Team temporal leadership and team performance: The mediating effects of temporal tension and employee voice

Buddhika Mudannayake

Faculty of Business, Justice and Behavioural Sciences

Charles Sturt University, Wagga Wagga, Australia

Email: bmudannayake@csu.edu.au

A/Professor. Ramudu Bhanugopan

Faculty of Business, Justice and Behavioural Sciences

Charles Sturt University, Wagga Wagga, Australia

Email: bramudu@csu.edu.au

Professor. Brian D'Netto

Curtin Graduate School of Business

Curtin University, Australia.

Email: brian.dnetto@curtin.edu.au

Team temporal leadership and team performance: The mediating effects of temporal tension and employee voice

ABSTRACT: *The present study investigates how employee voice and temporal tension relate to team temporal leadership and team performance, and how this can be successfully administered to maximize team performance. Using two-wave (3 months apart) survey data of 196 leaders and 873 subordinates at five manufacturing firms in Sri Lanka, we found that employee voice behaviour and temporal tension mediates the relationships between team temporal leadership and team performance. Theoretical contributions and managerial implications of these findings are discussed.*

Keywords:

Team temporal leadership, temporal tension, employee voice, team performance

INTRODUCTION

Organizations pay an extensive attention towards teams when structuring and assigning work projects to ensure they accomplish the complex tasks on time. Given the increasing challenges at hypercompetitive working environment involved time pressure and resources, the interaction among leader-subordinate relationship has become an influencing tactic determining team performance. There has been a significant literature on leader-subordinate dyads that has articulated the importance of these interactive relationships (Breevaart, Bakker, Demerouti & Derks, 2015; Solberg & Wong, 2016; Xu, Loi & Lam, 2015). Subsequently, to meet the increasing organizational demands, teams face temporal challenges such as meeting short deadlines, utilizing resources, as well as coordination among members to complete the task to satisfy the client expectations under temporal diversities. According to the time, interaction and performance theory by McGrath (1991), temporal patterns and interaction processes at the working environment could cause the uncertainty and conflicts in individual speed and work agendas among employees toward task accomplishment. Supervising the teams toward accomplishing tasks under urgency and pressure has introduced 'temporal leadership' style, combining temporal activities and team leadership (Santos, Passos, Utidewilligen & Nubold, 2016). Further explaining, the temporal leader behaviours include directing the teams to meet the high expectations of the clients by scheduling, synchronizing and allocating temporal resources to ensure the teams perform the tasks on-time (Mohammed & Nadkarni, 2011; Yuan & Lo, 2016). As a result of these temporal activities, issues and coordination processes, temporal tension of the leaders could arise. Conversely, dissatisfaction, disagreement among team members may promote subordinates to speak up.

Literature highlights tension and leadership are related with one another in many ways. Tension has been involved as an important factor of leadership functioning (Harms, Crede, Tynan, Leon & Jeung, 2017). A recent meta-analysis of leadership and stress (Harms et al., 2017) has found that leader stress influences leader behaviour and that leader-subordinate relationships are significant determinates of stress in subordinates. In order to avoid tension over temporal issues in leaders that arise through temporal activities such as allocating temporal resources, setting up milestones towards deadline etc, it has become highly important to manage leaders' temporal tension under this time-related diversity. In

addition to the leaders, subordinates too can be effected by the temporal diversity. And what is it that team members should do when they are faced with increasing time pressure and urgency to accomplish their tasks? Our study delve into this question by investigating the employee voice behaviour during six-month project cycle, where the temporal leadership interventions are most effective. In addition, employee voice has been recognized as an important element for leadership quality and organizational improvement (LePine & Dyne, 1998; Grant, 2013). Empirical studies on employee voice have also present positive effects on voice on leadership at team level (Detert & Burris, 2007; Saunders, Sheppard, Knight & Roth, 1992). Thus, existing research on temporal leadership has yet to address the behaviours of the subordinates under the temporal pressure and urgency, as well as the fluctuating relationship of leader-subordinate during the course of the task accomplishment. To address these limitations, our study will also explore the relationship between subordinates' voice behaviours towards leaders' temporal tension.

Fig. 1 depicts our research model. The current study was designed to extend previous research in three ways. First, we examine the role of temporal tension of the team temporal leaders, to extend the current knowledge by understanding the effects of temporal tension aroused by been consistently required to make decisions in time-pressure conditions. Second, we draw our attention to the voice behaviour of the subordinates under temporal leadership for a better understanding of the importance of the leader-subordinate experiences and performance-related behaviours that will enable teams to perform better under urgency and pressure. Third, we explore the mediating roles of temporal tension and voice behaviour on team temporal leadership and team performance. And finally, we investigate the relationship between subordinates voice behaviours towards the temporal tension of the leaders, attempting to understand how TTL is associated with leader-subordinate relationship associated with performance.

Insert Figure 1 about here

LITERATURE REVIEW AND HYPOTHESES

The mediating role of employee voice behaviour with team temporal leadership and team performance

Employee voice behaviour refers to a dissatisfaction or opportunity for improving the current personal or organizational state (Hirschman, 1970). According to the equity theory (Adams, 1965), "when employees perceive an imbalance between what they give and what they receive, they often attempt to restore equity by engaging in counterproductive work behaviours, being absent or underperforming" (McClean, Burris & Detert, 2013, p.529). Conversely, voice can also bring an innovative ideas and recommending alternations for a better change in an organization (Van Dyne & LePine, 1998). Scholars have identified high levels of voice can improve organisational routines, as well as learning, better error detection (reduce errors), innovation and change effectiveness as positive outcomes of voice (Edmondson, 2003; Argyris & Schon, 1978; Nemeth, 1997; Morrison & Milliken, 2000; McClean et al. 2013). Therefore, voice has been reported to be highly important under dynamic working environment and new ideas are required for continuous improvement, and effective voice from proactive employees can establish a good employee-supervisor relationship enhancing the team performance (Nemeth & Staw, 1989). However, voice has also been viewed as a challenging behaviour that could upset interpersonal relationships, for an example, when a team member speaks up of an innovative suggestion for a change of the current operating system in order to improve the working environment, could upset the other team members or the team leader (LePine & Van Dyne, 1998). As noted by Hirschman's concepts (1974), exit and voice are the two terms he used to explain the two options of an employee use when responding to a dissatisfying relationship with the organization. Some employees voice the dissatisfaction trying to change the situation, while others withdraw or leave the problematic situation (exit). Similarly, Shapiro (1993) supported Hirschman's concepts of voice and exit investigating how employee turnover becomes low when an employee feel their current situation has been improved as a result of their voice been considered. Simultaneously, McClean et al. (2013) suggested that reduced turnover and better performances are actually resulting from improvements from

voice, and/or from satisfied employees who felt that managers considered their suggestions seriously even substantive changes do not always occur.

A recent study by McClean et al. (2013), found that three managerial characteristics (1) willingness to engage in team change orientation, (2) participation in decision making and, (3) manager access to organizational resources, moderate the relationship between voice and exit. As described above, temporal leadership characteristics include reminding of the milestones, allocating temporal resources and these leadership behaviours could create temporal issues among the team members. Further, temporal leaders become inclusive when it comes to the time-related needs of the organization to ensure employees perform their tasks on-time. Under this time pressure team members may experience the requirement of synchronizing their actions and manage the given time efficiently. However, within these circumstances team members may experience high levels of temporal conflict situations, causing them to voice. Hence we argue that temporal leadership behaviours will play an important role in determining employee voice towards team performance. Therefore, we propose the following:

Hypothesis 1: Employee voice has a positive relationship with team temporal leadership

Hypothesis 2: Employee voice has a positive relationship with team performance

Hypothesis 3: Employee voice mediates the relationship between team temporal leadership and team performance

The mediating role of temporal tension with team temporal leadership and team performance

The time, interaction and performance theory has identified three temporal problems, "temporal ambiguity, conflict of temporal interests, and scarcity of temporal resources" (McGrath, 1991). Temporal activities during a project cycle has driven the attention of scholars to introduced temporal leadership behaviour, which addresses the challenges face under the time pressure and urgency (Ancona, Goodman, Lawrence & Tushman, 2011). Recently, Mohammed and Nadkarni (2011), advocated the characteristics of temporal leadership behaviour includes (a) scheduling of activities, (b) coordinating, and (c) allocating temporal resources required towards task accomplishment on time. Whilst Mohammed and Nadkarni (2011), explained temporal leadership as a task-oriented leadership

style, Myer & Mohammed (2012), expanded the literature highlighting the incorporation of temporal leadership on both task and relationship dimensions. They further described task dimension temporal leaders' behaviours as, reminding the member of the milestones/deadlines, synchronizing the team, allocating temporal resources. And similarly, the relationship dimension describes the leader behaviours aid to solve the time-related issues among team members, such as handling conflict situations, draw suggestions from team members prior make decisions toward time allocation for each milestone. Empirical studies have shown that temporal leadership has a positive relationship with team performance (Maruping, Venkatesh, Thacher & Patel, 2015; Mohammed & Nadkarni, 2011; Yuan & Lo, 2016). Therefore, temporal leaders face temporal challenges and guide the team members to effectively perform. Further, temporal leaders are capable of identifying temporal miscalculations between leaders and subordinates quickly, deliver more effective solutions as well as competent of allocating temporal resources in time to meet any unexpected events that might occur during a project cycle (Mohammed & Nadkarni, 2011; Mohammed & Alipour, 2014).

Much of the previous literature has identified that importance of the temporal aspects in teams has been minimally examined (Shamir, 2011; Van der Erve, 2004; Mohammed & Alipour, 2014). To fill that gap of the existing literature Mohammed and Alipour (2014), has highlighted the direct and indirect temporal leadership effects on individual, dyadic and team as well as performance levels arguing that temporality should be integrated with the leadership construct itself. The investigation of tension in leaders is a vastly active research area (Harms et al., 2017; Hunter, Tate, Dzieweczynski, Bedell-Avers, 2011; Gibson, Fielder, Barrett, 1993), and having considered the rich literature, which expresses tension as a 'reaction to an environment which there is a threat of a loss, an actual loss, or lack of an expected gain, in resources that includes objects, condition etc. (Grandey & Cropanzano, 1999, p.352). Temporal leaders have a limited time frame to recognize and anticipate the issues, analyse the data and to make plans and decisions and while trying to manage the issues that may rise under the temporal diversity, anxiety, depression may cause the experience of temporal tension among leaders (Hunter et al., 2011). Consequently, over team project cycle, having to deal with temporal issues may arise the tension of the leader. Temporal tension is related to the temporal activities caused towards task accomplishment of

the team effecting on the physical and psychological health of a temporal leader (Cohen, 1980). Thus, temporal tension of a temporal leader could be one of those obstacles that could hinder the team performance as well as the leader-subordinate relationship. Given this information, we propose the following;

Hypothesis 4: Temporal tension is negatively related to team temporal leadership

Hypothesis 5: Temporal tension is negatively related to team performance

Hypothesis 6: Temporal tension mediates the relationship between team temporal leadership and team performance.

The relationship between employee voice behaviour temporal tension

Drawing from the past literature, employee voice has been identified as a challenging behaviour that could effects the leader-subordinate dyadic relationship (LePine & Van Dyne, 1998). "Not all managers are able and motivated to take action on the suggestions made by their employees" (McClean et al., 2013, p.526). This could direct the subordinates to lose faith towards their managers, or even engage in aberrant behaviours (Milliken, Morrison, & Hewlin, 2003; Skarlicki & Folger, 1997). Under these situations managers may take the required steps either to remove or to transfer in to a different unit who would undermine the goals of the team (Giacalone & Greenberg, 1997; Parilla, Hollinger, & Clark, 1988). Therefore, these similar situations and may rise stressful situations between leaders and the subordinates. Thus, we propose the following;

Hypothesis 7: Employee voice has a relationship with temporal tension.

METHODS

Sample and procedures

The sample consisted of respondents employed at five manufacturing firms in Sri Lanka. The research was designed at two stages over the '6 month targeted' manufacturing line. Data were collected using two leader surveys with 3-month interval (Time 1 and Time 2) and one subordinate survey (Time 2). At time 1, questionnaires were distributed 3 months after commencing the production cycle measuring

temporal tension, employee voice behaviour and basic demographics. Another three months later, at the end of the production cycle (Time 2), we asked the leaders to evaluate the team performance, the employees were asked report on team temporal leadership and their demographic information. In order to reduce the risk of comprehension problems, the questionnaires were administered in Sinhala. Since the questionnaires were originally constructed in English, all of the items underwent a standard translation and back-translation procedure (Brislin, 1986). The questionnaires were translated from English to Sinhala and then back-translated into English to ensure a high degree of accuracy. Furthermore, a pilot test was conducted to ensure the clarity and adequacy of the translation. We used colour coding for each team as well as we created codes for each team member. Finally, we informed leaders and subordinates that their responses would be kept confidential and the codes were meant to ensure an accurate match of leader-subordinates surveys.

At Time 1, leader questionnaires were distributed to 210 employees and only 196 completed the time 2 questionnaires (93.3% response rate). Of the 1200 questionnaires distributed among subordinates, 873 completed questionnaires were returned (72.7%). Comparing the two sets of returned questionnaires of leaders together yielded a final sample of 196 leaders and 873 subordinates.

Measures

Time 1 measures

Temporal tension*;* we measured temporal tension using House and Rizzo's (1972) seven-item work tension scale. Sample items are "my job tends to directly affect my health" and "I often take my job home with me in the sense that I think about it when doing other things". Respondents coded the frequency that they have such feelings 1 (false) or 2 (true). Cronbach's alpha was .90.

Employee voice behaviour (EVB); we assessed EVB by using six-item scale of Van Dyne and LePine's (1998). Sample examples are "this particular co-worker develops and makes recommendations concerning issues that affect this work group" and "this particular subordinate gets involved in issues that affect the quality of work life here in this group". Respondents rated this measure based on a 7-point scale (1= strongly disagree to 7= strongly agree). The alpha coefficient was .84.

Time 2 measures

Team temporal leadership; we used the seven-item temporal leadership scale developed by Mohammed and Nadkarni (2011) to measure TTL (1 = not at all to 5 = a great deal). Sample items include "to what extent does your project leader remind members of important deadlines?" and "to what extent does your project leader effective in coordinating the team to meet client deadlines?" Cronbach's alpha was.86.

Team performance; the four-item scale used by Maruping, Venkatesh, Thatcher and Patel (2015) was adopted. Sample items are "rate the timeline by which this team's project was completed" and "the team's overall performance on this project was". Respondents rated this measure based on the 5-point Likert-type scale from 1 ("poor") to 5 ("exceptional"). The scale's reliability was .82.

Control variables; we also measured five demographic variables including age, gender, education, organizational tenure as well as job category as prior research has highlighted the importance of such variables to influence the individual behaviour (Bindl & Parker, 2010; Zhang & Bartol, 2010).

Preliminary analysis

Our survey data include leaders' self-assessment of their behaviour and, assessments of subordinates' behaviour, as well as subordinates' assessments of their leaders' behaviour. Thus all the variables applied in our model have been collected through self-reported employee surveys in order to obtain a larger amount of observations. Although, previous literature suggests self-reported surveys could result in common method bias (Audenaert, Vanderstraeten, Buyens, 2017; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, Podsakoff, 2012, Shih & Chuang, 2013). Hence, we have taken a number of procedural remedies suggested by Podsakoff et al. (2012) to control and address the common method bias. First, the study collected leader-subordinated dyadic data to control common method variance (Podsakoff et al., 2003; Shih & Chuang, 2013). Second, we collected the data with a temporal separation, two sets of questionnaires were distributed with three-month time lag (Audenaert et al., 2017; Podsakoff et al., 2012). Third, we obtained answers from leaders and subordinates working at stores, bundling, cutting, fabric, sampling, production, quality and packing as it has been suggested as a good strategy to collect data from different departments to void common-method bias (Lopez-

Cabrales, Bornay-Barrachina, Diaz-Fernandez, 2017). Fourth, the questionnaires consisted of different scales (Podsakoff et al., 2012). Fifth, we assured the participants of the confidentiality of the returned questionnaires and that would not be shared within their firms (Podsakoff et al., 2012). Sixth, we compared the mean and standard deviation of self-reported temporal tension of leader variable based on subordinates' assessment of team temporal leadership. Finally, we ran a confirmatory factor analysis of all of the 24 underlying items taken together from the four variables.

Analytic strategies

The study contains 196 supervisors providing ratings of voice behaviour for 873 subordinates, which may cause a nesting effect as the supervisor's rating of one subordinate may influence the rating of another (Li, Wu, Liu, Kwan & Liu, 2014). To address this issue we performed a one-way ANOVA using supervisor job role as the independent variable and employee voice as the dependant variable. According to the results, the one-way ANOVA was not significant for employee voice, indicating that supervisor ratings were relatively independent and did not significantly influence the results of the study. We tested all the hypotheses in our measurement model, with multi-level structural equation modelling (MSEM) using Mplus 8. The structural equation modelling approach allows simultaneous estimation of multiple indirect paths and provides model fit indices (James & Brett, 1984; James, Mulaik, & Brett, 2006). Then we conducted a comparison of the model fit between the proposed model and ten alternative models (Anderson & Gerbing, 1988). Next, the path estimates for testing each hypothesis were obtained in the theoretical model and finally we examined the indirect effects using a Monte Carlo simulation procedure in Mplus.

RESULTS

Model estimation

The hypothesized model was estimated using Mplus 8. Table 1 shows the means, standard deviation and correlations for the study variables. The correlations are consist with the past literature. For instance, temporal leadership is positively related to team performance (r = .36, p<0.01). As expected, temporal tension related negatively to temporal leadership (r = -.12, p<0.05) and team performance (r

= -.11, p<0.05). Also, significant associations were observed between employee voice behaviour with temporal leadership (r = .22, p<0.01) and team performance (r = .37, p<0.01).

Insert Table 1 about here

Confirmatory factor analysis

We conducted a confirmatory factor analyses (CFAs) on our measurement model to determine the discriminant validity of the constructs using Mplus 8 with the default setting (Muthen & Muthen, 2012). The proposed 4-factor model yielded a significantly better fit: χ^2 (246) = 528.04, p<.001, χ^2/df = 2.15; Comparative Fit Index (CFI) = .87, Tucker Lewis Index (TLI) = .85, Root Mean Square Error of Approximation (RMSEA) = .05, Standardized Root Mean Square Residual (SRMR) = .06, than the single-factor model ($\chi^2(df)$ = [1670.9 (252)], χ^2/df =6.63, CFI=.33, TLI=.27, RMSEA=.14, SRMR = .15). Therefore, the results of the Harman's one factor model with all self-rated items combined had a poor fit with the data set. Hence, we believe that the common method variance did not have a significant effect on our data. All of the surveyed items had significant loadings on their respective latent factors. Further, we conducted five 3-factor models and four 2-factor models to asses more parsimonious models. All indexes from the parsimonious models indicate that each model had a significantly worse fit to the data than to the proposed model.

Hypotheses testing

Insert Figure 2 about here

As shown in Fig.2, we tested mediation using Mplus 7. Employee voice has a positive relationship with team temporal leadership (β = .21, p<.001) and with team performance (β = .27, p<.001), thus supporting Hypothesis 1 and 2. With the presence of the employee voice, path between team temporal leadership and team performance became insignificant (β = .06, ns), indicating a full mediation effect. Further, temporal tension has a negative relationship with both temporal leadership (β = -.12, p<.05), and team performance (β = -.11, p<.05) supporting Hypothesis 4 and 5. In addition, temporal tension

also shows a full mediation effect on between temporal leadership and team performance (*β = .06, ns*), again, demonstrating a full mediation effect. Further, the results insured the four conditions of mediation are met (Baron & Kenny, 1986), that is, a significant relation exists between: (a) independent variable and dependant variable (b) independent variable with the mediator (c) the mediator and the dependant variable and (d) the relation between independent variables and the dependant variable is non-significant or less after adding the mediator to the model, supporting the mediation hypotheses.

To directly examine the mediating effects of employee voice and temporal tension in our proposed model, we performed a bootstrapping procedures using Monte Carlo simulation techniques (Preacher & Hayes, 2008; Preacher, Zyphur, & Zhang, 2010). With 10,000 replications, we found that the indirect effect of team temporal leadership on team performance through employee voice behaviour was 0.05, with a 95% bias-corrected bootstrap confidence interval of [0.0002, 0.06], which does not contain zero. Thus, the mediating effect of employee voice prosed in the Hypothesis 3 was supported. Further, the 10,000 replications showed that the indirect effect of team temporal leadership on team performance through temporal tension was 0.03, with a 95% bias-corrected bootstrap confidence interval of [0.0003, 0.07], which again does not containing zero, supporting the Hypothesis 6. Finally, Hypothesis 7 predicted a relationship between employees' voice and temporal tension. In supports of our prediction, the model shows a negative relationship between employee voice and temporal tension (*β = -.20, p<.05*).

GENERAL DISCUSSION

Our study demonstrated two important implications that have major influences for researchers and practitioners. Based on implicit leadership theories (ILTs) and implicit followership theories (IFTs), we investigated the time-based, time-pressured, individual characteristics and how temporal leadership influences employees' performance. Specifically, our findings indicate that employee voice behaviour plays an important role under these temporal work environment. Moreover, both temporal tension and employee voice were found to aid as mediating mechanisms that effects temporal leadership on team performance.

Theoretical implications

A recent conceptual study, "incorporating temporality into implicit leadership and followership theories" by Alipour, Mohammed and Martinez (2017) has argued ILT and IFT research has ignored time-based, time-pressured characteristics of leaders and followers as well as their influence into the theories and the dyadic outcomes. Having identified the gap in the theory, Alipour et al. (2017), infused temporal characteristics into ITL and IFT research, naming temporal implicit leadership theories (TILTs) and temporal implicit followership theories (TIFTs). To expand our current knowledge on the temporal implicit theories involving the both leadership and followership under temporal characteristics, we investigated the leader-subordinate dyadic effects of temporal tension and employee voice under team temporal leadership context as the research on temporal characteristics are surprisingly scarce.

Our study sheds light on understanding the leader-subordinate dyadic relationship and the underlying issues that may rise due to temporal problems in the teams. The results of our study highlights the importance of managing the temporal characteristics that could arise under temporal leadership to better comprehend the temporal problems. Similarly, our results support and address the recent literature appealing the incorporation of temporal elements to support TILTs and TIFTs (Alipour et al., 2017; Bluedorn & Jaussi, 2008; Halbesleben, Novicevic, Harvey & Buckley, 2003). Further, our study shows some important conjectures for leadership research. We highlight how temporal tension could significantly influence the relationship between temporal leadership towards team performance. Doing so, we confirms the theoretical conceptualization of TILTs with empirical evidence. Further, we examine the voice of the followers under the temporal diversity. Upon theoretical prospects, such as equity theory (Adams, 1965), we explain the effect of the employee voice on temporal leadership behaviour. The results corroborates the followers voice behaviour mediates the relationship between temporal leadership on team performance, which describes the interaction required to align between leader-follower dyadic relationships under temporal characteristics. Our theoretical model connects to team temporal leadership, temporal tension, employee voice, and team performance literatures and

highlights the importance for future research on time-based temporal dyadic interactions promoting team performance.

Practical implications

Our results build a concrete contribution on how to effectively manage teams engaged in time-based, time-pressured characteristics. The results indicate the importance of training the team leaders to manage the temporal characteristics that could rise under time-pressured working environment and, how to achieve strong team temporal leadership skills by overcoming the issues that team faces under this temporal environment. It is important for organizations to focus on urging the team leaders to utilise more temporal leadership skills as well as to train them improve their understanding of the subordinates' attitudes and behaviours toward task accomplishment under team temporal diversity. Drawing from our results, we can advocate that both team leaders and subordinates could held responsible for minimising the level of temporal tension and enhancing team performance. Therefore, it will be highly important for organisations to offer team leaders and team members with training to improve their temporal behaviours.

Limitations and directions for future research

In our study we have focused on a time-based, time-pressured organizational culture. Although we considered the temporal tension of the leaders, we failed to investigate the temporal tension of the subordinates for completely understand the role of temporal tension under the temporal leadership behaviour. Further, we only looked into one project cycle which was a '6-month targeted' manufacturing line. We measured temporal tension and employee voice behaviour in the middle of the target line and team temporal leadership and team performance at the end of the product-cycle. Team leaders rated the performance of each team after completing the task, thus, prior team performances may have influenced the ratings, if team leaders rated the performance measure over many projects, over a longer time rather rating the teams' performances based on the most recent project accomplishment. In addition, future studies should investigate other temporal characteristics and expand research on the mediating and moderating roles between team temporal leadership and

important outcomes. Further, the future research could be looking at longitudinal studies under these time-based, time-pressured leadership behaviour and investigate the effect through the temporal tension into work-family conflict, organizational commitment and burnout.

Conclusion

Our study examined the time-pressured organizational context, where the team leaders should provide strong temporal leadership skills driving their teams towards the task accomplishment within strict deadlines. We particularly developed and tested the mediating role of temporal tension and employee voice behaviour under team temporal leadership behaviour. In doing so, our research have extends the current literature on understanding unfavourable outcomes that effects team leaders, team members as well as the interacting relationship between team leader and team members' at time-pressured working environment.

REFERENCES

Adams, J.S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology, 62,* 335-343.

Alipour, K.K., Mohammed, S., & Martinez, P.N. (2017). Incorporating temporality into implicit leadership and followership theories: Exploring inconsistencies between time-based expectations and actual behaviors. *The Leadership Quarterly, 28,* 300-316.

Ancona, D. G., Goodman, P.S., Lawrence, B.S., & Tushman, M.L. (2011). Time: a new research lens. *Academy of Management Review, 26*(4), 645-663.

Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411-423.

Argyris, C., & Schon, D. (1978). Organizational learning: A theory of action perspectives. Reading, MA: Addison Wesley.

Audenaert, M., Vanderstraeten, A., & Buyens, D. (2017). When innovation requirements empower individual innovation: the role of job complexity. *Personnel Review, 46*(3), 608-623.

Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51,* 1173-1182.

Bindl, U., & Parker, S.K. (2010). Proactive work behavior: Forward-thinking and change-oriented action in organizations. In S. Zedeck (Ed), *APA handbook of industrial and organizational psychology*. Washington, DC: American Psychological Association.

Blue dorn, A.C., & Jaussi, K.S. (2008). Leaders, foloowers, and time. *The Leadership Quarterly, 19*(6), 654-668.

Breevaart, K., Bakker, A.B., Demerouti, E., & Derks, D. (2015). Who takes the lead? A multi-source diary study on leadership, work engagement, and job performance. *Journal of Organizational Behavior, 37*(3), 309-325.

Brislin, R.W. (1986). Translation and content analysis of oral and written material. In H.C. Triandis, & J.W. Berry (Eds.), *Handbook of cross-cultural psychology* (pp. 398-444). Boston: Allyn and Bacon.

Cohen, S. (1980). Aftereffects of stress on human performance and social behaviour: A review of research and theory. *Psychological Bulletin, 88*(1), 82-108.

Detert, J.R., & Burris, E.R., (2007). Leadership behaviour and employee voice: Is the door really open? *Academy of Management Journal, 50*(4), 869-884.

Edmondson, A.C. (2003). Speaking up in the operating room: How team leaders promote learning in inter-disciplinary action teams. *Administrative Science Quarterly, 44,* 350-383.

Giacalone, R., & Greenberg, J. (1997). Antisocial behaviour in organizations. London: Sage.

Gibson, F.W., Fielder, F.E, & Barrett, K.M. (1993). Stress, babble, and utilization of the leader's intellectual abilities. *Leadership Quarterly, 4*(2), 189-208.

Grandey, A.A., & Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior, 54*, 350-370.

Grant, A.M. (2013). Rocking the boat but keeping it steady: The role of emotio0n regulation in employee voice. *Academy of Management Journal, 56*(6), 1703-1723.

Halbesleben, J.R., Novicevic, M.M., Harvey, M.G., & Buckley, M.R. (2003). Awarenenss of temporal complexity in leadership of creativity and innovation: A competency-based model. *The Leadership Quarterly, 14*(4), 433-454.

Harms, P.D., Crede, M., Tynan, M., Leon, M., & Jeung, W. (2017). Leadership and stress: A meta-analytic review. *The Leadership Quarterly, 28*, 178-194.

Hirschman, A.O. (1974). Exit, voice and loyalty: Responses to decline in firms, organizations, and states. Cambridge, MA: Harvard University Press.

House, R.J., & Rizzo, J.R. (1972). Toward the measurement of organizational practices: scale development and validation. *Journal of applied Psychology, 50*(5), 388-396.

Hunter, S.T., Tate, B.W., Dzieweczynski, J.L., & Bedell-Avers, K.E. (2011). Leaders make mistakes: A multilevel consideration of why. *The Leadership Quarterly, 22*, 239-258.

James, L.R., & Brett, J.M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology, 69*(2), 307-319.

James, L.R., Mulaik, S. A., & Brett, J.M. (2006). A tale of two methods. *Organizational Research Methods, 9*(2), 233-244.

LePine, J.A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology, 83*(6), 853-868.

Li, J., Wu, L., Liu, D., Kwan, H.K., & Liu, J. (2014). Insiders maintain voice: a psychological safety model of organizational politics. *Asia Pacific Journal of Management, 31,* 853-874.

Lopez-Cabrales, A., Bornay-Barrachina, M., & Diaz-Fernandez, M. (2017). Leadership and dynamic capabilities: the role of HR systems. *Personnel Review, 46*(2), 255-276.

Maruping, L. M., Venkatesh, V., Thatcher, S. M. B., & Patel, P.C. (2015). Folding under pressure or rising to the occasion? Perceived time pressure and the moderating role of team temporal leadership. *Academy of Management Journal, 58*(5), 1313-1333.

McClean, E.J., Burris, E.R., & Detert, J.R. (2013). When does voice lead to exit? It depends on leadership. *Academy of Management Journal, 56*(2), 525-548.

McGrath, J.E. (1991). Time, interaction, and performance (TIP): A theory of groups. *Small Group Research, 22,* 147-174.

Milliken, F.J., Morrison, E.W., & Hewlin, P.F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies, 40,* 1453-1476.

Mohammed, S., & Alipour, K.K. (2014). It's time for temporal leadership: Individual, dyadic, team, and organizational effects. *Industrial and Organizational Psychology, 7,* 178-203.

Mohammed, S., & Nadkarni, S. (2011). Temporal diversity and team performance: The moderating role of team temporal leadership. *Academy of Management Journal, 54*(3), 489-509.

Morrison, E.W., & Milliken, F. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review, 25,* 706-725.

Muthén, L.K., & Muthén, B.O. (2017). *Mplus user's guide* (8th ed.). Los Angeles, CA: Muthén & Muthén.

Myer, A. T., & Mohammed, S. (April, 2012). *Team temporal leadership: Construct development and validation.* San Diego, CA: A poster presented to the Twenty-Seventh Annual Conference of the Society for Industrial/Organizational Psychology.

Nemeth, C. (1997). Managing innovation: When less is more. *California management Review, 40*(1), 59-74.

Nemeth, C.J., & Staw, B.M. (1989). The trade-offs of social control and innovation in groups and organizations. *Advances in Experimental Social Psychology, 22,* 175-210.

Parilla, P.E., Hollinger, R.C., Clark, J.P. (1988). Organizational control of deviant behaviour: The case of employee theft. *Social Science Quarterly, 69,* 261-280.

Podsakoff, P.M., MacKenzie, S.B., Lee, J., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

Podsakoff, P.M., MacKenzie, S.B., & Podsakoff, N.P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63,* 539-569.

Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879-891.

Preacher, K.J., Zyphur, M.J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods, 15*(3), 209-233.

Santos, C.M., Passos, A.M., Uitdewilligen, S., & Nubold, A. (2016). Shared temporal cognitions as substitute for temporal leadership: An analysis of their effects on temporal conflict and team performance. *The Leadership Quarterly, 27*(4), 574-587.

Saunders, D.M., Sheppard, B.H., Knight, V. & Roth, J. (1992). Employee voice to supervisors. *Employee Responsibilities and Rights Journal, 5*(3), 241-259.

Shamir, B. (2011). Leadership takes time: Some implications of (not) taking time seriously in leadership research. *22*(2), 307-315.

Shapiro, D.L. (1993). Reconciling theoretical differences among procedural justice researchers by re-evaluating what it means to have one's views "considered": Implications for third-party managers. In. R. Cropanzano (Ed.), Justice in workplace: approaching fairness in human resource management: 51-78. New York: Erlbaum.

Shih, C., & Chuang, C. (2013). Individual differences, psychological contract breach, and organizational citizenship behavior: A moderated mediation study. *Asia Pacific Journal of Management, 30*, 191-210.

Solberg, E. & Wong, S.I. (2016). Crafting one's job to take charge of role overload: When proactivity requires adaptivity across levels. *The Leadership Quarterly, 27*(5), 173-725.

Van Dyne, L., & LePine, J.A. (1998). Helping and voice extra-role behaviours: Evidence of construct and predictive validity. *Academy of Management Journal, 41*(1), 108-119.

Van der Erve, M. (2004). Temporal leadership. *European Business Review, 16*(6), 605-617.

Xu, A.J., Loi, R., & Lam, L.W. (2015). The bad boss takes it all: How abusive supervision and leader-member exchange interact to influence employee silence. *26*(5), 763-774.

Yuan, C.C., Lo, S.H. (2016). Relationship among team temporal leadership, competency, followership, and performance in Taiwanese pharmaceutical industry leaders and employees. *Journal of Career Development,* 1-12.

Zhang, X.M., & Bartol, K.M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal, 53*(1), 107-128.

Figure 1: The Research Model
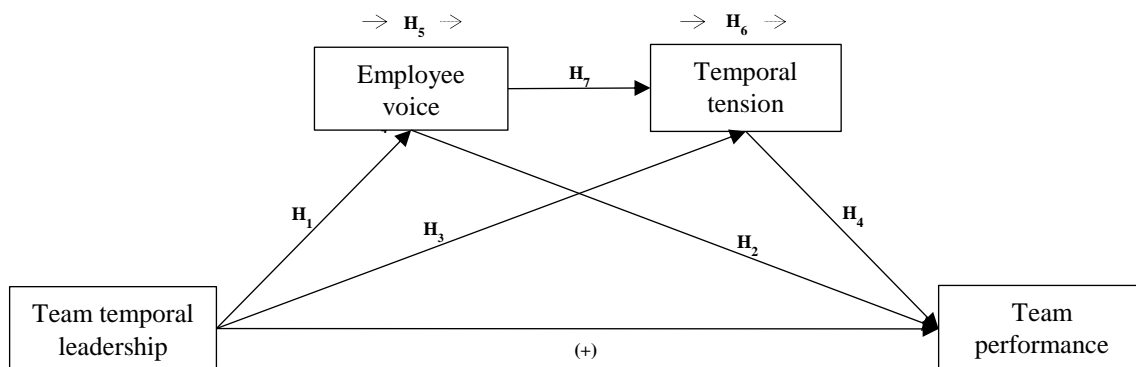
The model was tested as follows. First, we analysed the relationship between employee voice with, temporal leadership (Hypothesis 1), and team performance (Hypothesis 2). Second, we analysed relationship between temporal tension with temporal leadership (Hypothesis 3), and team performance (Hypothesis 4). Third, we analysed the mediating role of employee voice (Hypothesis 5) and temporal tension (Hypothesis 6) between temporal leadership and team performance. Finally, we analysed the relationship between employee voice and temporal tension (Hypothesis 7). Control variables include age, gender, education, job category and organization tenure.

Table 1: Descriptive Statistics and Correlations

Control variables	M	S.D	1	2	3	4	5	6	7	8	9
1. Age ^{L}	3.08	1.25									
2. Gender ^{L}	1.41	.50	-.05								
3. Highest Education Level ^{L}	2.06	1.38	.03	.08							
4. Job category ^{L}	5.15	2.13	.08	-.22**	-.01						
5. Organisational Tenure ^{L}	2.39	1.24	.44**	-.17*	-.10	-.05					
Time 1 variables											
6. Temporal tension ^{L}	3.29	.81	-.01	-.05	-.08	.01	-.01	(.90)			
7. Employee voice ^{L}	4.75	1.11	.07	-.19**	-.01	.21**	-.02	-.17*	(.84)		
Time 2 variables											
8. Team temporal leadership ^{S}	4.15	.65	-.14	-.09	.01	-.05	-.10	-.12*	.22**	(.86)	
9. Team performance ^{L}	5.09	1.02	-.16*	-.05	-.10	-.06	.03	-.11*	.37**	.36**	(.82)

N (Leaders) = 196; N (subordinates) = 873
For the correlation analysis, employees' ratings of team temporal leadership were disaggregated to each respective leader.
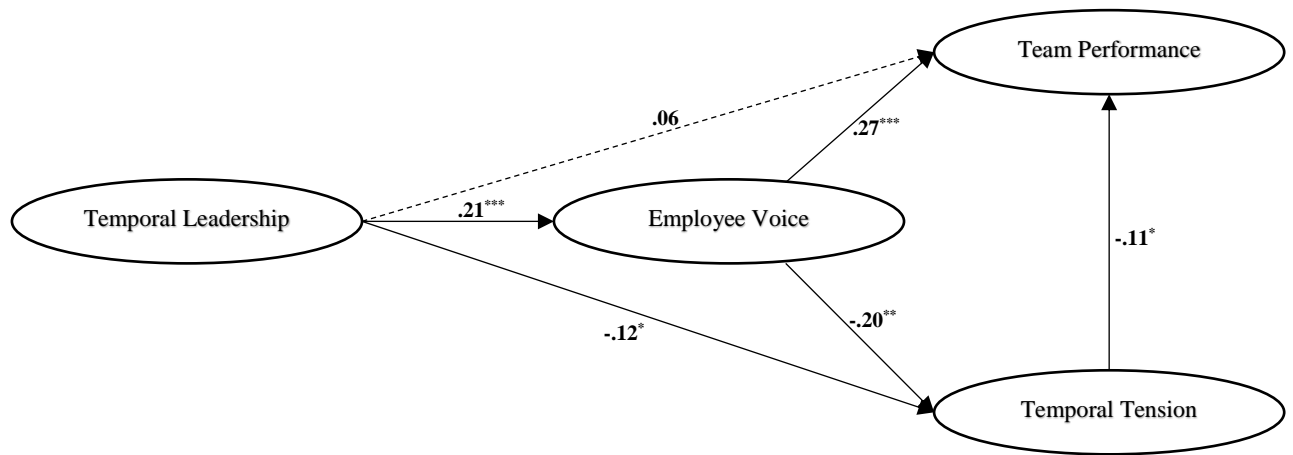Alpha coefficients are in parentheses on the diagonal
^{L} Indicates variables rated by leaders
^{S} Indicates variables rated by subordinates
 * p<0.05.
** p<0.01.

Figure 2: Results of the Final Model

*p<0.05; ** p<0.01; *** p<0.001.
Significant relationships are presented with, →
Control variables are age, gender, education leave, Job category, and organizational tenure.