

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

ABSTRACT

Although efficacy judgment has been recognized as one key factor leading to employee voice behavior, we still know little about how to help enhance employee perceived efficacy of voice. Based on social cognitive theory, we 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. We 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. We collected data from 32 health care teams in a hospital in China, by tracking nurses' voice proposed in monthly team meetings and their efficacy following leaders' voice implementation. We found 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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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. Although not directly testing perceived efficacy of voice, several scholars have also proposed some efficacy-related cognitions (i.e., personal control, Frese & Fay, 2001; Tangirala & Ramanujam, 2008; Tangirala & Ramanujam, 2012) to predict employee voice and identified various contextual factors that can help predict those efficacy-related perceptions (Frazier & Fainshmidt, 2012; Lam & Mayer, 2014; Tangirala & Ramanujam, 2008, 2012; Venkataramani &

Tangirala, 2010). By identifying these relatively stable antecedents of efficacy beliefs regarding voice, this line of research has provided valuable insights into why some employees have higher/lower perceived efficacy than others. 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 have its roots in leaders' prior treatments (Morrison, 2011, 2014). Few studies, however, have empirically tested the possible fluctuations of employee perceived efficacy of voice following leader different treatments on varying issues. Consequently, we still know little about how more fluctuating issue-based factor, like *past voice implementation* (i.e., the extent to which the focal employee's voiced issues in last voice episode were taken into action by leader, Baer, 2012; He, Han, Hu, Liu, Yang, & Chen, 2019; Satterstrom, Kerrissey, & DiBenigno, 2020), influence the focal employee's perceived efficacy of voice and their further voice behavior.

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. Satisfied experience can act as one

reason for believing the possible efficacy of action (Milliken et al., 2003; Withey & Cooper, 1989). 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, we 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 paper is to examine whether past voice implementation influences employee perceived efficacy of voice by considering voice episodes in consecutive processes. Specifically, we 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, we 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, we 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, we 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 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), which further affect employees' agency perception generated from past voice implementation. We propose that, only when employees perceive leader implementation rule clarity as clear and explicit, they can get better efficacy benefits from past voice implementation.

By conducting this research, we 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' specific voice treatments which vary on different issues. By considering issue-based voice episodes in consecutive processes, our 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. 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), we advance 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, we unveil the important boundary conditions of the assumed effect. Moreover, 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, we enrich social cognitive literature by considering situational complexity in employee efficacy formation process.

THEORY AND HYPOTHESES

Social-Cognitive Theory Perspective on Voice Behavior

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.

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, we apply social cognitive theory to theorize how past voice implementation affect employee voice through perceived efficacy of voice. Moreover, we further explore when past voice implementation can provide better efficacy implications for employee by considering more situational cues. Specifically, we identify the moderating role of perceived

implementation rule clarity in the past voice implementation—perceived efficacy of voice—further voice behavior link.

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 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.

Past voice implementation demonstrates 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 implementation results 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. Thus, we expect past voice implementation provides employees with much efficacy implications. We propose that, when past voice implementation is high, employees will have a more positive efficacy evaluation regarding voice.

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

The Mediating Role of Perceived Efficacy of Voice

As we 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 motivated 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 paper. 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, we further propose a mediating role of perceived efficacy of voice in the relationship between past voice implementation and employee voice behavior. We 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 provide direct

capabilities related information that one can successfully 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, we propose the following hypotheses:

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

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 perceived 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, we 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). We propose that although the final implementation decisions and outcomes are determined by leaders, whether the focal employee has access to leaders' 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, we expect that

employees will experience less efficacy increases from past implementation. Based on the above reasoning, we 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, we 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 we predict strong (weak) linkages between past voice implementation and employee perceived efficacy of voice when perceived implementation rule clarity is high (low), we 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).

METHOD

Sample and Procedures

We collected survey data from 32 health care teams at a hospital in mainland China. We chose the healthcare context to test our 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 took charge of daily safety management work in his/her team. 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 data collection work, our research team first visited each healthcare team and met the participants personally to help them better understand our research purpose and procedures as well as to get their approval and support. One month before formally tracking conference, all participants were asked to fill in a general questionnaire (including democratic

variables, baseline level of perceived efficacy of voice, and some controls, like leader openness and team safety climate). In the safety management and control conference at the end of each month (T0), voice from nurses was recorded and would be used for the following survey. One month after voice was proposed and before the next conference (T1), those voicers were asked to evaluate voice implementation status and their perceived efficacy of voice. Another month later (T2), employee's voice behavior in last month (the interval between T1 and T2) was measured. To get enough voice samples, the above procedures were repeated for three times. Time intervals between each survey (from T0—T5) were controlled as one month. Perceived implementation rule clarity was measured in the fourth nurses' survey (T4).

Finally, we recorded 263 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 we 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, we averaged the voice implementation scores rated by the same nurse and got mean scores of voice implementation at the individual level. In our final sample, 98.3 percent of 249 voicers were women. The predominance of women in our sample is not uncommon for nursing workforce. 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 ($SD = 5.86$).

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 six-item scale developed for this study (Morrison, 2011, 2014; Morrison & Milliken, 2000). Voice providers were asked to respond to this scale both in 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 by our nurse manager”.

Further Voice behavior. Further 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. We 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 characteristics 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, we included leader openness and team safety climate as 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. We also 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.

Analytical Approach

Given the nested structure of our data (nurses are nested in different health care teams), we tested our hypotheses using multilevel path analysis in Mplus 8.3 (Muthén & Muthén, 1998–

2017). Following prior recommendations (Enders & Tofghi, 2007; Hofmann, Griffin, & Gavin, 2000), we group-mean centered our individual level predictors to obtain an unbiased estimate of level-1 relationship. Specifically, we followed typical practice in multilevel modeling and group-mean exogenous variable (Preacher, Zyphur, & Zhang, 2010)—past voice implementation, implementation rule clarity and level 1 control factor (i.e. perceived efficacy of voice, T0). In the meanwhile, team-level control variables (i.e., leader openness and team safety climate) were grand-mean centered. We modelled all individual-level hypothesized effects with fixed slopes to reduce model complexity. To examine the moderating effects and conditional indirect effects, we adopted a Monte Carlo bootstrap method with 20,000 replications at high and low levels of perceived implementation rule ambiguity (Selig & Preacher, 2008).

RESULTS

We 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, we 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, $\chi^2(38) = 94.24$; CFI = .96; TLI = .94; RMSEA = .08, and it was better than a

three-factor model that combined past voice implementation and perceived efficacy of voice ($\chi^2(41) = 602.29$; CFI = .60; TLI = .50; RMSEA = .23; The Satorra-Bentler scaled chi-square difference = 126.98, $\Delta df = 3$, $p < .001$). These results supported the construct distinctiveness of our variables.

Insert Table 1, Figure 1 and Table 2 about here

Table 1 reports the means, standards deviations, and correlations of all our variables. Figure 1 shows 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) ($\beta = .05$, $p > .05$), rejecting Hypothesis 1. From Table 2, we can find that employee perceived efficacy of voice was positively related to further voice behavior, even when leader openness and team safety climate were controlled ($\beta = .14$, $p < .05$). Hypothesis 2 proposed the mediating role of perceived efficacy of voice in the relationship between past voice implementation and employee further voice behavior. Monte Carlo bootstrapping results suggested that the indirect effect of past voice implementation on employee further voice behavior via perceived efficacy of voice was not significant (95 % CI = $[-.008, .024]$), rejecting Hypothesis 2.

Insert Figure 2 about here

Hypothesis 3 proposed the moderating role of perceived implementation rule clarity in the relationship between past voice implementation and perceived efficacy of voice. As we predicted, the interactive effect of past voice implementation and perceived implementation rule clarity on perceived efficacy of voice was significant ($\beta = .15, p < .001$). We plotted this interactive effect in Figure 2. Moreover, following the suggestion of Dawson and Richter (2006), we tested the simple slopes. Results suggested that past voice implementation was positively related to perceived efficacy of voice ($\beta = .21, p < .001$) when perceived implementation rule clarity was higher but not significant ($\beta = -.08, p > .05$) when perceived implementation rule clarity was lower. Thus, Hypothesis 3 was supported. Hypothesis 4 suggested that perceived implementation rule clarity moderated 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 further voice behavior via perceived efficacy of voice was stronger (*difference* = .030, 95% CI = [.004, .065]) when perceived implementation rule clarity was higher (*indirect effect* = .024, 95% CI = [.003, .049]) than when it was lower (*indirect effect* = .007, 95% CI = [.023, .005]), supporting Hypothesis 4.

DISCUSSIONS

Based on social cognitive theory, we explored how past voice implementation influenced employee perceived efficacy of voice and further voice behavior. We 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 the role of leaders' specific behavior and behavioral patterns in promoting employee perceived efficacy of voice and voice behavior.

Theoretical Implications

Our findings offer several important theoretical contributions to literature. Firstly, this paper 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 variances of perceived efficacy following different voice experiences (Morrison, 2011, 2014), little empirical studies have been conducted to investigate changes of efficacy following leaders' specific voice treatments which vary on different issues. Our findings demonstrate 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 paper 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). We 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. Our 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 perceptions and stifle employees' engagement in voice in a subtle way (Locke & Anderson, 2010).

Thirdly, our paper has theoretical implications 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, we 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).

Practical Implications

Our study provides significant implications for managers. Our results suggest that voice episodes are not isolated with each other; rather, employees closely monitor how their voiced issues were 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, our paper 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.

Our 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. Our 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 teach 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.

Limitations and Future Directions

Our study still has some limitations, which are informative for future studies. Firstly, all of our 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). We did not do so as nurse managers in our samples supervised a large quantity of nurses (13.19 in average, and 35 in maximum) and addressed complex patient handoffs each day, and 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 at the same time point. To reduce the causality concerns caused by this cross-sectional design, we 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, our 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, our 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 our study and further test these conjectures in different industries and contexts to expand external validity of our study.

CONCLUSION

Based on social cognitive theory, we 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, we consider voice episodes in consecutive processes and explore how past voice implementation affect employees' consequent cognition and further voice behavior. Our 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.

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Table 1*Means, Standard Deviations, and Correlations among Variables*

Variables	M	SD	1	2	3	4	5	6	7
<i>Individual-level Variables</i>									
1. Past voice implementation	5.05	.91	(.94)						
2. Perceived efficacy of voice (T0)	4.75	.81	.13*	(.97)					
3. Perceived efficacy of voice (T1)	4.71	.73	.12	.37**	(.97)				
4. Perceived implementation rule clarity	4.84	.76	.22**	.37**	.23**	(.91)			
5. Further Voice behavior	3.16	.74	.11	.16*	.06	.12	(.94)		
<i>Team-level Variables</i>									
6. Leader openness	4.96	.47	.22	.45*	.43*	.17	.17	(.95)	
7. Team safety climate	5.24	.29	.35*	.02	.12	.09	.23**	.68*	(.99)

Note: Team-level N = 32, Employee-level n = 249. Correlations among employee-level variables were calculated by group-mean centered scores and 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.

* $p < .05$

** $p < .01$

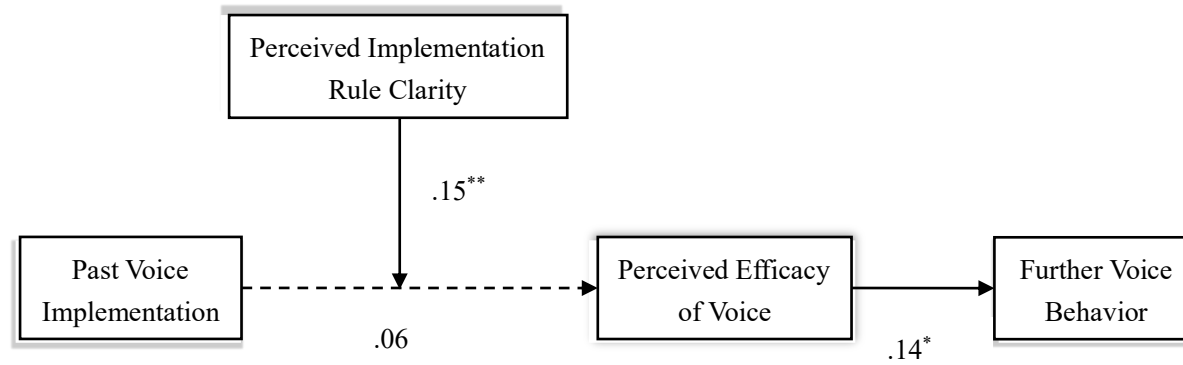
Table 2*Multilevel Path Analysis Results*

Predictors	Dependent Variables							
	Model 1				Model 2			
	Perceived efficacy of voice (T1)		Further Voice behavior		Perceived efficacy of voice (T1)		Further Voice behavior	
	B	SE	B	SE	B	SE	B	SE
Perceived efficacy of voice (T0)	.32***	.07			.26**	.08		
Past voice implementation (VI)	.05	.05	.09	.08	.06	.04	.09	.08
Perceived implementation rule clarity (IRC)	.12	.09	.06	.11	.18	.11	.06	.10
VI × IRC					.15**	.05	.00	.09
Perceived efficacy of voice (T1)			.14*	.07			.14*	.07
Leader openness			.07	.17			.07	.17
Team safety climate			.40	.21			.40*	.23

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

** $p < .01$

*** $p < .001$

Figure 1*Path Analyses Results*

Notes: Unstandardized coefficients were reported.

* $p < .05$

** $p < .01$

Figure 2

The Moderating Effect of Perceived Implementation Rule Clarity

