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ABSTRACT

We theorized and examined a Pygmalion perspective beyond those proposed in past studies in the relationship between transformational leadership and employee voice behavior. Specifically, we proposed that transformational leadership influences employee voice through leaders' voice expectation and employees' voice role perception (i.e., Pygmalion mechanism). We also theorized that personal identification with transformational leaders influences the extent to which employees internalize leaders' external voice expectation as their own voice role perception. In a time-lagged field study, we found that leaders' voice expectation and employees' voice role perception (i.e., the Pygmalion process) mediate the relationship between transformational leadership and voice behavior. In addition, we found transformational leadership strengthens employees' personal identification with the leader, which in turn, as a moderator, amplifies the proposed Pygmalion process. Theoretical and practical implications are discussed.

INTRODUCTION

Employee voice refers to informal, discretionary, and upward communication by an employee of ideas, solutions, or concerns about work-related problems (LePine & Van Dyne, 1998; Morrison, 2014). It is a type of proactive work behavior that aims to improve the status quo (Parker & Collins, 2010). Employees' voice behavior has been positively linked to desirable outcomes such as individual job performance and work unit or organizational effectiveness (e.g., Kim, MacDuffie, & Pil, 2010; Frazier & Bowler, 2015; Lam & Mayer, 2014; Ng & Feldman, 2012; Whiting, Podsakoff, & Pierce, 2008). Because of the potential benefits of voice, scholars have turned their attention to promoting voice behavior in organizations (see Morrison, 2011, 2014 for a review). As leaders are usually the target for voice and their attitudes and behavior directly shapes employees' willingness to speak up (Morrison, 2014), leadership has been identified as an important factor that largely determines employees' voice behavior. In particular, transformational leadership that involves developing, supporting, and intellectually stimulating employees to strive for a shared vision of the future (Kark & Shamir, 2002; Podsakoff, MacKenzie, Moorman, & Fetter, 1990) has been theorized and reported as an important antecedent of employees' voice behavior (e.g., Detert & Burris, 2007; Liu, Zhu, & Yang, 2010).

The link between transformational leadership and employees' voice behavior has been examined from a cost-benefit analysis perspective and a self-concept perspective. As speaking up could bring negative personal consequences, such as jeopardized relationship and less chance of promotion (Detert & Edmondson, 2011; Seibert, Kraimer, & Crant, 2001), engaging in voice can be risky. Based on a cost-benefit analysis perspective, Detert and Burris (2007) indicated that transformational leaders are more likely to cultivate employees' psychological safety, or a belief that engaging in risk-taking behaviors will not lead to personal harms (Edmondson, 1999; Liang,

Farh, & Farh, 2012), which alleviates negative concerns about speaking up and thus motivates employees' voice behavior. From a self-concept perspective (van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004; Walumbwa, Avolio, & Zhu, 2008), Liu and colleagues (2010) indicate that transformational leaders are more likely to evoke employees' identification with the leader personally (i.e., personal identification, the extent to which the followers' beliefs about a leader become self-defining; Kark, Shamir, & Chen, 2003) and build a strong relational self that motivates employees to speak up. From this perspective, the relational link between employees and transformational leaders is the key to employees' voice behavior. However, these two perspectives only consider external reasons (i.e., consequences of voice or the relational link between employees and transformational leaders) but ignore internal reasons why transformational leadership could motivate employees' voice behavior. Morrison (2014) has suggested that internal reasons that drive employees to engage in voice within their work roles should be given central attention and not taken as a given in the voice process. As transformational leaders can influence followers' beliefs, values, and aims (e.g., Bass, 1985; Howell & Avolio, 1993; Podsakoff et al., 1990), it is very likely that they strengthen followers' internal commitment to take challenges and devote effort to bringing about changes (Parker, Bindl, & Strauss, 2010; Parker & Wu, 2014), such as by making constructive suggestions.

In this study, we draw on Pygmalion theory (Eden, 1984, 1990; Livingston, 2003) and propose that transformational leaders can motivate employees' voice behavior via the Pygmalion process through which employees internalize leaders' expectation about their work roles. We propose that transformational leaders are more likely to send an expectation of voice to followers (i.e., leaders' voice expectation), which strengthens followers' voice role perception (the extent to which employees view and classify voice behaviors as in-role; Van Dyne, Kamdar, &

Joireman, 2008), and thus voice behavior. This Pygmalion process is likely to be operated to shape voice behavior because the Pygmalion effect is pronounced when desired performance or behaviors involve a high degree of uncertainty and risk (e.g., Tierney & Farmer, 2004) such as voice behavior (Burris, 2012; Morrison, 2011).

Pygmalion theory (Karakowsky, DeGama, & McBey 2012; White & Locke, 2000) also indicates that followers are not passive recipients of leaders' expectations but active agents who can determine whether they will accept and internalize leaders' expectations. As White and Locke (2000) suggested, "Pygmalion effect may not be due to just the actions and behaviors of the leaders, but rather to an interaction between the leader and the followers" (p. 400). Thus, important factors that will determine followers' internalization of leaders' expectations are followers' perceptions of their leader such as attitude towards the leader, trust in the leader, and affection for the leader. These factors will impact followers' interpretation and internalization of leader expectations and determine the emergence of the Pygmalion effect. Because followers tend to perceive transformational leaders as role models and identify with the leaders by incorporating their characteristics (e.g., values, beliefs, attitudes) as part of their self-concept (i.e., personal identification; Kark et al., 2003; Liu et al., 2010), they will be willing to internalize and rely on leaders' expectation to define their work role. In other words, we suggest that transformational leadership can strengthen followers' personal identification, which in turn enhances the association between leaders' voice expectation and followers' voice role perception and thus the aforementioned Pygmalion effect on employees' voice behavior. Overall, we propose that transformational leadership can promote employees' voice behavior by *evoking* the Pygmalion process via setting voice expectations and *strengthening* the process via establishing followers' personal identification. Figure 1 illustrates the proposed moderated mediation model.

Our investigation brings a number of unique contributions to the research on both voice behavior and the Pygmalion effect. First, we extend previous voice research by identifying a different mechanism (i.e., Pygmalion mechanism) linking transformational leadership and voice behavior. Specifically, we suggest that transformational leadership can influence employee voice by triggering a Pygmalion process that strengthens internal motivation for speaking up. Our study thus responds to the call for more research on leader-related mechanisms for voice (Grant & Ashford, 2008; Morrison, 2014). Second, we identify antecedents of employees' voice role perception, which have been rarely explored. Our investigation suggests that leadership can be a means to shape employees' voice role perception and specifically indicates that transformational leaders and their voice expectations of followers can strengthen employees' voice role perception. Third, our investigation of the moderating effect of personal identification with leaders brings an alternative perspective to understand the function of personal identification with leaders in shaping employees' voice behavior or proactive behavior broadly. Personal identification with leaders, especially transformational leaders, has been linked to followers' dependence (Kark et al., 2003) and employees' voice behavior (Liu et al., 2010), rendering inconsistent findings on how personal identification could shape employees' proactivity at work. Our study helps to solve the puzzle by suggesting that while transformational leaders set up an expectation of being proactive, they also intensify followers' personal identification with themselves, which in turn strengthens followers' internalization of the expectation for proactivity. Fourth, our study extends applications of the Pygmalion mechanism to employees' organizational behavior. To date, the Pygmalion mechanism has been largely used to understand how leaders' expectation can facilitate employees' task performance (Kierein & Gold, 2000; McNatt, 2000; Whiteley, Sy, & Johnson, 2012). We suggest that such a mechanism can be more critical to employees' proactive,

challenge-oriented behavior that involves personal risks and is not part of the job requirement (e.g., Tierney & Farmer, 2004). Fifth, our focus on employees' voice role perception extends Pygmalion research by delineating how leaders' expectations can be translated into employees' behaviors via a role perception process. Previous research on the Pygmalion effect of leadership has paid less attention to the intervening mechanisms (Natanovich & Eden, 2008; Whiteley et al., 2012). Our research fills the gap by indicating how the Pygmalion effect could occur in a role perception process. Finally, as indicated by Karakowsky and associates (2012), prior research on the Pygmalion phenomenon might be overly simplistic because it assumed that managerial expectations always translate into better employee performance and that the target employees play passive roles in the Pygmalion process. Our investigation addresses this concern directly by suggesting that the Pygmalion effect can be contingent upon an individual's identification with the target who sets up the expectation and examining this proposition.

Insert Figure 1 about here

THEORY AND HYPOTHESES

Pygmalion Theory

The Pygmalion effect is a form of self-fulfilling prophecy that emphasizes the influence of positive expectations on enhancing performance and productivity (Ambady & Rosenthal, 1993). In management studies, manager expectancy and its positive effects on employee performance and productivity have been realized from a Pygmalion perspective (e.g., Carmeli & Schaubroeck, 2007; Farmer, Tierney, & Kung-Mcintyre, 2003; Qu, Janssen, & Shi, 2015; Tierney & Farmer, 2004, 2011). This is because "the very act of leadership – any leadership – is interpreted by the subordinate as an expression of manager expectancy" (Eden, 1984, p. 68) and leaders' positive expectations of their followers can be communicated, internalized, and

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ultimately translated into followers' high performance and productivity (e.g., Eden, 1984). A typical Pygmalion process in leadership starts with leaders' positive expectations, followed by effective communication of these expectations to employees and the development of the employees' self-expectations at work, by which enhanced employee performance is ultimately obtained (Eden, 1984; White & Locke, 2000). This Pygmalion process in leadership has been supported in meta-analytic studies (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009; Kierein & Gold, 2000; McNatt, 2000).

Nevertheless, having leaders' positive expectations may not be enough to induce a Pygmalion process because employees are active agents in accepting expectations from leaders or not (e.g., Johanson, 1999; Karakowsky et al., 2012; Sutton & Woodman, 1989; White & Locke, 2000). In other words, the extent to which employees internalize leaders' expectations determines the operation of the Pygmalion process and thus the Pygmalion effect (Eden, 1990, 1992). How followers perceive their leaders has been theorized as an important factor that will determine followers' internalization of leaders' expectations. For example, White and Locke (2000) suggested that a follower's positive attitude, affect, or belief towards their leader impacts the strength of the Pygmalion effect. Karakowsky and associates (2012) posited that when targeted followers perceive their leaders as being credible, benevolent, and capable, they are more likely to trust their leaders and willing to accept and internalize leaders' expectations. Taken together, the Pygmalion effect in a managerial context implies that if leaders expect more they get more because followers behave in accordance with the expectations leaders maintain for them; moreover, the Pygmalion effect will be enhanced for leaders who are well received among followers.

Drawing on Pygmalion theory, we propose that transformational leadership will influence

employee voice behavior through leaders' voice expectation and employees' voice role perception. We also propose that transformational leadership will shape how employees perceive their leaders in defining themselves and evoke stronger personal identification from employees, which in turn strengthens the link between leaders' voice expectation and employees' voice role perception. We now turn to an elaboration of our proposed research model.

Transformational Leadership and Leaders' Voice Expectation

Transformational leadership is characterized as developing, intellectually stimulating, and inspiring followers to transcend their self-interests for a collective purpose of vision (Podsakoff et al., 1990). There are clear ties between transformational leadership and the Pygmalion effect in a managerial context (Eden, 1992; White & Locke, 2000). Theoretically, transformational leaders deliberately project confidence in the abilities of followers and inspire them to pursue a better future (Bass, 1985, 1999). Transformational leadership theories have recognized the importance of high leader expectations in motivating followers, and leaders of this type can effectively use the Pygmalion effect as a means of facilitating a more effective leadership process (Eden, 1992; Podsakoff et al., 1990). We have several reasons to argue that voice expectation could be embedded in specific transformational leader behaviors. First, as transformational leaders are future-oriented, they tend to intellectually challenge followers' perspectives and assumptions about work (Podsakoff et al., 1990) and expect followers to provide alternative views to understand the work situation. Second, by articulating the problems in the current organization and advocating possible changes to solve problems (Bass, 1999), transformational leaders will heighten followers' awareness of change-oriented goals and expect followers to offer constructive solutions or suggestions to advance the development of the organization. Third, while emphasizing the collective good of the group and organization (Bass & Avolio, 1994),

transformational leaders will expect followers to focus on collective benefit and regulate their effort and behavior accordingly, such as making recommendations regarding issues that can influence the entire work group. Moreover, as transformational leaders demonstrate individualized consideration and are willing to listen to followers' concerns and can behave flexibly to match the needs of specific individuals (e.g., Kark & Shamir, 2002; Wu, Tsui, Kinicki, 2010), those leaders will also expect followers to express their concerns and opinions. As such, we suggest that transformational leaders are more likely to hold strong voice expectations of their followers:

H1: Transformational leadership will be positively related to leaders' voice expectation.

Leaders' Voice Expectation and Voice Role Perception

We then propose that leader's voice expectation can shape employees' voice role perception. Voice role perception refers to the extent to which employees believe that voice is part of their job (Van Dyne et al., 2008). It is worth noting that voice role perception is conceptually different from felt responsibility for change (e.g., Fuller, Marler, & Hester, 2006; Morrison & Phelps, 1999) because the former focuses on a specific role definition concerning voice, whereas the latter focuses on a sense of felt responsibility to bring about constructive changes in general. For example, a sense of responsibility to bring changes can result from different reasons than role definition such as having greater accessibility to resources (Fuller et al., 2006). In addition, voice role perception should be differentiated from flexible role orientation (Parker, Wall, & Jackson, 1997; Parker, Williams, & Turner, 2006) in that flexible role orientation is a much broader construct capturing employees' role perception about problems, tasks, and competencies.

Leaders are legitimate sources of normative expectations. There are several reasons why

their expectations can shape how an employee perceives her/his roles at work. As leaders have higher positions in organizational hierarchies than followers, their expectations can greatly influence employees' beliefs about their role expectations toward a set of behaviors because leaders are guides who set standards and evaluate how followers ought to behave (Carmeli & Schaubroeck, 2007; Graen & Uhl-Bien, 1995). In addition, in order to establish and maintain good social exchange relations with the leaders, employees tend to embrace leader expectations because "obligations of social exchange relations, anchored in each party's beliefs about what the other party expects, help frame or define roles for relationship members" (Kamdar, McAllister, & Turban, 2006, p. 842). Role theory provides further arguments that followers act in relation to and in response to the expectations of leaders because these expectations are sent from a legitimate source in explicit and continuous ways (Katz & Kahn, 1978). Role expectations of important "social others" such as leaders emphasize responsibilities and requirements associated with successfully performing specific jobs and are a major source of followers' internalized role perceptions (Farmer et al., 2003). In the context of voice, we therefore suggest that when leaders send voice expectations, followers are likely to internalize these external requirements and incorporate them into their voice role definition. This leads to the following hypothesis:

H2: Leaders' voice expectation will be positively related to employees' voice role perception.

Transformational Leadership and the Moderating Effect of Personal Identification

We next propose that transformational leadership strengthens employees' personal identification with the leader, which in turn enhances the association between the leader's voice expectation and employees' voice role perception or the internalization mechanism in the Pygmalion process.

One way that transformational leaders could exert influence is through changing followers' self-concepts such as personal identification (Kark et al., 2003; Kark & van Dijk, 2007; van Knippenberg et al., 2004). Transformational leaders not only articulate a compelling vision and constitute a role model but also pay close attention to followers' needs, intellectually challenge them, and express high expectations for personal development and excellence (Bass & Avolio, 1994; Podsakoff et al., 1990). In other words, transformational leadership appeals to followers' values and their sense of higher purpose (Bass, 1999; Kark & Shamir, 2002). Therefore, followers tend to form strong personal identification with transformational leaders, that is, their beliefs about transformational leaders become self-referential and self-defining. Empirically, a positive association between transformational leadership and employees' personal identification has been reported in studies (e.g., Kark et al., 2003; Liu et al., 2010; Zhu, Wang, Zheng, Liu, & Miao, 2013).

In turn, employees who have higher personal identification are more likely to turn leaders' voice expectation into their role perception because they share similar beliefs and values with the leader and treat the leader's interests as their own (e.g., Kark et al., 2003; Sluss & Ashforth, 2007; van Knippenberg et al., 2004; Wang & Rode, 2010) and thus tend to use leaders' perspectives, beliefs, and values to understand their work roles. At the same time, they are more considerate of the leader's needs and more sensitive to the leader's expectations about their behavior (Qu et al., 2015; van Knippenberg et al., 2004) partly because they have a stronger motivation to establish and maintain good social exchange relations with the identified leaders. In addition, personal identification facilitates the impact of hierarchical leaders because of followers' enhanced sensitivity toward the leader's behaviors and expectations. Moreover, as suggested by Pygmalion theory (Karakowsky et al., 2012; White & Locke, 2000), strong conformity to leaders' role

expectations can be aroused when the followers see role expectation from a legitimate and trusted source. Thus, we believe that when employees have a high level of personal identification with their leader, they are more likely to trust their leader and conform to the leader's voice expectation and thus are more likely to develop voice role perceptions that are congruent to these expectations.

Taken together, we expect employee personal identification with the leader to amplify the effects of the leader's role expectation on employees' voice role perceptions. We posit:

H3: Transformational leadership will be positively associated with personal identification, which in turn will moderate the relationship between the leader's voice expectation and employees' voice role perception such that the positive relationship will be stronger when personal identification with leaders is higher.

Voice Role Perception and Voice Behavior

Finally, we propose a positive link between employees' voice role perception and actual voice behavior. Role perception is employees' internalized interpretation that determines their allocation of attention among various behaviors. In-role perception of a particular behavior is a determining factor of an individual's engagement in such behavior (Katz & Kahn, 1978; Morrison, 1994). In other words, in-role perception provides an internal reason for employees to take responsibility for a specific behavior. Parker and colleagues (2010) explain that *reason to* motivation reflects the reality that although people may have the ability to act proactively, they may refrain from doing so until they are motivated by a particular reason. Employees' belief that a behavior is part of the job is such a reason (i.e., internal rationale) particularly relevant to their engagement in proactive behavior (Parker & Wu, 2014). Previous studies on organizational citizenship behaviors have consistently found that employees tend to engage in citizenship

behaviors more when they believe these behaviors are part of their job (e.g., Coyle-Shapiro, Kessler, & Purcell, 2004; McAllister, Kamdar, Morrison, & Turban, 2007; Tepper, Moss, & Lockhart, 2007). With regard to voice behavior, employees develop their own role perception of how worthwhile it is to speak up. When employees have a high level of voice role perception and view voice as in-role, they tend to engage in voice behaviors more frequently than when voice behavior is viewed as extra-role (Morrison, 1994; Parker et al., 1997). Empirical evidence on the positive link between voice role perception and actual voice behavior has been reported in previous studies (Tangirala, Kamdar, Venkataramani, & Parke, 2013; Van Dyne et al., 2008). Thus, we hypothesize:

H4: Voice role perception is positively related to voice behavior.

A Moderated-mediation Model

Taken together, we propose that transformational leaders can encourage employees' voice behavior by setting up voice expectations and thus developing employees' voice role perception through a Pygmalion mechanism. At the same time, we suggest transformational leadership can enhance employees' personal identification, which in turn strengthens the influence of leaders' voice expectations on employees' voice role perception and thus the Pygmalion effect. We therefore propose a moderated mediation model to understand the impact of transformational leadership on employees' voice behavior from a Pygmalion perspective. In order to formally test the moderated mediation effect of personal identification specifically, we propose:

H5: Personal identification with the leader will moderate the strength of the mediated relationship between transformational leadership and employee voice behavior via leader voice expectation and employee voice role perception, such that the mediated relationship will be stronger when personal identification is high.

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METHODS

Sample and Procedures

Data for the current study were obtained from surveys filled out by matched pairs of subordinates and their direct leader in Southeastern China. We conducted a survey of 43 private companies in the industries of finance, technology, food, and manufacturing to increase the external validity of the proposed relationships. With the assistance of human resource managers, a list of 500 randomly selected subordinates was compiled. Two of the researchers visited their work sites and invited employees to participate in a study focused on leadership effectiveness. Questionnaires were then administered to both leaders and subordinates. One leader rated three subordinates who were randomly selected by the researchers rather than by the supervisors. Both the organizations and the participants were assured that they would stay anonymous and that the data collected would be kept confidential. Respondents were asked to place completed surveys in sealed envelopes and return them directly to the designated researchers.

In order to reduce common method bias, three waves of data collection were conducted over a 10-week period (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). In the first wave survey, we administered questionnaires to the 500 subordinates and their direct leader. Subordinates were asked to provide demographic information as well as their ratings of the transformational leadership of their direct leader. Meanwhile, leaders were asked to report demographic information and their voice expectation toward each subordinate. We obtained 478 usable matched responses that represented a response rate of 95.8%. Two months later, in the wave-two survey (Time 2), the 478 employees who provided usable data in the Time 1 survey were invited to report their voice role perception, personal identification, and control variables such as psychological safety and felt responsibility to change. Because of the turnover and other reasons,

we received 459 usable questionnaires for a response rate of 91.8%. The third-wave survey was conducted two weeks later, when we invited the direct leaders of the 459 employees who had completed the Time 2 survey to provide ratings on each subordinate's voice behaviors. Since 19 subordinates had left, 146 leaders with 440 subordinates returned questionnaires. Finally, we used 394 matched samples in the data analysis after dropping questionnaires with missing data or repeated answers (usable response rate: 89.55%).

Among 394 subordinates, 57.60% were male, with an average age of 32 years (SD = 8.08). The average organizational tenure was 4.82 years, 3.70 years in current position and 3.54 years of working together with their direct leader. 76.4% had a college degree or above. Of the 146 matched leaders, 63.20% were male. The average age was 36 years old and average organizational tenure was 7.74 years and 5.69 years in current status. Of the leaders, 85.3% had received a college degree or above.

Measures

As all measures used in this study were originally composed in English, they were first translated into Chinese, and then back translated to English by a panel of bilingual experts, following the translation and back translation procedures advocated by Brislin (1980). Any resulting discrepancies were then discussed and resolved. All measures employed here use a 5-point Likert-type scale with 1 = "strongly disagree" and 5 = "strongly agree" unless otherwise indicated.

Transformational leadership. Kirkman, Chen, Farh, Chen, and Lowe's (2009) 14-item scale was used to measure transformational leadership. Sample items include: "My leader articulates a vision" and "My leader shows respect for my personal feelings." The Cronbach's alpha for this measure is 0.87.

Leaders' voice expectation. We adapted the leader creativity expectation scale developed by Carmeli and Schaubroeck (2007) to create a 4-item scale for leaders' voice expectations. Sample items were "I expect this subordinate to speak up" and "I think voice is important to this subordinate." Since leaders reported their voice expectations for individual subordinates, we calculated the intraclass correlation or ICC1 for leaders' voice expectation, and its value is 0.52. The Cronbach's alpha for this scale was 0.76.

Voice role perception. Van Dyne and LePine's (1998) six-item voice scale was used to measure voice role perception. We asked employees to indicate if they agree that the six items in the original voice scale were part of their job. This approach was consistent with previous research on measuring role perceptions (McAllister et al., 2007; Tangirala et al., 2013). A sample item for this scale is: "Developing and making recommendations concerning issues that affect this work group is part of my job." The Cronbach's alpha for this scale was 0.81.

Personal identification. We used a 6-item scale to measure personal identification with the leader. This scale was adapted by Chen (2001) based on Mael and Ashforth's (1992) organizational identification scale and Shamir, Zakay, Breinin and Popper's (1998) study. Sample items include: "My leader's success is my success" and "When someone criticizes my leaders, it feels like a personal insult to me." The Cronbach's alpha for this scale was 0.80.

Voice behavior. We used leader assessment to measure employee voice behavior in our research. Van Dyne and LePine's (1998) 6-item scale was used. A sample item is: "This subordinate develops and makes recommendations concerning issues that affect this work group to me." A 5-point Likert-type scale with 1 = "never" and 5 = "always" was used. The ICC(1) value for voice behavior is 0.53. The Cronbach's alpha for this scale was 0.91.

Control variables. We controlled for participants' characteristics that have potential effects on key relationships in our model: gender, age, and working tenure with leader. Gender was dummy-coded, with male respondents coded as "1" and female respondents coded as "2." Age and tenure were self-reported in years. Prior research has documented that gender influences employees' voice behavior, with a possibility that females are less likely to speak up than males (e.g., Morrison, 2011; Tangirala et al., 2013). Similarly, having more experience or a longer-term relationship with their leader (reflected in age and tenure) may impact employees' capability and comfort level with speaking up (e.g., Ng & Feldman, 2008; Tangirala & Ramanujam, 2008).

In addition, we measured psychological safety and felt responsibility to change and controlled both in our analyses. Psychological safety was measured using Liang et al.'s (2012) 4-item scale. A sample item for this scale is: "In my work unit, I can express my true feelings regarding my job." Cronbach's alpha for psychological safety was 0.82. Given the purpose of our study (Pygmalion mechanism as an alternative mechanism beyond psychological safety) and the established importance of psychological safety as a foundation for voice (e.g., Detert & Burris, 2007; Detert & Edmondson, 2011; Walumbwa & Schaubroeck, 2009), we controlled psychological safety in the analysis to rule out alternative explanations. Felt responsibility to change was measured using Fuller et al.'s (2006) 5-item scale. Sample items include: "I feel a personal sense of responsibility to bring about change at work" and "It's up to me to bring about improvement in my workplace." Cronbach's alpha for felt responsibility to change was 0.83. Liang and associates (2012) found that felt responsibility to change is significantly related to employees' voice behavior, and controlling it allows us to capture the unique variance of our variable of interest (i.e., voice role perception) in the current study.

Data Analysis

In this study, all constructs were conceptualized and measured at the individual level. However, our data may lack independence as the supervisor responses were nested (i.e., a single supervisor provided expectation and behavioral assessments for three subordinates). We therefore employed a mixed model (also known as hierarchical linear model or multilevel random coefficient model) to test all the hypotheses while taking into account the random variance effect from supervisor level and the correlated structure of the data (Foo, Uy, & Baron, 2009).

Results

Confirmatory Factor Analyses

Before testing our hypotheses, we conducted a series of confirmatory factor analysis procedures to examine the measurement model fit and the distinctiveness among our study variables. We first carried out Harman's one-factor test, which included all variable measures in a single-factor analysis as recommended by Podsakoff and Organ (1986). The results indicated that neither a single factor nor a general factor could account for the majority of covariance in the variables (the eigenvalue of the first factor was 11.79 and the percentage of variance explained by the first factor was 26.19). This finding provided evidence that common source bias was not a severe issue in the current sample. Furthermore, we conducted confirmatory factor analysis (CFA) of the variables in our model, utilizing maximum-likelihood estimation. We tested a model that consisted of seven factors: transformational leadership, leaders' voice expectation, personal identification, voice role perception, voice behavior, psychological safety, and felt responsibility to change. Results showed that the seven-factor model fit the data well ($\chi^2/df = 2.07$, TLI = 0.90, CFI = 0.91, RMSEA = 0.05).

The discriminant validity tests of the seven constructs were conducted by contrasting the seven-factor model against a series of alternative models. As reported in Table 1, the seven-factor model fitted the data considerably better than any of the alternative models did (Bentler & Bonnet, 1980; Cheung & Rensvold, 2002). Thus, the distinctiveness of the seven constructs in this study was supported. Given the results, all seven constructs were applied in further analyses.

Insert Table 1 about here

Descriptive Statistics

Table 2 presents the means, standard deviations, and Pearson correlations of all key variables. As shown in the table, transformational leadership was positively correlated with leaders' voice expectation ($r = 0.16$, $p < 0.001$) and personal identification ($r = 0.39$, $p < 0.001$). In addition, leaders' voice expectation was positively correlated with voice role perception ($r = 0.29$, $p < 0.001$), and voice role expectation was positively correlated with employee voice behavior ($r = 0.33$, $p < 0.001$). These results were consistent with and provided initial support for our hypotheses.

Insert Table 2 about here

Test of Hypotheses

We ran mixed regression models to test the hypotheses in separate steps. To test Hypothesis 1, we regress leader's voice expectation on leader gender, leader age, subordinate gender, subordinate age and years of working together (Model 11) and then transformational leadership additionally (Model 12). As shown in Table 3.1, there is a positive relationship between transformational leadership and leader's voice expectation ($\beta = 0.13$, *S.E.* = 0.05, *p* <

0.01) while controlling for leader gender, leader age, subordinate gender, subordinate age and years of working together. Hypothesis 1 is supported.

To test Hypothesis 2, we regress voice role perception on leaders' voice expectation while controlling for demographic variables, psychological safety, felt responsibility to change, and transformational leadership (Model 21 and 22 in Table 3.1). Results indicate that leader's voice expectation was positively and significantly associated with voice role perception ($\beta = 0.07$, $S.E.$ = 0.04, $p < 0.05$), supporting Hypothesis 2.

Regarding Hypothesis 3, we first regress personal identification on transformational leadership while controlling for demographic variables, psychological safety and felt responsibility to change (Model 31, 32 and 33 in Table 3.2) and found that transformational leadership was positively associated with personal identification ($\beta = 0.16$, $S.E. = 0.07$, $p < 0.01$). Next, we examined an interaction effect between leaders' voice expectation and personal identification on voice role perception (Model 23 & 24 in Table 3.1). All interaction variables were mean centered to minimize multicollinearity (Aiken & West, 1991). Results indicate that the interaction was positively related to voice role perception ($\beta = 0.10$, $S.E. = 0.05$, $p < 0.05$)[1]. To determine the nature of the moderating effect, we plotted the interaction using Preacher, Curran, and Bauer's (2006) procedure of computing simple slopes at high (1 SD above mean) and low (1 SD below mean) levels of the moderator (personal identification with leader). Figure 2 shows that the interaction pattern is consistent with our hypothesis; that is, leaders' voice expectation was positively related to voice role perception when personal identification was high

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[1]Although we did not hypothesize it directly, Hypothesis 3 also implies that transformational leadership can moderate the leader's voice expectation → voice role perception linkage, and such moderation effect is mediated by personal identification. Therefore, we regressed voice role perception on the interaction effect between leader's voice expectation and transformational leadership with all other control variables included; however, the results show that the interaction effect is not significant. When we additionally included the interaction effect between leaders' voice expectation and personal identification, only the interaction effect between leader's voice expectation and personal identification was positively significant.

($\beta = 0.32$, *S.E.* $= 0.09$, $p < 0.001$), but was not significant at a low level of personal identification

($\beta = -0.05$, *S.E.* $= 0.12$ *n.s.*). Hypothesis 3 is therefore supported.

Insert Figure 2 about here

To test Hypothesis 4, we regress voice behavior on voice role perception while controlling for demographic variables and all other research variables (Model 41, 42 and 43 in Table 3.2). As shown in Table 3.2, voice role perception was positively associated with employee voice behavior ($\beta = 0.28$, *S.E.* $= 0.08$, $p < 0.01$), supporting Hypothesis 4.

Finally, to test Hypothesis 5, we follow a nested-equation path analytic approach (Edwards & Lambert, 2007; Hayes, 2013) and use coefficients obtained in M12, M24, and M43 to test conditional indirect effects of leader voice expectation and employee voice role perception on the association between transformational leadership and employee voice behavior when personal identification was high or low. We used the R Mediation program to calculate Monte Carlo and asymptotic normal theory confidence intervals (Tofighi & MacKinnon, 2015) to estimate the conditional indirect effects. We found the indirect effect is positive and significant when personal identification was high (conditional indirect effect = 0.012, 95% confidence interval = [0.002, 0.028]) and the indirect effect is not significant when personal identification was low (conditional indirect effect = -0.002, 95% confidence interval [-0.011, 0.007]). These results provided support for Hypothesis 5.

Insert Table 3.1 and 3.2 about here

DISCUSSION

The goal of the current study was to deepen our understanding of why and when transformational leadership promotes employee voice behavior from a Pygmalion perspective.

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We proposed that transformational leadership could facilitate employee voice behavior through a Pygmalion mechanism. Supporting our hypotheses, results from a field study in China revealed that transformational leaders elicited higher levels of leaders' voice expectation, which indirectly facilitated voice behavior through employee voice role perception. We also proposed that transformational leadership strengthens the Pygmalion process by intensifying employees' personal identification and thus the positive relationship between leaders' voice expectation and employee voice role perception, which is also supported in our study. Below we elaborate the contributions of this study to literature on voice behavior and the Pygmalion effect.

Theoretical Implications

Our study contributes to the voice literature in three ways. Our main contribution is to offer an alternative view based on Pygmalion theory to understand the impact of transformational leadership on employees' voice behavior. In contrast to the focus on a psychological safety or self-concept mechanism (Detert & Burris, 2007; Liu et al., 2010), we suggest that transformational leaders can evoke a Pygmalion process to promote employees' voice behavior by translating their voice expectations into employees' role perception. Empirically, we found that the Pygmalion mechanism drives employees to exhibit voice behavior above and beyond the direct influence of psychological safety and personal identification (as well as felt responsibility to change) that was controlled for in the analyses. This finding reflects a Pygmalion process that when transformational leaders hold expectations for voice behavior, employees report being more likely to consider voice as in-role and ultimately engage in more upward voice behavior. We therefore highlight a Pygmalion mechanism that originates inherently from the intention of transformational leadership (Avolio et al., 2009; Bass & Avolio, 1994; Eden, 1984; Podsakoff et al., 1990), which has been neglected in voice behavior research when the role of transformational

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leadership was discussed.

Second, as we hypothesized, employee voice role perception was found to mediate the relationship between leader voice expectation and employees' actual voice behavior. On the one hand, we explored transformational leaders and their voice expectations as antecedents of employee voice role perception. Researchers have suggested that voice role perception is a determining factor for employees to speak up (Chiaburu, Marinova, &Van Dyne, 2008) and called for more studies on why or when this broadening of roles occurs in the workplace (Tangirala et al., 2013; Van Dyne et al., 2008). On the other hand, our study joins an emerging research stream on the importance of role perceptions or definitions of proactive behaviors (e.g., Kamdar et al., 2006; McAllister et al., 2007; Tepper et al., 2007) and provides additional empirical support for the positive impact of role perceptions on these behaviors. Our results are consistent with those of previous citizenship behavior studies that stress the importance of viewing a specific behavior as in-role in order to promote such behavior (Coyle-Shapiro & Kessler, 2002; Coyle-Shapiro, Kessler, & Purcell, 2004; Morrison, 1994).

Third, in addition to indicating that transformational leaders can evoke a Pygmalion mechanism to promote employees' voice behavior by setting up voice expectations, we found that transformational leaders can strengthen this mechanism by intensifying employees' personal identification with them. In other words, we found that personal identification with the leader is a boundary condition for when transformational leadership facilitates employee voice behavior more effectively through a Pygmalion mechanism. Specifically, relative to those with low personal identification, employees with high personal identification were found to be more responsive to transformational leaders' voice expectation, leading them to form higher levels of voice role perception and engage in more voice behavior. Our finding on the moderating effect of

personal identification thus helps reconcile the inconsistent views about how personal identification could shape a transformational leader's impact on employee voice behavior at work (Kark et al., 2003; Liu et al., 2010). Specifically, Kark et al. (2003) reported that personal identification with a transformational leader increases employees' dependence on the leader, suggesting that employees with higher personal identification with a transformational leader will be more passive and less proactive. In contrast, Liu et al. (2010) reported that personal identification with transformational leaders could directly promote voice behavior as people tend to express their concerns and make suggestions to those who care. Our study reconciles these different findings by suggesting that personal identification with a transformational leader helps boost employees' proactivity as it could increase employees' dependence on the leader as indicated by Kark et al. (2003) and thus motivate employees to internalize leaders' voice expectations and then engage in more voice behavior as observed by Liu et al. (2010). Our investigation based on Pygmalion theory therefore provides a broader picture to understand the function of personal identification with transformational leaders in shaping employees' proactivity. At the same time, our approach also indicates the importance of examining how different mechanisms of transformational leadership can jointly shape employees' behavior. For example, by examining the interactive effects of employees' personal identification with the leader and the leader's expectation, our study offers a broader understanding of how transformational leaders can shape employees' behavior in a synergic way.

Our investigation also extends the organizational behavior research on the Pygmalion effect. First, the present study demonstrates that the Pygmalion effect can be applied to the context of proactive behavior such as employee voice. Prior studies on the Pygmalion effect in management have exclusively focused on identifying how the leader's performance or creativity

expectations facilitate employee task and creativity performance (e.g., Natanovich & Eden, 2008; Tierney & Farmer, 2004; 2011; Yuan & Woodman, 2010). Our study addresses an underexplored but valuable research need by highlighting the impact of leader voice expectation on employee voice behavior. We made the very first attempt to extend the Pygmalion effect to employees' voice behavior in the workplace and extended the nomological network of constructs for the Pygmalion effect.

Second, we articulate a viewpoint that the triggered Pygmalion effect in the voice context can be explained through a role perception process. For example, we found support for the positive relationship between leader voice expectation and employee voice behavior through voice role perception, suggesting that whether employees will incorporate a leader's expectations as part of role perception is critical to generate a Pygmalion effect on employees' behavior. Our findings thus provide empirical support for Karakowsky et al.'s (2012) proposition that employees should play an active role in the Pygmalion process. To further support their proposition, our finding on the moderating effect of employees' personal identification with the leader suggests the importance of employees' perception of leaders in shaping the Pygmalion process. As "the link between leader support and subordinate self-expectations remains largely a blank box with no real explanation for the conditions under which leader expectations and support can effectively trigger the Pygmalion effect" (Karakowsky et al., 2012, p. 580), our study made the first attempt to design a field study to examine these potential boundary conditions. Our findings thus contribute a better understanding of the dynamic process between leaders and followers involved in the Pygmalion effect.

Practical Implications

The results of our study offer practical implications for managers with regard to the use

of transformational leadership to stimulate employee voice behavior. First, our findings indicate that leaders who use transformational strategies can send clear voice expectations to stimulate more employee voice behavior. Managers need to bear in mind that employees generally conform to role expectations to obtain rewards and avoid sanctions (Eden, 1984; Katz & Kahn, 1978). Thus, to encourage employee voice, in addition to creating a safe environment or appealing to employees' self-concept, managers could also clearly state their voice expectations and effectively communicate those expectations to their employees through a Pygmalion mechanism. Previous researchers have suggested that managers generally provide the most relevant and important contextual cues for employee voice in organizational settings (Detert & Burris, 2007; Morrison, 2011, 2014). When employees believe that managers expect them to speak up more, they tend to regard engaging in voice as in-role prescribed.

At the same time, prior research on the Pygmalion effect suggests that there could be a gap between leaders' actual expectations and followers' perceived expectations from leaders (Karakowsky et al., 2012). Our study suggests that transformational leaders and their voice expectations should first be internalized into followers' voice role perceptions before they exert influences on followers' actual voice behaviors. Thus, transformational leaders need to be well aware of how their voice expectations are conveyed. Communication strategies such as two-way feedback collection should be adopted to ensure that followers interpret transformational leaders' voice expectation accurately.

Moreover, the moderating role of personal identification in the effects of transformational leadership on employee voice through a Pygmalion mechanism suggests that managers should not assume all employees would react similarly to their transformational leadership behaviors. Managers may find that followers with higher levels of personal identification are more receptive

to their voice expectations and thus are likely to internalize leaders' external voice expectation as voice role perception, which ultimately leads to actual voice behavior. Our study suggests that managers should also pay attention to how employees perceive their direct managers because a high level of personal identification with their leader motivates employees to internalize the manager's voice expectations more accurately and frequently. To make the Pygmalion effect more effective, managers should lead by example and form healthy work relationships with employees in order to enhance employees' personal identification with the leader.

Limitations and Future Research Directions

The theoretical and practical contributions of our study should be addressed in terms of several limitations that open up new opportunities for future research. First, the time-lagged data used in the current study preclude causal inferences. Specifically, this limitation precludes us from ruling out the possibility of reverse and reciprocal causality. Thus, our hypotheses could be better examined with longitudinal data in future field studies or laboratory experiments to establish a causal relationship.

Second, it is possible that the common method bias may artificially inflate the demonstrated relationships. However, we made great efforts to minimize common method bias by collecting independent and dependent variables, mediators, and moderators from different sources and multiple time points. For example, leaders rated voice expectation at Time 1 and employee voice behavior at Time 3 with a roughly 10-week time lag. Employees evaluated transformational leadership at Time 1 and employee voice role perception and personal identification at Time 2 with a 2-month time lag. Furthermore, in case of interaction effects, such common method variance can only deflate interaction effects (Siemsen, Roth, & Olieira, 2010). Therefore, common method variance is unlikely to bias the demonstrated moderation effect of

personal identification with the leader, which further strengthens our confidence in the results.

Third, our data were collected from various business organizations in China, which could potentially limit the extent to which our findings can be generalized to other cultures. Particularly, leaders could have a more significant impact on employees because of the paternalism and power distance that are common in Chinese culture (Farh, Earley, & Lin, 1997; Hui, Lee, & Rousseau, 2004; Pellegrini & Scandura, 2008). The dependence of employees on leaders makes transformational leaders themselves a key influence on followers' interpretation of leader voice expectation and actual voice behavior. Notwithstanding, setting the field study context in different Chinese organizations boosts the external validity of the Pygmalion effect. The Pygmalion effect has been found in Western cultures, but its influence in Eastern cultures is less clear. Our study shows that the Pygmalion effect could be generalizable to Chinese culture. Moreover, the importance of voice has long been recognized in Chinese history. However, some cultural elements in classic Confucian culture, such as power distance, face-saving, and harmony, make Chinese people less likely to speak up (Wei, Zhang, & Chen, 2015). So it is valuable to examine how leaders in Chinese organizations can promote more voice by setting voice expectations and shaping voice perceptions. Our findings should be applicable to any contexts where both leadership and voice play important roles. Future researchers should examine similar models in other cultures and attempt to replicate our results.

Fourth, this study explored voice expectations only from leaders as the source. Carmeli and Schaubroeck (2007) suggested that expectations could come from different reference groups and could be positively or negatively associated with employees' self-expectations and behaviors. Therefore, it would be interesting to examine multiple sources of voice expectations (e.g., other team members, subordinates, customers, and family) and how they may impact or interact with

each other to determine employees' voice role perception and voice behavior. In addition, it could be fruitful to include leader expectation and employee role perception with regard to a broader set of voice-related behaviors (Liang et al., 2012; Liu et al., 2010; Maynes & Podsakoff, 2014), as this would help us better understand whether the Pygmalion mechanism suggested in the current study would differentially influence different types of voice.

Fifth, this study merely explored personal identification as a boundary condition of our proposed Pygmalion mechanism. Kark et al. (2003) suggested that personalized identification and socialized identification are distinct concepts and have different impacts on employee behaviors. Whereas personalized identification with the leader anchors dependence on the leader, socialized identification with the leader anchors employee empowerment. Future empirical research should explore whether socialized identification has a stronger moderating effect on the Pygmalion mechanism in the context of voice behavior.

Lastly, our study only examined the type of voice expressed as a positively intended challenge to the status quo and generally in a supportive manner. Burris (2012) proposed that employees could speak up in either a challenging or supportive way. Recently, Maynes and Podsakoff (2014) suggested an expanded set of employee voice behaviors including supportive, constructive, defensive, and destructive types of voice. Differentiating between these different types of voice behavior could be a fruitful way for future researchers to explore the potentially different impacts of the Pygmalion mechanism on these distinct forms of voice or different paths from transformational leadership to these voices. Additionally, we follow the conventional approach to define voice and only measure the "frequency" of voice behavior in our study and thus cannot tell the issue of "quality" of voice behavior. It is possible that two employees would have the same amount of voice but different consequences. Future research could adopt

qualitative study to capture the influence of voice role perception on both the "frequency" and "quality" of employees' voice behavior.

Conclusion

A Pygmalion mechanism was examined to test the influence of transformational leadership on employee voice behavior. Our research effort demonstrates that transformational leadership is positively related to employee voice through leader voice expectations and voice role perception. Moreover, employees' personal identification with their transformational leader could influence the development of voice role perception, and increased feelings of identification with their transformational leader can strengthen such positive impact. These findings provide new knowledge regarding the Pygmalion effect in organizational settings and offer important practical implications to help managers better use the Pygmalion mechanism to motivate employees' voice behaviors within groups.

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Table 1. The results of confirmatory factor analysis ($N = 394$)

	χ^2	df	χ^2/df	AIC	BIC	CFI	TLI	SRMR	RMSEA(90%CI)
Seven-factor model	1118.05	539	2.07	27727.99	28229.01	0.91	0.90	0.05	0.05 [0.05, 0.06]
Six-factor model [a]	1564.10	545	2.87	28162.04	28639.20	0.84	0.83	0.08	0.07 [0.06, 0.07]
Six-factor model [b]	1258.45	545	2.31	27856.39	28333.55	0.89	0.88	0.05	0.06 [0.05, 0.06]
Six-factor model [c]	1195.90	545	2.19	27793.84	28271.00	0.89	0.89	0.05	0.06 [0.05, 0.06]
Six-factor model [d]	1231.28	545	2.26	27829.21	28306.38	0.89	0.88	0.05	0.06 [0.05, 0.06]
Five-factor model [e]	1322.98	550	2.41	27910.92	28368.20	0.88	0.87	0.05	0.06 [0.05, 0.06]
Five-factor model [f]	1803.46	550	3.28	28391.40	28848.68	0.80	0.79	0.07	0.08 [0.07, 0.08]
Four-factor model [g]	1597.24	554	2.88	28177.17	28618.55	0.84	0.83	0.06	0.07 [0.06, 0.07]
Three-factor model [h]	2041.53	557	3.67	28615.47	29044.91	0.77	0.75	0.07	0.08 [0.08, 0.09]
One-factor model [i]	3524.90	560	6.29	30092.84	30510.36	0.54	0.51	0.11	0.12 [0.11, 0.12]

NOTE: AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion

[a] combine transformational leadership and leader voice expectation into one latent factor

[b] combine voice role perception and psychological safety into one latent factor

[c] combine voice role perception and felt responsibility to change into one latent factor

[d] combine psychological safety and felt responsibility to change into one latent factor

[e] combine voice role perception, psychological safety and felt responsibility to change into one latent factor

[f] combine transformational leadership, voice role perception and personal identification into one latent factor

[g] combine voice role perception, personal identification, psychological safety and felt responsibility to change into one latent factor

[h] combine transformational leadership, voice role perception, personal identification, psychological safety and felt responsibility to change into one latent factor

[i] combine all variables into one latent factor

Table 2. Means, standard deviations, and correlations ($N = 394$)

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Leader gender	1.37	0.48												
2. Leader age	36.00	8.09	-0.20***											
3. Subordinate gender	1.42	0.50	0.24***	-0.07										
4. Subordinate age	32.00	8.10	-0.07	0.43***	-0.20***									
5. Years of work with leader	3.54	3.63	-0.21***	0.46***	-0.23***	0.42***								
6. Felt responsibility to change	3.90	0.60	-0.01	0.13*	0.04	0.09+	-0.06	*0.84*						
7. Psychological safety	3.61	0.71	-0.05	0.12*	0.02	0.09+	-0.05	0.65***	*0.82*					
8. Transformational leadership	3.77	0.54	0.01	-0.04	0.04	-0.06	-0.10+	0.44***	0.43***	*0.87*				
9. Leader voice expectation	3.93	0.64	0.08	0.11*	0.09+	0.04	0.05	0.34***	0.29***	0.16**	*0.76*			
10. Personal identification	3.33	0.66	0.03	-0.08	-0.05	-0.12*	-0.11*	0.45***	0.55***	0.39***	0.26***	*0.80*		
11. Voice role perception	3.90	0.50	-0.05	0.13**	-0.08	0.13**	-0.02	0.69***	0.60***	0.46***	0.29***	0.46***	*0.81*	
12. Voice behavior	3.32	0.77	0.11*	0.00	0.09+	0.01	0.01	0.25***	0.27***	0.18***	0.37***	0.30***	0.33***	*0.91*

NOTE: $N = 394$, *M* = mean, *SD* = Standard deviation. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, +$p < 0.10$.
Gender: 1 = male, 2 = female.
Cronbach's alpha in italics.

Table 3.1. Results of Mixed Models (N = 394)

	Leader Voice Expectation		Voice Role Perception			
	M11	M12	M21	M22	M23	M24
Intercept	3.22(.20)***	2.64(.33)***	1.74(.17)***	1.15(.20)***	1.07(.20)***	1.14(.20)***
Leader gender	.12(.06)+	.16(.09)+	-.03(.04)	-.03(.04)	-.03(.04)	-.04(.04)
Leader age	.01(.00)*	.01(.01)+	.00(.00)	.00(.00)	.00(.00)	.00(.00)
Subordinate gender	.11(.05)*	.10(.06)+	-.10(.04)**	-.11(.04)**	-.10(.04)**	-.10(.04)**
Subordinate age	-.00(.00)	-.00(.00)	.00(.00)	.00(.00)+	.00(.00)+	.00(.00)+
Work tenure with leader	.01(.01)	.01(.01)	-.01(.01)	-.01(.01)	-.01(.01)	-.01(.01)
Psychological safety			.12(.03)***	.10(.03)**	.08(.03)*	.09(.03)**
Felt responsibility to change			.45(.04)***	.41(.04)***	.40(.04)***	.39(.04)***
Transformational leadership		.13(.05)**		.14(.04)**	.14(.04)**	.14(.04)**
Leaders' voice expectation				.07(.04)*	.07(.04)+	.06(.04)+
Personal identification					.04(.03)	.04(.03)
Leaders' voice expectation × Personal identification						.10(.05)*
-2 restricted Log likehood	779.60	712.19	309.08	300.26	303.33	303.82
residual	.19(.02)***	.17(.01)***	.09(.01)***	.09(.01)***	.09(.01)***	.09(.01)***
Intercept F	268.76***	63.37***	106.34***	32.06***	28.30***	31.68***

Note：N = 394.　All data are unstandardized estimates. Gender: 1 = male, 2 = female.
　　***p < 0.001, **p < 0.01, *p < 0.05, +p < 0.10.

Table 3.2. Results of Mixed models (N = 394)

	Personal Identification			Voice Behavior		
	M31	M32	M33	M41	M42	M43
Intercept	3.83(.26)***	1.97(.27)***	1.60(.30)***	2.67(.42)***	1.59(.46)**	1.00(.43)*
Leader gender	-.04(.08)	.03(.07)	.03(.07)	.06(.12)	.05(.11)	.08(.10)
Leader age	-.01(.01)	-.01(.00)*	-.01(.01)*	-.00(.01)	-.01(.01)	-.01(.01)
Subordinate gender	-.10(.07)*	-.12(.06)*	-.12(.06)*	.02(.06)	.00(.06)	-.06(.06)
Subordinate age	-.00(.00)	-.01(.00)*	-.01(.00)+	.00(.00)	.00(.00)	.00(.00)
Work tenure with leader	-.01(.01)	-.00(.01)	-.00(.01)	.00(.01)	-.00(.01)	.00(.01)
Psychological safety		.39(.05)***	.36(.05)***	.03(.05)	.03(.05)	-.04(.06)
Felt responsibility to change		.18(.06)**	.14(.07)*	.09(.07)	.06(.07)	-.07(.08)
Transformational leadership			.16(.07)**		-.06(.07)	-.11(.07)
Leaders' voice expectation					.42(.07)***	.38(.07)***
Personal identification						.14(.06)*
Voice role perception						.28(.08)**
-2 restricted Log likehood	631.67	628.72	631.67	811.39	780.07	765.20
residual	.20(.02)***	.20(.02)***	.20(.02)***	.16(.01)***	.16(.02)***	.19(.02)***
Intercept F	52.93***	27.62***	52.93***	41.29***	11.79***	5.36*

Note：N = 394. All data are unstandardized estimates. Gender: 1 = male, 2 = female.
　　***p < 0.001, **p < 0.01, *p < 0.05, +p < 0.10.