect the efficacy increases from past achievements, this thesis enriches social cognitive literature by considering situational complexity in employee efficacy formation process.

1.4 Structure of the Thesis

This thesis consists of six chapters. Chapter 1 is a general instruction of the whole thesis.

Chapter 2 offers the literature review and clarifies research motives. Chapter 3 presents theory and four hypotheses. Chapter 4 describes the research method and the survey results.

Chapter 5 concludes the thesis and discusses its theoretical and practical implications, limitations as well as future directions.

CHAPTER 2

LITERATURE REVIEW

2.1 Perceived Efficacy of Voice

2.11 Definition of Perceived Efficacy of Voice

Perceived efficacy of voice is a construct that describes the agentic beliefs that underlie individuals' approaches to speaking up. It refers to employees' instrumentality beliefs that the proposed voice can receive leaders' appropriate treatment (Morrison, 2011, 2014; Wei et al., 2015). Specifically, this concept captures whether the proposed voice will result in leaders' remedial / improvement action (Miceli & Near, 1992; Withey & Cooper, 1989). Contrary to futility feelings that are closely related to silence (Morrison & Milliken, 2000), perceived efficacy of voice acts as a motivational driver that pushes employees to believe their voice as effective and influential and thus speak up actively (Milliken et al., 2003).

2.12 Antecedents of Perceived Efficacy of Voice

Previous research suggested that various employee characteristics, leader characteristics and organizational factors may influence employee perceived efficacy of voice.

(1) Employee characteristics

Many studies have revealed that some personal characteristics can directly influence employee perceived efficacy of voice. For example, Duan et al. (2014) indicated that employee general self-efficacy predicted his/her efficacy in voice activities. Milliken et al. (2003) also suggested that compared to older and more experienced employees at higher

organizational ranks, those young, or inexperienced, or low-ranked employees usually perceive they have less credibility to be taken seriously.

(2) Leader characteristics

One of the most important sources of cues that determine whether it is worthwhile to voice or not is leader behavior. Leaders play an important role here not only because they are the direct targets of employee voice, but also because of the imbalanced power relationships in organizations (i.e., the leader has the final say in voice decisions). Early research on upward communication suggested that supervisors' upward influence within the organization and their valuation towards employee input affect employee efficacy judgment and thus shape upward information flow (Glauser, 1984). Recent work tended to emphasize the role of leader attitude (i.e., openness; Morrison, 2011; Saunders et al., 1992) and actions (i.e., consultation behavior; Tangirala & Ramanujam, 2012) towards employee voice in affecting efficacy judgments. For example, Saunders et al. (1992) found that employees voice more when they perceive the leader as approachable and responsive. Tangirala & Ramanujam (2012) indicates that leaders' consultation behavior was positively related to employees' perceived influence and their further upward voice behavior. In the meanwhile, other research emphasized relationships between employees and leaders and suggested that poor relationships often took away employees' perceived influence ability in organizations (Milliken et al., 2003).

(3) Organizational factors

When it comes to organizational factors, various organizational culture, structure, or practices are relevant here. For example, Eisenberger, Fasolo, and Davis-LaMastro (1990) suggested that perceived organizational support positively predicted the perceived probability of issue-selling success. Based on interview studies, Milliken et al. (2003) posited that when the organizational culture or structure is not supportive of upward communication, employees' efficacy of voice heavily suffered. Erez, Lepine, and Elms (2002) turned their focus to within workgroups and found that adopting egalitarian practices can ensure that each group member has opportunities to make contributions, and consequently, voice, as a visible behaviour, will be more frequently found among employees.

2.13 Summary

The above line of research has provided valuable insights into why some employees have higher/lower efficacy beliefs than others by identifying the relatively stable individual, organizational or leader-related antecedents. However, the more dynamic and within-person voice processes (for instance, given the same employee, how leaders can help to increase his/her perceived efficacy of voice) have almost been neglected (Bolino, Harvey, & Bachrach, 2012). In this paper, I take the social cognitive perspective and episode-based design to explore what specific actions leaders can take to improve the given employee's efficacy level. By doing so, this paper not only reveals the within-person variance of employee perceived efficacy of voice, but also provides valuable practical suggestions for leaders who want to increase employee perceived efficacy of voice.

2.2 Social Cognitive Theory

Social cognitive theory (Bandura, 2001, 2006) introduces an agentic perspective towards human development, adaption and changes. According to the tenet of this theory, agentic behavior is preceded by intentionality and forethought. Specifically, it highlights the important role of efficacy beliefs in directing a future course of action and behavioral regulations (Bandura, 1997, 2001). That is, when individuals believe they can produce desired results by efforts, they are more motivated to act. As social cognitive theory addresses the cognitive beliefs underlying agentic behavior, it provides a particularly suitable lens to examine voice behavior, which also involves an *intentional* attempt to improve current environment. Liang, Farh, and Farh (2012) highlighted that, compared to other cooperative forms of citizenship behaviors, voice behavior involved more intentional and forethoughtful outcome considerations (Organ, 1988; Van Dyne, Cummings, & Parks, 1995), suggesting the fit between social cognitive theory and voice behavior studies.

2.21 Four Sources of Efficacy Beliefs

Social cognitive theory (Bandura, 1977) identifies four sources of information on which people evolve their efficacy, mastery experience (e.g., past achievements), vicarious experience (e.g., past experiences that individuals acquire by observing and learning from role models), social persuasion (e.g., others' expressions of faith in an individual's ability), and physiological state (e.g., individuals' emotional arousal).

(1) Enactive Mastery Experience

Enactive mastery experiences are the most influential predictor of efficacy beliefs because it serves as indicators of capability (Bandura, 1977). As Bandura (1977, 53) suggested,

powerful mastery experiences provided useful testimony to one's capacity to effect personal changes. In particular, the cognitive, behavioral and self-regulatory tools acquired from successful hands-on experiences (i.e., voice successes) can produce "a transformational restructuring of efficacy beliefs". However, it should be noted that efficacy changes do not result from success feedback per se, but from the diagnostic evaluations about whether they can achieve success consistently and effectively through utilizing those tools generated from past enactive experience.

(2) Vicarious Experience

When lacking direct knowledge of their capabilities, individuals can rely on modelled indicators for efficacy information. During this process, social comparison operates as a primary mechanism and usually, the attainments of others who are similar to oneself are used as diagnostic information of one's capability. Modelled information enhances individual efficacy beliefs mainly through improving one's predictability and controllability.

(3) Verbal Persuasion

Verbal persuasion can serve as a further strategy to enhance individuals' beliefs that they possess the capabilities to finish the task. It mainly functions through installing persuasory efficacy information and invoking self-affirming beliefs. Thus, the way in which performance feedback is framed, who the persuaders are, their knowledgeableness and credibility, and how discrepant their appraisals are from one's own beliefs matter in affecting persuasion effectiveness.

(4) Physiological and Affective States

Another way of enhancing efficacy beliefs is to improve the physical status, reduce stress levels and negative emotional arousal. However, it should be noted that it is not the sheer intensity of emotional/physical states or reactions that matter but how they are interpreted. Bandura suggested that both environmental factors and individual characteristics exerted a strong influence on how internal somatic states were perceived and interpreted.

Although social cognitive theory and the four types of efficacy sources have been widely adopted to explain various agentic behavior, most of this research took a between-level approach (e.g., Gong, Huang, & Farh, 2009; Liao, Liu, & Loi, 2010). Recently, scholars have begun to call for taking a dynamic and within-individual perspective on those agentic behaviors (e.g., Ng & Lucianetti, 2016) and pay more attention to specific events or processes-based cues (Bolino et al., 2012; Methot, Lepak, Shipp, & Boswell, 2017). This paradigm shift provides us opportunities to investigate richer situational factors that may influence efficacy formation processes.

2.22 Voice Implementation as Mastery-relevant Indicators

Past voice implementation refers to the extent to which leaders took the focal employees' voiced issues in the last voice episode into action (Baer, 2012; He et al., 2019; Satterstrom et al., 2020). Compared to other leader treatment behaviors (i.e., leader endorsement), voice implementation is more relevant to fulfill the original aim of voice — bringing about effective changes and producing improved effectiveness (He et al., 2019; Satterstrom et al., 2020). Just as recent scholars (i.e., He et al., 2019) suggested, while voice endorsement indicates that leaders have some motivations to take voice into action (Burris, 2012; Fast et al., 2014; Howell et al., 2015; Whiting et al., 2012), it is the actual

implementation that determines the ultimate effect of voiced ideas. This view is also in line with issue selling (Dutton & Ashford, 1993) and organizational change literature (Armenakis & Bedeian, 1999; Kotter, 2009; Lewin, 1947) that implementation provides particularly useful evidence about the feasibility and effectiveness of new practices.

So in this thesis, I take past voice implementation as a direct mastery-relevant indicator and focus on the effect of past voice implementation on employee perceived efficacy of voice and further voice behavior.

2.3 Conclusion

Based on the literature review in this chapter, several underexplored research issues are identified. Firstly, although a few previous research examined the antecedents of employees' perceived efficacy of voice, they predominantly took a between-individual approach by focusing on stable predictors (e.g., Duan et al., 2014; Wei et al., 2015), ignoring that employees may experience efficacy variances following leaders' different treatments towards varying voiced issues. Second, although openness-fostering behavior was often emphasized in voice literature, little effort has been paid to exploring how leaders' specific behaviors or actions can influence the formation of employee perceived efficacy of voice and potential boundary conditions in this process. In addition, although social cognitive theory (Bandura, 1997) suggested the important role of situational cues in affecting the formation of efficacy beliefs, empirical studies seldom tested the richly contextualized characteristic of efficacy beliefs (Bandura, 2012).

To address these research gaps, I conduct this research by drawing on social cognitive theory. Firstly, I consider issue-based voice episodes in consecutive processes and propose

past voice implementation as a new issue-based predictor of perceived efficacy of voice. Moreover, I explore the looping effects of past voice implementation on employee further voice behavior via the efficacy mechanism. In addition, I further investigate the salient boundary conditions (i.e., leader implementation rule clarity) on the abovementioned relationships. This investigation can help us understand what specific behavioral patterns leaders should adopt when treating employee voice. The development of theory and hypotheses are presented in the next chapter.

CHAPTER 3

THEORY AND HYPOTHESES

3.1 Social-Cognitive Theory Perspective on Voice Behavior

In social cognitive theory, past enactive mastery experiences (i.e., personal experiences of managing efforts toward performance accomplishments) have been identified as a key source of efficacy information as they provide direct and authentic evidence of whether one can muster whatever it takes to succeed (Bandura, 1997; Biran & Wilson, 1981; Feltz, Landers, & Raeder, 1979; Gist, Schwoerer, & Rosen, 1989). To gain successful performance, especially complex ones, individuals usually require cognitive, behavioral and self-regulatory tools for creating and executing effective courses of action. During this enactive process, individuals develop their efficacy beliefs through acquisition of knowledge of rules and strategies that can be applied effectively. However, only receiving success feedback without believing that they can exercise them consistently and effectively may weaken the validity of efficacy implications employees get from past successful experience.

In the following, I apply social cognitive theory to theorize how past voice implementation as a key leader intervention affects employee voice through perceived efficacy of voice. Moreover, I further explore when past voice implementation can provide better efficacy implications for employee by considering more situational cues. Specifically, I identify the moderating role of perceived implementation rule clarity in the past voice implementation—perceived efficacy of voice—further voice behavior link.

3.2 Development of Efficacy Beliefs from Past Voice Implementation

Past voice implementation refers to the extent to which leaders took the focal employees' voiced issues in the last voice episode into action (Baer, 2012; He et al., 2019; Satterstrom et al., 2020). It is an important leader treatment in response to employee voice, which signals employee success in past enactive voice experience. To influence leaders to make immediate efforts to take voice into action, voicers often need to work out some thoughtful and effective voice contents and take appropriate strategies to influence leaders to act (Chamberlin, Newton, & Lepine, 2017; Lam, Lee, & Sui, 2019; Whiting et al., 2012). The achieved voice implementation demonstrate that leaders care about the voice they raise and has taken efforts to make a change in the focal team accordingly. This achievement conveys employees about their capability to voice effectively (i.e., they have the essential knowledge, skills and strategies to induce leaders to make an effective change) so that their voice can win out from multiple issues. In line with social cognitive theory, I expect past voice implementation provides employees with much positive efficacy implications. Thus, I propose the following hypothesis:

Hypothesis 1: Past voice implementation is positively related to the increase of employee perceived efficacy of voice.

3.3 The Mediating Role of Perceived Efficacy of Voice

As I stated earlier, social cognitive theory (Bandura, 1997, 2001, 2006) highlighted the core role of efficacy beliefs in regulating individual behavior. This supposition resonates with both expectancy theories (Vroom, 1964) and theory of planned behavior (Ajzen, 1991),

which suggest that individuals become increasingly motived to exert effort when they have an increasing perception that such effort is likely to lead to anticipated outcomes. Our logic is similar in this thesis. Perceived efficacy of voice represents employees' agency perception regarding the potential outcomes of voice (i.e., how leaders treat their voice). When employees believe they have capabilities to voice effectively and get leader's attention and appropriate treatments, they are expected to engage in more voice behavior.

Accordingly, I further propose a mediating role of perceived efficacy of voice in the relationship between past voice implementation and employee voice behavior. I posit that employees actively assess the potential outcomes of their voice (Withey & Cooper, 1989) and thus decide whether to engage in voice or not. As past voice implementation provides direct capabilities related information that one can successful attract leaders' attention and induce them to take immediate efforts to make things happen, employees are expected to be more willing to initiate further voice behavior following past voice implementation (Detert & Treviño, 2010; Milliken et al., 2003). Accordingly, I propose the following hypotheses:

Hypothesis 2: Perceived efficacy of voice mediates the positive relationship between past voice implementation and employee further voice behavior.

3.4 The Moderating Role of Perceived Implementation Rule Clarity

Although past achievement provides forceful efficacy evidence, the extent to which it enhances efficacy beliefs is affected by situational diagnostic information that can be used to evaluate whether one can employ its strategies or capabilities consistently and effectively.

Indeed, both social cognitive theory (Bandura, 1997) and expectancy literature (Rotter, 1954; Vroom, 1964) highlight the important role of psychological situations in affecting employee's

agency perception and efficacy benefits generated from past achievements. For instance, Lasko (1952) first distinguished learning in situation where the reinforcements following behaviors are a function of the behavior itself and learning in situations where the reinforcements are prearranged or determined by someone else. Phares (1957) further tagged these two situations as "skill" and "chance" situation and posited that the expectancy changes were more salient in "skill" (vs. "chance") situation where individuals perceive they were (not) effective agent. Similarly, Bandura (1977, 2001, 2012) also supported that employees gained more efficacy benefits when situational cues indicated they had personal power to produce results through the exercise of skills, rules and strategies.

According to the tenets mentioned above, I propose a relevant moderator in the past implementation-efficacy link—employee perceived implementation rule clarity. It refers to the extent to which employee perceives leader implementation rule as clear and explicit (Joseph & Gaba, 2015; Lippman & Rumelt, 1982). I propose that although the final implementation decisions and outcomes are determined by leaders, whether the focal employee can clearly understand leader's decision logics and implementation criteria determines whether he/she can obtain agency-related information about past achievement, which directly affects efficacy changes following achieved results (Bandura, 1997; Powell, Lovallo, & Caringal, 2006; Rotter, 1954).

Specifically, when perceived implementation rule clarity is high, employees perceive that leaders' decision logics are clear and transparent. Under such condition, the focal employees can have a clear picture of the causal path from their own capability to leader's voice implementation outcomes (Joseph & Gaba, 2015; Konlechner & Ambrosini, 2019).

High implementation results demonstrate they are effective agents who have required capabilities to voice effectively and get leaders' supportive treatment. As employees can clearly get access to what capabilities contribute most to their achievement results, they can extend success sustainability and anticipate further reinforcement by continuing leveraging these competences or their functional equivalence (Powell et al., 2006). When perceived implementation rule clarity is low, however, past voice implementation provides less agency-related information. As employees do not have access to the criteria their achievements are based on, the path to attained implementation is more likely to be perceived as unstructured (i.e., determined by leaders' own will), and thus little learning implications are involved (Joseph & Gaba, 2015; Rotter, 1954). Accordingly, I expect that employees will experience less efficacy increases from past implementation. Based on the above reasoning, I propose the following hypotheses.

Hypothesis 3: Perceived implementation rule clarity moderates the relationship between past voice implementation and perceived efficacy of voice, such that when perceived implementation rule clarity is high (vs. low), past voice implementation is more positively related to employee perceived efficacy of voice.

Integrating the above hypothesis, I proposed a moderated mediation effect (Preacher, Rucker, & Hayes, 2007). Specifically, past voice implementation is positively and indirectly related to employee voice behavior via perceived efficacy of voice; this indirect effect is dependent on perceived implementation rule clarity. That is, perceived implementation rule clarity conditionally influences the indirect effect of past voice implementation on employee voice behavior. This conditional influence is realized via the effect of past voice

implementation on employee perceived efficacy of voice. Because I predict strong (weak) linkages between past voice implementation and employee perceived efficacy of voice when perceived implementation rule clarity is high (low), I propose the following:

Hypothesis 4: Perceived implementation rule clarity moderates the indirect relationship between past voice implementation and employee further voice behavior via perceived efficacy of voice, such that this indirect effect is more positive when perceived implementation rule clarity is high (vs. low).

CHAPTER 4

MEHTOD

4.1 Sample and Procedures

I collected survey data from 32 health care teams at a hospital in mainland China. I chose the healthcare context to test the hypotheses for several reasons. Firstly, nurses closely contact with patients and thus are well positioned to identify problems and raise suggestions for unsafe conditions or flawed procedures (Institute of Medicine [IOM], 2004). Moreover, as patient care is an important aspect of nurses' job, voicing safety related concerns is an essential part of their work and has consequential effect on safety outcomes (Edmondson, 2003; Helmreich & Merritt, 1998). In addition, considering the complex patient handoffs in healthcare teams, nurse managers do not always have enough time to give feedback about their implementation rules, leaving the agency-related information about implementation uncertain. Thus, perceived implementation rule clarity could be a key but largely ignored boundary factor in this context.

Participants in this study are 422 nurses embedded in 32 health care teams. Each team was managed by one nurse manager who independently takes charge of daily safety management work in his/her teams. To facilitate safety knowledge learning and safety procedure improvement, nurse managers in this hospital arranged safety management and control conference regularly at the end of each month, in which nurses' comments and suggestions about safety issues were welcomed. Before the data collection work, our research team first visited each healthcare team and met the participants personally to help them better understand the research purpose and procedures as well as to get their approval and support.

One month before formally tracking conferences, all participants were asked to fill in a general questionnaire (including democratic variables, and some controls, like leader openness and team safety climate). Before the safety management and control conferences at the end of each month, baseline level of perceived efficacy of voice $(T_{n-1}, n=1, 2, 3, 4)$ was measured. During the conferences, voices from nurses were recorded and would be used for the following survey. One month after voice was proposed and before the next monthly conference, those voicers were asked to evaluate voice implementation status and their perceived efficacy of voice $(T_n, n=1, 2, 3, 4)$. Another month later $(T_{n+1}, n=1, 2, 3, 4)$, employee's voice behavior in last month (the interval between T_n and T_{n+1} , n=1, 2, 3, 4) was measured. To get enough voice samples, the above procedures were repeated for four times. Time intervals between each survey was controlled as one month. Perceived implementation rule clarity was measured in the fourth nurses' survey (T4).

Finally, the research team recorded 265 voiced issues from 249 nurses nested in 32 healthcare teams. All participants finished the baseline survey and efficacy measures, but implementation measures were rated only by 249 voicers. As I focused on the impact of past voice implementation on the focal employees' perceived efficacy of voice at the individual level, for those who raised more than one issue at a meeting, I averaged the voice implementation scores rated by the same nurse and got mean scores of voice implementation at the individual level. In the final sample, 98.3 percent of 249 voicers were women. The predominance of women in this sample is not uncommon for nursing workface. 60.6 percent of them had a bachelor degree or higher. Their average organization tenure was 6.02 years (SD = 4.76). The average age of them was 28.2 years (SD = 5.86).

4.2 Measures

All the questionnaires were designed in Chinese. For the original English version items, the research team translated them following the translation-back-translation procedure (Brislin, 1986). Unless otherwise specified, all measures used a 6-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*).

Past voice implementation. The scale of past voice implementation was adapted from idea implementation scale used in innovation literature (Baer, 2012). Voicers (nurses who raised voice in last conference) were asked to respond to this three-item scale to rate the implementation status of each voiced issue they proposed in last safety management and control conference. Questionnaires were designed for each voiced issue. One sample item was "Our nurse manager has transformed this suggestion into usable products, processes, or procedures". If one voicer provided more than one suggestion in a conference, he/she would be asked to evaluate the implementation status of each voice.

Perceived efficacy of voice. Perceived efficacy of voice was measured using a sixitem scale developed for this study (Morrison, 2011, 2014; Morrison & Milliken, 2000). Voice providers were asked to respond to this scale both in the baseline survey and in the following survey after implementation. One sample item was "I believe if I put up suggestions that aim to improve working procedures, these suggestions will be taken seriously".

Further Voice behavior. Voice behavior was measured by the ten-item scale developed by Liang et al. (2012). Voice providers were asked to respond to a 5-point Likert scale to report the frequency of engaging in voice behavior in the following month after they

reported implementation status (1 = never to 5 = always). One sample item of promotive voice was "I proactively developed and made suggestions for issues that may influence our nursing team". One sample item of prohibitive voice was "I spoke up honestly with problems that might cause serious loss to our nursing team, even when/though dissenting".

Perceived implementation rule clarity. I adapted three items from causal ambiguity scales used in prior studies (Keck & Babcock, 2018; Lippman & Rumelt, 1982) to measure perceived implementation rule ambiguity. The items were chosen and adjusted according to characteristic of voice implementation context. One sample items was "The criteria our nurse manager adopts in voice implementation decisions are clear and explicit".

Control variables. To take into consideration the possibility that leader characteristics and team climate might influence both leader implementation and employee voice, I included leader openness and team safety climate as team-level control variables in our analyses. For instance, it was possible that leaders with high openness are more likely to implement employee voice, and in the meanwhile, employee may be more willing to speak up. Similarly, in teams with high safety climate, both leader's implementation and employee voice behavior could be enhanced. Leader openness was measured using three items from Ashford et al.'s (1998) top management openness scale and team safety climate was measured using 15 items adopted from Katz-Navon et al.'s (2005) scale.

At the individual level, I controlled perceived efficacy of voice (T0) when testing the influence of leader voice implementation on perceived efficacy of voice (T1), which enabled us to examine efficacy changes after implementation. Voicers' organizational tenure was also controlled to reduce endogeneity concerns, as it may influence past voice implementation and

perceived efficacy of voice simultaneously. In addition, to exclude the social influence (i.e., vicarious learning effect, or social comparison effect) of other voicers' achieved outcomes and get a clean effect of voicers' personal experience, I also controlled other voicers' past voice implementation in the focal team, that is, the average implementation scores of those voice proposed and rated by other voicers in the focal team in the last episode.

4.3 Analytical Approach

Given the nested structure of the data (nurses are nested in different health care teams), I tested the hypotheses using multilevel path analysis in Mplus 8.3 (Muthén & Muthén, 1998–2017). Following prior recommendations (Enders & Tofighi, 2007; Hofmann, Griffin, & Gavin, 2000), I grand-mean centered the individual level predictors to obtain an unbiased estimate of level-1 relationship. Specifically, I followed typical practice in multilevel modeling and grand-mean exogenous variable (Preacher, Zyphur, & Zhang, 2010)—past voice implementation, implementation rule clarity and level 1 control factor (i.e. perceived efficacy of voice (T_{n-1}), other voicers' past voice implementation). In the meanwhile, team-level control variables (i.e., leader openness and team safety climate) were also grand-mean centered. I modelled all individual-level hypothesized effects with fixed slopes to reduce model complexity. To examine the moderating effects and conditional indirect effects, I adopted a Monte Carlo bootstrap method with 20,000 replications at high and low levels of perceived implementation rule ambiguity (Selig & Preacher, 2008).

CHAPTER 5

RESULTS

5.1 Multi-Level Confirmatory Factor Analyses

I first conducted multi-level confirmatory factor analyses to confirm the hypothesized four factor structure of past voice implementation, perceived efficacy of voice, perceived leader implementation rule clarity, and employee voice behavior. For variables which had more than three measurement items, I employed parceling techniques (Little, Rhemtulla, Gibson, & Schoemann, 2013). Specifically, for perceived efficacy of voice, three-item parcels were created using an item-to-construct balance technique, where the highest loading items were paired with the lowest loading items (Little, Cunningham, Shahar, & Widaman, 2002). Two-item parcels were created for voice behavior which was in line with Liang et al.'s (2012) two-dimension division of voice behavior. Results of this multilevel four-factor measurement model indicated a good overall fit, $\chi^2(76) = 228.06$; CFI = .94; TLI = .92; RMSEA = .09, SRMR_{within} = .06, SRMR_{between} = .16. It was better than a three-factor model that combined past voice implementation and perceived efficacy of voice ($\chi^2(82) = 1147.58$; CFI = .59; TLI = .45; RMSEA = .23, SRMR_{within} = .20, SRMR_{between} = .20; The Satorra-Bentler scaled chisquare difference = 187.96, $\Delta df = 6$, p < .001). These results supported the construct distinctiveness of these variables.

5.2 Descriptive Statistics and Correlations

Table 1 reports the means, standards deviations, and correlations of all core variables.

5.3 Test of Hypotheses

Figure 1 showed overall path analyses results. Hypothesis 1 proposed that past voice implementation was positively related to employee perceived efficacy of voice. Results in Table 2 show that past voice implementation was not related to perceived efficacy of voice (T1) after controlling for perceived efficacy of voice (T0) ($\gamma = .08$, p = .15), rejecting Hypothesis 1. From Table 2, it can be found that employee perceived efficacy of voice was positively related to consequent voice behavior, even when leader openness and team safety climate were controlled ($\gamma = .17$, p = .005). Hypothesis 2 proposed the mediating role of perceived efficacy of voice in the relationship between past voice implementation and employee voice behavior. Monte Carlo bootstrapping results suggested that the indirect effect of past voice implementation on employee voice via perceived efficacy of voice was not significant (*indirect effect* = .03, 95 % CI = [-.0003, .067]), rejecting Hypothesis 2.

Hypothesis 3 proposed the moderating role of perceived implementation rule clarity in the relationship between past voice implementation and perceived efficacy of voice. As I predicted, the interactive effect of past voice implementation and perceived implementation rule clarity on perceived efficacy of voice was significant ($\gamma = .20$, p < .001). I plotted this interactive effect in Figure 2. Moreover, following the suggestion of Dawson and Richter (2006), I tested the simple slopes. Results suggested that past voice implementation was positively related to perceived efficacy of voice ($\gamma = .23$, p < .001) when perceived implementation rule clarity is higher but not significant ($\gamma = -.07$, $\gamma = .29$) when perceived implementation rule clarity is lower. Thus, Hypothesis 3 was supported.

Table 1 Means, Standard Deviations, and Correlations among Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
Individual-level Variables											
1. Organizational tenure	6.09	4.64	_								
2. Past voice implementation	5.05	.91	.04	(.94)							
3. Other voicers' past voice implementation	5.11	.73	.08	.09							
4. Perceived efficacy of voice (T _{n-1})	4.75	.81	.11	.19*	.20**	(.97)					
5. Perceived efficacy of voice (T _n)	4.71	.73	.05	.18**	$.19^{*}$.45**	(.97)				
6. Perceived implementation rule clarity	4.84	.76	.13	.28**	$.17^{*}$.44**	.31**	(.91)			
7. Voice behavior	3.15	.73	.07	.18**	.07	.26**	.23**	.22**	(.94)		
Team-level Variables											
8. Leader openness	4.96	.47	.32	.22	.00	.45*	.43*	.17	.12	(.99)	
9. Team safety climate	5.24	.29	.20	.35*	.08	.02	.12	.09	.13	.58*	(.95)

Note: Team-level N = 32, Employee-level n = 249. Correlations between employee-level variables and team-level variables were calculated based on team-level aggregated scores. Cronbach's alpha coefficients were reported along the diagonal and were highlighted in bold.

^{*} *p* < .05

^{**} *p* < .01

Table 2. Multilevel Path Analysis Results

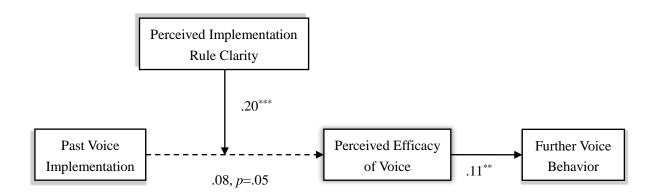
	Dependent Variables									
Predictors		Mode	el 1		Model 2					
		Perceived efficacy		Voice behavior		efficacy	Voice b	ehavior		
	of voice	(T1)			of voice	(T1)				
	В	SE	В	SE	В	SE	В	SE		
Organizational tenure	.01	.01	00	.01	.00	.01	00	.01		
Perceived efficacy of voice (T0)	.24***	.07			.22***	.06				
Other voicers' past voice implementation	.13	.08	02	.09	.12	.07	02	.09		
Past voice implementation (VI)	.08	.05	.11*	.05	.08	.05	.11*	.05		
Perceived implementation rule clarity (IRC)	.16*	.08	.15*	.07	.19**	.07	.16*	.08		
$VI \times IRC$.20***	.04	.03	.08		
Perceived efficacy of voice (T1)			.17**	.06			.11**	.05		
Leader openness			05	.17			04	.17		
Team safety climate			.35	.25			.35	.25		

 $\it Note$: Team-level N = 32, Individual-level n = 249. Unstandardized path coefficients were reported.

^{**} *p* < .01

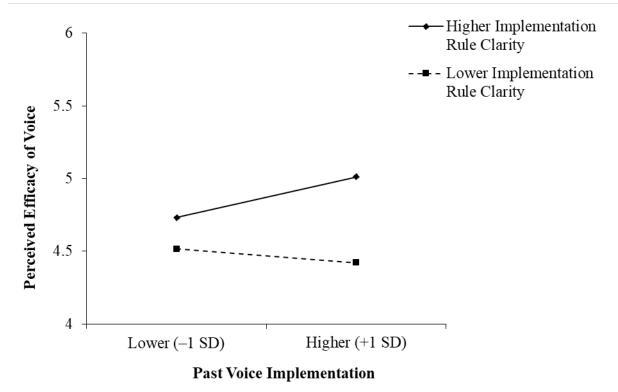
^{***} *p* < .001

Figure 1. Path Analyses Results



Notes: The unstandardized coefficients were reported.

Figure 2. The Moderating Effect of Perceived Implementation Rule Clarity



^{*} p < .05

^{**} *p* < .01

Hypothesis 4 suggested that perceived implementation rule clarity moderates the indirect relationship between past voice implementation and voice via perceived efficacy of voice. The results of Monte Carlo bootstrap simulation indicated that the indirect relationship between past voice implementation and voice via perceived efficacy of voice was stronger (difference = .03, 95% CI = [.003, .070]) when perceived implementation rule clarity was higher (indirect effect = .04, 95% CI = [.003, .080]) than when it was lower (indirect effect = .004, 95% CI = [-.013, .026]), supporting Hypothesis 4.

5.4 Supplementary Analyses

For exploratory purposes, I also conducted some supplementary analyses to examine the direct effect of other voicers' past voice implementation on perceived efficacy of voice, and the interactive effect of other voicers' past voice implementation and one's own past voice implementation on perceived efficacy of voice. Results showed that other voicers' past voice implementation was not significantly related to perceived efficacy of voice after controlling one's own past voice implementation ($\gamma = .10$, p = .22). But other voicers' past voice implementation marginally negatively moderated the relationship between one's own past voice implementation and perceived efficacy of voice ($\gamma = -.11$, p = .07), such that one's own past voice implementation was positively related to perceived efficacy of voice ($\gamma = .18$, p = .02) when others' past voice implementation was lower but not significant ($\gamma = .01$, p = .81) when others' past voice implementation was higher. That means, employees not only monitor their own voice outcomes but also process external comparative informational cues (i.e., the situations of peer voicers) to form efficacy beliefs—they gain more confidence and

efficacy benefits when they are "better off" than others. This finding is in line with the social comparison element of the social cognition process.

CHAPTER 6

DISCUSSIONS

6.1 Overview of the Results

By considering voice episodes in consecutive processes, I explored how past voice implementation influenced employee perceived efficacy of voice and further voice behavior. I found that not all voice implementation in past episodes produced efficacy benefits for the focal nurses. They experienced efficacy increase and conducted more consequent voice behavior only when they perceived leader's implementation rule as explicit and clear. Overall, these findings highlight the importance of considering leaders' specific behavior and behavior patterns in promoting employee perceived efficacy of voice and voice behavior.

6.2 Theoretical Implications

The findings in this thesis offer several important theoretical contributions to literature. Firstly, this thesis unveils the dynamic nature of perceived efficacy of voice which varies following leaders' voice treatments. The few extant studies have predominantly investigated perceived efficacy of voice at the individual level and identified its relatively stable personal or situational predictors (Duan et al., 2014; Wei et al., 2015). Although some scholars have discussed the possible efficacy variances following leaders' voice episodes (Morrison, 2011, 2014), little empirical studies have been conducted to investigate changes of efficacy following leaders' different treatments towards varying voiced issues. The finding demonstrates that employees' perceived efficacy has its roots in leaders' prior implementation treatments. If leaders can take employee's voice successfully into action and let him/her know clearly what criteria they rely on, employees will experience much efficacy benefits

and engage in more voice behavior in the future.

Secondly, this thesis contributes to voice literature by exploring the role of leaders' specific behavior and behavioral pattern in shaping employee perceived efficacy of voice. Although previous voice literature always highlighted the benefits of leader openness-fostering behavior (i.e., Detert & Burris, 2007; Lebel, 2016), systematic theory building and testing about the effect of leaders' specific behavior is rare (Morrison, 2011). I responded to Morrison's (2011) call and advanced prior voice literature by providing empirical evidence of the interactive effect of leaders' specific voice treatment (i.e., voice implementation) and treatment pattern (i.e., perceived implementation rule clarity) on employee perceived efficacy of voice. The results suggest that some obvious openness-promoting behavior (i.e. voice implementation) may not always be helpful as expected in previous literature. Sometimes leaders' unconscious behavioral style (i.e., leaving their implementation rule obscure and unpredictable) may influence employee voice perception and stifle employees' engagement in voice in a subtle way (Locke & Anderson, 2010).

Thirdly, this thesis has theoretical implementations for social cognitive theory as well. Although social cognitive theory suggested the important role of situations in affecting the formation of efficacy beliefs (Bandura, 1997), few studies examined how different situational perceptions may affect the efficacy gains from past performance in the real organizational settings. The scarcity of this train of research may be out of both the theoretical difficulty of abstracting situational characteristics and the empirical difficulty of choosing an appropriate context to test it. However, this omission is unfortunate, for efficacy formation process may be inhibited by some subtle situational cues in environment (Morrison, 2011). By proposing

the concept of perceived implementation rule clarity and examining its moderating effect in past voice implementation-efficacy relationship, I enriched social cognitive theory by considering situational complexity in employee efficacy formation process and verified that in real organizational settings (i.e., voice implementation process).

6.3 Practical Implications

This study provides significant implications for managers. The results suggest that voice episodes are not isolated with each other; rather, employees closely monitor how their voice was treated by leaders in previous episodes. One direct managerial implication is that, to encourage employees' constant input, leaders should carefully treat employee voice and take appropriate measures to address it. Furthermore, the conditional effect of past voice implementation on perceived efficacy of voice suggests that not all supportive treatment towards voice can always bring about efficacy benefits. For example, this thesis indicates that the focal employee gains significant efficacy benefits from past voice implementation only when he/she perceives leader's implementation rule as explicit and clear. So rather than merely putting noses to the grindstone to address voiced issues, leaders should also be very careful of their behavioral patterns. To ensure that their efforts bring about significant benefits, they should proactively learn some voice treatment and feedback skills to better shape employee agentic perceptions in this process. By doing so, they can expect employees' further voice engagement following their implementation reinforcement more confidently.

This study also has practical implications for organizations. Given voice management (i.e., pay attention and respond to employee voiced issues, take measures to put voice into action) goes beyond leaders' formal work requirements, organizations usually lack systematic

Instructions or guidance to leaders about how to treat employee voice in appropriate ways. This study suggests that, to cultivate employee efficacy beliefs, organizations should provide specific trainings (i.e., how to set unbiased implementation rules, how to communicate rules with employees in decision-making process, etc.) to train leaders/managers how to address voice appropriately, rather than only highlighting openness-fostering values. Organizations can also hold some seminars to introduce employees' common concerns regarding voice (Detert & Edmondson, 2011) to help leaders better understand employees' psychology. When leaders can better take perspectives of employees, they will be more competent and skillful to improve employees' cognitive beliefs towards voice.

6.4 Limitations and Future Directions

This study still has some limitations, which are informative for future studies. Firstly, all of the measures were employee self-reported. There are theoretical reasons to let employees report their perceived implementation rule clarity, past voice implementation and perceived efficacy of voice, as those measures were designed to capture employees' perceptions or evaluations. But for employee voice behavior, using leader-reported measures should be better to reduce common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). I did not do so as nurse managers in the samples supervised a large quantity of nurses (13.19 in average, and 35 in maximum) and addressed complex patient handoffs each day, it would be challenging to let them remember each nurse's voice behavior in last month. Thus, employee self-reported measures were used. Moreover, past voice implementation and perceived efficacy of voice were measured by voicers at the same time point, which will lead to common method bias. To reduce the causality concerns caused by this cross-sectional

design, I controlled perceived efficacy of voice in last month, which allowed us to investigate the changes of efficacy following implementation. Future researchers are encouraged to use different methods (i.e., experiments) to address common method bias and causality problems.

Moreover, this study only tested changes of employee perceived efficacy of voice following one piece of implementation reinforcement (i.e., one voice implementation episode). To thoroughly understand the regularities of variances of employee perceived efficacy, future research can adopt longitudinal designs to track efficacy changes following a series of reinforcements (Ployhart & Vandenberg, 2009). By doing so, researchers can deeply examine how different reinforcement patterns, sequences, or trends may make a difference in affecting the formation process of employee perceived efficacy of voice. Additionally, this research has taken the first step to examine the boundary conditions (i.e., perceived implementation rule clarity) of the effect of past voice outcomes on employee future cognition towards voice. Future research is expected to identify other potential moderating factors which may affect employee's agency perception and thus affect their efficacy benefits from achievements. This will provide insightful instructions for organization managers about how to address employee voice appropriately.

Furthermore, this thesis only focused on the role of mastery enactive experience in affecting employee perceived efficacy of voice. Although the supplementary analysis demonstrated that there was no significant vicarious learning effect, the other two main sources of efficacy beliefs (i.e., verbal persuasion, physiological and affective states) were not tested in this thesis. Future research is expected to test the effect of all these four sources of efficacy beliefs and relevant contingency factors. It is also well worth exploring how these

four sources of efficacy beliefs interact with each other to influence the formation of perceived efficacy of voice. At least with the current data set, I found the marginally significant interactive effect of direct voice experience (i.e., one's own past voice implementation) and vicarious voice experience (i.e., other voicers' past voice implementation) on perceived efficacy of voice, which support the social comparison tenets in social cognitive theory.

Lastly, the proposed model was tested only in health care context. Although healthcare is a rich context to investigate voice phenomena, there remains some generalizability concerns. One major problem in health care context is that the participants are predominantly females. It is not sure whether the same conclusions can be achieved in more gender-balanced contexts. For example, there may exist some gender differences in sensitivity to outcome effectiveness and relevant cues in environment (Eibl, Lang, & Niessen, 2020; Hora, Lemoine, Xu, & Shalley, 2020). Thus, future research is encouraged to replicate this study and further test these conjectures in different industries and contexts to expand external validity of this study.

6.5 Conclusion

Based on social cognitive theory, I posit and find that leaders' voice treatment (i.e. voice implementation) in past voice episodes play a great role in shaping employees' perceived efficacy of voice. Unlike previous research that focused on stable predictors of perceived efficacy of voice in current environment, I consider voice episodes in consecutive processes and explore how past voice implementation affect employees' consequent cognition and further voice behavior. The results show that not all voice implementation will

bring about efficacy benefits. They achieve so only when employees perceive leaders' implementation rule as clear and explicit. Overall, rather than broadly encouraging leaders/managers to take open-fostering behavior, the effect of their specific behavioral patterns warrant more research attention in the future.

APPENDICES

Appendix 1: Baseline survey and Time 4 survey Questionnaires (Chinese version)

医院谏言实施情况调研

[员工版]

尊敬的先生 / 女士:

您好!首先,衷心感谢您参与此次调研。此份调查问卷是由香港理工大学管理及市场学系和南京大学人力资源管理学系设计,旨在追踪研究医院情境下谏言实施的相关情况。我们在此向您承诺: 将对您提供的信息进行严格保密,所有资料只作科学研究,研究结果只展现综合数据,调查资料绝不会提交给医院领导或其他任何第三方。

研究结果的可信赖度取决于您对问题的认真和客观回答,请您填写此问卷时,细心阅读各项问题。答案没有对错之分,请真实地表达您的感受。每题必答。

下面是**问卷填答的局部示例**,正式填答问卷时,您只需要在相应的数字上打O或打√即可以下题项是对您工作状态的描述,请根据您对自己的真实感受选择 常 同 较 较 意 常最符合您真实状态的选项。请在最能代表您意见的数字上打圈。"1" 同 意 意

代表非常不同意,"6"代表非常同意

A2. 我善于实现工作中的想法

您如希望进一步了解研究结果,或您对此项研究有任何疑问和建议,请通过下列联系方式与我

意

意

们联系。

最后,再次对您的参与表示衷心的感谢!

	请阅读下列陈述,并判断在多大程度上这些陈述适用于 <u>您的直</u> <u>〔导(护士长)</u> ,并根据您的看法选择适当的数字。	非常不同意	同	较	比较同意	同意	非常同意
A1	我们护士长对于员工的建议持开放态度	1	2	3	4	5	6
A2	对于好的建议,我们护士长会认真地进行考虑	1	2	3	4	5	6
A3	我们提出的好建议会得到护士长公正的评估	1	2	3	4	5	6
	请阅读下列陈述,并判断在多大程度上这些陈述适用于 <u>您所</u> 1 <u>科室</u> ,并根据您的看法选择适当的数字。	非常不同意	不同意	比较不同意	比较同意		非常同意
B1	在我们科室,有很多书面的安全流程	1	2	3	4	5	6
B2	在我们科室,安全流程覆盖到所有工作相关问题	1	2	3	4	5	6
В3	在我们科室,安全流程是十分详细的	1	2	3	4	5	6
B4	在我们科室,安全流程广泛存在	1	2	3	4	5	6
C1	我们科室会将一些新的安全制度和规则告知员工	1	2	3	4	5	6
C2	我们科室会告知员工一些潜在的隐患	1	2	3	4	5	6
C3	在我们科室,有很多安全培训的项目	1	2	3	4	5	6

刘武 教授 贺伟 副教授

香港理工大学管理及市场学系 南京大学管理学系

4	5	6
4	3	0
4	5	6
4	5	6
4	5	6
4	_	6
4	5	0
4	5	6
4	5	6
	4 4 4	4 5 4 5 4 5 4 5

三、在你所在的护理团队中经常有护士提出改进工作流程和安全绩效的相关建议,这些建议在 提出后,有的被护士长妥善实施,有的则没有得到妥善实施(没有列入日程或被搁置)...

下列	陈述描述了领导在实施员工建言活动中所遵循的相关规律。根	非常	不同	比较	比较	同意	非常
据你的观察,请您判断以下陈述在多大程度上适用于你所在科室护			意	不	同		同
士长	对建言的实施情况,请根据实际情况选择合适的数字	同 意		同意	意		意
F1	护士长实施建言所遵循的规则是十分清楚的	1	2	3	4	5	6
F2	建言为何会得到护士长的实施是有规则可循的	1	2	3	4	5	6
F3	 护士长会遵循清晰的规则去实施员工所提的建言 	1	2	3	4	5	6

四、个人基本信息

1.	性别:	□男	□女			
2.	您的年龄:	岁;				
3.	教育程度:	□ 中专 (含高	中)及以下	□大专	□本科	□ 研究生及以上
4.	您在这个 行	业 工作了	年(如 6	5.5 年);您在	这家 医院 工作了_	年 (如 6.5

年);	
5. 您在这个 科室 工作了	年(如 3.5 年);您与您的 直接领导(护士长) 在一起工
作	
年 (如 6.5 年)。	

Appendix 2: Issue-based Implementation Questionnaire (Chinese version)

谏言	下属姓名:XXX						
谏	言 时 间:XXX						
谏	i 内容:XXX XXXXXXXX						
	建议提出后,请依据 <u>该建议在你们科室被实施的实际情况</u> ,对 陈述进行判断,并根据同意程度选择适当的数字。	非常不同意	不同意	比较不同意	比较同意	同意	非常同意
A1	这条建议已经在科室内得到进一步的落实	1	2	3	4	5	6
A2	这条建议已经被落实成有用的护理步骤或流程	1	2	3	4	5	6
A3	这条建议在科室内已经被成功地实施	1	2	3	4	5	6

Appendix 3: Monthly Employee Perceived Efficacy of Voice Questionnaires

	请阅读下列陈述,并判断在多大程度上这些陈述适用于 <u>您所在的</u> 科室,并根据您的看法选择适当的数字。		不同意	比较不同意	比较同意	同意	非常同意
B1	我相信如果我向护理团队提出安全改进建议的话,会得到重视	1	2	3	4	5	6
В2	我相信如果我向护理团队提出有益的工作建议的话,会得到重视	1	2	3	4	5	6
В3	我相信如果我向护理团队提出改善工作流程的建议的话,会得到重视	1	2	3	4	5	6
C1	我相信如果我向护理团队指出影响安全的事项,会得到重视	1	2	3	4	5	6
C2	我相信如果我向护理团队指出存在的工作问题,会得到重视	1	2	3	4	5	6

C3	 我相信如果我向护理团队指出工作流程上的盲区,会得到 	重	1	2	3	4	5	6
C3	视		•	2	3	•	J	U

REFERENCE

- Ajzen, I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.
- Armenakis, A. A. & Bedeian, A. G. 1999. Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25: 293-315.
- Baer, M. 2012. Putting creativity to work: The implementation of creative ideas in organizations. *Academy of Management Journal*, 55: 1102-1119.
- Bandura, A. 1997. Self-efficacy: The exercise of control. New York: Freeman.
- Bandura, A. 2001. Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52: 1-26.
- Bandura, A. 2006. Toward a psychology of human agency. *Perspectives on Psychological Science*, 1: 164-180.
- Biran, M. & Wilson, G. T. 1981. Treatment of phobic disorders using cognitive and exposure methods: A self-efficacy analysis. *Journal of Consulting and Clinical Psychology*, 49: 886-899.
- Bolino, M. C., Harvey, J., & Bachrach, D. G. 2012. A self-regulation approach to understanding citizenship behavior in organizations. *Organizational Behavior and Human Decision Processes*, 119: 126-139.
- Burris, E. R. 2012. The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of Management Journal*, 55: 851-875.
- Chamberlin, M., Newton, D. W., & Lepine, J. A. 2017. A meta-analysis of voice and its promotive and prohibitive forms: Identification of key associations, distinctions, and

- future research directions. *Personnel Psychology*, 70: 11-71.
- Dawson, J. F. & Richter, A. W. 2006. Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology*, 91: 917-926.
- Detert, J. R. & Burris, E. R. 2007. Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50: 869-884.
- Detert, J. R. & Treviño, L. K. 2010. Speaking up to higher-ups: How supervisors and skip-level leaders influence employee voice. *Organization Science*, 21: 249-270.
- Detert, J. R. & Edmondson, A. C. 2011. Implicit voice theories: Taken-for-granted rules of self-censorship at work. *Academy of Management Journal*, 54: 461-488.
- Duan, J., Kwan, H. K., & Ling, B. 2014. The role of voice efficacy in the formation of voice behaviour: A cross-level examination. *Journal of Management and Organization*, 20: 526-543.
- Dutton, J. E. & Ashford, S. J. 1993. Selling issues to top management. *Academy of Management Review*, 18: 397-428.
- Edmondson, A. C. 2003. Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40: 1419-1452.
- Eibl, B., Lang, F. R., & Niessen, C. 2020. Employee voice at work: The role of employees' gender, self-efficacy beliefs, and leadership. *European Journal of Work and Organizational Psychology*, 29: 570-585.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. 1990. Perceived organizational support and

- employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75: 51-59.
- Enders, C. K. & Tofighi, D. 2007. Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods*, 12: 121-138.
- Erez, A., Lepine, J. A., & Elms, H. 2002. Effects of rotated leadership and peer evaluation on the functioning and effectiveness of self-managed teams: A quasi-experiment.

 Personnel Psychology, 55: 929-948.
- Fast, N. J., Burris, E. R., & Bartel, C. A. 2014. Managing to stay in the dark: Managerial self-efficacy, ego defensiveness, and the aversion to employee voice. *Academy of Management Journal*, 57: 1013-1034.
- Feltz, D. L., Landers, D. M., & Raeder, U. 1979. Enhancing self-efficacy in high-avoidance motor tasks: A comparison of modeling techniques. *Journal of Sport and Exercise**Psychology*, 1: 112-122.
- Floyd, S. W. & Wooldridge., B. 1996. *The strategic middle manager: How to create and sustain competitive advantage*. San Francisco, Calif.: Jossey-Bass Publishers.
- Frazier, M. L. & Fainshmidt, S. 2012. Voice climate, work outcomes, and the mediating role of psychological empowerment: A multilevel examination. *Group & Organization Management*, 37: 691-715.
- Frese, M. & Fay, D. 2001. 4. Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, 23: 133-187.
- Gist, M. E., Schwoerer, C., & Rosen, B. 1989. Effects of alternative training methods on self-efficacy and performance in computer software training. *Journal of applied*

- psychology, 74: 884-891.
- Gong, Y., Huang, J.-C., & Farh, J.-L. 2009. Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of management Journal*, 52: 765-778.
- He, W., Han, Y., Hu, X., Liu, W., Yang, B., & Chen, H. 2019. From idea endorsement to idea implementation: A multilevel social network approach toward managerial voice implementation. *Human Relations*, 73: 1563-1582.
- Helmreich, R. L. & Merritt, A. C. 1998. *Culture at work: National, organizational, and professional influences*. Aldershot, England: Ashagete.
- Hofmann, D. A., Griffin, M. A., & Gavin, M. B. 2000. The application of hierarchical linear modeling to organizational research. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions.*: 467-511. San Francisco, CA, US: Jossey-Bass.
- Hora, S., Lemoine, G. J., Xu, N., & Shalley, C. E. 2020. Unlocking and closing the gender gap in creative performance: A multilevel model. *Journal of Organizational***Behavior*, n/a.
- Howell, T. M., Harrison, D. A., Burris, E. R., & Detert, J. R. 2015. Who gets credit for input?

 Demographic and structural status cues in voice recognition. *Journal of Applied Psychology*, 100: 1765-1784.
- Joseph, J. & Gaba, V. 2015. The fog of feedback: Ambiguity and firm responses to multiple aspiration levels. *Strategic Management Journal*, 36: 1960-1978.
- Keck, S. & Babcock, L. 2018. Who gets the benefit of the doubt? The impact of causal

- reasoning depth on how violations of gender stereotypes are evaluated. *Journal of Organizational Behavior*, 39: 276-291.
- King, A. W. & Zeithaml, C. P. 2001. Competencies and firm performance: Examining the causal ambiguity paradox. *Strategic Management Journal*, 22: 75-99.
- Konlechner, S. & Ambrosini, V. 2019. Issues and trends in causal ambiguity research: A review and assessment. *Journal of Management*, 45: 2352-2386.
- Kotter, J. P. 2009. Leading change: Why transformation efforts fail. *IEEE Engineering Management Review*, 37: 42-48.
- Lam, C. F. & Mayer, D. M. 2014. When do employees speak up for their customers? A model of voice in a customer service context. *Personnel Psychology*, 67: 637-666.
- Lam, C. F., Lee, C., & Sui, Y. 2019. Say it as it is: Consequences of voice directness, voice politeness, and voicer credibility on voice endorsement. *Journal of Applied**Psychology, 104: 642-658.
- Lasko, A. A. 1952. *The development of expectancies under conditions of patterning and differential**reinforcement*. The Ohio state University.
- Lebel, R. D. 2016. Overcoming the fear factor: How perceptions of supervisor openness lead employees to speak up when fearing external threat. *Organizational Behavior and Human Decision Processes*, 135: 10-21.
- Lewin, K. 1947. Frontiers in group dynamics: Ii. Channels of group life; social planning and action research. *Human Relations*, 1: 143-153.
- Liang, J., Farh, C. I. C., & Farh, J.-L. 2012. Psychological antecedents of promotive and prohibitive voice: A two-wave examination. *Academy of Management Journal*, 55:

- Liao, H., Liu, D., & Loi, R. 2010. Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. *Academy of Management Journal*, 53: 1090-1109.
- Lippman, S. A. & Rumelt, R. P. 1982. Uncertain imitability: An analysis of interfirm differences in efficiency under competition. *The Bell Journal of Economics*, 13: 418-438.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. 2002. To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling:*A Multidisciplinary Journal, 9: 151-173.
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. 2013. Why the items versus parcels controversy needn't be one. *Psychological Methods*, 18: 285-300.
- Locke, C. C. & Anderson, C. 2010. The downside of looking like a leader: Leaders' powerful demeanor stifles follower voice in participative decision-making. *Academy of Management Proceedings*, 2010: 1-6.
- MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. 2011. Challenge-oriented organizational citizenship behaviors and organizational effectiveness: Do challenge-oriented behaviors really have an impact on the organization's bottom line? *Personnel Psychology*, 64: 559-592.
- Methot, J. R., Lepak, D., Shipp, A. J., & Boswell, W. R. 2017. Good citizen interrupted:

 Calibrating a temporal theory of citizenship behavior. *Academy of Management Review*, 42: 10-31.

- Miceli, M. P. & Near, J. P. 1992. *Blowing the whistle: The organizational and legal implications for companies and employees*: Lexington Books.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. 2003. An exploratory study of employee silence: Issues that employees don't communicate upward and why*. *Journal of Management Studies*, 40: 1453-1476.
- Morrison, E. W. & Milliken, F. J. 2000. Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review*, 25: 706-725.
- Morrison, E. W. 2011. Employee voice behavior: Integration and directions for future research. *Academy of Management Annals*, 5: 373-412.
- Morrison, E. W. 2014. Employee voice and silence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1: 173-197.
- Muthén, L. K. & Muthén, B. O. 1998–2017. *Mplus user's guide* (Eighth ed.). Los Angeles, CA: Muthén & Muthén.
- Nemeth, C. J. 1997. Managing innovation: When less is more. *California Management Review*, 40: 59-74.
- Ng, T. W. & Lucianetti, L. 2016. Within-individual increases in innovative behavior and creative, persuasion, and change self-efficacy over time: A social–cognitive theory perspective. *Journal of Applied Psychology*, 101: 14-34.
- Organ, D. W. 1988. *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA, England: Lexington Books/D. C. Heath and Com.
- Phares, E. J. 1957. Expectancy changes in skill and chance situations. *The Journal of Abnormal and Social Psychology*, 54: 339-342.

- Ployhart, R. E. & Vandenberg, R. J. 2009. Longitudinal research: The theory, design, and analysis of change. *Journal of Management*, 36: 94-120.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63: 539-569.
- Powell, T. C., Lovallo, D., & Caringal, C. 2006. Causal ambiguity, management perception, and firm performance. *Academy of Management Review*, 31: 175-196.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. 2007. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42: 185-227.
- Preacher, K. J., Zyphur, M. J., & Zhang, Z. 2010. A general multilevel sem framework for assessing multilevel mediation. *Psychological Methods*, 15: 209-233.
- Rotter, J. B. 1954. *Social learning and clinical psychology*. Englewood Cliffs, NJ: Prentice-Hall.
- Satterstrom, P., Kerrissey, M., & DiBenigno, J. 2020. The voice cultivation process: How team members can help upward voice live on to implementation. *Administrative***Science Quarterly: Advance Online Publication.
- Selig, J. P. & Preacher, K. J. 2008. Monte carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [computer software]: Retrieved from http://quantpsy.org.
- Tangirala, S. & Ramanujam, R. 2008. Exploring nonlinearity in employee voice: The effects of personal control and organizational identification. *Academy of Management*

- Journal, 51: 1189-1203.
- Tangirala, S. & Ramanujam, R. 2012. Ask and you shall hear (but not always): Examining the relationship between manager consultation and employee voice. Relationship between manager consultation and employee voice. *Personnel Psychology*, 65: 251-282.
- Van Dyne, L., Cummings, L., & Parks, J. M. 1995. Extra role behaviors: In pursuit of construct and definitional clarity. In B. M. Staw & L. L. Curamings (Eds.), *Research* in organizational behavior, vol. 17: 215-285. Greenwich, CT: JAI.
- Van Dyne, L. & LePine, J. A. 1998. Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41: 108-119.
- Van Dyne, L., Ang, S., & Botero, I. C. 2003. Conceptualizing employee silence and employee voice as multidimensional constructs*. *Journal of Management Studies*, 40: 1359-1392.
- Venkataramani, V. & Tangirala, S. 2010. When and why do central employees speak up? An examination of mediating and moderating variables. *Journal of Applied Psychology*, 95: 582-591.
- Vroom, V. H. 1964. Work and motivation. New York, NY: Wiley & Sons.
- Wei, X., Zhang, Z.-X., & Chen, X.-P. 2015. I will speak up if my voice is socially desirable:

 A moderated mediating process of promotive versus prohibitive voice. *Journal of Applied Psychology*, 100: 1641-1652.
- Weick, K. E. & Sutcliffe, K. M. 2001. *Managing the unexpected: Assuring high*performance in an age of complexity. San Francisco, CA: Jossey-Bass.
- Whiting, S. W., Maynes, T. D., Podsakoff, N. P., & Podsakoff, P. M. 2012. Effects of

message, source, and context on evaluations of employee voice behavior. *Journal of Applied Psychology*, 97: 159-182.

Withey, M. J. & Cooper, W. H. 1989. Predicting exit, voice, loyalty, and neglect.

Administrative Science Quarterly, 4: 521-539.