



# Transformational leadership, transactional leadership, and affective organizational commitment: a closer look at their relationships in two distinct national contexts

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## Abstract

This study compared the relationship between leadership style and affective organizational commitment (AOC) for Korean and U.S. employees, based on path-goal leadership theory and culturally endorsed implicit leadership theory. The results showed that the positive relationship between transformational leadership and AOC was stronger for U.S. employees than their Korean counterparts, whereas transactional leadership was positively related to AOC only for Korean employees. Also, we tested Bass's (Leadership and performance beyond expectations, Free Press, New York, 1985) augmentation effect and House's (Leadership Q 7(3):323–352, 1996) negative moderating effect of the two leadership styles. Interestingly, our results differed from theirs in this cross-national context. The findings provide important theoretical and managerial implications.

**Keywords** Transformational leadership · Transactional leadership · Affective organizational commitment · Korea · The U.S.

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## Introduction

While transformational and transactional leadership have been at the forefront of the leadership literature for the past two decades, not much attention has been paid to the simultaneous effect of these two leadership styles in cross-national contexts. Although a couple of meta-analytic studies for transformational leadership (TFL) and transactional leadership (TSL) have been conducted, they focused solely on the independent effect of the two leadership styles on employee outcomes (Judge and Piccolo 2004; Jackson et al. 2013). However, leadership effects may occur simultaneously (Cohen and Cohen 1983; Jia et al. 2018) and effective leaders frequently supplement TSL with TFL (Howell and Avolio 1993). Past researchers have taken a rather piecemeal approach in examining transformational and transactional leadership styles, focusing on only one leadership style at a time or on interactions between either TFL or TSL with situational factors. It seems likely that managers often use both these leadership styles to different extents to lead their employees. What is not clear is how these two leadership styles operate in tandem. Do they build on each other, as proposed by Bass's (1985) augmentation hypothesis, or do they interact with each other negatively, as suggested by House (1996)?

Though only two studies have investigated the simultaneous effects of TFL and TSL, the augmentation effect and the moderating effect (Schriesheim et al. 2006; Vecchio et al. 2008), these studies involved only one national context, the U.S.; thus, there is a clear lack of comparative research in a cross-national setting. We have especially limited knowledge about these effects in non-Western contexts. The purpose of this study is to conduct a comprehensive examination of the effects of TFL and TSL on affective organizational commitment (AOC) from the following three perspectives: the relative effectiveness of transformational and transactional leadership styles, the augmentation effect, and the moderating effects of these two leadership styles on AOC in two different national contexts. We focus on South Korea (henceforth Korea) and the U.S. Korea, in sharp contrast to the U.S., is regarded as having a collectivist culture with high power distance and high uncertainty avoidance (Hildisch et al. 2015; Hofstede 2001). American employees tend to prefer transformational leaders who stimulate them intellectually and consider them as individuals (Walumbwa et al. 2005). In contrast, Korean employees are inclined to comply with transactional leaders who clearly define roles, determine goals, and provide rewards in exchange for their efforts (Dorfman et al. 1997), since Korean culture is deeply rooted in Confucianism, which emphasizes hierarchical inequalities, but values harmonious relationships (Hong and Kim 2017; Kim et al. 2013). The U.S. and Korea, representing Western and non-Western cultures, respectively, provide an appropriate context for comprehensive investigation of TFL and TSL. No research to date has empirically examined the simultaneous effect of the two leadership styles using a Korean sample.

The major contribution of this study is that it is the first to empirically examine the relative effectiveness of transformational and transactional leadership



behaviors, in addition to examining the augmentation effect and moderating effects of these leadership styles, in a cross-national context. Our conceptual model is based on path-goal leadership theory (House 1996) and culturally endorsed implicit leadership theory (House et al. 2004). Even though the leadership preferences of Korean and American employees differ greatly, little comparative research has been conducted on these differences. Also, the augmentation effect and moderating effects, which are fundamental to transformational–transactional leadership theory, have only been tested in single-country studies in Western contexts. Using national context as a proxy for cultural differences, we propose that different cultural backgrounds of employees may influence their leadership preferences (Herbert et al. 2014). By examining the relationships among TFL, TSL, and AOC in Korea and the U.S., we hope to extend the leadership literature by gaining important insights into the cultural underpinnings of the two leadership behaviors and paving the way for theoretical elucidation of the augmentation effect and moderating effects in a cross-national context.

## Theoretical background and hypotheses

The central tenet of path-goal theory is that leaders should engage in behavior that helps or facilitates followers to achieve their goal effectively, and to offer them the necessary support and direction to attain both their own and organizational goals (House 1971). Preferred leadership behaviors have positive influences on subordinates' motivation, commitment, satisfaction, and performance. House (1996) substantially redeveloped the original path-goal theory and suggested links between leadership styles and path-goal theory reflecting various boundary conditions between leadership behavior and employee outcomes. Specifically, House (1996) suggested that “The emergence and effectiveness of value based leadership will be enhanced to the extent that... the leader refrains from the use of extrinsic rewards contingent on subordinate performance” (House 1996, p. 345) in *Proposition 24* of the revised path-goal theory. In other words, House (1996) argued that a leader's transactional behavior acts as a negative moderator between value-based leadership behavior and follower outcomes. That can be interpreted as transformational leadership, which has a stronger effect on follower outcomes when transactional leadership behavior is minimal. Only two studies, those of Schriesheim et al. (2006) and Vecchio et al. (2008), empirically tested this negative interaction in conjunction with Bass's (1985) augmentation effect between TFL and TSL. However, they did not consider the boundary conditions of individuals. House (1996) suggested that the effectiveness of certain leadership behaviors such as TFL and TSL would differ depending on the preferences of individuals for independence and self-direction (versus interdependence and assigned direction), as outlined in *Proposition 5* of his revised path-goal theory. We fill this gap in the literature by examining the augmentation effect and moderating effects between the two leadership behaviors for employees of different cultural backgrounds (i.e., Korea and the U.S.). We compare the direct effectiveness of TFL and TSL on AOC in a cross-national context first.



## Two leadership styles and affective organizational commitment

TFL is a type of leadership that transforms followers, prompting them to think about the interests of the organization rather than their own interests, boosting their morale, encouraging them to examine how their values align with those of the organization, appealing to their ideal sense of what the organization can be, and encouraging them to do their best for the greater good (Bass 1985). TFL behaviors can be distinctly divided into four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The first refers to ways that leaders may behave, ways that appeal to followers and can be described as benevolent, admirable, and charismatic behavior. Second, leaders that inspire and motivate their followers are vision-casters, people that can make their followers see the possibilities for the organization. Intellectually stimulating leaders solicit ideas from their followers while also encouraging them to take risks and examining prior assumptions. Finally, good leaders think of their followers as individuals with particular needs, coming alongside them to offer help, experience, and advice and keeping their ears open to what they may have to say. By contrast, TSL involves exchanges, expectations, and rewards (Bass 1999), of which there are three types: contingent reward, management-by-exception active, and management-by-exception passive. Leaders offering contingent rewards motivate their followers to expected performance using constructive transactions or exchanges. The second category, management-by-exception, involves corrective action in cases where the results of leader–follower transactions entail unmet expectations. Active management-by-exception, however, involves intervention prior to problems developing; such leaders monitor the activities of their followers and take preventative actions as necessary rather than waiting until problems have already occurred (Howell and Avolio 1993).

There is some evidence in the literature for a positive relationship between the TFL and TSL styles and various organizationally and individually valued work outcomes (Jackson et al. 2013; Judge and Piccolo 2004; Piccolo et al. 2012). We are particularly interested in AOC, which refers to emotional attachment to a work organization (Meyer and Allen 1991). In the context of our study, AOC is the most relevant form of organizational commitment with which to examine the effectiveness of these two leadership styles. Unlike continuance (commitment based on perceived costs of leaving the organization) and normative commitment (commitment based on normative pressures), AOC is not likely to be influenced by economic and societal forces; it is, however, most likely to be influenced by leadership style. Transformational leaders motivate followers through emotional appeal and are sensitive to and try to meet their differentiated needs (Jackson et al. 2013). Not surprisingly, TFL behaviors improve employees' affective attachment and sense of belonging to their organization by creating family-like conditions. On the other hand, TSL behaviors, including contingent reward and active management-by-exception, are conceptually related to perceptions of organizational support and justice (Bycio et al. 1995). Meyer et al. (2002) found that organizational support and justice have strongly positive relations with AOC. Employees' higher perceptions of aid and fairness in organizations through leaders' transactional behaviors therefore increase their AOC.



It has been well established in the leadership literature that culture influences leadership style and employee perceptions (House et al. 2004; Jackson et al. 2013). Hanges et al. (2000) empirically confirmed that employees' perceptions of leadership were influenced by their view of self and their cultural background. Employees' cultural values interact with leadership behavior to influence various affective, cognitive, and behavioral outcomes. Thus, it is important for a leader to exhibit behaviors consistent with followers' culture-specific expectations (Dorfman et al. 2004). Culturally endorsed implicit leadership theory is founded on implicit leadership theory (Lord and Maher 2002). The central tenet of implicit leadership theory is that leadership is "in the eye of the beholder." In implicit leadership theory, employees refer to cognitive prototypes in interpreting leadership styles, evaluating them for compatibility with what they consider important and normal (Lord et al. 1984; Zhu et al. 2018). A more similar or compatible leadership style to the follower's idea of an effective leader results in a more positive response to that leader's style (Hong et al. 2016). The GLOBE project took this concept to the cultural level, introducing "culturally endorsed implicit leadership theory," in which cultural factors affect individual beliefs, convictions, and assumptions about preferred leadership behaviors (House et al. 2004).

Our study is based on path-goal leadership theory (House 1996) and culturally endorsed implicit leadership theory (House et al. 2004). In this study, we assume that the employees in a given country share similar cultural values. Since those values are deeply rooted in culture, they are not easily changed (Hofstede 2001). Further, Bass (1990) claimed that perceptions of what constitutes a leader vary across cultures, but that most people of the same culture have a common set of beliefs about the attributes of a typical leader. Thus, we focus on the relationships among TFL, TSL, and AOC for Korean and U.S. employees who have different cultural backgrounds in this cross-national study.

### **Cross-national effectiveness of TFL and TSL**

The essence of TFL lies in executing a needed change by developing a vision for that change and building the commitment of subordinates (Bass and Riggio 2006). Transformational leaders expect commitment and passion from their followers in meeting goals set forth by the leader (Spreitzer et al. 2005). Naturally, transformational leaders have high performance expectations from their followers. In an eight-country study, Engelen et al. (2014) found that high performance expectations regarding innovation were only effective in cultures characterized by high levels of individualism and low power distance. High performance expectations might not be effective in collectivistic cultures where maintaining harmony might override performance expectations (Spreitzer et al. 2005). In fact, individually focused behaviors like high performance expectations and individualized support are not likely to be well received by employees from cultures that are collectivistic in orientation and value group goals over individual achievements.

Another cultural aspect that might influence the effectiveness of TFL behaviors is power distance, that is, to what extent unequal power distribution is accepted and



expected in a given society (Hofstede 2001). In societies with low power distance that do not emphasize hierarchical differences, a leader is expected to involve followers and seek their input in making decisions (Javidan et al. 2006). Such behaviors may be less motivating for followers who prefer specific directions (Javidan et al. 2006). A transformational leader who strives to stimulate followers intellectually by challenging them to reexamine or rethink their work might be suspected of incompetence in societies with high power distance that emphasize hierarchical differences (Hofstede 2001; Javidan et al. 2006). In such societies (such as Korea, India, and Venezuela), followers expect clear directives from their leaders. There is a strong sense of dependence in these societies due to hierarchical differences between followers and leaders. Followers typically respect and obey leaders and are unwilling to question them (Kirkman et al. 2009). Interactive behaviors of TFL leaders, such as encouraging reciprocal action, inviting feedback, and fostering communication are more effective in cultures with low power distance (Hoffman and Shipper 2012).

Transformational leaders are also agents of change in their organizations. They encourage their followers to transform themselves by pushing their limits and adopting new ways of doing things (Bass and Avolio 1990). This change-inducing leadership style is well suited to cultures which are low on uncertainty avoidance (Den Hartog et al. 1999). Uncertainty avoidance refers to how comfortable people in a given society feel about unstructured situations (Hofstede 2001). While people from low uncertainty avoidance cultures thrive in ambiguous situations, it may be more difficult for people from cultures which value the status quo (De Luque and Javidan 2004). In a cross-national study, Flatten et al. (2015) contended that TFL increases absorptive capacity and the ability of employees to recognize and exploit external knowledge sources more in low uncertainty avoidance cultures than in high uncertainty avoidance cultures. We argue that TFL behaviors such as vision creation and intellectual stimulation (which encourages employees to find new ways of dealing with problems) are likely to generate uncertainty. These behaviors can be less effective or disadvantageous in high uncertainty avoidance cultures.

We contend that given the high need for achievement, high tolerance for ambiguity, and low power distance in the U.S., TFL may be more effective in motivating followers to have a sense of purpose (idealized influence), articulating a vision, inspiring followers (inspirational motivation), and attending and listening to followers' voices (individual consideration). These behaviors are likely to induce identification and trust in the leader and organization. Identification and trust lead to strong emotional attachment to the organization (Walumbwa et al. 2009). In contrast, the core values in Korea (such as hierarchical differences and emphasis on uncertainty avoidance) are likely to foster the status quo (Hildisch et al. 2015; Hofstede 2001). The leadership prototype of Korean employees may be influenced by norms based on hierarchical inequalities and Confucian values (Kim et al. 2013); therefore, they expect their leaders to be hierarchical and authoritative. As a result, leaders exhibiting TFL behaviors may be less effective in gaining follower identification and trust. Based on the above discussion, we propose the following hypothesis:

**Hypothesis 1a** TFL will be positively related to AOC in such a manner that the positive effect will be greater in the U.S. than in Korea.



TSL is built on an exchange relationship between leader and follower based on contingent reward (punishment) determined by attainment or non-attainment of performance goals. Cross-national research has shown that there is a significant difference in individual orientation toward performance systems (Fischer and Smith 2003). We believe that national context regulates the effectiveness of TSL. High power distance cultures tend to be more conducive to these types of leadership behaviors as they accept and expect dominant and authoritarian leadership behaviors (Den Hartog et al. 1999). In these cultures, subordinates expect their leaders to make decisions on reward and punishment. In countries with higher power distance cultures, individuals are likely to prefer reward allocation based on individual performance rather than on equality (Fischer and Smith 2003). Since contingent reward leadership is founded on rules of equity, this type of leadership could effectively stimulate AOC in countries with cultures high in power distance and hierarchy (Jackson et al. 2013). In such countries, it is important for followers with a high power distance orientation that leaders provide them with rewards in exchange for their efforts. Empirical findings in related domains support these arguments. For example, the meta-analysis of Jackson et al. (2013) showed that power distance strengthens the positive relationship between TSL and AOC. Dorfman et al. (1997) determined that the positive relationship between TSL and AOC is greater among Japanese employees than U.S. employees.

Additionally, TSL behaviors are consistent with cultures characterized by high power distance and high uncertainty avoidance (Den Hartog et al. 1999). In these cultures, an effective leader is expected to define roles and responsibilities clearly, determine goals, and allocate appropriate rewards for achievement of those goals (Bass and Stogdill 1990). TSL behaviors, which focus on rules and procedures to maintain stability in the workplace, are perceived as effective in cultures like that in Korea (Clugston et al. 2000) and fit well with the leadership prototype of these cultures. In contrast, in countries with cultures characterized by low power distance and low uncertainty avoidance such as the U.S., such behaviors may be perceived as oppressive. We posit that in cultures characterized by high uncertainty avoidance, the TSL style will induce more positive reactions from employees and is likely to be more positively related to AOC than TFL. Based on the above discussion, we propose the following hypothesis:

**Hypothesis 1b** TSL will be positively related to AOC in such a manner that the positive effect will be greater in Korea than in the U.S.

### **Augmentation effect between TFL and TSL**

There has been very little research on the augmentation effect between the two leadership styles in a cross-national context. The augmentation effect is the extent to which TFL builds on the transactional base in contributing to followers' performance (Bass 1985). Since transformational leaders induce their followers to grow beyond the initially expected performance, TFL may explain the unique variance in employee outcomes over and above the effect of TSL. Results from previous studies



prove that TFL accounts for additional unique variance in diverse leadership criteria such as satisfaction, motivation, identification, and performance after controlling for TSL (Bass et al. 2003; Hater and Bass 1988; Judge and Piccolo 2004; Rowold and Heinitz 2007; Waldman et al. 1990; Zhu et al. 2012). In other words, TFL positively augments the relationship between TSL and employee outcomes.

However, two studies have challenged the existing claim that the TFL style builds on TSL, but not vice versa (Bass 1985). Both Schriesheim et al. (2006) and Vecchio et al. (2008) reported that transactional contingent reward leadership explains the additional unique variance in followers' performance and satisfaction over and above the effect of TFL. When both types of leadership were entered together as predictors of followers' performance or satisfaction, TFL had no significant relationship with those outcomes. Drawing upon those previous studies, Wang et al. (2011) proposed two competing hypotheses: (1) that TFL explains the unique variance in followers' performance beyond the effect of TSL, and (2) that TSL explains the unique variance in followers' performance beyond the effect of TFL. They found support for the latter hypothesis.

More recently, Zhu et al. (2012) investigated differences in the augmentation effect between TFL and TSL on employee outcomes in the U.S. The results indicated that TFL explains additional variance in psychological empowerment and organizational identification of employees beyond TSL, but not vice versa. Also, Tyssen et al. (2014) examined the effects of TFL and TSL on employees' project commitment in an integrated sample including employees from Germany, Austria, and Switzerland. They found that TFL had a stronger positive influence on project commitment than TSL. In Birasnav's (2014) study of Bahrain, an Arabic country whose culture is characterized by high levels of collectivism, power distance, and uncertainty avoidance (Hofstede 2001), TSL influenced knowledge transfer and organizational performance in addition to the effect of TFL. Also, TFL influenced these outcomes in addition to the effect of TSL. Although differences among various nations were not set as a boundary condition of the sample, a meta-analytic study including extant literature from Western countries (i.e., the U.S., Australia, the Netherlands, and Germany) and non-Western countries (i.e., China, Singapore, India, and Taiwan) compared the relative importance of leadership styles such as TFL, TSL, and leader-member exchange on various employee performance variables (Chiaburu et al. 2014). In this integrated sample, although TFL and TSL each explained the additional variance in employee performance over and above the effect of the other, the respective effectiveness of these two leadership styles differed depending on the performance variable. That is, the effect of TFL on proactive and prosocial contextual performances was stronger than that of TSL, while the effect of TSL on task performance was stronger than that of TFL.

Based on the findings in the literature, we argue that the augmentation effect on AOC differs between the two leadership styles in the cross-national context. Drawing upon our arguments in an earlier section, we expect that TFL will strongly augment the relationship between TSL and AOC in the U.S., with its culture characterized by individualism, low power distance, and low uncertainty avoidance (in addition to egalitarianism, independence, self-direction, and high tolerance for ambiguity). American culture may facilitate the augmentation effect of TFL over





TSL as compared to the Korean cultural context. However, TSL is likely to be more effective in Korea, with its culture strongly emphasizing collectivism, power distance, and uncertainty avoidance (in addition to hierarchy, interdependence, assigned direction, the status quo, and rewards based on rules of equity). Based on the above discussion, we propose the following hypotheses:

**Hypothesis 2a** TFL will positively augment the relationship between TSL and AOC in such a manner that the additional variance will be greater in the U.S. than in Korea.

**Hypothesis 2b** TSL will positively augment the relationship between TFL and AOC in such a manner that the additional variance will be greater in Korea than in the U.S.

### **Moderating effect between TFL and TSL**

The effect of the interaction between TFL and TSL is clearly distinct from the augmentation effect, which predicts the main effects of those two leadership styles (Schriesheim et al. 2006). For example, the augmentation effect is evident when leaders who are engaging in TFL behaviors additionally manifest TSL behaviors. In this case, augmented positive effects on employee outcome will occur corresponding to the additional TSL behaviors—or not. The moderating effect occurs when leaders engage in TFL and TSL behaviors at the same time; a positive synergy will occur beyond the combined effect of both leadership behaviors, or TSL will undermine the positive effect of TFL on employee outcomes. House's (1996) proposition for a negative moderating effect between these two leadership styles predicts that TSL will weaken the positive effect of TFL behavior.

Bass (1985) argued for simultaneous and complementary relations between TFL and TSL behaviors: "TFL does not substitute for TSL" and "the best leaders are both transformational and transactional" (Bass 1999, p. 21). However, House (1996) disputed this argument by claiming that leaders should refrain from the use of extrinsic rewards that are contingent on followers to enhance the effectiveness of TFL. The lack of extrinsic or contingent rewards helps a leader "foster an ideological orientation toward work" (House 1996, p. 345).

To our knowledge, only two studies have simultaneously tested Bass's positive interaction and House's negative interaction between TFL and TSL (Schriesheim et al. 2006; Vecchio et al. 2008). The findings of these studies were quite contradictory: Vecchio et al. (2008) found that the interaction of TFL and TSL had a negative effect on performance, whereas Schriesheim et al. (2006) found a positive effect of the interaction between them on satisfaction. Schriesheim et al. (2006) argued that perceptions for the fairness of the rewards may have influenced the followers' trust of their leaders, so that TFL behavior was more effective when leaders engaged in contingent reward transactional leadership behavior (Pillai et al. 1999). In other words, TFL behaviors with the intention of achieving better performance



than initially expected would not be successful with followers who are aware of the imbalance between the rewards and their efforts.

However, Vecchio et al. (2008) provided evidence for House's negative interaction, explaining that the different findings may result from differences in research settings compared to the previous study. Schriesheim et al. (2006) investigated employees working for a single government agency in the southeastern U.S., while Vecchio et al. (2008) explored principal–teacher dyads in 179 high schools in California. Educational institutions constantly deal with organizational changes such as curriculum development and administrative affairs, more than a governmental agency, which would be restricted by bureaucratic forces to maintain the status quo (Vecchio et al. 2008). It may be that leaders' transactional behavior may have a positive synergy effect in conjunction with TFL under bureaucratic conditions compared to changeable conditions. These findings make it clear that the interaction hypothesis proposed by House (1996) could be context-specific.

We extend the interaction hypothesis proposed by House (1996) and assert that TSL will be a positive moderator of the relationship between TFL and AOC in Korea, whereas TSL will be a negative moderator of the relationship between TFL and AOC in the U.S. This is in accordance with our earlier assertion that TSL leadership styles based on contingent rewards and corrective action will create a synergy in Korea and will create cognitive dissonance in the U.S. This is in line with Vecchio et al.'s (2008) argument that boundary conditions, such as bureaucratic versus changeable forces, can explain the contradictory results of the interaction hypotheses in the previous two studies. In Korea, Confucian values make employees take hierarchical inequalities for granted and incline them to prefer interdependence, assigned direction, and rewards based on rules of equity (Kim et al. 2013), whereas American employees tend to avoid the status quo, preferring independence and self-direction (De Luque & Javidan 2004). Thus, the moderating effect of TSL with TFL on AOC might be different between Korea and the U.S. Based on the above discussion, we propose the following hypotheses:

**Hypothesis 3a** TSL will positively moderate the relationship between TFL and AOC in Korea.

**Hypothesis 3b** TSL will negatively moderate the relationship between TFL and AOC in the U.S.

## Methods

### Sample

The survey data for this study were collected from MBA students working for leading companies studying at Korea University in Seoul and the University of Memphis in Tennessee. In the Korean sample, all scales in the survey were translated into Korean using the back-translation method (Brislin 1970). To ensure consistency and accuracy of meaning, the Korean version of the survey was reviewed by four



academicians. The cover letter of the survey questionnaire explained the purpose of the study and provided an assurance of confidentiality. We asked the MBA students to cooperate on the leadership survey and each participant received approximately 10–20 copies of the survey, as many as they wanted. They were rewarded for their assistance with a gift voucher. The survey questionnaires were randomly distributed to employees in 37 companies in the manufacturing and service industries. Data collection was conducted from March to May in 2014. In total, 218 and 345 questionnaires were initially returned from the U.S. and Korea, respectively. However, 67 of the 563 questionnaires were eliminated due to missing data; thus, the analysis was based on data from 496 usable questionnaires.

The final sample consists of 181 American employees and 315 Korean employees. Among American respondents, 49.7% were male, 58.0% were less than 24 years old, and 70.7% were entry-level employees. The average organizational tenure was about four years. In addition, 62.5% of respondents in the U.S. sample had earned undergraduate degrees, and 20.4% were married. Among Korean respondents, 76.2% were male, and 47.3% were between 25 and 34 years old. In terms of workplace demographics, 69.8% of respondents in the Korean sample were first/middle managers and their average organizational tenure was about seven years. In total, 89.2% of Korean participants had undergraduate degrees, and 57.8% were married. Overall, American employees can be characterized as relatively young and they tend to have lower positions and shorter tenure compared to Korean employees. These minor differences are to be expected considering the facts that military service for 2–3 years is mandatory in Korea, employment in Korea tends to be long term rather than short term, and the labor market in the U.S. is characterized by greater flexibility.

## Measures

We used a five-point Likert scale with scores ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5) to measure AOC and from ‘almost never’ (1) to ‘almost always’ (5) to measure TFL and TSL styles.

### Affective organizational commitment

The dependent variable was measured using Allen and Meyer’s (1990) eight-item scale of AOC. Among the three dimensions of organizational commitment, AOC is the best known; turnover intention and job performance of employees are two factors that are strongly influenced by AOC (Meyer et al. 2002). A sample item is “I feel a strong sense of belonging to my company.” The Cronbach’s alpha was 0.79 (U.S. = 0.82, Korea = 0.74).

### Leadership styles

The independent variables were measured by a widely used construct from the multifactor leadership questionnaire (MLQ) Form 5x-Short (Bass and Avolio 2000). We



used 16 items to measure TFL (4 items for each subcomponent: behavioral idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration; Wang and Walumbwa 2007). A sample item for inspirational motivation is “My direct supervisor articulates a compelling vision of the future.” The Cronbach’s alpha was 0.95 (U.S.=0.97, Korea=0.93). We used 8 items to measure TSL (4 items for each subcomponent: contingent reward and management-by-exception active; Pieterse et al. 2010). A sample item for contingent reward is “My direct supervisor provides me with assistance in exchange for my efforts.” The Cronbach’s alpha was 0.82 (U.S.=0.85, Korea=0.79).

### Control variables

We controlled for some demographic variables that may influence employees’ AOC: age, gender, tenure, rank, education level, and marital status (Mathieu and Zajac 1990). We utilized gender as a dummy variable, coded as follows: male=1, female=2. The age variable was divided into seven groups numbered from 1 (<24 years) to 7 (>50 years). Rank was also divided into three groups ranging from entry-level employee to senior/top manager. Organizational tenure was measured in months. Education level was divided into seven groups ranging from elementary school to doctoral degree. Marital status was measured as a dummy variable (single=1, married=2). In addition, we used a country dummy variable (Korea=0, U.S.=1) to investigate the interaction effects of national contexts between the two leadership styles and AOC.

### Confirmatory factor analysis

We conducted a confirmatory factor analysis to examine the factor structure among the three constructs (TFL, TSL, and AOC). To remedy the limitation of a measurement model with a large number of items in the small sample, we used item parcels to represent the indicators of the variables (Little et al. 2002). The results of the confirmatory factor analysis showed that the three-factor model ( $\chi^2(df)=96.06(24)$ , GFI=0.94, CFI=0.94, NFI=0.92, RMSEA=0.09) fitted the data significantly better than the one-factor model ( $\chi^2(df)=237.67(27)$ , GFI=0.85, CFI=0.83, NFI=0.81, RMSEA=0.16) for the Korean sample. For the U.S. sample, the three-factor model ( $\chi^2(df)=66.68(24)$ , GFI=0.92, CFI=0.96, NFI=0.95, RMSEA=0.09) also fitted the data significantly better than the one-factor model ( $\chi^2(df)=168.80(27)$ , GFI=0.83, CFI=0.88, NFI=0.86, RMSEA=0.17). Furthermore, we calculated the values of average variance extracted (AVE) and construct reliability (CR) using standardized factor loadings to verify the convergent validity of all the variables. AVE values over 0.50 and CR values over 0.70 are appropriate for empirical analysis (Hair et al. 1998). The results showed acceptable convergent validity for each of the study variables: TFL (AVE=0.61, CR=0.94), TSL (AVE=0.51, CR=0.78), and AOC (AVE=0.55, CR=0.93) for the Korean sample and TFL (AVE=0.80, CR=0.94), TSL (AVE=0.55, CR=0.71), and AOC (AVE=0.58, CR=0.75) for the U.S. sample. Taken together, the confirmatory



factor analysis findings provide evidence of the discriminant validity of and independence among the measures of the two leadership styles and AOC in this comparative study between two countries.

To test for equivalence of the measures used for Korea and the U.S., maximum likelihood estimation for the confirmatory factor analysis was conducted using AMOS (Walumbwa et al. 2005). We followed the procedure recommended by Vandenberg and Lance (2000) by investigating differences in the Chi squares for the constrained versus unconstrained models (see Kirkman et al. 2009). The results showed good support for both the constrained model ( $\chi^2$  ( $df$ )=183.87 (57), GFI=0.90, CFI=0.92, NFI=0.90, RMSEA=0.08) and the unconstrained model ( $\chi^2$  ( $df$ )=162.80 (48), GFI=0.93, CFI=0.95, NFI=0.93, RMSEA=0.07). Furthermore, the difference in Chi squares between the models was not statistically significant ( $\Delta\chi^2$  ( $\Delta df$ )=21.07 (9)). Thus, there was sufficient evidence that the measures captured the same constructs in both Korea and the U.S., and that different response biases in the two country samples were unlikely to influence the validity of our comparison between Korea and the U.S. based on these measures.

### Assessing common method bias

Given that the data were obtained from participants' self-reported questionnaires, we assessed for effects of same-source variance using a rigorous statistical test. In the re-estimation of our model, we added a latent common method factor (Hong et al. 2016; Podsakoff et al. 2012). Theoretical latent constructs and unmeasured latent common method factors were loaded for all items. All factor loadings of items on the previously described theoretical constructs were significant even with the addition of the common method factor, and, for the models with the additional factor added, better fit indices were showed than for the theoretical model without the added factor for Korea ( $\chi^2$  ( $df$ )=90.51 (23), GFI=0.94, CFI=0.95, NFI=0.93, RMSEA=0.09). For the U.S., the fit indices were equal to those in the theoretical model without the added method factor ( $\chi^2$  ( $df$ )=66.68 (23), GFI=0.92, CFI=0.96, NFI=0.95, RMSEA=0.09). Thus, inclusion of this factor improved the overall model fit; however, the total amount of variance explained by this method factor was 8% for Korea and 13% for the U.S., far below the recommended 25% indicator of substantial method variance (Williams et al. 1989). We therefore conclude that same-source bias was not a serious concern in this study.

## Results

### Correlation analysis

Table 1 shows the means, standard deviations, and correlations among the variables for the two countries. Both TFL and TSL styles are positively correlated with AOC in both countries. Also, several control variables are correlated with AOC. A significant difference exists between the two countries. For example, AOC is positively



**Table 1** Means, standard deviations, and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	Mean	SD
1. Gender	1.24	0.43										1.50	0.50
2. Age	3.70	1.24	-0.42**									1.87	1.38
3. Rank	1.87	0.53	-0.27**	0.63**								1.36	0.60
4. Tenure	84.96	62.21	-0.18**	0.68**	0.42**							39.34	49.36
5. Education	5.00	0.49	-0.00	0.05	0.23**	-0.13*						4.11	0.99
6. Marital status	1.58	0.49	-0.44**	0.60**	0.47**	0.46**	-0.02					1.20	0.40
7. Transformational leadership	3.65	0.61	-0.12*	-0.04	-0.08	-0.08	0.00	-0.05				3.46	0.99
8. Transactional leadership	3.45	0.55	-0.14*	-0.03	-0.11*	-0.03	-0.05	-0.08	0.69**			3.36	0.84
9. Affective organizational commitment	3.64	0.50	-0.20**	0.22**	0.10	0.22**	0.03	0.17**	0.41**	0.36**		3.33	0.86

\* $p < 0.05$ , \*\* $p < 0.01$ 

Below diagonal: Korean sample, above diagonal: U.S. sample

correlated with age, tenure, and marital status and negatively correlated with gender in Korea. However, in the U.S., AOC is positively correlated only with rank and tenure.

## Hypothesis testing

To test the hypotheses for the moderating effect of national context (i.e., Korea and the U.S.) between the two leadership styles and AOC for the entire sample and the augmentation and moderating effects between TFL and TSL on AOC for each country, we ran hierarchical linear regression analyses. All regression results are presented in Table 2. First, we conducted a regression analysis using both the Korean and U.S. samples for *H1*. In model 1, we tested the effects of the control variables. Rank and tenure had positive effects on AOC ( $\beta=0.12, p<0.05$ ;  $\beta=0.16, p<0.01$ ). When we added TFL and TSL in model 2, those leadership factors accounted for a 24% additional variance in AOC (total  $R^2=0.34$ ). TFL was positively related to AOC ( $\beta=0.48, p<0.001$ ), while TSL was not significant. To test *H1a* and *H1b*, we added the interaction terms in model 3. Variables forming the interaction term were centered to minimize multicollinearity among the interaction terms and their components by subtracting each variable from its respective mean value (Aiken and West 1991). The two interaction terms accounted for a 1% additional variance in AOC (total  $R^2=0.35$ ). As shown in model 3, the positive relationship between TFL and AOC was stronger for U.S. employees ( $\beta=0.15, p<0.01$ ). Although the relationship between TSL and AOC was not significant in model 2, there was quite a significant difference between the two countries in model 3 ( $\beta=-0.12, p<0.05$ ).

To shed further light on the significant interaction terms, we plotted the simple slopes for the relationships between the two leadership styles and AOC for both samples using Cohen et al. (2003) procedures. We divided the Korean and U.S. samples into high- and low-TFL and high- and low-TSL groups by one standard deviation above and below the mean value. Figure 1 shows the results. The positive relationship between TFL and AOC was stronger in the U.S. (dashed line) than in Korea (solid line). To ensure the accuracy of this interpretation, we used statistical tests to compare the two slopes to zero. As expected, both slopes differed significantly from zero for the American ( $b=0.51, s.e.=0.06, t=8.81, p<0.001$ ) and Korean ( $b=0.27, s.e.=0.07, t=3.95, p<0.01$ ) samples, indicating that *H1a* was supported. The positive relationship between TSL and AOC in Korea is indicated by the solid line in Fig. 1. However, this relationship was negative in the U.S., as indicated by the dashed line. The slope for Korea differed significantly from zero ( $b=0.14, s.e.=0.08, t=1.85, p<0.05$ ), while that for the U.S. did not ( $b=-0.08, s.e.=0.07, t=-0.18, p=0.24$ ). Thus, *H1b* was partially supported.

To test the augmentation and moderating effects between TFL and TSL on AOC for *H2* and *H3*, we conducted a separate regression analysis for Korea and the U.S. (see Table 2). For Korea, the six control variables (gender, age, rank, tenure, education, and marital status) were included in model 4 (total  $R^2=0.08$ ). Gender had a negative effect, but tenure had a positive effect on AOC ( $\beta=-0.16, p<0.05$ ;  $\beta=0.18, p<0.05$ ). When we added TFL and TSL in models 5 and 6, the respective



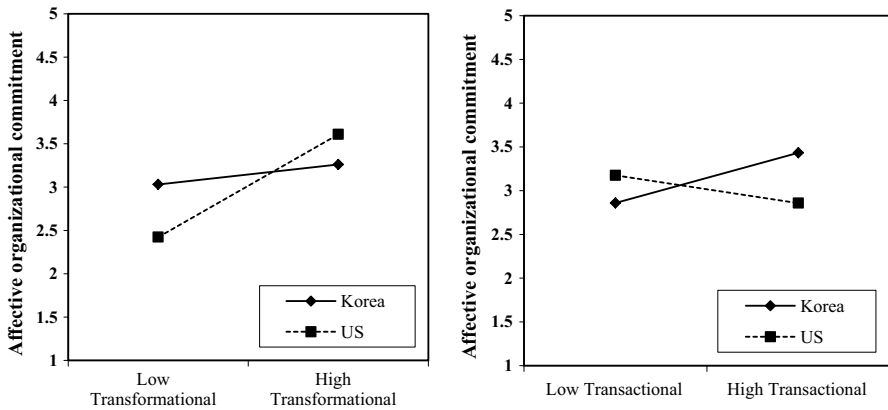
**Table 2** Results of hierarchical linear regression analyses

Variables	Affective organizational commitment												
	Korea (n = 496)						U.S. (n = 181)						
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13
Control													
Gender	-0.05	0.00	0.01	-0.16*	-0.08	-0.07	-0.07	-0.07	0.04	0.05	0.04	0.05	0.05
Age	0.01	0.03	0.02	0.08	0.07	0.08	0.07	0.09	-0.07	-0.01	-0.02	-0.01	-0.01
Rank	0.12*	0.10*	0.10*	-0.09	-0.05	-0.04	-0.04	-0.04	0.22**	0.16*	0.18*	0.17*	0.17*
Tenure	0.16**	0.16**	0.16**	0.18*	0.21**	0.17*	0.20**	0.19**	0.17*	0.15*	0.16*	0.15*	0.15*
Education	0.07	0.02	0.00	0.07	0.07	0.08	0.07	0.07	-0.01	-0.05	-0.04	-0.04	-0.04
Marital status	0.04	0.06	0.06	0.01	0.04	0.06	0.05	0.04	0.09	0.08	0.10	0.08	0.07
Independent													
TFL	0.48***	0.41***	0.41***		0.42***	0.36***	0.33***	0.35***	0.53***	0.53***	0.33***	0.59***	0.59***
TSL	0.02	0.07	0.07		0.36***	0.14*	0.12†				0.33***	-0.08	-0.08
Moderator													
Country													
Interaction													
TFL x Country													
TSL x Country													
TFL x TSL													
R <sup>2</sup>	0.10***	0.34***	0.35***	0.08***	0.25***	0.21***	0.26***	0.27***	0.10**	0.37***	0.20***	0.37***	0.37***
ΔR <sup>2</sup>	0.24***	0.01*	0.01*	0.17***	0.13***	0.05**	0.01*	0.01*	0.27***	0.10***	0.17***	0.17***	0.00

†p < .10, \*p < .05, \*\*p < .01, \*\*\*p < .001 (Standardized coefficients are reported)

Country dummy (Korea = 0, U.S. = 1)





**Fig. 1** Effects of the interaction of these two leadership styles by country on affective organizational commitment ( $n = 496$ )

leadership factor accounted for 17% and 13%, respectively, of the additional variances in AOC (total  $R^2 = 0.25$  and  $0.21$ ). Both TFL and TSL were positively related to AOC ( $\beta = 0.42, p < 0.001$ ;  $\beta = 0.36, p < 0.001$ ). To test  $H2$  regarding the augmentation effect between TFL and TSL, we entered both leadership styles into model 7 at the same time. The results can be interpreted as follows: the TFL factor accounted for a 5% additional variance in AOC over the effect of TSL (total  $R^2 = 0.26$ ) and TFL was positively related to AOC ( $\beta = 0.33, p < 0.001$ ). Conversely, the TSL factor also accounted for a 1% additional variance in AOC over and above the effect of TFL, and TSL was positively related to AOC ( $\beta = 0.14, p < 0.05$ ). Therefore, the results indicate that TFL and TSL have positive augmentation effects on AOC and the additional variance of TFL (5%) is greater than the additional variance of TSL (1%) in Korea.

For the U.S., the six control variables were also included in model 9 (total  $R^2 = 0.10$ ). Rank and tenure had positive effects on AOC ( $\beta = 0.22, p < 0.01$ ;  $\beta = 0.17, p < 0.05$ ). When we added TFL and TSL in models 10 and 11, the respective leadership factor accounted for 27% and 10%, respectively, of the additional variance in AOC (total  $R^2 = 0.37$  and  $0.20$ ). Both TFL and TSL were positively related to AOC ( $\beta = 0.53, p < 0.001$ ;  $\beta = 0.33, p < 0.001$ ). To test  $H2$  regarding the augmentation effect between TFL and TSL, we entered both leadership styles into model 12 at the same time. The results can be explained as follows: the TFL factor accounted for a 17% additional variance in AOC over and above the effect of TSL (total  $R^2 = 0.37$ ) and TFL was positively related to AOC ( $\beta = 0.59, p < 0.001$ ). However, TSL did not account for any additional variance in AOC over and above the effect of TFL. Thus, there was no evidence with regard to TSL augmenting effect of TFL on AOC in the U.S. Taking these results from both countries into account, we can conclude that TFL positively augmented the relationship between TSL and AOC in such a manner that the additional variance was greater in the U.S. (17%) than in Korea (5%), supporting  $H2a$ . On the other hand, TSL positively augmented the relationship between TFL and AOC only in Korea (1%), partially supporting  $H2b$ .

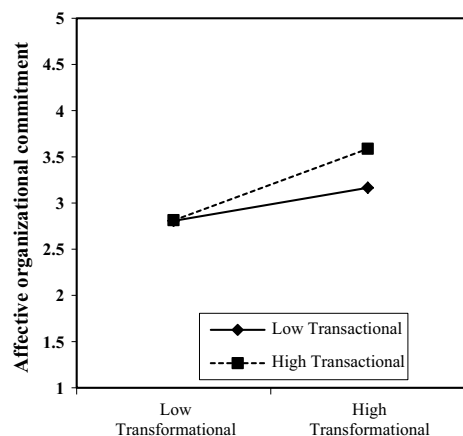


To test the moderating effect of TSL on the interaction between TFL and AOC, we added the interaction terms in models 8 and 13 for the country samples. For Korea, the interaction term accounted for a 1% additional variance in AOC (total  $R^2=0.27$ ). There was a significantly positive effect of the interaction between TFL and TSL on AOC in model 8 ( $\beta=0.10$ ,  $p<0.05$ ). To elucidate the meaning of the interaction term, we plotted simple slopes for the relationship between TFL and TSL and AOC for the Korean sample by following Cohen et al.'s (2003) procedure. In Fig. 2, the relationship between TFL and AOC is more positive when TSL is higher (dashed line). Also, both slopes were different from zero for employees with higher perceptions of TSL ( $b=0.34$ ,  $s.e.=0.07$ ,  $t=5.09$ ,  $p<0.001$ ) and employees with lower perceptions of TSL ( $b=0.23$ ,  $s.e.=0.06$ ,  $t=3.95$ ,  $p<0.01$ ). Thus,  $H3a$  was supported. For the U.S., there was no significant effect of the interaction between TFL and TSL on AOC in model 13. Thus,  $H3b$  was not supported.

## Discussion

A major contribution of our study is that it is the first comprehensive attempt to investigate TFL and TSL in a cross-national context including Korea and the U.S. We not only compared the cross-national effectiveness of TFL and TSL in terms of AOC, but we also tested hypotheses related to the augmentation and moderating effects between these two leadership styles. Almost all studies investigating the augmentation and moderating effects, which are fundamental to transformational–transactional leadership theory, have focused on Western contexts (Bass et al. 2003; Judge and Piccolo 2004; Rowold and Heinitz 2007; Schriesheim et al. 2006; Tyssen et al. 2014; Vecchio et al. 2008; Zhu et al. 2012). Two meta-analytic studies tested such effects for totally integrated country samples from the extant literature, and no hypotheses were provided predicting national differences (i.e., Chiaburu et al. 2014; Wang et al. 2011). Thus, the findings of those studies are limited to provide insight into the cross-national context. Drawing upon path-goal leadership theory

**Fig. 2** Effect of the interaction of transformational leadership and transactional leadership on affective organizational commitment for Korea ( $n=315$ )



and culturally endorsed implicit leadership theory, we tested the augmentation and moderating effects for employees with different cultural backgrounds. Korea and the U.S. are appropriate settings for testing *Proposition 5* of House's (1996) revised path-goal theory since the employees of these countries have relatively contrasting preferences for independence and self-direction (versus interdependence and assigned direction).

The current study showed that TFL positively augmented the relationship between TFL and AOC in both countries, but the additional variance was greater in the U.S. (17%) than in Korea (5%). On the other hand, TSL positively augmented the relationship between TFL and AOC only for Korea (1%). These results provide two theoretical implications. First, the effect of TFL is more important than the effect of TSL in both countries. Second, the augmentation effect of TSL is significant only for Korea. Taken together, our results for the U.S. sample were consistent with Bass's (1985) argument for the augmentation effect, whereas the results for the Korean sample were partially in accordance with his argument. Furthermore, we tested House's (1996) proposition regarding a negative interaction between TFL and TSL, disputing Bass's (1985) suggestion of a complementary relationship. The only two previous studies to test these arguments for the two leadership styles described herein found both a positive interaction (Schriesheim et al. 2006) and a negative interaction (Vecchio et al. 2008). Our findings showed that TSL positively moderated the relationship between TFL and AOC in Korea. That is, there was a positive synergy effect beyond the combined effect of both leadership behaviors. This finding is contrary to House's (1996) argument for a negative interaction, but consistent with Schriesheim et al.'s (2006) study using a government agency sample. There was no significant moderating effect in the U.S. Thus, we found no negative moderating effect in this study. Also, we tested the moderating effect of national context on the relationship between the two leadership styles and AOC. As hypothesized *ex ante*, the positive relationship between TFL and AOC was stronger in the U.S. than in Korea. However, TSL was positively related to AOC in Korea, while TSL had no significant effect on AOC in the U.S.

Furthermore, our research findings elucidate an important issue common to cross-national studies: the argument for universal or culture-specific attributes of transformational and transactional leadership styles (Hoffman and Shipper 2012; Jackson et al. 2013). The results of this study showed that TFL was positively related to AOC and further augmented the relationship between TSL and AOC for both Korea and the U.S. However, TSL was effective in AOC only for Korea and the additional variance of TSL was weaker than the additional variance of TFL. That is, TFL tended to have a universal appeal, as indicated by the simultaneous augmentation effect as well as individual direct effect as compared to TSL in Korea and the U.S.

Our findings also provide practical implications for how managers should lead their employees to maintain high AOC in Korea and the U.S. Organizational leaders can use various types of leadership skills and behaviors in a flexible manner. In fact, various leadership effects could occur simultaneously (Cohen and Cohen 1983; Jia et al. 2018). Bass (1999) argued that the best leaders exhibit both transformational and transactional leadership behaviors. Rosing et al. (2011) insisted that ambidextrous leadership using both TFL and TSL skills can improve employees' innovative



performance. Nevertheless, leaders have a limited amount of time and resources with which to utilize their leadership behaviors. Byrne et al. (2014) also explained that leaders' depleted psychological resources decrease transformational leadership behavior, but increase abusive supervision. We suggest that leaders must concentrate and choose to invest their transformational and transactional leadership behaviors requiring both physical and psychological resources in ways that maximize their subordinates' AOC. The results of this study showed a universally positive effect of TFL in the two countries and reciprocally positive augmentation and moderating effects between the two leadership behaviors in Korea. To improve subordinates' AOC, managers of American employees should spend time and energy on developing their TFL skills (e.g., idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration). It is recommended for managers of Korean employees to engage in performance monitoring, corrective actions, contingent rewards, and assistance in exchange for their subordinates' efforts as well as TFL behaviors. These behavioral approaches may alleviate resource depletion for leaders and enhance their subordinates' AOC at the same time. In conclusion, this study provides an insight into the cultural underpinnings of transformational and transactional leadership styles comparing Korea and the U.S. We hope this study expands the theoretical scope of the augmentation and moderating effects to a cross-national context.

### Limitations and future research

The limitations of this study point to the need for future research. Although the U.S. and Korea could effectively represent Western and Asian contexts, the study sample consisted of Korean and U.S. employees only; future research could include employees from other nations. Also, we considered national context as a proxy or a situational factor representing cultural boundaries. According to the scores for the cultural dimensions of Hofstede (2001) and the GLOBE project of House et al. (2004), a sharp contrast exists between Korea and the U.S. in terms of various cultural aspects (e.g., collectivism versus individualism, power distance, and uncertainty avoidance). Furthermore, this study focuses on the different cultural backgrounds of employees in two distinct national contexts. Nevertheless, future research may investigate further the relative effectiveness of these two leadership styles along with the augmentation and moderating effects of transformational and transactional leadership. We call for research testing hypotheses predicting differences according to national boundaries using relevant existing literature with various country samples in a meta-analytic study. In addition, research is necessary examining the augmentation effect and the moderating effects in other Asian contexts (e.g., China and Japan). Finally, studies can be conducted using cultural variables measured at the individual level as situational factors in addition to various other factors (e.g., organizational culture or climate, leader–follower fit, gender-matched leaders and followers, and individual personality or orientation), which potentially influence the relative effectiveness of these two leadership styles and their augmentation and moderating effects. We hope



this study will be a springboard for further research deeply exploring the mechanisms of transformational–transactional leadership theory.

This study has limitations related to use of single-source data and sample equivalence. The same individual provided data for all the measures at one single point in time; therefore, the results of our study may be subject to common method bias. However, we suggest that this is less of a serious concern in this study because we developed our hypotheses concerning the moderating effects of national context and the augmentation and moderating effects between the two leadership styles, neither of which can be anticipated by respondents. Furthermore, the result of the confirmatory factor analysis with an additional latent method factor indicated that common method bias was not serious enough to distort our results (Podsakoff et al. 2012). Also, the U.S. employees included in our sample were relatively young and had lower positions and shorter tenure compared to the Korean employees. This may generate sample bias for testing our hypotheses. To check for this potential bias, we conducted an additional regression analysis for Korean employees who were relatively young and had lower positions and shorter tenure ( $n = 161$ ). The results were almost consistent with the results for the whole sample ( $n = 315$ ). That is, there were significantly positive augmentation and moderating effects of TSL on the relationship between TFL and AOC. To eliminate the effects of common method bias and sample bias further, use of a diverse set of sources from supervisors, peers, and subordinates and more balanced samples among countries are recommended in future research.

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