Effectiveness of Interpersonal Leadership for Engagement and Task Performance of Nurses

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Abstract
Transformational leadership has been studied as an essential trait for nurse leaders in the past; however, there is a dearth of studies on interpersonal leadership which is a combined construct of transformational leadership and interactional justice. The main objective of this article was to examine the relationship between interpersonal leadership and task performance. A cross-sectional research design was adopted for this study. 700 questionnaires were circulated among nurses from 14 major hospitals across the country. Out of these, 336 nurses replied. The final usable sample size was 283 full-time nurses, out of which 91.8% were female. The online and paper-based instruments were floated twice, at different timings with different cover letters to avoid common method bias. Nurses perceive that interpersonal leadership can significantly enhance their task performance. Similarly, the study also found significant mediation of work engagement in the positive relationship between interpersonal leadership and task performance. Moreover, there was no significant difference between public and private sector nurses about interpersonal leadership and its relationship with work engagement and task performance. Interpersonal leadership has been found as significantly and positively effective toward work engagement and task performance of nurses working both in public and private sector hospitals. The results establish that by adopting the interpersonal leadership style, a nurse leader can enhance the work engagement of her followers. The study suggests that interpersonal leadership should be adopted as a total concept in nurse management to achieve better results in terms of work engagement and task performance.

Keywords
interactional justice, interpersonal leadership, transformational leadership, engagement, task performance, nurses

Introduction
Interpersonal leadership (IL) is a relatively new term in the leadership literature, which has emerged as a higher order concept of transformational leadership (TL) combining characteristics of TL and interactional justice (IJ) (Hansen et al., 2014). TL and IJ both are considered strong motivational tools for employee performance. Therefore, the leaders possessing these qualities are blessed with strong motivational abilities that positively influence their followers toward their vision for the future (Hansen et al., 2014).

Previously, research has indicated a positive relationship between TL and employees’ performance through IJ. Some studies have also considered the importance of IJ as a mediator or moderator toward organizational performance and effectiveness. For instance, Carter et al. (2014) established the relationship between TL and organizational citizenship behavior through IJ. Similarly, Gillet et al. (2013) linked TL with the quality of work-life and engagement through IJ. Recently, Singhry (2018) has also studied the mediating effect of organizational justice in the relationship between TL and employee job satisfaction and found a positive effect. These studies suggest that combining the two concepts (TL and IJ) can be helpful for administrators to effectively resolve multiple employees’ related issues. They also assume the relationship between the two concepts as useful in raising the employees’ level of achievement, growth, intellectual ability, working life, and service delivery. IL, which is a combination of TL and IJ, can provide a useful framework for the managers to exercise and expect better results in terms of engagement and performance from employees. However, despite its significance, the concept of IL has not been studied in detail, especially in the context of nurses’ work engagement (WE) and task performance (TP).

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Extensive research is available suggesting a positive relationship between TL and employee WE (Ghadi et al., 2013; Kopperud et al., 2014; Mahmood et al., 2019; Mozammel & Haan, 2016; Prochazka et al., 2017). Similarly, some researchers have also discussed its direct or indirect relationship with TP of employees (Bacha, 2014; Chi & Pan, 2012; Liang & Chi, 2013). On the other hand, very few researchers have specifically discussed the role of organizational justice in engagement and task or contextual performance (Ghosh et al., 2014; He et al., 2014). However, no study could be found on the integrated role of IJ and TL toward WE or TP. Therefore, this study was designed to fill the gap and achieve three main objectives. Primarily, this study investigates the relationship between IL (a combined concept of TL and IJ) and TP of nurses. Second, it establishes the path between IL and TP through WE. Third, the comparison between public and private sector nurses was conducted to find out any sector-specific differences.

WE involves high levels of personal investment in tasks (Newton et al., 2020) and mainly comprises enthusiasm, involvement, meaningfulness, and energy (Chaudhary & Akhouri, 2019; Costantini et al., 2017; Liu et al., 2019; Mostafa et al., 2020; Newton et al., 2020). The concept of WE was initially introduced by Kahn (1990), who presented it as a combination of the ideas of Maslow (1954) and Alderfer (1969). According to him, the engagement theory postulates that people require self-expression and self-employment in their work lives (Costantini et al., 2017; Frey, 2019; Tamta & Rao, 2017). From the nursing point of view, the ethical consideration of professional nurses supports individual responsibility for WE in professional practice. Thus, engagement at work is an inbuilt feature of nurses’ job demand (Keyko et al., 2016).

TL theory has evolved to describe four dimensions of leader behavior: individualized consideration (treats each follower on an individual basis), intellectual stimulation (risk-taker and encourage creativity), inspirational motivation (visionary), and idealized influence (role model). These leaders are admired, respected, and trusted because of their consideration of the needs of others over their personal needs (Liang & Chi, 2013). According to Poghosyan and Bernhardt (2018), transformational leaders provide constructive feedback to their followers, convince them to exhibit extra effort, and encourage them to think creatively about complex problems. More importantly, they inculcate selflessness among the followers. In response, followers contribute more positively toward collective organizational goals and scarily their personal interests for the organization. As a result, they tend to behave in ways that facilitate high levels of TP (Jyoti & Bhau, 2015; Perko et al., 2016; Stroud, 2016; Yi et al., 2019). This kind of supporting leadership becomes even more significant for health care and nurse leaders. It has been found very effective in finding creative solutions to nursing-specific challenges like shift work or emergency calls which may negatively affect their WE otherwise (Gillet et al., 2013). Cummings et al. (2018) conclude that relational and TL has particular implications for health care and nurses. It becomes even more critical for them to display relational skills, concern for their employees and encourage collaborative working to achieve preferred future for themselves, their employees, their patients, and organizations simultaneously.

However, the researchers have been trying to explore TL in terms of its behavioral characteristics and consequences since its introduction (Andersen, 2015; Lin et al., 2019). However, the process as to how transformational leaders influence and followers react to their specific behaviors needs further investigation (Choi et al., 2016, 2017; Fischer, 2016). Similarly, research also acknowledges the influential role of leaders in developing perception of justice among their followers but fails to explain the process as to how the leader performs this role (Rinfret et al., 2018). Some studies (Carter et al., 2014; Deschamps et al., 2016) have also indicated a high level of correlation between the perception of IJ and TL and suggested a detailed investigation in this regard. Research has indicated that the creation of a justice climate in an organization is among the basic responsibilities of a leader, which may foster autonomy, responsibility, and motivation among the followers. Weng et al. (2015) reiterate that nurses are subject to highly risky and demanding jobs directly related to patients’ health. Therefore, they are required to ensure a high quality of caring services, for which TL, perception of justice, and WE are equally important. This study has hypothesized that a positive perception of justice among employees acts as an important psychological mechanism in the process of TL. Therefore, the primary focus remains on the theoretical integration of literature pertaining to the two concepts from the nursing perspective.

Carter et al. (2014) conclude that TL can be an effective means of demonstrating interactional fairness. They also indicated the gap for studying the relationships from different perspectives including relevant moderators or mediators to understand the concept in greater detail. Some researchers have acknowledged the importance of justice for a transformational leader in different ways and suggested that effective TL leads to a positive perception of justice among the followers, which ultimately enhances employees’ and organizational outcomes (Deschamps et al., 2016; Gillet et al., 2013). As indicated earlier, research has extensively discussed the linkages between TL with employees’ WE, performance, commitment, and so on; however, none except Hansen et al. (2014) have discussed its role along with IJ and suggested studying its enhanced role for other employee and organization-related outcomes. Although in another study, Perko et al. (2016) have found that TL leads to an enhanced level of IJ at the individual level which ultimately leads to enhanced citizenship behavior; however, they had not combined it as a part of IL. They also suggested seeking further insight into this relationship in different structural and cultural contexts. Therefore, the aim of this study was to fill the
knowledge gap in the existing literature by exploring the effectiveness of IL in terms of its employee’s related outcomes like engagement, and TP among nurses of public and private sector hospitals of Pakistan.

**Literature Review**

Modern research revolves around exploring and understanding the mechanism as to how the leadership/supervisor’s transformational behavior influences subordinates (Buil et al., 2019; Holten et al., 2018; Pattar & Wang, 2016). In other words, researchers have started examining the mediation mechanisms which may possess the potential to explain the phenomenon toward employees’ in-role and extra-role performance (Fernet et al., 2015; Pan & Lin, 2015). The proponents of social exchange theory (SET; Wang et al., 2012) opine that subordinates will be more likely to respond by their feelings through in-role and extra-role performance behaviors when they perceive that their leaders attend them fairly on an individual basis positively through their continuing interactions. This kind of interpersonal treatment is known as IJ. Leaders directly affect their subordinates’ daily life with positive attitudes and interactions based on justice and equity (Ambrose et al., 2015; Li et al., 2017; Meyer et al., 2018; Van Knippenberg & Hogg, 2018).

Although early researchers (like Burns, 1978) had included justice as an integral part of effective TL, the majority of later research on the topic ignored it to some extent. However, some modern researchers (Dang & Pham, 2020; Deschamps et al., 2016; Giddens, 2018) have acknowledged the importance of IJ as a natural outcome of leadership influence. Leaders are the role models who give priority to their organizational or followers’ concerns over their self-interest and build loyalty and devotion among them (Long et al., 2016; Shin et al., 2015; Sun et al., 2017). They build trust and certainty about the authenticity of their visions among the followers. In response, their followers react and accept the change initiatives and are more likely to perform their high-risk tasks. This type of initiative induces a sense of energy and sacrifice among the followers to perform more effectively beyond their self-interest and contribute in a better way toward bigger organizational objectives (Sousa & van Dierendonck, 2017).

TL is also linked to WE through individualized consideration which demonstrates that leaders pay special attention to each subordinate. They show care for employees’ individual differences and effectively look after their growth and achievement-related needs (Freeborough & Patterson, 2016; Jeong et al., 2016; Pourbarkhordari et al., 2016). This trait of TL is embedded in SET (Blau, 1968) developed on the premise of subjective cost–benefit analysis and the comparison of alternatives. Schmitt et al. (2016) add that if a leader provides important personal resources to followers (care, consideration, respect, etc.), they more likely perceive the workplace as supportive. Resultantly, it helps to create a sense of obligation among the followers to reciprocate positively in terms of engagement and performance (Breevaart et al., 2014; Xu et al., 2016).

**Research Framework and Hypotheses**

TL, in particular, has been regarded as a useful approach for understanding employees’ attitudes, behaviors, and performance (e.g., Ribeiro et al., 2018). It is typically conceptualized as influencing subordinates by broadening and elevating followers’ goals and providing them with the confidence to perform beyond expectations specified in the implicit or explicit exchange agreement (Azim et al., 2019; Fok-Yew, 2015; Ho, 2016). Other researchers have also found a positive effect of TL on employee TP (Bacha & Walker, 2013; Chi & Pan, 2012; Liang & Chi, 2013). On the other hand, leaders demonstrate powerful relational behaviors when practicing interpersonal and informational justice (parts of IJ), both of which convey respect, empathy, and care for the followers (Cho & Dansereau, 2010; Loosemore & Lim, 2016; Xu et al., 2016). As discussed earlier, previous research has not explicitly studied the relationship between IL and TP; however, the link has been established at several places between the perception of fairness and TL on the individual or collective basis. Based on the above literature, it can be concluded that IL enhances employee TP, and this could be assessed in the Pakistani nursing context as well. Therefore, the first hypothesis states:

**Hypothesis 1 (H1):** Interpersonal leadership enhances the task performance of nurses working in public and private sector hospitals of Pakistan.

TL emphasizes a relationship-based performance which includes ethical practices, cooperation, healthy competition, and an unselfish approach toward goal attainment (Kiari et al., 2017; Kim et al., 2018). Previous studies have explored the association between TL and employees’ engagement at work. Several research findings in the area of TL have shown that leaders who articulate a powerful vision have a positive effect on the employee attitude, providing them role clarity, and facilitation (Anderson & Sun, 2017; Cope & Murray, 2017; Pradhan & Pradhan, 2016). One key attribute of a transformational leader is the ability to display self-sacrificial behaviors for the organization (Arnold et al., 2016; Choi et al., 2017). Many studies suggest that transformational leaders’ self-sacrificial behaviors influence followers so much that they copy them (Cavazotte et al., 2013; Chen et al., 2016; Pradhan & Pradhan, 2016). As indicated by Zdaniuk and Bobocel (2013) when leaders demonstrate genuine concern for their subordinates, they enable themselves to create a strong leader–follower relationship and help in improving their sense of belongingness with the organization. As a result, the employees devote themselves and put
their best effort into their work. Therefore, this study also proposes that:

**Hypothesis 2 (H2):** Interpersonal leadership enhances the work engagement of nurses working in public and private sector hospitals of Pakistan.

Researchers have conceptualized WE in multiple ways; however, a majority of them agree that it is a positive psychological state characterized by energy, investment, and psychological presence (Crawford et al., 2010; Rothbard & Patil, 2011; Sonntag, 2017). In other words, it is a combination of vigor, dedication, and absorption at work, enabling the employee to express his or her active self in his or her TP. Importantly, it is not a stable state but constantly changing to improve the performance of employees at work, which is more obvious in the ways they perform (Byrne et al., 2016, 2017; Diehl & Wyrick, 2015). Sonntag (2017) indicates that task-specific WE is not entirely dependent on the availability of resources. In fact, the available resources with the potential to influence the course of action for an engagement at the workplace can act as a catalyst. Therefore, it is an established fact that a higher level of WE enhances the TP of nurses. The third hypothesis is developed as:

**Hypothesis 3 (H3):** Work engagement enhances the employee work performance in public and private sector hospitals of Pakistan.

Plenty of research is available on the relationship between TL and WE; however, no study is found in the context of IL. Buil et al. (2019) find that WE along with identification and proactive personality mediates the relationship between TL and (in-role and extra-role) performance. Hassan et al. (2018) also discovered a significant mediation of WE between the same variables. Duatu and Butuvescu (2019) indicate that TL has a significant impact on employee WE; however, they have also included psychological empowerment as a mediator in the relationship and suggested to include organizational justice as another probable mediator. On the other hand, some researchers have found a positive relationship between organizational justice and employee WE (Haynie et al., 2017; Panatik et al., 2017; Yean, 2016) as well as performance (Kalay, 2016). Still, no study could be found that has investigated IJ and TL as a combined construct leading to employee performance through WE. Therefore, this research assumes a significant mediation of WE in the relationship between IL and TP of nurses in both private and public sector hospitals of Pakistan, for which the following hypothesis is developed:

**Hypothesis 4 (H4):** Work engagement mediates the positive relationship between interpersonal leadership and task performance of nurses in public and private sector hospitals of Pakistan.

The cultural differences between the public and private sector organizations can have significant effects on employees and should be considered while studying any related concept (Bysted & Hansen, 2015; Hsieh, 2016). Especially in the context of Pakistani hospitals, there exists a big divide between the two cultures (Khawaja, 2017; Parveen et al., 2016). Therefore, the work behaviors, leadership styles, engagement level, and performance of nurses in these organizations may differ from each other. Hence, this study incorporates the perceptions of both sectors and proposes the last hypothesis as:

**Hypothesis 5 (H5):** There are significant differences among the nurses working in public and private sector hospitals of Pakistan in terms of the relationship between interpersonal leadership and task performance through work engagement.

Figure 1 depicts the model of the study.

**Research Methodology**

This study was cross-sectional, where the data were collected from a single source during the period between June and December 2018. A survey questionnaire was floated in 14 major hospitals (seven public and seven private) located in seven capital cities of Pakistan, including Islamabad (the federal capital), Lahore (Punjab), Karachi (Sindh), Peshawar (Khyber Pakhtunkhwa), Quetta (Balochistan), Muzaffarabad (Azad Jammu Kashmir), and Gilgit (Gilgit Baltistan). The hospitals with the highest number of beds were selected from each city and equal numbers of nurses (50) from each hospital were approached to participate in the study. Data were collected through two separate online questionnaires. The first questionnaire contained items about IL. Similarly, the scales of WE and TP were floated in the second questionnaire. However, this technique was not very useful as several respondents from distant cities responded to only one questionnaire and did not reply to the second one despite several reminders. Therefore, a paper-based approach was used where questionnaires were sent by mails or through focal persons in different cities. The respondents were given the option to include their contact numbers and email addresses, which most of them provided for future contacts. Moreover, they were also given assurance that the data provided by them would solely be used for academic purposes and treated as privileged information. Overall, 700 questionnaires were distributed among the nurses. Out of these, 330 completed or partially completed questionnaires were received back (47% response rate). A total of 48 responses were incomplete and therefore excluded from the final analyses. The remaining 283 responses (152 Public and 131 Private) were complete in all respects and used for further analyses.
Measurement and Scaling

IL

IL in the context of this study was taken as a measure of qualities of TL among the hospital managers who also practiced the IJ in their dealings with hospital nurses. TL was assessed using Rafferty and Griffin’s (2004) 15-item scale as done by Hansen et al. (2014). Sample items include “Says things that make employees proud to be a part of this organization.” IJ perceptions were assessed using the six-item scale from Hansen et al. (2014) measure of justice. Sample items include “Treated you with respect?” and “Communicated details in a timely manner?”. A 7-point Likert-type scale, as recommended in these studies, was used to obtain the perception of respondents against these items (1 = strongly disagree to 7 = strongly agree). On the whole, the 21 items scale used by Hansen et al. (2014) was adopted.

WE

WE was taken as a mediator in this study and represented the extent to which the nurses feel themselves intrinsically involved and motivated toward their job. WE was measured using a 17-item Utrecht Work Engagement Scale developed by Schaufeli and Bakker (2004). The sample items included “At my work, to me, my job is challenging; . . . My job inspires me,” and so on.

TP

TP was the outcome variable in this study and explained the extent to which the nurses perform their assigned tasks. It was measured through a 17-item scale developed by Van Dyne and LePine (1998). Sample items include “At my work I meet performance expectations” and so on. All items were measured on a scale ranging from 1, strongly disagree, to 7, strongly agree.

Overall, there were 55 items included in two separate questionnaires, used for data collection. The first one comprised 21 items about IL (TL: 15; IJ: 6). Similarly, the second questionnaire comprised 34 items about WE (17 items) and TP (17 items).

Results and Analyses

Demographics

The respondents for this study represented different groups in terms of gender, age, and work experience. Most (91%) of the respondents were female. Male nurses (9%) were also made part of the sample to represent their minority in the nursing profession in Pakistan. A total of 94% of nurses had work experience between 1 and 5 years and only seven of them were representing the group with the higher work experience (more than 11 years). On the whole, 65% of the respondents belonged to the age group between 20 and 30 years, 29% between 30 and 40 years, and remaining were above 40 years of age (Table 1).

Common Method Bias

As indicated by Meier and O’Toole (2013), self-reported responses like that in this study could have common method bias (CMB), particularly when researchers link subjective performance measures to self-reported management practices. In our case, it was attempted that the respondents could give their opinions about the existing practices. The items were asked as to what extent certain practices took place in their organizations instead of asking as to what did they perceive about these practices. It was important to avoid their subjective understanding of the concepts about the study. Moreover, two separate questionnaires were presented to them at different times following the precautionary measures given by Podsakoff et al. (2003), which helped contain the self-reported bias to a minimum. Data were checked for CMB through the Common Marker variable method (Podsakoff et al., 2003). The results indicated a good fit to the data (CMIN = 5,399.446, Df = 1,476, p = .00, CMIN/ Df = 3.658, comparative fit index [CFI] = 0.954, Tucker–Lewis index [TLI] = 0.952, root mean square error of approximation [RMSEA] = 0.036, RMR = 0.021). Moreover, the difference in standardized correlations between substantive latent variables for both models (with and without common factor) varied negligibly (mean difference = 0.06). These results demonstrated that the respondents were able to understand and differentiate between substantive variables. Therefore, it can be safely inferred that
the data collected for this study did not show a significant amount of CMB.

Validity and Reliability Analyses

The measures used in this study were adapted and had gone through validity and reliability processes by previous researchers. However, as these tools were used in different contexts and combinations, confirmatory factor analysis (CFA) was conducted for revalidation of these instruments. Table 2 contains the results of two CFA (first and second order) models (Figure 2).

Initially, the first-order confirmatory factor analyses (CFA) were conducted but the model fitness was not satisfactory. Therefore, one item from TP (TP16 < 0.5) was removed that exhibited low factor loading (Field, 2013). The new model comprised 54 items and exhibited better fitness. However, the correlation and covariance between TL and IJ were very strong ($r = .71$; covariance = 0.72). Therefore, a second-order CFA model was developed in which IJ and TL were shown as dimensions of IL. As shown in Table 2, the fit indices (CMIN = 4,027.483; $p = .00$, RMR = 0.037 TLI = 0.955; CFI = 0.955; IFI = 0.938; RMSEA = 0.036 < 0.05) comply with the desired criteria for fitness of model (Awang et al., 2015; Hair et al., 2014). Therefore, the same second-order model was used for further analyses. Data were further tested for the convergent and discriminant validities measured through composite reliability (CR), average variance explained (AVE), maximum shared squared variance (MSV), and average shared squared variance (ASV), calculated in AMOS and statistical tools package in MS Excel 2007 (Figure 2; Table 3). The values of CR (Min = 0.818, Max = 0.960) were found greater than the threshold value of 0.70; hence, the data qualified the conditions for reliability. Similarly, the value of AVE for each variable was found as more than the required value of 0.5. Moreover, the value of CR was greater than AVE (Min = 0.507, Max = 0.691) as required for the convergent validity of data. The values of MSV (Min = 0.394, Max = 0.524) were also smaller than AVE and conformed to the conditions for the discriminant validity of data. The results indicated that data qualified the conditions for reliability and validity and was good for further statistical analyses.

Mediation Analyses

It was a comparative study where the type of organization was taken as a fixed factor for comparison. Therefore, six different models (direct and indirect models for each group) were developed and tested in AMOS (Composite $N = 283$, Public $N = 131$, Private $N = 152$). Table 2 also indicates the values of fit indices for composite structural equation modeling (SEM) models (direct and indirect) as satisfactory (Awang et al., 2015; Hair et al., 2014). Table 4 contains the results of direct and indirect (composite model) impacts of IL on WE and TP for which second-order SEM analyses were conducted. All the relationships in this model were found

### Table 1. Demographics.

| Variable | Public | Private | Total |
|----------|--------|---------|-------|
| Age 20–30 | 83     | 101     | 184   |
| 31–40    | 44     | 40      | 84    |
| 41–50    | 5      | 10      | 15    |
| Gender Male | 12     | 11      | 23    |
| Female   | 120    | 140     | 260   |
| Work experience Less than 5 years | 109 | 135 | 244 |
| 6–10     | 19     | 13      | 32    |
| 11–15    | 4      | 3       | 7     |
| Total    | 132    | 151     | 283   |

### Table 2. Model Fit Indices.

| Model                  | CMIN     | df     | $p$   | CMIN/df | RMR    | IFI    | TLI    | CFI    | RMSEA |
|------------------------|----------|--------|-------|--------|--------|--------|--------|--------|-------|
| CFA Model 1 (first order) | 4,017.733 | 1,454.000 | .00   | 2.763  | 0.037  | 0.945  | 0.938  | 0.945  | 0.036 |
| CFA Model 2 (second order) | 4,027.483 | 1,455.000 | .00   | 2.768  | 0.037  | 0.955  | 0.938  | 0.955  | 0.036 |
| SEM composite (indirect) | 4,027.483 | 1,455.000 | .00   | 2.768  | 0.035  | 0.912  | 0.907  | 0.912  | 0.035 |
| SEM composite (direct) | 2,481.250 | 729.000  | .00   | 3.404  | 0.035  | 0.903  | 0.899  | 0.903  | 0.042 |

Note. TLI = Tucker–Lewis index; CFI = comparative fit index; RMSEA = root mean square error of approximation; CFA = confirmatory factor analysis; SEM = structural equation modeling; CMIN/DF = minimum discrepancy per degree of freedom; RMR = root mean square residual; IFI = incremental fit index.
Figure 2. Confirmatory factor analysis (CFA) (IL-WE-TP).

Note. IL = interpersonal leadership; WE = work engagement; TP = task performance; IJ = interactional justice; TL = transformational leadership.
positive and significant ($\beta = .792, p < .01$; IL-WEL: $\beta = .689, p < .01$; WE-TL: $\beta = .371, p < .01$). These results validate all the assumptions for mediation as defined by Baron and Kenny (1986). The indirect impact of IL on TP ($\beta = .211, p = .02 < .05$) was also significant; however, the values reduced in the second case and indicated complimentary mediation of WE in the relationship between IL and TP (Figure 3). The results were further verified through bootstrapping and found significance ($p = .01 < .05$) (Preacher & Hayes, 2004). The results suggest that WE significantly mediates the relationship between IL and TP. In other words, IL enhances the TPs of nurses through WE.

**Group Analyses**

Table 4 also reflects the results of direct and indirect models (Public) and indicates significant relationships in both cases. Similar to the previous case, the relationship between IL and WE ($\beta = .784, p < .001$) as well as WE and TP were positive and significant ($\beta = .701, p = .000 < .001$). Moreover, both the direct ($\beta = .588, p < .001$) and indirect ($\beta = .364, p < .001$) relationships between IL and TP were also positive and significant. However, the values reduced in the second case (Baron & Kenny, 1986) and indicate complimentary mediation of WE in the relationship which was confirmed through bootstrapping ($p = .000 < .001$; upper bound = 0.615, lower bound = 0.993; 95% CI). Similar to the composite and public sector models, the data of the private sector hospitals also depicted significant and positive relationships (IL-TP: $\beta = .591, p = < .001$; IL-WE-TL: $\beta = .377, p < .001$; upper bound = .103; 95% CI) and significant mediation ($p = .004 < .05$). To check if the two nursing groups (Public and Private) were different from each other, chi-square difference test was also conducted in AMOS for each of the direct and indirect models. The results indicated no significant difference between the two groups (chi-square difference for direct model = 38.127, df difference = 39, $p = .510$; chi-square difference for indirect model = 69.52, df difference = 55, $p = .090$). In other words, public and private sector nurses responded in the same way to the survey about IL, WE, and TP and there were no significant differences in this regard.

**Discussion**

As indicated by Hansen et al. (2014), IL is a newer term and has not been studied in the context of TP in the past. This study demonstrated significant relationships among IL, WE, and TP. Previously, researchers have studied IJ, TL, WE, and TP and found positive relationships; however, none has taken it collectively as done in this study. Ghadi et al. (2013) found positive and significant impact ($b = .21, p < .001$) of TL on WE in a study conducted in Australia. Similarly, in another study by Song et al. (2012), WE was taken as a mediator in the relationship between TL and organizational knowledge creation practices. The study found a significant and positive impact of TL on WE ($b = .54, p < .01$). Lately, in a study by Besieux et al. (2018), the theory was re-endorsed as TL was found to have a significant impact on WE ($b = .48, p < .01$). On the other hand, IJ has also been found as a significant influencer toward enhancing employee motivation and engagement (Agarwal, 2014; Ghosh et al., 2014).

Saks and Gruman (2014) discuss the phenomenon in the context of SET that suggests a reciprocal link between employees and the organization. When employees have a positive perception of justice in the organization, they are more likely to be better involved in their work and are more engaged. From the nursing point of view, employee engagement and TP both become even more important as their work involves human health and life-related issues (Enwereuzor et al., 2018). Previously researchers have studied its relationship with TL (Enwereuzor et al., 2018; Hayati et al., 2014; Salanova et al., 2011) and found positive associations. Gillet et al. (2013) studied three constructs simultaneously. They took IJ as a mediator in the relationship between TL and WE and found positive associations in all the cases. However, none has studied IJ and TL as parts of IL leading to WE and TP of nurses as done in this study for both private and public sector hospitals of Pakistan.

Some researchers have studied the mediating role of WE in the context of TL, however with multiple outcome variables like quality of ideas, quantity of ideas, persistence (Kovjancic et al., 2013), service climate (Kopperud et al., 2014), and proactive work behavior (Schmitt et al., 2016). The most relevant study in this context was done by Christian

### Table 3. Validity and Reliability Analyses.

| Variable | M    | SD   | Cronbach's $\alpha$ | CR  | AVE  | MSV   | MaxR (H) | IJ   | WE   | TP   | TL   | IL   |
|----------|------|------|----------------------|-----|------|-------|----------|------|------|------|------|------|
| IJ       | 6.7718 | 0.487 | .971                 | 0.938 | 0.654 | 0.506 | 0.941    | 0.809 |
| WE       | 6.0704 | 0.531 | .954                 | 0.953 | 0.582 | 0.458 | 0.964    | 0.637 | 0.763 |
| TP       | 6.2874 | 0.488 | .949                 | 0.945 | 0.507 | 0.394 | 0.956    | 0.712 | 0.677 | 0.712 |
| TL       | 6.2636 | 0.565 | .960                 | 0.960 | 0.617 | 0.506 | 0.961    | 0.711 | 0.623 | 0.711 | 0.785 |
| IL       | 6.5184 | 0.482 | .968                 | 0.818 | 0.691 | 0.524 | 0.818    | 0.724 | 0.623 | 0.725 | 0.832 |

Note. CR = composite reliability; AVE = average variance explained; MSV = maximum shared variance; IJ = interactional justice; WE = work engagement; TP = task performance; TL = transformational leadership; IL = interpersonal leadership.
et al. (2011) where they found significant mediation of WE in the relationship between TL and TP. Lamm et al. (2016) found three main functions of interpersonal leaders namely, supporting, motivating, and developing their followers. They conceptualized these functions of interpersonal leaders from previous literature and left the empirical investigation of their framework for future research. This study has investigated a different domain of IL by including IJ as another dimension of IL. However, the supporting, motivational, and developmental functions of IL are left for future studies. Although no specific reference similar to this research was found to compare the public and private health sector organizations, Al-Husseini and Elbeltagi (2016) also found no difference between private and public

Table 4. Model Estimates.

| Model       | Unst. est. | SE  | CR   | p   | Standardized est. | Unst. est. | SE  | CR   | p   |
|-------------|------------|-----|------|-----|-------------------|------------|-----|------|-----|
| Direct      |            |     |      |     |                   |            |     |      |     |
| TP <--- IL  | 0.816      | 0.1 | 8.34 | *** | 0.792             | 0.673      | 0.067 | 10.044 | *** |
| Indirect    |            |     |      |     |                   |            |     |      |     |
| WE <--- IL  | 0.729      | 0.07 | 10.7 | *** | 0.689             | 0.769      | 0.083 | 9.265 | *** |
| IJ <--- IL  | 0.71       | 0.06 | 12.8 | *** | 0.821             | 0.955      | 0.088 | 10.827 | *** |
| TL <--- IL  | 1          | 0.883 | 1   | 0.949 | 1                 | 0.949      | 1    | 0.804 |     |
| TP <--- WE  | 0.319      | 0.07 | 4.31 | *** | 0.371             | 0.334      | 0.083 | 4.639 | *** |
| TP <--- IL  | 0.144      | 0.07 | 2.06 | .02 | 0.211             | 0.234      | 0.067 | 3.492 | *** |

Note. The figures in bold and single underline represent path c and with double underline path c'. CR = composite reliability; TP = task performance; IL = interpersonal leadership; WE = work engagement; IJ = interactional justice; TL = transformational leadership.

***p < 0.001.

Figure 3. Indirect composite model (IL-WE-TP).

Note. IL = interpersonal leadership; WE = work engagement; TP = task performance; IJ = interactional justice; TL = transformational leadership.
### Table 5. Discussion.

| Research gap                                                                 | References                                                                 | This study findings                                                                 | Comments                                                                 |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Interpersonal leadership is a combined construct of transformational leadership and interactional justice. | Singhry (2018) Carter et al. (2014) Hansen et al. (2014) Dang and Pham (2020) | This study has found a significant correlation \( (r = .71, p < .001) \) and covariance \( (0.72, p < .001) \) between the two concepts of transformational leadership and interactional justice. Therefore, both were combined to form a construct, while studying in the nursing context of Pakistan. | Nurses face very tough work routines and challenges in terms of shift work and busy schedules in emergencies, and so on. Therefore, the role of a nurse leader to exhibit transformational leadership qualities and interactional justice simultaneously becomes very important as it enhances their engagement at work. This study has provided evidence that transformational leadership and interactional justice go hand in hand. It is important to study the synergistic effect of the two concepts on nurses' engagement as well as performance. |
| Previous research has discussed the role of transformational leadership and interactional justice on employee work engagement (WE) and task performance separately. However, no one has studied the two constructs collectively as a single construct leading to work engagement and performance. Especially, it was never done in the nursing context in the past. | Prochaska et al. (2017) Mozammel and Haan (2016) Mahmood et al. (2019) Ghosh et al. (2014) | This study has found a significant and positive relationship between interpersonal leadership and work engagement \( (b = 0.689, p < .01) \) as well as task performance \( (b = 0.792, p < .01) \) of nurses in Pakistan. | Interpersonal leadership was never studied in the context of nursing previously. This study has authenticated that transformational leadership and interactional justice, when combined as a single construct, produce a synergistic effect on work engagement and task performance of nurses. |
| Although it is an established fact that leaders play an influential role in developing the perception of justice among their followers, the process remains less explored as to how the leader performs this role. Researchers have been trying to explore transformational leadership in terms of its behavioral characteristics and consequences since its introduction. However, the process through which a transformational leader influences the followers' performance needs further investigation. This problem is even more evident when studying interpersonal leadership (a combined construct of transformational leadership and interactional justice). Therefore, the process through which an interpersonal leader influences the task performance of nurses was never studied in the past. | Rinfret et al. (2018) Andersen (2015) Fischer (2016) | This study has found that work engagement significantly and positively mediates the relationship between interpersonal leadership and task performance of nurses. The indirect effect of interpersonal leadership on task performance was less than the direct effect \( (j = 0.211, p < .05) \) and the difference was found \( (p < .05) \) significant. | Transformational leaders are characterized by individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence. These leaders are admired, respected, and trusted because of their consideration of the needs of others over their personal needs. This study had hypothesized that a positive perception of justice among employees acts as another important psychological mechanism for a transformational leader to influence their followers. The collective construct of TL and IJ generates even better results in terms of task performance among the followers. The study has established the process between interpersonal leadership and task performance through work engagement. In other words, an interpersonal nurse leader enhances the enthusiasm, involvement, meaningfulness, and energy among followers who resolutely perform better at their jobs. |
| Previous research explained the relationship between transformational leadership and employee engagement through social exchange theory. It is especially more applicable when followers have a positive perception about the fairness of leaders. In such a situation, the followers tend to exhibit their response in terms of their improved in-role and extra-role performance. Early research in the field had included justice as an integral part of effective transformational leadership but later on, it was ignored to some extent. Modern research has once again felt the importance of studying the two concepts together and recommended incorporating this perception as an integral part of transformational leadership. | Li et al. (2017) Meyer et al. (2018) Ambrose et al. (2015) Van Knippenberg and Hogg (2018) Dang and Pham (2020) Deschamps et al. (2016) Giddens (2018) | This study has found a strong correlation \( (r = .71, p < .001) \) between transformational leadership and interactional justice. Therefore, the two constructs were joined to form a composite construct of interpersonal leadership. This was done by applying second-order CFA in AMOS version 23 and the new model provided even better fitness statistics \( (CMIN = 4027.483; p = .00, RMR = 0.037; TLI = 0.955; CFI = 0.955; IFI = 0.938; RMSEA = 0.036 < 0.05) \). The results confirmed that transformational leadership and IJ can be combined to form a composite construct of interpersonal leadership. | The results of this study have extended the validity of social exchange theory in the context of interpersonal leadership. It provided empirical evidence that the two variables (transformational leadership and interactional justice) can be used together as a combined construct. Moreover, it was established that transformational leadership and interactional justice, when used as a single combined construct of interpersonal leadership, bring a synergistic effect on the work engagement of nurses. Resultantly, nurses display their behavior through a better in-role performance at work. |

Note. TL = transformational leadership; IJ = interactional justice; CFA = confirmatory factor analysis; TLI = Tucker–Lewis index; CFI = comparative fit index; RMSEA = root mean square error of approximation; CMIN/DF = minimum discrepancy; RMR = root mean square residual; IFI = incremental fit index.
sector organizations (higher education) of Iraq, in terms of the relationship between TL and innovation, which is another dimension of employee performance. Moreover, the presented model is indigenous and is a true contribution to the leadership and engagement literature. Detailed discussion is included in Table 5.

Implications

This study has extended the validity of IL theory presented by Hansen et al. (2014) in the Pakistani nursing context. The model presented by this study has not been studied in the past. Previous research has focused on TL and IJ on individual bases. In very few cases, these were used as a mediator; however, none has studied it as a composite construct (IL) and established its linkages with WE and TP as done by this study. This is a true contribution of this research in nursing leadership literature. The study has also extended the validity of SET which postulates that socially acceptable behaviors of management or leadership (especially in terms of IJ) enhance employees’ WE at work which leads to enhanced employee performance. On the whole, there were five hypotheses developed for this study. Out of which four were accepted as IL was found to have a significantly positive impact on WE and TP (H1, H2, and H3). Moreover, a significant mediation of WE was found in the relationship between IL and TP (H4) that establishes the path between two variables. However, no significant differences among the practices of private and public sector health organizations were found in terms of IL leading to enhanced engagement and TP. Therefore, the last hypothesis (H5) was rejected. The research has useful implications for hospital management and recommends that the perception of IL significantly enhances the engagement and TP of nurses. Therefore, it is suggested that nurse managers should adopt an IL style to make their subordinates more comfortable with them and become more productive toward high-quality patient care. For this purpose, hospitals may arrange management development programs for the nurse leaders to become more interpersonal in terms of their management style, as it is directly linked to enhancing their followers’ engagement and TP at work. Such programs may include training in leadership and communication skills. In this regard, nurse leaders may be encouraged to learn to become role models for the followers by treating them on an equitable basis, taking risks, boosting creativity, inspiring and motivating, and instilling a perception of justice through respectful and participative communication.

Research Limitations and Future Directions

This study has tried to incorporate the response from across the country which has its own strengths and weaknesses. The response rate was fairly low and the overall sample size was small (N = 283). Future research may consider overcoming this deficiency. However, the representation of all the provinces of the country was ensured which enhances the generalizability of the study across the country. Moreover, the model developed in the study can be replicated with other related outcomes like contextual performance (Charlton & Eschleman, 2019; Hansen et al., 2014), employee innovation (Khan & Khan, 2019; Weng et al., 2015), and mediators like person-job fit (Charlton & Eschleman, 2019), meaningful work, and trust in leadership (Khattak et al., 2020). This study was based on perceptions of nurses about their leaders and their performance. Such a perception could be biased. Therefore, in the future, the researchers can adopt a dyadic study design to incorporate dual responses from employees and their leaders simultaneously. A dyadic research design can help the researchers to investigate the relationship among variables more objectively. This study has studied the engagement function of an interpersonal leader. Future researchers can also explore the functions of an interpersonal leader in terms of supporting, motivating, and developing the followers (Lamm et al., 2016; Thibault et al., 2019). In addition, the model has focused on nurses’ related outcomes only. Future research can extend the model and incorporate the organizational outcomes as well like health unit, organizational effectiveness, performance, and so on (Tang, 2019).

Conclusion

The study is an extension of the IL model presented by Hansen et al. (2014) and is linked to WE and TP. IL as a new leadership concept was found significant and positively related to WE and TP in all three cases (Composite model, Public, Private). Moreover, significant mediation of WE occurred in the relationship between IL and TP in three different models. The comparative analyses indicated that there were no statistically significant differences among the groups in terms of the relationships among IL, WE, and TP.

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References

Agarwal, A. U. (2014). Examining the impact of social exchange relationships on innovative work behaviour: Role of work engagement. Team Performance Management, 20(3–4), 102–120.
Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance, 4*(2), 142–175.

Al-Husseini, S., & Elbeltagi, I. (2016). Transformational leadership and innovation: A comparison study between Iraq’s public and private higher education. *Studies in Higher Education, 41*(1), 159–181.

Ambrose, M. L., Wo, D. X. H., & Griffith, M. D. (2015). Overall justice: Past, present, and future. In R. S. Cropanzano & M. L. Ambrose (Eds.), *Oxford library of psychology: The Oxford handbook of justice in the workplace* (pp. 109–135). Oxford University Press.

Andersen, J. A. (2015). Barking up the wrong tree: On the fallacies of the transformational leadership theory. *Leadership & Organization Development Journal, 36*(6), 765–777.

Anderson, M. H., & Sun, P. Y. T. (2017). Reviewing leadership styles: Overlaps and the need for a new “full-range” theory. *International Journal of Management Reviews, 19*(1), 76–96.

Arnold, K. A., Loughlin, C., & Walsh, M. M. (2016). Transformational leadership in an extreme context: Examining gender, individual consideration and self-sacrifice. *Leadership & Organization Development Journal, 37*(6), 774–788.

Awang, Z., Affhanorhan, A., & Asri, M. A. M. (2015). Parametric and non-parametric approach in structural equation modeling (SEM): The application of bootstrapping. *Modern Applied Science, 9*(9), 58–67.

Azim, M. T., Fan, L., Uddin, M. A., Abdul Kader Jilani, M. M., & Begum, S. (2019). Linking transformational leadership with employees’ engagement in the creative process. *Management Research Review, 42*, 837–858.

Bacha, E. (2014). The relationship between transformational leadership, task performance and job characteristics. *Journal of Management Development, 33*(4), 410–420.

Bacha, E., & Walker, S. (2013). The relationship between transformational leadership and followers’ perceptions of fairness. *Journal of Business Ethics, 116*(3), 667–680.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182.

Besieux, T., Baillien, E., Verbeke, A. L., & Euwema, M. C. (2018). What goes around comes around: The mediation of corporate social responsibility in the relationship between transformational leadership and employee engagement. *Economic and Industrial Democracy, 39*(2), 249–271.

Blau, P. M. (1968). Social exchange. In D.L. Sills (Ed.), *International encyclopedia of the social sciences* (Vol. 7, pp. 452–457). Macmillan.

Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology, 87*(1), 138–157.

Buil, I., Martinez, E., & Matute, J. (2019). Transformational leadership and employee performance: The role of identification, engagement and proactive personality. *International Journal of Hospitality Management, 77*, 64–75. https://doi.org/10.1016/j.ijhm.2018.06.014

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

Byrne, Z. S., Hayes, T. L., & Holcombe, K. J. (2017). Employee engagement using the federal employee viewpoint survey. *Public Personnel Management, 46*(4), 368–390.

Byrne, Z. S., Peters, J. M., & Weston, J. W. (2016). The struggle with employee engagement: Measures and construct clarification using five samples. *Journal of Applied Psychology, 101*(9), 1201–1227.

Bysted, R., & Hansen, J. R. (2015). Comparing public and private sector employees’ innovative behaviour: Understanding the role of job and organizational characteristics, job types, and subsectors. *Public Management Review, 17*(5), 698–717.

Carter, M. Z., Mossholder, K. W., Feild, H. S., & Armenakis, A. A. (2014). Transformational leadership, interactional justice, and organizational citizenship behavior: The effects of racial and gender dissimilarity between supervisors and subordinates. *Group & Organization Management, 39*(6), 691–719.

Cavazotte, F., Moreno, V., & Bernardo, J. (2013). Transformational leaders and work performance: The mediating roles of identification and self-efficacy. *Bar —Brazilian Administration Review, 10*(4), 490–512.

Charlton, R., & Eschleman, K. J. (2019). Person—Group fit moderating the transformational leadership contextual performance relationship. *Academy of Management Proceedings, 2019*(1), 18624.

Chaudhary, R., & Akhouri, A. (2019). CSR perceptions and employee creativity: Examining serial mediation effects of meaningfulness and work engagement. *Social Responsibility Journal, 15*, 61–74.

Chen, L., Zheng, W., Yang, B., & Bai, S. (2016). Transformational leadership, social capital and organizational innovation. *Leadership & Organization Development Journal, 37*(7), 843–859.

Chi, N.-W., & Pan, S.-Y. (2012). A multilevel investigation of missing links between transformational leadership and task performance: The mediating roles of perceived person-job fit and person-organization fit. *Journal of Business and Psychology, 27*(1), 43–56.

Cho, J., & Dansereau, F. (2010). Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. *The Leadership Quarterly, 21*(3), 409–421.

Choi, S. B., Kim, K., Ullah, S. E., & Kang, S. W. (2016). How transformational leadership facilitates innovative behavior of Korean workers. *Personnel Review, 45*(3), 459–479.

Choi, S. B., Kim, K., & Kang, S.-W. (2017). Effects of transformational and shared leadership styles on employees’ perception of team effectiveness. *Social Behavior and Personality: An International Journal, 45*(3), 377–386.

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*(1), 89–136.

Cope, V., & Murray, M. (2017). Leadership styles in nursing. *Nursing Standard, 31*(43), 61–70.

Costantini, A., De Paola, F., Ceschi, A., Sartori, R., Meneghini, A. M., & Di Fabio, A. (2017). Work engagement and psychological capital in the Italian public administration: A new resource-based intervention programme. *SA Journal of Industrial Psychology, 43*(1), 1–11.
Deschamps, C., Rinfret, N., Lagacé, M. C., & Privé, C. (2016). Organizational justice and nurses’ quality of work life: A cross-sectional questionnaire survey. International Journal of Nursing Studies, 50(10), 1359–1367.

Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. Brazilian Journal of Marketing, 13(2), 44–55.

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. Journal of Applied Psychology, 95(5), 834–848.

Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. International Journal of Nursing Studies, 85, 19–60.

Dang, T. T., & Pham, A. D. (2020). What makes banks’ front-line staff more customer oriented? The role of interactional justice. International Journal of Bank Marketing. doi:10.1108/IBM-09-2019-0321

Deschamps, C., Rinfret, N., Lagacé, M. C., & Privé, C. (2016). Transformational leadership and change: How leaders influence their followers’ motivation through organizational justice. Journal of Healthcare Management, 61(3), 194–213. https://doi.org/10.1097/0115514-201605000-00007

Diehl, V. A., & Wyrick, M. (2015). The relationships between need for cognition, boredom proneness, task engagement, and test performance. SAGE Open, 5(2), 1–10.

Dutu, R., & Butucescu, A. (2019). On the link between transformational leadership and employees’ work engagement: The role of psychological empowerment. Psiholgia Resurselor Umane, 17(2), 42–73.

Enwereuzor, I. K., Ugwu, L. I., & Eze, O. A. (2018). How transformational leadership influences work engagement among nurses: Does person-job fit matter? Western Journal of Nursing Research, 40(3), 346–366.

Fernet, C., Trépanier, S. G., Austin, S., Gagné, M., & Forest, J. (2015). Transformational leadership and optimal functioning at work: On the mediating role of employees’ perceived job characteristics and motivation. Work and Stress, 29(1), 11–31. https://doi.org/10.1080/02678373.2014.1003998

Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage.

Fischer, S. A. (2016). Transformational leadership in nursing: A concept analysis. Journal of Advanced Nursing, 72(11), 2644–2653.

Fok-Yew, O. (2015). The relationship between transformational leadership and followers’ work characteristics and task performance. International Journal of Academic Research in Business and Social Sciences, 5(6), 366–377.

Freeborough, R., & Patterson, K. (2016). Exploring the effect of transformational leadership on nonprofit leader engagement. Servant Leadership: Theory & Practice, 2(1), 49–70.

Frey, B. (2019). The development of emotional intelligence for increased work engagement of employees in a medium-sized South African audit firm [Master’s thesis, University of South Africa].

Ghadi, M. Y., Fernando, M., & Caputi, P. (2013). Transformational leadership and work engagement: The mediating effect of meaning in work. Leadership & Organization Development Journal, 34(6), 532–550.

Ghosh, P., Rai, A., & Sinha, A. (2014). Organizational justice and employee engagement: Exploring the linkage in public sector banks in India. Personnel Review, 43(4), 628–652.

Giddens, J. (2018). Transformational leadership: What every nursing dean should know. Journal of Professional Nursing, 34(2), 117–121.

Gillet, N., Fouquereau, E., Bonnau-Antignac, A., Mokounkolo, R., & Colombat, P. (2013). The mediating role of organizational justice in the relationship between transformational leadership and nurses’ quality of work life. Journal of Advanced Nursing, 70(3), 433–447.

Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. Brazilian Journal of Marketing, 13(2), 44–55.

Hansen, A., Byrne, Z., & Kiersch, C. (2014). How interpersonal leadership relates to employee engagement. Journal of Managerial Psychology, 29(8), 953–972.

Hassan, H. A., Abbas, S. K., Iftikhar, S., Waqar, N., & Waris, A. (2018). Determinants of employee engagement practices in IT sector. International Journal of Scientific & Technology Research, 7(5), 156–158.

Hayati, D., Charkhabi, M., & Naami, A. (2014). The relationship between transformational leadership and work engagement in governmental hospitals nurses: A survey study. SpringerPlus, 3(1), 25.

Haynie, J. J., Flynn, C. B., & Mauldin, S. (2017). Proactive personality, core self-evaluations, and engagement: The role of negative emotions. Management Decision, 55(2), 450–463.

He, H., Zhu, W., & Zheng, X. (2014). Procedural justice and employee engagement: Roles of organizational identification and moral identity centrality. Journal of Business Ethics, 122(4), 681–695.

Ho, J. (2016). Influence of organizational context and follower’s deposition on the effectiveness of transformational leadership. International Journal of Organization Theory & Behavior, 19(3), 308–343.

Holten, A.-L., Bøllingtoft, A., Carneiro, I. G., & Borg, V. (2018). A within-country study of leadership perceptions and outcomes across native and immigrant employees: Questioning the universality of transformational leadership. Journal of Management & Organization, 24(1), 145–162.

Hsieh, J. Y. (2016). Spurious or true? An exploration of antecedents and simultaneity of job performance and job satisfaction across the sectors. Public Personnel Management, 45(1), 90–118.

Jeong, S., Hsiao, Y., Song, J. H., Kim, J., & Bae, S. H. (2016). The moderating role of transformational leadership on work engagement: The influence of professionalism and openness to change. Human Resource Development Quarterly, 27(4), 489–516.

Jyoti, J., & Bhau, S. (2015). Impact of transformational leadership on job performance: Mediating role of leader-member exchange and relational identification. Sage Open, 5(4), 2158244015612518.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. The Academy of Management Journal, 33(4), 692–724.

Khan, N. A., & Khan, A. N. (2019). What followers are saying about transformational leaders fostering employee innovation via organizational learning, knowledge sharing and social media use in public organisations? Government Information Quarterly, 36(4), 101391.

Kalay, F. (2016). The impact of organizational justice on employee performance: A survey in Turkey and Turkish context. International Journal of Human Resource Studies, 6(1), 1–20.
Keyko, K., Cummings, G. G., Yonge, O., & Wong, C. A. (2016). Work engagement in professional nursing practice: A systematic review. International Journal of Nursing Studies, 61, 142–164.

Khattak, M. N., Zolin, R., & Muhammad, N. (2020). Linking transformational leadership and continuous improvement. Management Research Review. Advance online publication. https://doi.org/10.1108/MRR-06-2019-0268

Khavaja, S. F. (2017). Impact of spiritual intelligence on employee task performance and OCB: Mediating role of self efficacy, moderating role of collectivist culture of Pakistan. Journal Business Review, 5(1), 34–45.

Kiarie, M. A. W., Maru, L. C., & Cheruiyot, T. K. (2017). Leader personality traits and employee job satisfaction in the media sector, Kenya. The TQM Journal, 29(1), 133–146.

Kim, B.-J., Kim, T.-H., & Jung, S.-Y. (2018). How to enhance sustainability through transformational leadership: The important role of employees’ forgiveness. Sustainability, 10(8), 2682.

Kopperud, K. H., Martinsen, O., & Humborstad, S. I. W. (2014). Engaging leaders in the eyes of the beholder: On the relationship between transformational leadership, work engagement, service climate, and self–other agreement. Journal of Leadership & Organizational Studies, 21(1), 29–42.

Kovjanic, S., Schuh, S. C., & Jonas, K. (2013). Transformational leadership and performance: An experimental investigation of the mediating effects of basic needs satisfaction and work engagement. Journal of Occupational and Organizational Psychology, 86(4), 543–555.

Lamm, K. W., Carter, H. S., & Lamm, A. J. (2016). A theory based model of interpersonal leadership: An integration of the literature. Journal of Leadership Education, 15(4), 183–205.

Li, X., Zhang, J., Zhang, S., & Zhou, M. (2017). A multilevel analysis of the role of interactional justice in promoting knowledge-sharing behavior: The mediated role of organizational commitment. Industrial Marketing Management, 62, 226–233.

Liang, S.-G., & Chi, S.-C. S. (2013). Transformational leadership and follower task performance: The role of susceptibility to positive emotions and follower positive emotions. Journal of Business and Psychology, 28(1), 17–29.

Lin, S. H., Scott, B. A., & Matta, F. K. (2019). The dark side of transformational leader behaviors for leaders themselves: A conservation of resources perspective. Academy of Management Journal, 62(5), 1556–1582.

Liu, Y., Ye, L., & Guo, M. (2019). The influence of occupational calling on safety performance among train drivers: The role of work engagement and perceived organizational support. Safety Science, 120, 374–382.

Long, C. S., Yong, L. Z., & Chuen, T. W. (2016). Analysis of the relationship between leadership styles and affective organizational commitment. International Journal of Management, Accounting & Economics, 3(10), 572–598. http://www.ijmae.com/index.php?mod=journalman&act=17&pid=531&issid=247k&v=3&n=10

Loosemore, M., & Lim, B. T.-H. (2016). Intra-organisational injustice in the construction industry. Engineering, Construction and Architectural Management, 23(4), 428–447.

Mahmood, M., Uddin, M. A., & Fan, L. (2019). The influence of transformational leadership on employees’ creative process engagement: A multi-level analysis. Management Decision, 57(3), 741–764.

Maslow, A. H. (1954). The instinctoid nature of basic needs. Journal of Personality, 22, 326–347.

Meier, K. J., & O’Toole, L. J., Jr. (2013). I think (I am doing well), therefore I am: Assessing the validity of administrators’ self-assessments of performance. International Public Management Journal, 16(1), 1–27.

Meyer, M., Ohana, M., & Stinglhamber, F. (2018). The impact of supervisor interpersonal justice on supervisor-directed citizenship behaviors in social enterprises: A moderated mediation model. The International Journal of Human Resource Management, 29(20), 2927–2948.

Mostafa, A. M. S., & Abed El-Motalib, E. A. (2020). Ethical leadership, work meaningfulness, and work engagement in the public sector. Review of Public Personnel Administration, 40(1), 112–131.

Mozammel, S., & Haan, P. (2016). Transformational leadership and employee engagement in the banking sector in Bangladesh. The Journal of Developing Areas, 50(6), 43–55.

Newton, D. W., LePine, J. A., Kim, J. K., Wellman, N., & Bush, J. T. (2020). Taking engagement to task: The nature and functioning of task engagement across transitions. Journal of Applied Psychology, 105(1), 1–18.

Pan, S.-Y., & Lin, K. J. (2015). Behavioral mechanism and boundary conditions of transformational process. Journal of Managerial Psychology, 30(8), 970–985.

Panatik, S. A., Ahmad, U. N. U., Ashari, H., Azhar, Z. N., Muhammad, S. N., & Yusof, F. M. (2017). The effect of organisational justice on work engagement: An empirical investigation among female engineers in Malaysia. Advanced Science Letters, 23(9), 8634–8641.

Parveen, F., Jaafar, N. I., & Ainin, S. (2016). Social media’s impact on organizational performance and entrepreneurial orientation in organizations. Management Decision, 54(9), 2208–2234.

Patiar, A., & Wang, Y. (2016). The effects of transformational leadership and organizational commitment on hotel departmental performance. International Journal of Contemporary Hospitality Management, 28(3), 586–608.

Perko, K., Kinnunen, U., Tolvanen, A., & Feldt, T. (2016). Back to basics: The relative importance of transformational and fair leadership for employee work engagement and exhaustion. Scandinavian Journal of Work and Organizational Psychology, 1(1), 1–13. https://doi.org/10.16993/sjwap.8

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.

Poghosyan, L., & Bernhardt, J. (2018). Transformational leadership to promote nurse practitioner practice in primary care. Journal of Nursing Management, 26(8), 1066–1073.

Pourbarkhordari, A., Zhou, E. H. I., & Pourkarimi, J. (2016). How individual-focused transformational leadership enhances its influence on job performance through employee work engagement. International Journal of Business and Management, 11(2), 249–261.

Pradhan, S., & Pradhan, R. K. (2016). Transformational leadership and job outcomes: The mediating role of meaningful work. Global Business Review, 17(Suppl. 3), 173S–185S.
Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717–731.

Prochazka, J., Gilova, H., & Vaculik, M. (2017). The relationship between transformational leadership and engagement: Self-efficacy as a mediator. *Journal of Leadership Studies, 11*(2), 22–33.

Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The Leadership Quarterly, 15*(3), 329–354.

Ribeiro, N., Yücel, İ., & Gomes, D. (2018). How transformative leadership predicts employees’ affective commitment and performance. *International Journal of Productivity and Performance Management, 67*(9), 1901–1917. https://doi.org/10.1108/IJPPM-09-2017-0229

Rinrret, N., Laplante, J., Lagacé, M. C., Deschamps, C., & Privé, C. (2018). Impacts of leadership styles in health and social services: A case from Quebec exploring relationships between emotional intelligence and transformational leadership. *International Journal of Healthcare Management. Advance online publication. https://doi.org/10.1080/20479700.2018.1548153

Rothbard, N. P., & Patil, S. V. (2011). Being there: Work engagement and positive organizational scholarship. In G. M. Spreitzer & K. S. Cameron (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 56–69). Oxford University Press.

Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly, 25*(2), 155–182.

Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly, 25*(2), 155–182.

Salanova, M., Lorente, L., Chambel, M. J., & Martinez, I. M. (2011). Linking transformational leadership to nurses’ extra-role performance: The mediating role of self-efficacy and work engagement. *Journal of Advanced Nursing, 67*(10), 2256–2266.

Schaufeli, W. B., & Bakker, A. B. (2004, December). *Utrecht work engagement scale preliminary manual* (Version 1.1). Occupational Health Psychology Unit, Utrecht University. https://doi.org/10.1037/01350-000

Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2016). Transformational leadership and proactive work behaviour: A moderated mediation model including work engagement and job strain. *Journal of Occupational and Organizational Psychology, 89*(3), 588–610. https://doi.org/10.1111/jop.12143

Shin, J., Seo, M. G., Shapiro, D. L., & Taylor, M. S. (2015). Maintaining employees’ commitment to organizational change: The role of leaders’ informational justice and transformational leadership. *Journal of Applied Behavioral Science, 51*(4), 501–528. https://doi.org/10.1177/002188631503123

Singhry, H. B. (2018). Perceptions of leader transformational justice and job satisfaction in public organizations. *International Journal of Public Leadership, 14*(2), 80–95. https://doi.org/10.1108/ijpl-01-2018-0007

Song, J. H., Kolb, J. A., Lee, U. H., & Kim, H. K. (2012). Role of transformational leadership in effective organizational knowledge creation practices: Mediating effects of employees’ work engagement. *Human Resource Development Quarterly, 23*(1), 65–101.

Sommentag, S. (2017). A task-level perspective on work engagement: A new approach that helps to differentiate the concepts of engagement and burnout. *Burnout Research, 5*, 12–20.

Sousa, M., & van Dierendonck, D. (2017). Servant leadership and the effect of the interaction between humility, action, and hierarchical power on follower engagement. *Journal of Business Ethics, 147*(1), 13–25. https://doi.org/10.1007/s10551-015-2725-y

Stroud, J. (2016). *Constructive-experiential leadership model: Exploring the minds and behaviours of transformational leaders* [Honours thesis, Murdoch University].

Sun, J., Chen, X., & Zhang, S. (2017). A review of research evidence on the antecedents of transformational leadership. *Education Sciences, 7*(1), 15.

Tan, V., & Rao, M. K. (2017). Linking emotional intelligence to knowledge sharing behaviour: Organizational justice and work engagement as mediators. *Global Business Review, 18*(6), 1580–1596.

Tang, K. N. (2019). Leadership styles and organizational effectiveness. In K. N. Tang (Ed.), *Leadership and change management* (pp. 11–25). Springer.

Thibault, T., Gulseren, D. B., & Kelloway, E. K. (2019). The benefits of transformational leadership and transformational leadership training on health and safety outcomes. In R. J. Burke & A. M. Richardsen (Eds.), *Increasing occupational health and safety in workplaces* (pp. 334–348). Edward Elgar.

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

Van Knippenberg, D., & Hogg, M. A. (2018). Social identifications in organizational behavior. In D. L. Ferris, R. E. Johnson, & C. Sedikides (Eds.), *The self at work: Fundamental theory and research* (pp. 72–90). Routledge; Taylor & Francis.

Wang, X., Chontawan, R., & Nantsupawat, R. (2012). Transformational leadership: Effect on the job satisfaction of Registered Nurses in a hospital in China. *Journal of Advanced Nursing, 68*(2), 444–451.

Weng, R., Huang, C., Chen, L., & Chang, L. (2015). Exploring the impact of transformational leadership on nurse innovation behaviour: A cross-sectional study. *Journal of Nursing Management, 23*(4), 427–439.

Xu, F., Caldwell, C., & Anderson, V. (2016). Moral implications of leadership-transformative insights. *International Journal of Business and Social Research, 6*(3), 76–85.

Xu, A. J., Loi, R., & Ngo, H. Y. (2016). Ethical leadership behaviour and employee justice perceptions: The mediating role of trust in organization. *Journal of Business Ethics, 134*(3), 493–504.

Yean, T. F. (2016). Organizational justice: A conceptual discussion. *Procedia —Social and Behavioral Sciences, 219*, 798–803.

Yi, L., Uddin, M., Das, A. K., Mahmood, M., & Sohel, S. M. (2019). Do transformational leaders engage employees in sustainable innovative work behaviour? Perspective from a developing country. *Sustainability, 11*(9), 2485.

Zdaniuk, A., & Bobocele, D. R. (2013). The automatic activation of (un)fairness behavior in organizations. *Human Resource Management Review, 23*(3), 254–265.