The impact of Team Temporal Leadership on Employee Engagement and Team Performance

Buddhika S. Mudannayake
Faculty of Business, Justice and Behavioural Sciences
Charles Sturt University, Australia.
Email: bmudannayake@csu.edu.au

A/Professor Ramudu Bhanugopan
Faculty of Business, Justice and Behavioural Sciences
Charles Sturt University, Australia.
Email: Bramudu@csu.edu.au

Dr Pamela Lockhart
Faculty of Business, Justice and Behavioural Sciences
Charles Sturt University, Australia.
Email: plockhart@csu.edu.au
The impact of Team Temporal Leadership on Employee Engagement and Team Performance

ABSTRACT: Numerous studies have attempted to explain that the success of team performance is largely a function of leadership effectiveness (Marks, Mathieu & Zaccaro, 2001; Mullen & Cooper, 1994; Simosi & Xenikou, 2010). Given the relationship between team temporal leadership effectiveness and team performance, it is important that leaders are aware, and have a good understanding of the factors that may have an impact on their effectiveness. Do the temporal leaders foster a strong work commitment to organizations and their success? Leadership effectiveness, resulting in team performance, will require affirmative answers to such questions. This paper delves into this question by focusing on the important advantages of connectedness, and demonstrates that certain constructs have the potential to help the team to perform even better. Further, it will seek to expand understanding of team performance by leveraging the literature on employee engagement under team temporal leadership.

Previous research on leadership revealed a number of approaches to leadership styles such as autocratic, democratic, leader-member exchange, participative, laissez-faire, situational, transactional, transformational etc. (Detert & Burris, 2007; Erkutlu, 2008; Judge & Piccolo, 2004; Lee, 2005). Recently however, the study of leadership in a team context has become a key topic of interest among many researchers.

Team temporal leadership (TTL) has been defined as “leader behaviours that aid in structuring, coordinating and managing the pacing of task accomplishment in a team” (Mohammed & Nadkarni, 2011, p.492); and which captures the task-oriented behaviours of a team leader, rather than relationship-oriented behaviours. Team temporal leadership then, explicitly describes how team leaders facilitate the clear temporal structure of team activities through scheduling, synchronizing and allocating temporal resources in a team, with regard to “the temporal aspects of a specific group task, such as the importance of meeting the deadline, (sub) task completion times, setting interim milestones, coordinating the team so that work is finished on time, building in time for contingencies and problems and the appropriate timing and pacing of task activities” (Gevers, Rutte, & van Eerde, 2006, p.54).

Over the last three decades researchers have proposed several theories related to leadership behaviour: i.e. time, interaction and performance theory, social exchange theory, broaden and build theory etc. (Adams, 1965; Blau 1989; McGrath, 1991; Mohammed & Nadkarni, 2011). While, TTL has received significant attention; scholars such as Maruping, Venkatesh, Thathcher and Patel (2015);
and Santos, Passos, Uitdewilligen and Nubold (2016), have advocated the positive and negative effects of TTL in the context of temporal tension and team performance. However, TTL remains understudied, despite the fact that, TTL is practiced predominantly in large organisations.

This study extends research on team temporal leadership by examining its effects from employee engagement and team performances. While doing so, the study delineates the effects of TTL associated with temporal tension, employee proactivity proficiency and adaptivity, role innovation, career commitment, and employee voice behaviour. The current study seeks to predict paths linking team temporal leadership with several related constructs. This linking of paths and complexities is reflected in the theoretical framework guiding this research and is presented in Figure 1.

The purpose of this paper is twofold. First it examines team temporal leadership and evaluates the current state of the field and also synthesizes the literature relating to employee engagement, team performance, temporal tension, employee proactivity proficiency & adaptivity, role innovation, team conflict, employee voice behaviour, and career commitment. Second, a number of propositions are developed to illustrate the relationship framework among the variables to explain the influence of team temporal leadership. Thus, the paper begins by exploring a number of constructs identified as having the potential to impact upon TTL. This is followed by a discussion of the relationship between the different constructs and the development of a number propositions which highlight the relevance of the constructs to effective TTL. The implications for theory and practice are then presented in the final sections of the paper.

THEORETICAL BACKGROUND AND LITERATURE REVIEW

Team temporal leadership

Due to frequent changes in organisational demands, it has become a crucial role for team leaders to engage in temporal leadership behaviours in order to coordinate team members’ efforts, avoid time related conflicts and to ensure that the team performs well (Santos et al., 2016).
Historically, according to the time, interaction and performance (TIP) theory of McGrath (1990), explains the nature of groups, their interaction and performance, whilst the diversity of temporal orientations generates ambiguity and conflict within teams regarding pacing, and the scheduling of work activities, which could affect both the timeliness and quality of team output (Mohammed & Nadkarni, 2011).

**Employee engagement**

According to Fredrickson’s (2001) broaden and built theory, supported by employees who engage in positive emotions such as enthusiasm and inspiration in their role, are more likely to think outside the box, becoming more innovative and adaptive in their work (Eldor & Harpaz, 2016; Fredrickson & Losada, 2005). In the same vein, Kahn (1990, p.700) explains employee engagement as “the simultaneous employment and expression of a person’s preferred self in task behaviours that promote connections to work, personal presence (physical, cognitive and emotional) and active full performances”. It was later defined by Schaufeli, Salanovs, Gonzalez, Roma and Bakker (2002) as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. Britt (1999) viewed employee engagement as feeling responsible for and committed to superior job performance. Kaliannan and Adjovu (2014) have described employee engagement as an “engine” in talent management that attracts the effectiveness from numerous environmental factors inside and outside of an organisation.

**Team performance**

Research into team performance has a long history. According to Hackman (1991) group effectiveness is the degree to which a team’s output meets requirements in terms of quantity, quality and timeliness. Different models of team performances have generally agreed that teams must be considered on three different levels of analysis: individual, team, and organisational. They tend to categorize team functioning as consisting of input considerations (e.g., type of task, equipment, and training), throughput (e.g., team processes), and output or team product (Brannick, Sala, & Prince, 1997, p. 4). The outcome of a successful team process is successful performance. Marks, Mathieu and Zaccaro (2001, p.357) defined team process as ‘members interdependent acts that convert inputs to
outcomes through cognitive, verbal, and behavioural activities directed toward organizing task work to achieve collective goals’.

**Temporal tension**

A previous study on leadership found that (i) leader’s personal stress mediates the effective operation of intellectual abilities, especially when the leader is under conditions of stress; whilst (ii) the leader’s intelligence and creativity correlated negatively with the team performance (Gibson, Fiedler, & Barrett, 1993). Stressful conditions prevent the leader from delivering all available knowledge and resources to the task. Hence, meaningful work can become unfulfilling and meaningless (Cole, Walter, Bedeian & O’Boyle, 2012). According to the conservation of resources model, a persistent threat to valued resources ultimately culminates in burnout (Hobfoll, 1989). Excessive tension results in burnout and then it becomes more problematic.

**Employee proactivity, proficiency, and adaptiveness**

The literature has emphasized the importance of role theory as an important approach to describe the nature of work roles as well as the set of role responsibilities; which encompass both organisational context and individual work behaviour (Griifin, Neal, & Parker, 2007). Further, several researchers have proposed that role theory is useful for describing a broader set of work responsibilities (e.g., Ilgen & Hollenbeck 1991; Morgeson, Dealaney-Klinger, & Hemingway, 2005). Griffin et al., (2007) defines employee task proactivity as ‘the extent to which individuals engage in self-starting and future oriented behaviour, to change their individual work situations, their individual work roles, or them-selves’. Further, Griffin et al., (2007) stated individual task proficiency is where behaviours reflect the degree to which an employee meets the known expectations and requirements of his or her role as an individual. Also, employee adaptivity has been described as the need for individuals to adapt themselves to the unpredictability of technological change in the current working environments. Griffin et al., (2007) highlighted the importance of individual task adaptivity when new technology, work redesign and changes in strategy occurs and requires them to adjust themselves accordingly.

**Team conflict**
According to social identity theory people tend to classify themselves and others into various social categories (e.g., gender, age cohort, organisational membership, religious affiliation) (Tajfel & Turner, 1985). Conflict in teams is related to relationship and task issues. In other words, there are primarily two types of conflict; task conflict and relationship conflict (Amason & Schweiger, 1997; Jehn, 1997; Kabanoff, 1991). A study by Jehn (1994) indicates that the emotional conflicts among team members are related to decreased performance, while task associated conflicts are related to an increase in performance. Jehn (1994) further explained the importance of the managers and leaders’ ability to differentiate the two types of conflict so that they can resolve relationship conflict while promoting productive task conflicts. Task conflicts can also results when managers or team leaders have different viewpoints and ideas related to a task (Jehn, 1994).

**Role innovation**

Nicholson (1984) and Nicholson and West (1988) argued that work-role transitions may involve two independent adjustment processes: personal development and role development. Personal and role development together create four modes of work adjustment: (a) replication (low personal development, low role development); (b) absorption (high personal development, low role development); (c) determination (low personal development, high role development); and (d) exploration (high personal development, high role development), where there is simultaneous change in personal and role attributes (Ashforth & Saks, 1995). Van de Ven (1986) defined innovation as modification and change in behaviour after learning and practices. According to Usman, Danish, Waheed and Tayyeb (2011), most managers desire to see job innovation through their employees as they consider role innovation key to developing new, productive methods utilizing current resources.

**Employee voice behaviour**

Traditionally, it has been argued that, when employees feel inequity between what they contribute and what they receive, “intense emotions such as frustration, anger, and dissatisfaction often drive employees to speak up” (Grant, 2013, p.1703). Within an increasingly challenging, competitive and uncertain economy, organisations depend on ideas and suggestions from employees for improvement (Grant, 2013; Morrison, 2011). Van Dyne and LePine (1998), define voice as promotive behaviour that emphasizes expression of constructive challenge intended to improve rather
than merely criticize. They further stated the voice becomes important when there is a dynamic environment within the organisations that requires innovative ideas for improvement (Nemeth & Staw, 1989).

Career commitment

Career commitment is conceptualized as the strength of one’s motivation to work in a chosen career-role (Aryee and Tan, 1992; Hall, 1971). London’s (1983) and London and Mone’s (1987) theory of career motivation has been used as a framework for examining the antecedents and outcomes of career commitment. Research on career commitment is important as commitment to work can strongly affect employee turnover (Blau & Boal, 1987). Employee turnover breaches the relationship of an employee with the organisation. This incurs a loss for both the individual and the organisation. For an organisation the cost of turnover will result in additional costs such as reselection, retraining and above all could decrease the motivation and morale of the remaining employees effecting the organisation performance (Chang, 1999).

THE RELATIONSHIP BETWEEN THE CONSTRUCTS AND PROPOSITION DEVELOPMENT

Team temporal leadership and Team performance

Team leadership has been identified as one of the fundamental characteristics that drives effective team performance (Zaccaro, Rittman, & Marks, 2001). A recent study by Tost, Gino and Larrick (2013) examined the impact of the subjective experience of power on leadership dynamics and team performance and found that the psychological effect of power on formal leaders spills over to affect team performance. According to Halbesleben, Novicevic, Harvey and Buckley (2003) leaders who establish clear time frames and convey them to members through schedules, reminders, and interim milestones and time frames tied to project goals are better positioned to maximize team productivity. A recent study by Mohammed and Nadkarni (2011) on temporal diversity and team performance claims that, team temporal leadership has an effect on the team performance. Therefore it is posited:

Proposition 1: Team temporal leadership is positively related to team performance

Employee engagement and Team performance
Kahn (1990) presumed that, the more one's presence was engaged in the tasks, the more positive impact there would be on performance and throughout the process individual levels of employee engagement could inspire team performance (Mullen & Copper, 1994). Performance is the outcome of a combined effort of individual employees in an organisation and therefore employee engagement among team members enhances performance (Bakker & Schaufeli, 2008; Bakker, Schaufeli, Leither, & Taris, 2008). Therefore it is posited;

**Proposition 2: Employee engagement is positively related to team performance**

**Team temporal leadership and Employee engagement**

According to McGrath (1962) the team leader’s primary function is “to do, or get done, whatever is not being adequately handled for group needs”, accordingly the task of managing temporal problems in a team often falls to the leader. As per this view, leadership researchers have begun to explicitly link temporally related activities to the leadership role affecting employee engagement (e.g., Mohommed & Nadkarni, 2011). Hence, the follow proposition is posited:

**Proposition 3: Team temporal leadership is positively related to employee engagement**

**Temporal tension, Team temporal leadership and Employee engagement**

Leadership drives team members to achieve high levels of performance by planning their work, managing their time (reminding of the deadlines etc.). However team lifecycle obstacles may arise that reduce the team performance, one of which is temporal tension (Santos et al., 2016). Surra and Longstreth (1990) demonstrated that people who felt tension with the person they were dating were less satisfied in the relationship than those who didn’t. Jehn (1995) applied this situation to groups and argued that co-workers experiencing interpersonal tension would be less satisfied with their job, where eventually the engaged workers become disengaged. Based on the previous literature on team temporal leadership and the relationship of temporal tension it is posit that:

**Proposition 4a: Team temporal leadership has a positive relationship with temporal tension.**

**Proposition 4b: Temporal tension has a positive relationship with employee engagement.**

**Proposition 4c: Temporal tension mediates the relationship between team temporal leadership and employee engagement**
Grant, Gino and Hofmann (2011) proposed that although extraverted leadership enhances group performance when employees are active, they stated that when employees are proactive, they may be more effective even when their leaders are less extraverted. On the basis of prior research (Colquitt, Noe, & Jackson, 2002; Griffin et al., 2007) it was noted that perceiving a supportive team environment is an important antecedent of behaviours contributing to team effectiveness. Hence, it is posited;

**Proposition 5a:** EPPA has a positive relationship with employee engagement

**Proposition 5b:** Team temporal leadership has a positive relationship with EPPA

**Proposition 5c:** Employee proactivity, proficiency and adaptiveness mediates the relationship between team temporal leadership and employee engagement

**Role innovation, Employee engagement and Team performance**

According to Letchumanasamy (2011, p.10) innovative work behaviours are discretionary behaviours and are not part of the employees’ prescribed job description or explicitly defined roles (Janssen, 2000; Ramamoorthy, Flood, Slattery, & Sardessai, 2005). Nevertheless, employees’ tendencies to engage in these extra-role behaviours can lead to enhanced team, individual and organisational effectiveness and superior performance (Ramamoorthy et al., 2005). Therefore the following propositions are posited:

**Proposition 6a:** Role innovation has a positive relationship with employee engagement

**Proposition 6b:** Role innovation has a positive relationship with team performance

**Proposition 6c:** Role innovation mediates the relationship between employee engagement and team performance

**Team conflict, Employee engagement and Team performance**

decreases employees' performance because in such experiences, the focus tends to be on the conflict, hence leading to disengagement from the task and organisational performances (Sulea, Virga, Maricutoiu, Schaufeli, Dumitru, & Sava, 2012). Therefore it is posited;

**Proposition 7a:** Team conflict is positively related to employee engagement

**Proposition 7b:** Team conflict is positively related to team performance

**Proposition 7c:** Team conflict mediates the relationship between employee engagement and team performance

**Career commitment, Team temporal leadership and Team performance**

Referring to the study by Arthur and Rousseau (1996), long term career planning in an organisation has become more difficult and partly been replaced by employees' own career management (Biemann, Kearney, & Marggraf, 2015). According to Biemann and colleagues empowered employees with individual career plans may create problems for organisational performance as their career planning does not necessarily include a continuous career in the current organisation. Due to an increasing reliance on complex knowledge work and rapid technological advancements, the retention of managers and other high-quality employees is vital for the success of today's organisations (Grant, 1996; Holtom, Mitchell, Lee, & Eberly, 2008). Offering development opportunities and career perspectives for employees have been shown to decrease turnover and enhance career commitment and retained valued employees (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011). Biemann et al., (2015) further stated leadership plays an important role in facilitating access to career development opportunities. It is therefore, posited;

**Proposition 8a:** Team temporal leadership is positively related to career commitment

**Proposition 8b:** Career commitment is positively related to team performance

**Proposition 8c:** Career commitment mediates the relationship between team temporal leadership and team performance

**Employee voice behaviour, Team temporal leadership and Team performance**

Li and Sun (2015) identified a variety of factors, including leaders who play a key role in motivating employees to voice their thoughts, which have been identified as important antecedents to voice behaviour (Morrison, Wheeler-Smith, & Kamdar, 2011). Van Dyne and LePine (1998) also
demonstrated in their study that individuals who exhibited more positive voice received higher overall performance ratings from supervisors. As team temporal leadership style in general, focuses on task oriented behaviours (Mohammed & Nadkarni, 2011), it is more likely employees are to speak up. As leadership behaviours shape the dyadic relationship between leaders and members and further affect members’ behaviour. Therefore, it is posited;

**Proposition 9a:** Team temporal leadership has a positive relationship with employee voice behaviour

**Proposition 9b:** Employee voice behaviour has a positive relationship with team performance

**Proposition 9c:** Employee voice behaviour mediates the relationship between team temporal leadership and team performance

**GENERAL DISCUSSION**

This paper reviews the literature related to nine key constructs in the proposed model (Figure 1) and presents theoretical background and related literature. The aim of this paper was to gain a more informed understanding about team temporal leadership style and it’s effect on employee engagement and team performance. While leaders may be aware of the impact that employee values have on their effectiveness, they may not have a clear understanding of the underlying dynamics they reveal in the workplace such as tension and conflict. To understand the managing process and effects of the team temporal leadership in the leader-follower relationships, this paper has described the implications for leaders and followers through a number of related constructs. First, the study reviewed the literature and the most applicable theory for each construct. Then developed propositions indicating the relationship of the constructs. It is believed that these constructs are important temporal phenomena for advancing leadership theory and research, hence the specific attention given to the theoretical basis of team temporal leadership, employee engagement and team performance. Collectively, this paper demonstrates the importance of understanding how the alignment of team temporal leadership attributes can be beneficial, by creating supportive leader-member relationship in organizations.

**IMPLICATIONS FOR THEORY**

The literature review presented in this paper, has focused on the effect of the team temporal leader on employee engagement and team effectiveness. First, it highlighted direct dyadic temporal leadership effects on subordinates and team performance. Mohammed and Nadkarni (2011)
demonstrated that multiple facets of team functioning may be affected by temporal conditions in the
task environment and found that the influence of time urgency and pacing style diversity on team
performance was more positive under conditions of stronger team temporal leadership than weaker
team temporal leadership. The theoretical framework presented here is about the behaviour of teams
and of their interaction and performance. It offers a series of propositions that present assumptions
underlying the model (Figure 1). From previous studies and literature these propositions are testable.

Secondly, this paper sought to understand the relationship of employee engagement on the
team performance in team temporal leadership context. The study focused on the positive relationship
between team temporal leadership with related constructs. Thus this made an important contribution
to theory on the effects of time pressure on performance relating to McGrath’s TIP theory (1991)
which explains the nature of groups, their interaction and performance. It identified the temporal
issues in team work but it does not discuss how these problems arise or are solved (Mohammed &
Nadkarni, 2011). When this degree of regularity occurs, employees may become unsatisfied and
pressured in their work, then the tension increases, that could drive to team conflict among team
members, and the work engagement of employees would get effected. This paper further explains the
theory by discussing the mediated roles among the constructs and the relationship between leader-
member interaction and performance. Almost 15 years ago, Fredickson (2001) formulated broaden
and build theory, centred around employees who engage in positive emotions are more likely to think
‘outside of the box’. When the employees’ work under task oriented leadership towards meeting the
deadlines the positive work environment could become less interesting, hence this paper helps to
identify the influencing variables in the theoretical context.

Thirdly, a number of propositions proposed to test the positive relationship of employee
proactivity proficiency and adaptiveness with team temporal leadership. These propositions extends
the knowledge of role theory on how the employee proactivity proficiency and adaptiveness vary,
working in a temporal diversity under task oriented, time pressured working environment, the broader
set of responsibilities and the nature of the work roles.

Finally, although Nicholson and West’s (1988) work role transitions theory highlights the
predictions about role innovation in organisations based on a knowledge of prior occupational
socialization, motivational orientation, organisational processes and role requirements that may influence subordinates, the variables are essentially limited to leader-subordinate level of analysis. This paper was the first to look at the possibilities of leadership effectiveness from the perspective of employment engagement. It is vital for leaders to understand the underlying differences of various employment modes, and adjust their behaviours to the expectations and demands of different employee groups.

**IMPLICATIONS FOR PRACTICE**

The paper demonstrates the importance of exploring the task oriented team temporal leadership behaviours. Discussing the employee perceptions of their engagement, temporal leadership will enhance the readers’ ability to understand employee attitudes toward accomplishing tasks under TTL. By understanding the employee attitudes, role innovation, adaptivity and team conflict, for dealing with team temporal diversity within the team it will help to utilise strong temporal leadership to maximise team performance. For example, if the team leader has no skills or competencies to drive the team to finish the tasks on time to meet the deadline due to lack of temporal leadership behaviours, this will result in poor team performances. On the other hand if an organization failed to understand the importance of these relationships, it can unknowingly limit training and development of such leadership style in teams. Therefore given the importance of temporal leadership, it may also be worthwhile for companies to invest in training team leaders to improve their team temporal leadership behaviours.

**CONCLUSION**

Team temporal leadership is in the early stages of theoretical development. While there is a growing body of theoretical evidence that this form of leadership has the potential to increase follower outcomes, this paper has focused on the assumption that temporal leaders influence employees’ attitudes and behaviour. Conversely, there is the possibility of followers’ attitudes influencing their team leaders’ behaviours. Consequently, many issues related to this topic remain vague. This gap in the extant literature suggests the need for additional exploratory research. The conceptual model, set forth in this paper represents an attempt to partially satisfy this need. The literature review suggested that these propositions have practical value for leadership, a process that inherently involves time and
organization. Thus, this encourages further research into, the nature and impact of team temporal leadership to expand the knowledge of leadership theory and practice and move forward in new directions by further addressing the temporal leader-follower perceptions, processes and performance outcomes and have important implications for organizational leaders as well as for those interested in advancing research on the topic of team temporal leader effectiveness.

REFERENCES


Letchumanasamy, R.S. (2013). The impact of transformational leadership on organisational climate for innovation, innovative work behaviour and organisational performance in government-linked companies. (Doctoral thesis), Charles Sturt University, Australia.


Figure 1: The Theoretical Model

- Employee proactivity (proficiency and adaptivity)
- Temporal tension
- Team temporal leadership
- Career commitment
- Role innovation
- Team conflict
- Team performance
- Employee engagement
- Employee voice behaviour

Positive relationship
Mediator