Transformational Leadership and Turnover Intentions among School Teachers in the Deep South of Thailand

Krisana Promchart[1] and Wisanupong Potipiroon[2]

School teachers in the deep south of Thailand have been affected by the violence and unrest that have plagued this region for almost two decades. It has been reported that hundreds of school teachers have left their jobs and moved out of the affected areas. This research uses the insights from behavioral research (e.g. need theories) to propose that transformational school leaders can play a crucial role in reducing teachers' turnover intentions by altering their safety perceptions and job satisfaction. In particular, this study takes a multilevel perspective to test this hypothesis, both at the individual and organizational levels of analysis. Based on the data obtained from 779 teachers in 82 primary schools located in the three southernmost provinces of Thailand, multilevel structural equation modeling analysis was used for testing the proposed theoretical model. Specifically, at both the individual and organizational levels of analysis, the results indicated that the relationship between transformational leadership and turnover intentions was fully and sequentially mediated by perceived safety and job satisfaction (individual-level indirect effect index: -0.02; SE = 0.01; 90% CI [-0.03, -0.01]; organizational-level indirect effect index: -0.13; SE = 0.07; 90% CI [-0.25, -0.01]). These findings suggest that transformational leaders can play a special role in reducing employee anxiety in uncertain contexts. This research also contributes to behavioral science research by proposing the mediating role of perceived safety in the relationship between transformational leaders and employee turnover intentions. Several theoretical and practical implications emerged from the present findings.

Keywords: transformational leadership, perceived safety, job satisfaction, turnover intentions, multilevel modeling

The incidents of violence in the three southernmost provinces of Thailand—the so-called "Deep South"—has long been a predicament for both local civilians and government employees working in this region. Since 2004, this region has been caught in the grip of spiraling violence and relentless unrest that have resulted from years of religious and indigenous conflicts. Examples of violence include drive-by shootings, attacks using improvised explosive devices and vicious assaults on school teachers, monks and local officials (Mandhana, 2018). Just recently, 15 civilians trained to protect the local villages, were killed by the separatist insurgents (BBC News, 2019).

As a result of this, it has been reported that school teachers working in this region tend to experience significantly lower levels of work-life quality than those in other regions in the country (Pannitayapong & Wisalaporn, 2011). Research has revealed that after 2004, up to 2,700 school teachers had relocated out of the region while the rate of suicides among school teachers had risen up to 18.83% (Archavanitkul et al., 2018; Wisalaporn, 2009). School

[1] Ph.D. Candidate, Faculty of Management Sciences, Prince of Songkla University, Hat Yai Campus, Thailand. E-mail: krisana_pnu@hotmail.com
[2] Assistant Professor, Director of Ph.D. Program in Management, Faculty of Management Sciences, Prince of Songkla University, Hat Yai Campus, Thailand.

teachers in the Deep South have also suffered from job insecurity, work-life conflicts, and a lack of perceived safety, job fairness and job advancement (Kaewrattanasri, 2013). Although the updates on these dire conditions are not currently available, it is plausible to assume that the lack of these 'hygiene' factors has continued to adversely affect the psychological and physical well-being of educational staff working in this region.

Given the adverse conditions faced by school teachers in the Deep South, it is important for the employing schools to find ways to help alleviate their concerns and anxiety. This present research brings attention to the role of transformational leadership among school principals. In particular, transformational leadership has been defined as a leader's ability to transform the focus of their followers from self-interests to a collective vision and to inspire them to perform above and beyond the call of their duties (Bass & Riggio, 2006; Bass & Avolio, 1990). It is expected that school principals with transformational leadership qualities can serve as exemplars and role models for their teachers to follow while inspiring them to look at the higher-order goals that exceed own interests and also to persist even in the face of adversity. More importantly, it is expected transformational school leaders can put employees' mind at ease by providing them with hope for the future. Indeed, the importance of transformational leaders and their ability to effectively communicate to different stakeholder groups in times of crisis is most evident during the world-wide outbreak of coronavirus epidemic (Argenti, 2020). Empirically, it has been shown that the role of transformational leadership is critical in uncertain (Brooks, 2015; De Hoogh et al., 2004; Pawar & Eastman, 1997) or extreme contexts (Eberly et al., 2017).

The purpose of this research was to examine the relationship between school principals' transformational leadership and their teachers' turnover intentions. Indeed, issues of safety and the ensuing difficulty of keeping qualified teachers has been an inherent challenge for school leaders in Southernmost Thailand (Brooks & Sungtong, 2014; Brooks, 2015). Turnover intentions could be defined as one's intent to leave one's jobs or current employment (Mowday et al., 1982; Steel & Ovalle, 1984; Tett & Meyer, 1993). Recent research indicates that transformational leadership can play a critical role in reducing employees' turnover intentions by promoting perceptions of job embeddedness (i.e., combined factors that keep a person from leaving his or her job) (Eberly et al., 2017), mission valence and goal clarity (Caillier, 2016), and collaborative culture (Sun & Wang, 2016). Latest research in Thailand has also shown that trust in the leaders (Ariyabuddhiphongs & Kahn, 2017) and the 'right' speech (i.e., perceptions that leaders are truthful and polite in their speech) (Pravichai & Ariyabuddhiphongs, 2018) can play important mediating roles. However, few studies to date have examined the psychological mediating factors that are specific to uncertain contexts such as the Deep South of Thailand.

The present study seeks to fill this void in the literature by investigating the mediating role of perceived safety, which is conceptualized in this research as the extent to which employees feel safe and secure in their surrounding environment including the workplace, home, and in life in general. Past research reports that the primary reason why school teachers in the Deep South choose to quit their job can be attributed to the lack of security measures and the sense of job insecurity (Kaewrattanasri, 2013). In the language of human needs theories (Kovach, 2018), perceptions of safety could be regarded as one of the lower-order needs. Although past research has shown that transformational leaders can play an important role in enabling their employees to accomplish higher-order goals of the organization such as helping the needy (Caillier, 2016), very few research to date has attempted to shed light on the important role of leadership in fulfilling employees' lower-order needs such as perceptions of safety. Yet, one's lower-order needs are critical because, according to Maslow (1970), if one's

lower-order needs are not properly met or satisfied, it will be difficult for a person to strive for other higher goals.

This study also seeks to contribute to the literature by considering whether job satisfaction will mediate the influence of transformational leadership and perceptions of safety on employee turnover intentions. Job satisfaction could be viewed as an emotional state that results from the perception that an employee's job actually provides what he or she values in the work situation (Hulin & Judge, 2003). Past research has shown that job satisfaction is influenced by transformational leadership (Bass & Riggio, 2006) and perceptions of safety (Haung et al., 2016). In particular, it has been shown that transformational leaders can positively alter individuals' job perceptions (Piccolo & Colquitt, 2006), especially for those who work in monotonous or undesirable conditions (Grant, 2008). For these reasons, it is expected that job satisfaction could also play a mediating role in the Deep South context.

In order to test the proposed theoretical model, the present research investigates a sample of 779 school teachers working in 82 primary schools in the three southernmost provinces in Thailand, which have been adversely affected by the indigenous conflict caused by the local Muslim separatist militants since 2004. As shown in Figure 1, this research adopts a multilevel perspective (Hox, 2010) to explain the influence of transformational leadership on school teachers' turnover intentions via the sequential mediating roles of perceived safety and job satisfaction. At the school level of analysis, this research asks whether the influence of transformational leadership on turnover intentions will vary across schools. However, at the individual level of analysis, this research asks whether it is the within-school variation in teachers' perceptions (i.e., differences among teachers) that affects their turnover intentions. This multilevel design thus helps to answer whether it is the shared perceptions among school teachers or their unique perceptions, or both, that result in turnover intentions. Although past research indicates that the influence of transformational leaders, safety perceptions, job satisfaction and turnover intentions may operate at both the individual and organizational levels (Chang et al., 2013; Eberly et al., 2017; Kara et al., 2013; Peachey et al., 2014), few studies to date have empirically considered such a possibility. The following sections discuss the role of transformational leadership, perceptions of safety and job satisfaction in reducing employees' turnover intentions.

Figure 1

The Theoretical Model
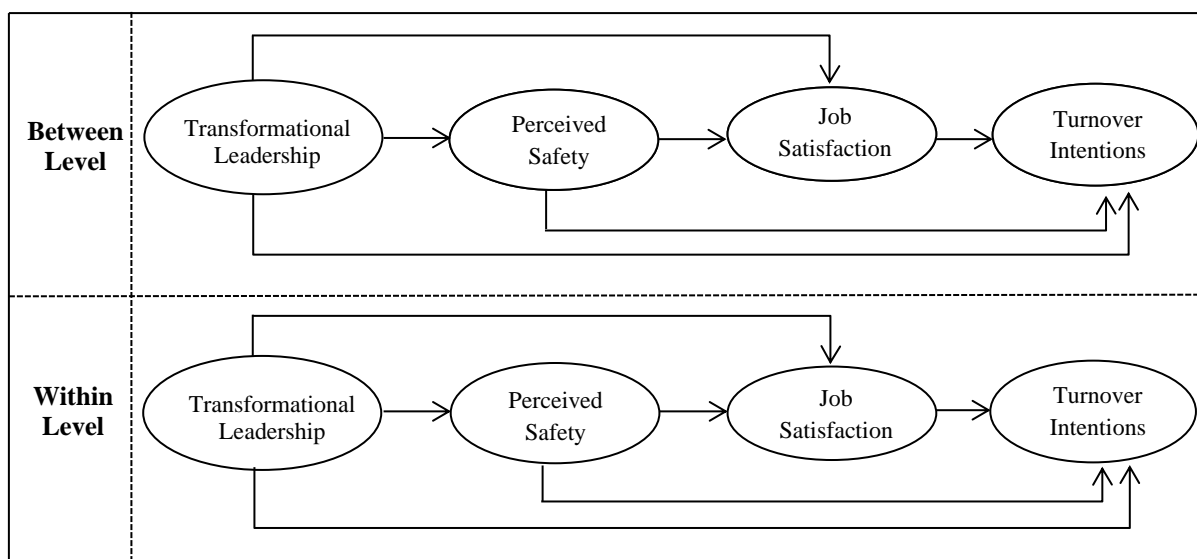
Literature Review and Hypotheses

Transformational Leadership and Turnover Intentions

Transformational leadership plays an important role in fostering a positive, value-based vision of the future, and motivating followers, eliciting their trust and performance (Bass & Riggio, 2006; Borgmann et al., 2016). According to the extant leadership literature, transformational leadership refers to a specific type of leadership styles, which consists of four distinct yet interrelated types of behavior, including: (1) idealized influence—serving as role-models of competence and ethical standards that employees can look up to; (2) individualized consideration—a display of care and concern for employees' well-being and the ability to address followers' strengths and needs, while coaching and developing their unique potential; (3) inspirational motivation—the communication of a meaningful vision and the use of positive appeals to motivate followers to work toward the vision; and (4) intellectual stimulation—promoting new ways of thinking in deriving solutions (e.g., thinking outside the box (Bass & Avolio, 1995; Bass & Avolio, 1990; Bass & Riggio, 2006; Bass & Steidlmeier, 1999). Given these noteworthy qualities, previous research has consistently shown that transformational leadership is positively related to a variety of employee and organizational outcomes, including organizational commitment, trust, satisfaction, and job performance (Judge & Piccolo, 2004) and these effects are generalizable across different national cultures (Crede et al., 2019).

This study brings attention to the role of transformational leadership in reducing employees' turnover intentions. Turnover intentions can be thought of as an individual's view that he/she would leave the organization (Mowday et al., 1982; Steel & Ovalle, 1984; Tett & Meyer, 1993). Turnover intentions thus capture the final stage in the decision-making process of an employee when they look for other alternative employments (Park & Kim, 2009). Past research indicates that turnover intentions are a strong predictor of an employee's future behavior and actual turnover (Harter et al., 2002; Park & Kim, 2009; Peltokorpi et al., 2015; Sun & Wang, 2016). Turnover intentions can also greatly impact organizations' productivity and stability, which in itself proves to be very costly (Firth et al., 2004; Siong et al., 2006). Thus, understanding the factors that can help reduce employee turnover intentions could make a tremendous difference in the organization's overall effectiveness.

In this respect, transformational leadership is known to play a critical role in preparing employees to face the challenges in their work roles. Indeed, the early view of transformational leadership (Bass, 1985; Burns, 1978) indicated that transformational leaders are particularly relevant and necessary in contexts characterized by crises, turmoil and uncertainty (De Hoogh et al., 2004; Pawar & Eastman, 1997). In the Deep South context, Brooks (2015) showed that school principals employ several transformational leadership approaches to building trust with the local communities and leaders, which helps to create a second line of defense against the insurgency. Accordingly, several researchers have called for more leadership research in these "underexplored, yet theoretically and practically relevant contexts" (Dust et al., 2014; Eberly et al., 2017; Van Knippenberg & Sitkin, 2013).

Past research has consistently indicated that transformational leadership is a key factor in influencing employee turnover intentions. A study of public schools in the United States, Pavic (2020) found that school principals' transformational leadership can reduce their teachers' turnover intentions. Other studies went beyond examining the direct influence of

transformational leadership. For example, in a study on a sample of five-star hotel employees in Turkey, Kara et al. (2013) found that transformational leadership of hotel managers was instrumental in minimizing their employees' turnover intentions through perceptions of quality of life. In another study, which used a sample of U.S. Army unit leaders operating within the extreme context of combat, Eberly et al. (2017) found that transformational leaders can significantly reduce their employees' turnover intentions by promoting perceptions of job embeddedness (i.e., a combined forced that keep a person in one's job, which is determined by the fit between employees and their jobs and organization and jobs, their relationships with others and also the perceived costs of leaving). Furthermore, Caillier (2016) showed that mission valence and goal clarity mediated the relationship between transformational leadership and turnover intentions among U.S. public sector employees. Finally, Sun and Wang (2016) showed that transformational leadership of school principals in public schools in New York State can significantly reduce their teacher's turnover intentions and actual turnover via the mediating role of collaborative culture.

In the context of Thailand, a study by Ariyabuddhiphongs and Kahn (2017) showed that among Thai employees working in café restaurants in Bangkok, trust and job performance mediated the relationship between transformational leadership and turnover intentions. More recently, Pravichai and Ariyabuddhiphongs (2018) also revealed that trust in leaders and the right speech (i.e., perceptions that leaders are truthful and polite in their speech) mediated the influence of transformational leadership and turnover intentions among bank employees in Thailand.

Overall, these previous findings indicated that the more employees perceive their leaders to exhibit transformational leadership qualities, the less likely they intend to quit or leave their jobs. Hence, transformational leadership is considered as an effective tool to mitigating employee turnover intentions. Based on the literature discussed above, it is thus expected that school principals' transformational leadership will negatively affect their teachers' turnover intentions. Thus, it is proposed that:

Hypothesis 1: Transformational leadership is negatively related to turnover intentions.

The Mediating Role of Perceived Safety

In this research, perceived safety is proposed to mediate the relationship between transformational leadership and turnover intentions. Before discussing further how leaders can help to alter employees' safety perceptions, it is first necessary to indicate upfront that the term 'perceived safety' used here is distinct from other related terms used in the extant literature. For example, the term 'psychological safety' refers to a belief that others will not judge, humiliate or penalize one for taking risks, such as speaking up with suggestions or concerns (Edmondson, 1999) whereas the term 'perceived safety' used in the occupational safety literature refers to the degree to which occupational safety is perceived by employees to be a priority in the organization (Zohar, 2010). In this present research, perceived safety is defined specifically as the extent to which one feels safe and secure in his/her surrounding environment including the workplace, home, and in life in general. In the context of this research, this measure also extends to include the general perceptions of feeling safe to work in the Deep South of Thailand.

It goes without saying that safety and security is fundamental human needs. In this respect, Maslow's (1970) hierarchy of needs theory posits that human needs and goals can be portrayed as a hierarchy (i.e., like a pyramid), with the most fundamental needs situated at the bottom. Physiological needs (e.g., thirst and hunger) are the most fundamental human needs, followed by other higher-order needs, namely, the needs for safety (e.g., security), the need for belongingness (e.g., friendship), the need for esteem (e.g., recognition and achievement), and the need for self-actualization (e.g., the fulfillment of one's life goals) (Zheng et al., 2016). Central to Maslow's theory of needs is the deficit principle, which postulates that if one's lower-order needs are not satisfied or fulfilled, one will not strive to accomplish other higher-order goals (Kapp, 2012).

While past research has shed light on the influence of leadership on the fulfillment of individuals' needs such as the needs for belongingness and esteem (De Cremer et al., 2006; Potipiroon & Ford, 2019) and self-actualization (Bellé, 2013), there is virtually no research examining the influence of transformational leadership on individuals' perceived safety. Indeed, employees need a safe work environment before they can even begin to think about striving for higher-order goals. That is, safety is recognized as a prerequisite to achieving other higher-order goals. Similarly, according to Herzberg's two-factor (motivation-hygiene) theory (Herzberg et al., 1959), perceived safety could be viewed as a 'hygiene' factor that, if not properly considered by the employing organization, can undermine employees' job satisfaction and their commitment to the employing organizations (See also Kovach, 2018).

So how can transformational leadership shape employees' perceptions of safety? In particular, what specific roles can transformational school leaders take to influence perceptions of safety among their teachers in the context of Thailand's Deep South? As noted, transformational leadership comprises a complex set of behaviors including idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration First, it is expected that through inspirational motivation and intellectual stimulation, transformational school leaders can help reduce teachers' anxiety and alter their safety perceptions by encouraging them to look at the adverse work conditions as an inherent work challenge that can be overcome. Transformational leaders can do this by providing them with hope and assurances that things will get better (Argenti, 2020). Secondly, through individualized consideration, school leaders can serve as mentors and counselors by showing employees empathy, care and concern for their safety and well-being. Such emotional support will likely help mitigate one's safety concerns. Research indicates that during times of crises or fast-moving situations, employees emphasize the importance of hearing the voice of their leader, whether in person or through email or phone messages (Argenti, 2002). Furthermore, given the concern for personal safety of their employees, transformational school leaders may enact specific changes in the safety measures at the school level (e.g., strict school entry policy and training teachers on self-defense) such that employees could feel more secure when coming to work on the school premises. Indeed, leaders who are high in idealized influence may embrace their teachers' safety as a core value through their own personal commitment, thereby facilitating higher levels of followers' sense of safety.

To date, although there is little emprical evidence to suggest that transformatinal leaders can influence employees' safety perceptions in uncertain contexts, research in related literatures has consistently shown that transformational leadership can influence perceptions of occupational safety among young Canadian workers from diverse jobs (Barling et al., 2002) and also among Norwegian offshore oil installation workers (Nielsen et al., 2013).

Furthermore, Huang et al. (2016) found that employee safety perceptions was related to a lower turnover rate, whereas Morrow and Crum (1998) showed that safety perceptions were positively related to the intent to remain with the organization. The only known study that pertains directly to this current research is the qualitative study by Brooks and Sungtong (2014), which indicates that transformational school leaders in the deep south of Thailand can indirectly influence their teachers' turnover by way of altering their safety perceptions. Based on this reasoning and also the emerging empirical evidence, the present study hypothesizes that:

Hypothesis 2: Perceived safety mediates the relationship between transformational leadership and turnover intentions.

The Mediating Role of Job Satisfaction

Job satisfaction is a specific job attitude relating to the reaction that individuals have to either their overall work or specific facets of the job such as their supervisors, coworkers and pay (Judge & Kammeyer-Mueller, 2012). Broadly speaking, job satisfaction results from the perception that one's job or facets of the job can provide what one values in the work situation. It has been indicated that job satisfaction is one of the most important pieces of information once a person joins the organization (Hulin & Judge, 2003). Indeed, employee job satisfaction has been shown to be an important outcome for organizations as it can predict performance on the job (Judge et al., 2001; Riketta, 2008) and employee turnover intentions (Tett & Meyer, 1993).

Leadership is considered one of the most important determinants of employee job satisfaction. Past studies have consistently shown that leadership behavior such as transformational leadership can influence one's satisfaction with the leader (Wells & Peachey, 2011) and overall job satisfaction (Judge et al., 2001). First, through idealized influence, transformational leaders can behave as role models for employees in terms of promoting prosocial work ethics. In the contexts of schools, transformational leaders can emphasize to their teachers the importance of working for the underprivileged and the students in need, in turn increasing their awareness and instilling in them the belief that prosocial value is a shared common goal that transcends individual interests (Aydogmus et al., 2018). This can generate perceptions that one's jobs are important to the betterment of others, which in turn influence one's job satisfaction. Secondly, through inspirational motivation, transformational leaders can communicate with their teachers, which allow them to understand the organizational goals and also how their roles help to contribute to such goals (Bogler, 2001; Aydogmus et al., 2018). Indeed, the line of sight between one's jobs and organization's goals has been shown to be associated with job satisfaction (Paarlberg & Lavigna, 2010). Thirdly, through intellectual stimulation, transformational leaders can continuously engage their followers in important organizational decision-making. It has been shown that teachers report greater satisfaction in their work when they perceive their principal as someone who shares information, delegates authority, and keeps open channels of communication with teachers while challenging their ideas (Bogler, 2001; Dinham & Scott, 2000). This can make employees perceive their work as more interesting due to increased learning and growth. Finally, through individualized consideration, transformational leadership is concerned not only about the work output from their employees but also about their feelings and well-being (Cummings et al., 2010). Job satisfaction can thus arise through personal care and attention, and respectful treatment from organizational leaders.

Several previous studies have highlighted in the importance of the mediating role of safisfaction. For example, in a sample of 200 softball and volleyball assistant coaches in the US, Wells and Peachey (2011) found that the relationship between transformational leadership and turnover intentions was mediated by employee satisfaction with the leader. Similarly, in a corporate setting characterized by high turnover rates, Lim et al. (2017) found that job satisfaction and organizational commitment can attenuate the negative relationship between transformational leadership and turnover intentions. Based on the existing empirical evidence, the present research thus hypothesizes that;

Hypothesis 3: Job satisfaction mediates the relationship between transformational leadership and turnover intentions.

Sequential Mediation Hypothesis

Thus far, the present research proposes that perceptions of safety and job satisfaction will individually mediate the relationship between transformational leadership and turnover intentions. This present study further proposes that the influence of transformational leadership on turnover intentions could be sequentially mediated by perceived safety and job satisfaction. Specifically, it is argued that the relationship between perceived safety and turnover intentions is likely indirect. For example, in a sample of truck drivers from two U.S. trucking companies, Huang et al. (2016) found that job satisfaction mediated the relationship between employees' perceptions of safety and turnover rate. Thus, it is proposed that job satisfaction is likely a proximal predictor of turnover intentions that will mediate the influence of transformational leadership and safety perceptions. Thus, this study proposes the following hypothesis:

Hypothesis 4: Perceived safety and job satisfaction sequentially mediate the relationship between transformational leadership and turnover intentions.

Methodology

Context of the Deep South of Thailand

Since 2004, the three southern border provinces of Thailand have been caught in a series of violence and conflict caused by the local Muslim separatist militants who seek to create an independent entity state, comprising of Yala, Narathiwat, and Pattani provinces. The source of this protracted conflict is complex, which encompasses political, social, economic, ethnic and religious reasons (Storey, 2018). As noted, Buddhist Thais and those who represent the Thai authority such as school teachers and governing officers are often the targets of attacks (Human Rights Watch, 2010). Since 2005, more than 1,000 schools in the deep south have been shut down while Thai officials and the military are under increasing pressure to improve school safety and security measures. Although the Thai military is stationed in most affected areas, the tensions still persist. According to the statistics from Deep South Watch (2018), crimes of violence have resulted in roughly 14,890 casualties, involving 5,377 deaths and 9,513 injuries during 2004 to 2012. Additionally, the violence has claimed the lives of more than 150 teachers (Bangkok Post, 2018). Reports from public school principals also indicated the sheer difficulty in running public schools in this region. Brooks and Sungtong (2014) indicated that public school principals tend to lack the understanding of the local

cultures and also access to important security information while also encountering a continuous competition from the local Islamic schools for student enrollments. Furthermore, the presence of Thai armed military patrols in and around school grounds can send the wrong signal to the local communities that the school principals are not on the people's side, making them the ultimate targets of attacks (Brooks, 2015). Under this dire situation, the Southern Border region is still far removed from the atmosphere of safety.

Sample and Data Collection

The data were collected from a sample of the primary school teachers working under the jurisdiction of the Primary Educational Service Area Office (PEASO) in the Three Southern Border Provinces of Thailand (Office of the Basic Education Commission, 2018). The sample was randomly selected from the Yala Primary Educational Service Area Offices 1 to 3, Pattani Primary Educational Service Area Offices 1 to 3 and Narathiwat Primary Educational Service Area Offices 1 to 3. In particular, this study used two-stage cluster sampling technique for selecting the schools and the respondents. In particular, proportional stratified sampling technique was used to determine the number of schools to be selected from each educational service area, totally 90 schools. This number was also determined by taking into account the number of clusters that is appropriate for multilevel modeling. In particular, Muthén (1989) recommended that at least 50 to 100 clusters should be sampled. Early in 2018, the lead researcher hand-distributed 900 self-administered questionnaires to the 90 schools. At least 10 teachers from each of the 90 schools were asked to respond to the survey questionnaires. Each survey has a personalized letter introducing the recipient to the survey and detailed instructions on how to answer the survey questions. The teacher participants were asked to fill out the information about themselves, and then return the questionnaires directly to the lead researcher.

Out of 900 questionnaires distributed to the teachers in 90 schools in the 3 provinces, a total of 779 usable surveys from 82 schools were returned to the researcher after a period of three months, resulting in the response rate of 86.55%. About 76.12% of the respondents are full-time teachers; 41.46% are around 35 to 44 years old; 79.21% are female; 68.93% are married status and 85.49% are bachelor graduates. More than 40% have tenure of less than 10 years and more than 80% of the respondents have a dyad tenure with the school principals for less than 5 years. Most of the respondents had monthly salary of between 500 to 1,000 USD.

Measures

The measure of transformational leadership was adapted from the 20-item Multifactor Leadership Questionnaire (MLQ Form 5X; Bass & Avolio, 1995). This measurement was based on a five-point scale ranging from 1 *(not at all)* to 5 *(frequently, if not always)* (α = .92). Perceived safety was measured using the 4 items adapted from Grieger et al. (2003). This measurement was based on a five-point scale ranging from 1 *(not at all)* to 5 *(extremely)* (α = .82). Job satisfaction was measured using the 5 items adapted from Brayfield and Rothe (1951). This measurement was based on a seven-point scale ranging from 1 *(strongly disagree)* to 7 *(strongly agree)* (α = .92). Finally, turnover intentions were measured using 3 items adapted from O'Reilly III et al. (1991). This measurement was based on a five-point scale ranging from 1 *(strongly disagree)* to 5 = *(strongly agree)* (α = .89). All the study items (except for the specific items of transformational leadership measurement) are shown in Table 1.

Data Analyses

The study hypotheses were tested using multilevel structural equation modeling (MSEM) in Mplus Version 7.2 (Muthén & Muthén, 1998-2012). MSEM has the ability to model multivariate and clustered data by relying on the strengths of both multi-level modeling (MLM) and conventional SEM (Preacher et al., 2010). The MSEM approach specifies two structural models—a within-cluster ("individual-level") structural model and a between-cluster ("organizational-level") structural model. The benefit of using MSEM to test the hypotheses is that it creates latent variables at the within-group level and the between-group level for the variables that vary at both levels of analysis (Ryu, 2014). In the current study, this advantage applies to all of the study variables, which were measured at the individual level but are nested within organizations; thus, they could vary at both the individual (within-organization) and organization (between-organization) levels of analysis. As noted, research on transformational leadership, perceived safety, job satisfaction and turnover intentions have indicated that these variables could vary at both levels of analysis (Chang et al., 2013; Eberly et al., 2017). Thus, the proposed theoretical model corresponds with the 1-1-1 MSEM model discussed by Preacher et al. (2010).

As discussed, it is important to first examine whether the study variables, which were observed at Level 1, had sufficient variance to be examined at Level 2. Next, the measurement model was tested via multilevel confirmatory factor analysis (MCFA). Several indicators of fit were used, including chi-squared tests, comparative fit index (CFI), Tucker-Lewis index (TLI), root mean-square error of approximation (RMSEA) and the level-specific information for the standardized root-mean square residual (SRMR) index (Hu & Bentler, 1999). Finally, the proposed theoretical model was tested using MSEM.

Results

Multilevel Considerations

The study first assessed whether transformational leadership, perceived safety, job satisfaction and turnover intentions could be examined at the organizational level of analysis. Note that, it is necessary to demonstrate both between-groups disagreement and within-group agreement (LeBreton & Senter, 2008). This study used the intraclass correlation coefficients (ICC1 and ICC2) to assess between-groups disagreement and interrater agreement (r_{wg}) to assess within-groups agreement. Specifically, we found support for between-organizational variances in transformational leadership ($F_{81, 697} = 6.04$, $p < 0.001$; ICC1 = 0.35; ICC2 = 0.83; the median $r_{wg (j)} = 0.99$), perceived safety ($F_{81, 697} = 3.08$, $p < 0.001$; ICC1 = 0.18; ICC2 = 0.68; the median $r_{wg (j)} = 0.92$), job satisfaction ($F_{81, 697} = 3.42$, $p < 0.001$; ICC1 = 0.20; ICC2 = 0.71; the median $r_{wg (j)} = 0.97$), and turnover intentions ($F_{81, 697} = 2.81$, $p < 0.001$; ICC1 = 0.16; ICC2 = 0.64; the median $r_{wg (j)} = 0.67$). These results suggest that it is appropriate to examine these variables at both levels of analysis.

Measurement Model

In assessing the convergent validity of the measurement items, the factor loadings were examined (Hulland, 1999). Furthermore, the factor loadings were all above 0.50 and significant at both levels of analysis. The composite variables, which were used as the input for the MSEM analysis, were based on this multilevel CFA model. As shown in Table 1, the

factor loadings of the constructs at the individual level were all above 0.50, ranging from 0.59 to 0.93. Furthermore, we found that the average variance extracted (AVEs) ranged from 0.52 to 0.77, which exceeded the recommended value of 0.50 (Fornell & Larcker, 1981). Composite reliabilities (CR) also ranged from 0.80 to 0.89, which exceeded the recommended value of 0.60 (Bagozzi & Yi, 1988). At the organizational level, the factor loadings of the constructs ranged from 0.72 to 1.02. Furthermore, we found that the average variance extracted (AVEs) ranged from 0.74 to 0.97 (Fornell & Larcker, 1981). Composite reliabilities (CR) also ranged from 0.80 to 0.89, which exceeded the recommended value of 0.60 (Bagozzi & Yi, 1988).

Table 1

Multilevel Confirmatory Factor (MCFA) Analysis

Latent Constructs and Manifest Indicators	Standardized Loadings	
	Within Level	Between Level
Transformational Leadership	AVE = 0.77 CR = 0.80	AVE = 0.96 CR = 0.80
1. Idealized Influence	0.86	0.98
2. Inspirational Motivation	0.87	0.97
3. Intellectual Stimulation	0.74	0.96
4. Individualized Consideration	0.76	0.92
Perceived safety	AVE = 0.54 CR = 0.80	AVE = 0.74 CR = 0.80
1. I feel safe to work in this school.	0.75	0.92
2. I feel safe in my own home.	0.59	0.73
3. I feel safe to live a life here.	0.90	1.00
4. I feel safe to work in the deep south of Thailand.	0.64	0.72
Job satisfaction	AVE = 0.65 CR = 0.83	AVE = 0.97 CR = 0.83
1. I feel fairly satisfied with my present job.	0.78	0.98
2. Most days I am enthusiastic about my work.	0.84	0.98
3. Each day seems like it will never end.	0.72	0.96
4. I feel real enjoyment in my work.	0.87	0.99
5. I consider my job to be rather unpleasant.	0.78	0.99
Turnover Intentions	AVE = 0.52 CR = 0.89	AVE = 0.91 CR = 0.89
1. I often think about leaving this school.	0.78	0.91
2. If I have my way, I would not be working for this school.	0.93	0.97
3. I have seriously thought about leaving this school.	0.79	1.00

A series of MCFA were then conducted to evaluate the convergent and discriminant validity of the constructs at both levels of analysis. The results showed that the hypothesized four-factor model (i.e., transformational leadership, perceived safety, job satisfaction and turnover intentions) provided an acceptable fit to the data ($\chi^2 = 541.90$, $df = 196$, $p < 0.001$; RMSEA = 0.05; CFI = 0.95; TLI = 0.94; SRMR = 0.04_{within} and $0.12_{between}$, Model 1). The fit of this model was better than those of other alternative models. For example, the two-factor model in which we combined perceived safety, job satisfaction and turnover intentions a significantly worse fit to the data ($\Delta \chi^2 = 2,267.42$, $\Delta df = 10$, $p < 0.001$; RMSEA = 0.13; CFI = 0.61; TLI = 0.54; SRMR = 0.15_{within} and $0.22_{between}$). The proposed four-factor model was thus accepted as the best fitting model. These results are reported in Table 2.

Table 2

Comparisons of Measurement Models

Model	χ^2	df	RMSEA	CFI	TLI	SRMR	$\Delta\chi^2/\Delta df$
1. Four-factor	541.90	196	0.05	0.95	0.94	W = 0.04 B = 0.12	-
2. Three-factor[1]	1,545.92	202	0.09	0.80	0.76	W = 0.11 B = 0.19	1,004.02/6
3. Three-factor[2]	1,871.06	202	0.10	0.75	0.70	W = 0.11 B = 0.34	1,329.16/6
4. Two-factor	2,809.32	206	0.13	0.61	0.54	W = 0.15 B = 0.22	2,267.42/10
5. One-factor	4,228.77	208	0.16	0.39	0.30	W = 0.17 B = 0.29	3,686.87/12

Note. All $\Delta\chi^2/\Delta df = p < 0.001$; Four-factor (hypothesized); Three-factor [1] (job satisfaction and perceived safety merged); Three-factor [2] (job satisfaction and turnover intentions merged); Two-factor (job satisfaction, perceived safety and turnover intentions merged); One-factor (all constructs merged); W= Within level; B = Between level.

Descriptive Statistics and Correlations

Descriptive statistics, bivariate correlations, means and standard deviations are reported in Table 3. Variables at the individual level (Level 1 [$N = 779$]) are shown in the upper table, whereas aggregated variables at the organizational level (Level 2 [$N = 82$]) are shown above lower table. As expected, the bivariate correlation analysis showed that, at both levels of analysis, all the predictors were negatively correlated with turnover intention. Consistent with the MCFA results, the bivariate correlations among all the key variables were also found to fall within acceptable range ($r < 0.70$) (Hair et al., 2010). Moreover, the report show that the square roots of AVE were greater than the correlations shared between the construct and other constructs in the model (Fornell & Larcker, 1981).

Table 3

Means, Standard Deviations, and Correlations

Variables	M	SD	1	2	3	4
Within Level ($N = 779$)						
1. Transformational leadership	3.88	0.57	(0.88)			
2. Perceived safety	3.91	0.67	0.34**	(0.73)		
3. Job satisfaction	5.94	0.78	0.49**	0.36**	(0.81)	
4. Turnover intentions	2.56	1.09	-0.13**	-0.06**	-0.22**	(0.72)
Between Level ($N = 82$)						
1. Transformational leadership	3.88	0.36	(0.98)			
2. Perceived safety	3.91	0.35	0.40**	(0.86)		
3. Job satisfaction	5.94	0.42	0.62**	0.58**	(0.98)	
4. Turnover intentions	2.56	0.54	-0.24**	-0.11**	-0.35**	(0.95)

Note. ** $p < 0.01$; Numbers in the parentheses are square roots of AVEs (Fornell & Larcker, 1981).

Structural Model: Hypothesis Testing

The hypothesized theoretical model in which all paths were estimated was conducted using MSEM. The results showed that the hypothesized model provided an acceptable fit to the data ($\chi^2 = 517.67$, $df = 196$, $p < 0.001$; RMSEA = 0.05; CFI = 0.96; TLI = 0.95; SRMR = 0.04_{within} and $0.12_{between}$). However, the results showed that two paths were non-significant (e.g., [1] the path linking transformational leadership and turnover intentions and [2] the path linking perceived safety and turnover intentions) and thus an alternative model in which both of these paths were removed was tested. The result showed that this alternative model had an

acceptable fit to the data ($\chi^2 = 519.02$, $df = 200$, $p < 0.001$; RMSEA = 0.05; CFI = 0.96; TLI = 0.95; SRMR = 0.04$_{within}$ and 0.12 $_{between}$) and did not differ significantly from the hypothesized model. Since this is a more parsimonious model (i.e., containing fewer paths), it was accepted as the best fitting model. As shown in Table 4 and Figure 2, the results of the MSEM analysis were separated into the individual and the organizational levels of analysis.

At the individual level of analysis, the results showed that individuals' perceptions of transformational leadership were positively related to perceived safety ($\beta = 0.33$, $p < 0.001$). This explained about 11.00% of the variance in perceived safety. The results also showed that transformational leadership ($\beta = 0.42$, $p < 0.001$) and perceived safety ($\beta = 0.15$, $p < 0.001$) were positively related to job satisfaction. Together, these variables explained about 24.00% of the variance in job satisfaction. Finally, job satisfaction was found to be negatively related to turnover intentions ($\beta = -0.17$, $p < 0.001$). Together, these variables explained about 3% of the variance in turnover intentions.

Table 4

Multilevel Structural Equation Modeling (MSEM) Analyses

Estimated Paths	Within Level (N = 779)		Between Level (N = 82)	
	β	SE	β	SE
TL --> Perceived safety	0.33***	0.03	0.55***	0.11
Perceived safety --> Job satisfaction	0.15***	0.04	0.54**	0.13
TL --> Job satisfaction	0.42***	0.03	0.39***	0.14
Job satisfaction--> Turnover intentions	-0.17***	0.04	-0.42**	0.14
Explained Variance (R^2)				
Perceived Safety	0.11***	0.02	0.30*	0.13
Job satisfaction	0.24***	0.03	0.69***	0.11
Turnover intentions	0.03*	0.01	0.17^t	0.11

Note. TL = Transformational leadership; β= standardized coefficients; ^{t} $p < 0.10$; * $p < .05$; ** $p < 0.01$; *** $p < 0.001$.

At the organizational level of analysis, the results showed that the aggregated perceptions of transformational leadership were positively related to perceived safety ($\beta = 0.55$, $p < 0.001$). This could explain about 30% of the variance in perceived safety. The results further showed that transformational leadership ($\beta = 0.39$, $p < 0.001$) and perceived safety ($\beta = 0.54$, $p < 0.01$) were positively related to job satisfaction. Together, these variables explained about 69.00% of the variance in job satisfaction. Finally, job satisfaction was found to be negatively related to turnover intentions ($\beta = -0.42$, $p < 0.01$). Together, these variables explained about 17.00% of the variance in turnover intentions.

In terms of testing the indirect effects, confidence intervals (CIs) of 90% are used to correspond to one-tailed (.05) hypothesis tests, which are often justified in mediation research (Preacher et al., 2010). The results showed that the indirect effects of transformational leadership via job satisfaction was significant on turnover intentions at the individual level of analysis (-0.15; $SE = 0.04$; 90% CI [-0.22, -0.08]). Similarly, the results showed that the indirect effects of transformational leadership via job satisfaction was significant on turnover intentions at the organizational level of analysis (-0.17; $SE = 0.09$; 90% CI [-0.32, -0.02]). These results provide full support to Hypothesis 3. More importantly, the results showed that the indirect effects of transformational leadership on turnover intentions via the roles of perceived safety and job satisfaction was significant at the individual level of analysis (-0.02;

SE = 0.01; 90% CI [-0.03, -0.01]) as well as at the organizational level of analysis (-0.13; *SE* = 0.07; 90% CI [-0.25, -0.01]). These results provide full support to Hypothesis 4, as shown in Table 5.

Table 5

Mediation Analyses

Mediated Paths	Effect	SE	90% CI	
			LLCI	ULCI
Within Level (*N* = 779)				
TL --> Jobsat--> Turnover intentions	-0.15***	0.04	-0.22	-0.08
TL --> Safety --> Jobsat--> Turnover intentions	-0.02**	0.01	-0.03	-0.01
Between Level (*N* = 82)				
TL --> Jobsat--> Turnover intentions	-0.17^t	0.09	-0.32	-0.02
TL --> Safety --> Jobsat--> Turnover intentions	-0.13^t	0.07	-0.25	-0.01

Note. SE = standard errors; *LLCI* = lower limit confidence interval; *ULCI* = upper limit confidence interval; *CI* that excludes zero indicates that the conditional indirect effects are significant; * = significant indirect paths [90% CI]; ^{t} $p < 0.10$; ** $p < 0.01$; *** $p < 0.001$; TL = Transformational leadership; Jobsat = Job satisfaction; Safety = Perceived safety.

Discussion

The present research examined the relationship between transformational leadership and employee turnover intentions by considering the sequential mediating roles of perceived safety and job satisfaction among primary school teachers in the three Southern Border Provinces in Thailand. The results showed that, at both the individual and organizational levels of analysis, employee perceptions of safety and job satisfaction played particularly important mediating roles in influence transformational leadership and turnover intentions. Several theoretical and practical contributions emerged from the current findings.

Figure 2

Multilevel structural equation modeling (MSEM) results
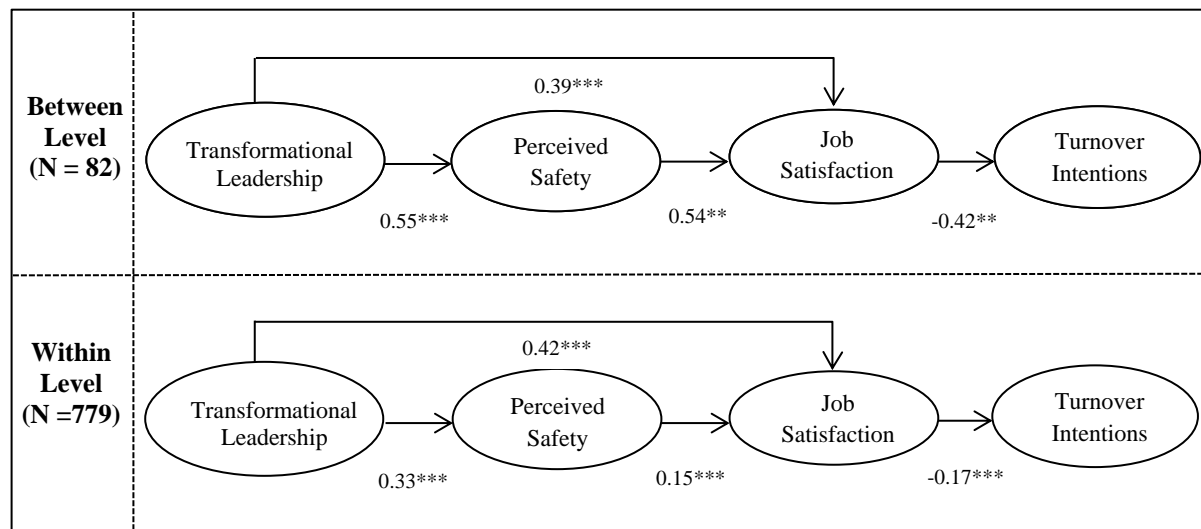
Note. Coefficients are unstandardized; ** p < .01; *** p < 0.001.

Theoretical Implications

The present research reveals that transformational leadership qualities of school principals can play a critical role in preparing employees to face the inherent challenges in the context of the Deep South of Thailand. Few studies to date have examined the role of transformational leadership in fast-moving contexts characterized by turmoil and uncertainty (Brooks, 2015; De Hoogh et al., 2004; Eberly et al., 2017; Pawar & Eastman, 1997). In fact, none has examined the role of transformational leadership on school teachers' turnover intentions in conflict-prone areas such as the Deep South of Thailand. More importantly, this research contributes to the growing literature on the relationship between transformational leadership and turnover intentions (Ariyabuddhiphongs & Kahn, 2017; Caillier, 2016; Eberly et al., 2017; Pravichai & Ariyabuddhiphongs, 2018).

A primary contribution from this research is the finding that transformational leadership can help to enhance employees' safety perceptions. The results from this study as well as those from previous studies suggest that while employees can feel threatened by the environments that are unsafe, transformational leaders can help to fulfill these fundamental human needs. This knowledge adds to the existing leadership literature which has the tendency to emphasize higher-order needs. Although other types of safety perceptions (e.g., occupational safety) have been examined in previous research (Barling et al., 2002; Nielsen et al., 2013), this research is among the first to shed light on the role of safety perceptions (e.g., "I feel safe to work here"). Future research will benefit from examining whether the influence of transformational leadership on safety perceptions is generalizable to other important organizational and national contexts.

The second contribution of this research is the finding that job satisfaction mediates the influence of transformational leadership on turnover intentions. This finding points to the importance of leadership in altering employees' perceptions about their work roles (Wells & Peachey, 2011). It is important to note that school teachers in the deep south not only have to deal with daily life threats but they also experience difficulties in performing in-role duties. In particular, this region provides a challenging setting for educational staff in terms of embracing ethnic and cultural diversity among the students but also in terms of coping with the students' generally low performance on national tests (Isranews Agency, 2018). It is thus good news that transformational leaders can help to mitigate teachers' negative perceptions about their work roles.

The third contribution of this research is the use of multilevel approach to examining the influence of transformational leadership. The current findings confirm that the influence of transformational is multilevel. In particular, there was a significant variation in the levels of transformational leadership across the 82 primary schools, which in turn resulted in different levels of employee safety perceptions, job satisfaction and turnover intentions. At the organizational level of analysis, the proposed theoretical model could explain more than 17 percent of the variance in turnover intentions, whereas at the individual level of analysis the model could explain about 3 percent of the variance in turnover intentions. Although turnover intentions do not always translate to actual turnover intentions, research has shown that turnover intentions are positively related to withdrawal behaviors (e.g., reducing one's work efforts) (Podsakoff et al., 2007), which are undesirable in themselves.

Practical Implications

There are several practical implications that arise from this current research. Clearly, it is first important for school leaders to understand that their teachers rely on them for

emotional support, guidance, clarity and motivation especially in times of uncertainty. In the context of the Deep South of Thailand, several school teachers decide to leave the affected areas as they are perceived as soft targets of insurgent attacks (Brooks, 2015). The current findings indicate that school leaders could alleviate their teachers' concerns and anxiety by engaging in different types of transformational behavior. As noted earlier, school leaders not only have to work closely with the local communities in order to create a second line of defense for the schools (Brooks, 2015), they also need to provide teachers with the needed moral support, and to keep them informed about the situation in the most transparent fashion. In so doing, it is important for them to turn their teachers' attention away from the situation at hand and also to remind them of other important goals, missions and values (e.g., helping needy students) that draw them to the teaching profession in the first place. More importantly, school leaders need to act decisively, embody strength and serve as role models, which employees can look up to. All of these are easier said than done. As leadership is both art and science, it is imperative for the public sector (e.g., the Ministry of Education) to provide school principals with proper training that equips them not only with the understanding of the local Islam culture but also with the leadership lessons that are delivered through both vicarious learning and hands-on experience.

Study Limitations and Future Research

Although the use of MSEM enables us to advance the knowledge and clarify the nature of the multilevel relationships between transformational leadership on turnover intentions, there are several limitations that should be acknowledged. First, all the study variables were collected from a single point in time, which could raise concerns about the causality of the proposed relationships. It is recommended that future research rely on a longitudinal research design to mitigate this concern. Secondly, if possible, future research should use multiple sources of data for the measurement of the variables to alleviate concerns about common method variance (CMV) (Podsakoff et al., 2003). For example, school deputy principals could be asked to provide the ratings of their school principals' leadership behaviors. Although the level of variance explained in this research suggests that CMV was not a critical concern, future research will benefit from utilizing objective measures of actual turnover at the school level (i.e., using the ratio of employees who have left and the total number of employees in a given period). It will also be fruitful to conduct in-depth interviews to understand more precisely what school leaders actually do that help to mitigate employees' safety concerns and enhance their job satisfaction; and also if there any other specific leadership behavior that may suit the context. Furthermore, although this research has emphasized the importance of leadership at the school level, it is important to acknowledge that employees' perceptions of safety could also be influenced by higher-level leaders in their respective areas including those at the district, provincial or perhaps national levels.

Conclusion

The present research adopts a multilevel perspective to examine the relationship transformational leadership on turnover intentions among primary school teachers in the three Southern Border Provinces in Thailand. Specially, perceived safety and job satisfaction were found to play important mediating roles at both the individual and organizational levels of analysis. The results further indicated that the relationship between transformational leadership and turnover intentions was fully and sequentially mediated by employee

perceptions of safety and job satisfaction. The present research is among the first to propose the mediating role of general perceived safety in the relationship between transformational leaders and turnover intentions. The researchers hope that these findings will stimulate future research in this important area.

Acknowledgement

Reference

Archavanitkul, K., Vajanasara, K., & Siangdang, H. (2018, March 31). *Khwāmrunrǣng lǣ khwāmtāi phāitai nayōbāi rat : kōranī sām čhangwat chāidǣn phāk tai* [Violence and death under state policy in the Southern Border Provinces of Thailand]. http://www.ipsr.mahidol.ac.th/IPSR/AnnualConference/ConferenceII/Article/Article12.htm

Argenti, P. A. (2020, March 13). *Communicating Through the Coronavirus Crisis*. https://hbr.org/2020/03/communicating-through-the-coronavirus-crisis

Argenti, P. A. (2002). Crisis communication. Lessons from 9/11. *Harvard Business Review*, *80*(12), 103-109.

Ariyabuddhiphongs, V., & Kahn, S. I. (2017). Transformational leadership and turnover intention: The mediating effects of trust and job performance on café employees in Thailand. *Journal of Human Resources in Hospitality & Tourism, 16*(2), 215-233. doi: 10.1080/15332845.2016.1202730

Aydogmus, C., Camgoz, S. M., Ergeneli, A., & Ekmekci, O. T. (2018). Perceptions of transformational leadership and job satisfaction: The roles of personality traits and psychological empowerment . *Journal of Management & Organization, 24*(1), 81-107. doi: 10.1017/jmo.2016.59

Bangkok Post. (2018, March 31). *Teachers in deep South vow to stay on regardless*. http://www.bangkokpost.com/news/local/331133/teachers-in-deep-south-vow-to-stay-on

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74-94. https://doi.org/10.1007/BF02723327

Bass, B. M. (1985). *Leadership and performance beyond expectations.* Free Press.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics, 18*(3), 19-31. https://doi.org/10.1016/0090-2616(90)90061-S

Bass, B. M., & Avolio, B. J. (1990). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training, 14*(5), 21-27. https://doi.org/10.1108/03090599010135122

Bass, B. M., & Avolio, B. J. (1995). *MLQ multifactor leadership questionnaire, leader form, rater form, and scoring.* Mind Garden.

Bass, B. M., & Riggio, R. (2006). *Transformational leadership*. Lawrence Erlbaun Associates, Inc. Publishers.

Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly, 10*(2), 181-217. https://doi.org/10.1016/S1048-9843(99)00016-8

Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of Applied Psychology, 87*(3), 488-496. https://doi.org/10.1037/0021-9010.87.3.488

BBC News. (2019, November 6*). Gunmen kill 15 in southern Thailand's 'biggest attack' in recent years*. https://www.bbc.com/news/world-asia-50312920

Bellé, N. (2013). Experimental evidence on the relationship between public service motivation and job performance. *Public Administration Review, 73*(1), 143-153. https://doi.org/10.1111/j.1540-6210.2012.02621.x

Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly, 37(*5), 662-683. doi: 10.1177/00131610121969460

Borgmann, L., Rowold, J., & Bormann, K. C. (2016). Integrating leadership research: A meta-analytical test of Yukl's meta-categories of leadership. *Personnel Review, 45*(6), 1340-1366. https://doi.org/10.1177/00131610121969460

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307-311. https://doi.org/10.1037/h0055617

Brooks, M. C. (2015). School principals in Southern Thailand: Exploring trust with community leaders during conflict. *Educational Management Administration & Leadership, 43*(2), 232-252. https://doi.org/10.1177/1741143213513191

Brooks, M. C., & Sungtong, E. (2014). Leading in conflict zones: Principal perceptions of armed military guards in Southern Thai Schools. *Planning & Changing, 45*(3/4), 356-380.

Burns, J. M. (1978). *Leadership.* Harper and Row.

Caillier, J. G. (2016). Do transformational leaders affect turnover intentions and extra-role behaviors through mission valence? *The American Review of Public Administration, 46*(2), 226-242. https://doi.org/10.1177/0275074014551381

Chang, W. J. A., Wang, Y. S., & Huang, T. C. (2013). Work design–related antecedents of turnover intention: A multilevel approach. *Human Resource Management, 52*(1), 1-26. https://doi.org/10.1002/hrm.21515

Crede, M., Jong, J., & Harms, P. (2019). The generalizability of transformational leadership across cultures: A meta-analysis. *Journal of Managerial Psychology*, 1-36. https://doi.org/10.1108/JMP-11-2018-0506

Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., Muise , M., & Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies, 47*(3), 363-385. https://doi.org/10.1016/j.ijnurstu.2009.08.006

Deep South Watch. (2018, March 31). *A meaningful peace: Ramadan ceasefire assessment*. http://www.deepsouthwatch.org/node/4720

De Cremer, D., Van Knippenberg, D., Van Dijke, M., & Bos, A. E. R. (2006). Self-sacrificial leadership and follower self-esteem: When collective identification matters. *Group Dynamics: Theory, Research, and Practice, 10*(3), 233-245. https://doi.org/10.1037/1089-2699.10.3.233

De Hoogh, A., Den Hartog, D., Koopman, P., Thierry, H., Van den Berg, P., Van der Weide, J., & Wilderom, C. (2004). Charismatic leadership, environmental dynamism, and

performance. *European Journal of Work and Organizational Psychology, 13*(4), 447-471. https://doi.org/10.1080/13594320444000164

Dinham, S., & Scott, C. (2000). Moving into the third, outer domain of teacher satisfaction. *Journal of Educational Administration, 38*(4), 379-396. https://doi.org/10.1108/09578230010373633

Dust, S. B., Resick, C. J., & Mawritz, M. B. (2014). Transformational leadership, psychological empowerment, and the moderating role of mechanistic–organic contexts. *Journal of Organizational Behavior, 35*(3), 413-433. https://doi.org/10.1002/job.1904

Eberly, M. B., Bluhm, D. J., Guarana, C., Avolio, B. J., & Hannah, S. T. (2017). Staying after the storm: How transformational leadership relates to follower turnover intentions in extreme contexts. *Journal of Vocational Behavior, 102*, 72-85. https://doi.org/10.1016/j.jvb.2017.07.004

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350-383. https://doi.org/10.2307/2666999

Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2004). How can managers reduce employee intention to quit? *Journal of Managerial Psychology, 19*(2), 170-187. https://doi.org/10.1108/02683940410526127

Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research, 18*(3), 382-388. https://doi.org/10.1177/002224378101800313

Grant, A. M. (2008). Designing jobs to do good: Dimensions and psychological consequences of prosocial job characteristics. *The Journal of Positive Psychology, 3*(1), 19-39. https://doi.org/10.1080/17439760701751012

Grieger, T. A., Fullerton, C. S., & Ursano, R. J. (2003). Posttraumatic stress disorder, alcohol use, and perceived safety after the terrorist attack on the Pentagon. *Psychiatric Services, 54*(10), 1380-1382. https://doi.org/10.1176/appi.ps.54.10.1380

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Prentice Hall.

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*(2), 268-279. https://doi.org/10.1037/0021-9010.87.2.268

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. John Wiley & Sons.

Hox, J. J. (2010). *Multilevel analysis: Techniques and applications* (2nd ed.). Routledge.

Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. doi: 10.1080/10705519909540118

Huang, Y. H., Lee, J., McFadden, A. C., Murphy, L. A., Robertson, M. M., Cheung, J. H., & Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied Ergonomics, 55*(July), 248-257. https://doi.org/10.1016/j.apergo.2015.10.007

Hulin, C. L., & Judge, T. A. (2003). Job attitudes. *Handbook of psychology, 12*, 255-276. https://doi.org/10.1002/0471264385.wei1211

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal, 20*(2), 195-204. https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7

Human Rights Watch. (2010). *Targets of both sides: Violence against students, teachers, and schools in Thailand's southern border provinces.* https://www.hrw.org/report/2010/09/20/targets-both-sides/violence-against-students-teachers-and-schools-thailands

Isranews Agency. (2018, March 31). *Kānsưksā chāidǣn tai wikrit čhop Por sām 'ān mai 'ǭk sām sām kǭ kā nakrīan nap sǣn mai daitǭ 'a'u dom sưksā* [The education crisis in the Southern Border Provinces: 33% of third grade students are unable to read, hundreds of thousands of students with disabilities are enrolling in higher education]. http://www.isranews.org/content-page/67-south-slide/1752

Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. *Annual Review of Psychology, 63*, 341-367. https://doi.org/10.1146/annurev-psych-120710-100511

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology, 89*(5), 755-768. https://doi.org/10.1037/0021-9010.89.5.755

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*(3), 376-407. https://doi.org/10.1037/0033-2909.127.3.376

Kaewrattanasri, P. (2013). *Khunnaphāp chīwit nai kānthamngān khǭng khārātchakān khrū nai phưnthī phahu watthanatham : kān wikhrǭ patčhai chǣng sāhēt nai sām čhangwat chāidǣn phāk tai* [Quality of work life of teachers in multiculture area: Analysis of causal variable in the Three Southern Border Provinces] [Master 's thesis]. Prince of Songkla University.

Kapp, E. A. (2012). The influence of supervisor leadership practices and perceived group safety climate on employee safety performance. *Safety Science, 50*(4), 1119-1124. https://doi.org/10.1016/j.ssci.2011.11.011

Kara, D., Uysal, M., Sirgy, M. J., & Lee, G. (2013). The effects of leadership style on employee well-being in hospitality. *International Journal of Hospitality Management, 34*, 9-18. https://doi.org/10.1016/j.ijhm.2013.02.001

Kovach, M. (2018). A review of classical motivation theories. *Journal of Interdisciplinary Studies in Education, 7*(1), 34-53. https://doi.org/10.32674/jise.v7i1.1059

LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods, 11*(4), 815-852. https://doi.org/10.1177/1094428106296642

Lim, A., Loo, J. T. K., & Lee, P. H. (2017). The impact of leadership on turnover intention: The mediating role of organizational commitment and job satisfaction. *Journal of Applied Structural Equation Modeling, 1*(1), 27-41.

Mandhana, N. (2018, March 31). *No peace: Why conflict persists in Thailand's deep south.* https://world.time.com/2012/04/23/thailand-insurgency/

Maslow, A. H. (1970). *Motivation and Personality* (2nd ed.). Harper & Row.

Morrow, P. C., & Crum, M. R. (1998). The effects of perceived and objective safety risk on employee outcomes. *Journal of Vocational Behavior, 53*(2), 300-313. https://doi.org/10.1006/jvbe.1997.1620

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organizational linkage: The sychology of commitment absenteeism and turnover*. Academic Press.

Muthén, B. O. (1989). Latent variable modeling in heterogeneous populations. *Psychometrika, 54*(4), 557–585. https://doi.org/10.1007/BF02296397

Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user's guide: Statistical analysis with latent variables* (7th ed.). Muthén & Muthén.

Nielsen, M. B., Eid, J., Mearns, K., & Larsson, G. (2013). Authentic leadership and its relationship with risk perception and safety climate. *Leadership & Organization Development Journal, 34*(4), 308-325. https://doi.org/10.1108/LODJ-07-2011-0065

Office of the Basic Education Commission. (2018, March 31). *Rabop sārasonthēt phư̄a b̜̄ǫrihān kānsưksā* [Education management information system: EMIS]. http://data.bopp-obec.info/emis/

O'Reilly III, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*(3), 487-516. https://doi.org/10.5465/256404

Paarlberg, L. E., & Lavigna, B. (2010). Transformational leadership and public service motivation: Driving individual and organizational performance. *Public Administration Review, 70*(5), 710-718. https://doi.org/10.1111/j.1540-6210.2010.02199.x

Pannitayapong, V., & Wisalaporn, S. (2011). Kānphatthanā tūa bong chī khunnaphāp chīwit kānthamngān khǭng khrū nai sangkhom phahu watthanatham sām čhangwat chāidǣn phāk tai [The development of the quality of work life indicators of teachers in multi-cultural society in the Three Southern Border Provinces of Thailand]. *Journal of Education, 22*(2), 13-25.

Park, S. J., & Kim, H. T. (2009). Do types of organizational culture matter in nurse job satisfaction and turnover intention? *Leadership in Health Services, 22*(1), 20-38. https://doi.org/10.1108/17511870910928001

Pavic, V. (2020). Investigating the relationship between principal behaviors and teacher turnover intentions in selected maryland schools (Publication No. 27543743) [Doctoral dissertation]. Wilmington University.

Pawar, B. S., & Eastman, K. K. (1997). The nature and implications of contextual influences on transformational leadership: A conceptual examination. *Academy of Management Review, 22*(1), 80-109. https://www.jstor.org/stable/259225

Peachey, J. W., Burton, L. J., & Wells, J. E. (2014). Examining the influence of transformational leadership, organizational commitment, job embeddedness, and job search behaviors on turnover intentions in intercollegiate athletics. *Leadership & Organization Development Journal, 35(*8), 740-755. https://doi.org/10.1108/LODJ-10-2012-0128

Peltokorpi, V., Allen, D. G., & Froese, F. (2015). Organizational embeddedness, turnover intentions, and voluntary turnover: The moderating effects of employee demographic characteristics and value orientations. *Journal of organizational behavior, 36*(2), 292-312. https://doi.org/10.1002/job.1981

Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal, 49*(2), 327-340. https://doi.org/10.5465/AMJ.2006.20786079

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of applied psychology, 92*(2), 438-454. https://doi.org/10.1037/0021-9010.92.2.438

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & 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. https://doi.org/10.1037/0021-9010.88.5.879

Potipiroon, W., & Ford, M. T. (2019). Relational costs of status: Can the relationship between supervisor incivility, perceived support, and follower outcomes be exacerbated?

Journal of Occupational and Organizational Psychology, 92(4), 873-896. https://doi.org/10.1111/joop.12263

Pravichai, S., & Ariyabuddhiphongs, V. (2018). Transformational leadership and turnover intention: The mediating effects of right speech (Samma Vaca) and trust in the leader. *Journal of Management, Spirituality & Religion, 15*(3), 253-272. https://doi.org/10.1080/14766086.2017.1417892

Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods, 15*(3), 209-233. https://doi.org/10.1037/a0020141

Riketta, M. (2008). The causal relation between job attitudes and performance: A meta-analysis of panel studies. *Journal of Applied Psychology, 93*(2), 472-481. doi: 10.1037/0021-9010.93.2.472

Ryu, E. (2014). Model fit evaluation in multilevel structural equation models. *Frontiers in Psychology, 5*, 1-9. https://doi.org/10.3389/fpsyg.2014.00081

Siong, Z. M. B., Mellor, D., Moore, K. A., & Firth, L. (2006). Predicting intention to quit in the call centre industry: Does the retail model fit? *Journal of Managerial Psychology, 21*(3), 231-243. https://doi.org/10.1108/02683940610659579

Steel, R. P., & Ovalle, N. K. (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. *Journal of Applied Psychology, 69*(4), 673-686. https://doi.org/10.1037/0021-9010.69.4.673

Storey, I. (2018, March 31). *Ethnic separatism in Southern Thailand: Kingdom Fraying at the Edge?* http://www.dtic.mil/ cgi-bin/GetTRDoc?AD=ADA462929

Sun, R., & Wang, W. (2016). Transformational leadership, employee turnover intention, and actual voluntary turnover in public organizations. *Public Management Review, 19*(8), 1124-1141. https://doi.org/10.1080/14719037.2016.1257063

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*(2), 259-293. https://doi.org/10.1111/j.1744-6570.1993.tb00874.x

Van Knippenberg, D., & Sitkin, S. B. (2013). A critical assessment of charismatic—transformational leadership research: Back to the drawing board? *Academy of Management Annals, 7*(1), 1-60. https://doi.org/10.1080/19416520.2013.759433

Wisalaporn, S. (2009). *Saphāp kānčhatkān sưksā nai čhangwat chāidǣn tai* [Status of educational management in the three Southern Border Provinces] (3rd ed.). V. T. C. Communication, Ltd.

Wells, J. E., & Peachey, J. W. (2011). Turnover intentions: Do leadership behaviors and satisfaction with the leader matter? *Team Performance Management, 17*(1/2), 23-40. doi: 10.1108/13527591111114693

Zheng, Z., Gu, S., Lei, Y., Lu, S., Wang, W., Li, Y., & Wang, F. (2016). Safety needs mediate stressful events induced mental disorders. *Neural Plasticity*. https://doi.org/10.1155/2016/8058093

Zohar, D. (2010). Thirty years of safety climate research: Reflections and future directions. *Accident Analysis & Prevention, 42*(5), 1517-1522. https://doi.org/10.1016/j.aap.2009.12.019