



# Organization citizenship behaviour among indian nurses during SARS-COV-2: A direct effect moderation model

Amar Kumar Mishra<sup>1</sup> · Simarjeet Singh<sup>2</sup>  · Rajesh Kumar Upadhyay<sup>3</sup>

Accepted: 9 January 2022 / Published online: 30 March 2022  
© The Author(s), under exclusive licence to Springer Nature B.V. 2022

## Abstract

The pandemic COVID has engulfed the entire world in general and India in particular. Almost the entire country is under lockdown now and then forcing the people to stay inside their homes for the safety of themselves and others. There is one section, i.e. Indian nurses, which is braving against all odds to ensure the proper functioning of the health care system and educate and persuade the patients and their relatives. This has necessitated the nurses to go an extra mile reflecting a sense of responsibility towards patients, colleagues, hospitals, society, and nation and discharge their duties performing activities beyond the formal job descriptions, formal reward system, or direct and explicit recognition. In the present study, the researchers have empirically investigated the nature, extent, and mechanism of the impact of variables transformational leadership, job satisfaction, and emotional intelligence that lead to nurses displaying the organizational citizenship behaviour at this unprecedented juncture of time in India.

**Keywords** Organizational citizenship behaviour · Emotional intelligence · Transformational leadership · Job satisfaction · Indian nurses

---

✉ Simarjeet Singh  
jeetsimarkamal93@gmail.com

Amar Kumar Mishra  
amarkumarmishra.mgt@geu.ac.in

Rajesh Kumar Upadhyay  
Upadhyaya.rajesh@gmail.com

<sup>1</sup> Graphic Era (Deemed to be) University, Dehradun, India

<sup>2</sup> Indian School of Business, Mohali, India

<sup>3</sup> Graphic Era Hill University, Dehradun, India

## 1 Introduction

For almost one and half year, like other countries, India is reeling under the effect of the deadly coronavirus. The pandemic has taken the death toll to more than four lakh in the country. Second wave of Covid-19 has proven to be more deadly. There are instances of lockdown every then and there. A major chunk of the population is forced to stay inside their home for the safety of themselves and others. However, some sections of society are not so privileged. One of the most significant of them being nurses. Nurses constitute two-thirds of the total health workforce in India. They have to treat and take care of admitted patients in the overburdened hospitals and have to educate, communicate, persuade, and cajole the relatives and acquaintances of the patients. There is also a shortage of trained nurses in most hospitals that put extra pressure on their work. Against the global average of 2.5 nurses, India has only 1.7 nurses per thousand population. This necessitates them to discharge their duties going the extra mile performing discretionary work-related activities beyond formal job descriptions, formal reward systems, or direct and explicit recognition. In other words, this necessitates them to display organizational citizenship behavior (OCB)- a term coined by Organ (1988) that refers to the “individual behaviour that is discretionary, not directly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization.” While OCB had always been of paramount importance especially in the medicare, it has gained more prominence in the contemporary world plagued by the global pandemic. Hospitals will require more nurses with an intent to go extra mile. This necessitates the need to explore hitherto unexplored piece of work more important. OCB, though, are not nurtured in isolation. Based on the extensive literature review, the researchers have identified three variables that significantly impact the cultivation of OCB in nurses: supportive leadership, job satisfaction (JS), and Emotional Intelligence (EI).

The researchers studied 50 research papers in the Scopus Database (period 2000–2021) that have explored the relationship between the three variables namely TL, OCB, EI and JS to identify the research gap. The extensive literature review found that though there exist studies justifying the relationship between TL, OCB, EI and JS in context to different countries and industries; there is an absolute dearth in the Indian context (evidence gap). Several gaps were identified. First, the studies are limited to foreign countries such as Langitan 2010; Monoppo 2020; Baik and Yom 2012; Görgens-Ekermans and Brand 2012. There is not a single study in the Indian context (Prasad and Sen 2018). Second, the earlier studies are limited to specific products or services such as restaurants, financial products (Prasad and Sen 2018), automobiles (Jalilvand, 2012), electronic products (Baber et al., 2016). Third, the earlier studies cannot be contextualized in the Indian society as each country has its sociological background. Further, in the rapidly changing environment where work culture is changing at the speed of thought, there is a need to continuously monitor the behaviour of nurses. This leads to exploring the nexus in the Indian context (population gap) conducting a cross-sectional survey on Indian Nurses who are incessantly rendering their services in this tough time so that the findings can be used by hospitals and Government to frame a proper policy to increase the OCB among Indian nurses (practical knowledge gap). The research objectives for the present study are to gain new insight into the relationship between the studied constructs in addition to consolidating the earlier studies. The present study has employed structural equation modeling to empirically test the relationship in the

Indian context to overcome the methodological gap. The insights from the current study will also bestow the academic literature in the field of OCB which will provide a future base for the other researchers. The research findings will not only help policymakers and stakeholders to help in increasing OCB among nurses in India; but will also motivate other researchers to explore the relationship in other countries with the similar culture so that the results can be generalized.

## 2 Literature review and hypothesis development

### 2.1 Theoretical foundation

The current study's theoretical underpinning, namely the relationship between TL, JS, EI, and OCB, has been explained using the resource-based view (RBV) theory (Barney's 1986, 2001). According to RBV theory, companies acquire "distinctive competence" via the unique combination of resources and skills (Peteraf and Bergen, 2003). Additionally, Ranjhan and Mallick (2018) illustrated the linkage between resources, competitive advantage, and OCB, with OCB being represented as a component of organisational effectiveness (Yen and Niehoff 2004). The scope of resources such as assets (tangible such as land, intangible such as knowledge), capabilities (individual such as leadership abilities, emotional intelligence, and group such as teamwork) (El-Kassar et al. 2017) results in OCB. In other words, firms may stay ahead of their competition by analysing and applying prospective variables (Fahy and Smithee, 1999a). Thus, for this research, the OCB may be defined as a unique combination of resources that include individual capabilities such as TL, EI, and JS.

### 2.2 Transformational leadership and organizational citizenship behaviour

Transformational leadership has sparked a great deal of interest among professionals and academics (Dinh et al., 2014). It has received significant attention because to evidence that leaders encourage followers in achieving their objectives and drive them to be creative and responsive to improved practices and changes in the organisation (Ghafoor, 2011). Such leaders foster their followers' passion for the job by enlightening them on the significance of the task results, inspiring them to go beyond their desires, and triggering their higher-order needs (Yukl, 1994).

The effective functioning of organizations is contingent upon three human-related factors- the presence of competent people, the performance of the assigned tasks, and the display of "innovative and spontaneous behaviour" going beyond assigned tasks. Bateman and Organ (1983) conceptualized the third contextual performance of going beyond the job description as "citizenship" behaviour. OCB is defined as behaviour that reflects a sense of responsibility towards colleagues, employees, organizations, workgroups, or others. Organ (1988) proposed five dimensions of OCB: altruism (willingness to help others without any expectation of consideration), courtesy (proactive behaviour in taking steps to alleviate a potential problem), conscientiousness (carrying out one's duty beyond the mechanical compliance with routine directives.), sportsmanship (willingness to tolerate the impositions work without complaining) and civic virtue (willingness of the employees to participate in political process or policy debate of the organization).

TL is the ability to influence the behaviour of others in the workplace through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass 1985; Bass & Avolio, 1994). The impact of TL on Nurses has gained support in the works of Roberts-Turner et al. 2014. TL strengthens nurses' intrinsic motivation (Tu & Lu, 2013), helps employees to think outside the box, and promotes an innovative organizational culture where nurses feel challenged and push themselves toward going the extra mile (Aryee et al., 2012). Podsakoff et al. (1990) identified six characteristics of TL: articulating a vision (inspiring employees to have long term orientation); providing an appropriate model (serving as role models; accepting group goals (fostering collaboration); expecting high performance; providing individualized support (empathy with the feelings of employees), and providing intellectual stimulation (challenging employees to look at the tasks and assignments from broader perspective).

There is no surprise that TL and OCB have been closely related in many researchers' works (e.g. Oguz 2010; Cohen et al., 2012; Vigoda-Gadot and Beeri, 2012; Wang et al., 2018). TL trust involves, motivates, and empowers employees. This results in increased voluntary commitment and satisfaction among the employees that propel them to go the extra mile and reciprocate the trust displaying more OCB (Podsakoff et al. 1990). The researchers have provided empirical support for the positive relationship between transformational leadership and OCB.

Accordingly, the following hypotheses have been set:

**Hypothesis 1** TL is positively related to OCB.

### 2.3 Transformational leadership and job satisfaction

Job Satisfaction refers to the degree of liking or disliking about their jobs (Spector 1997). JS of nurses is of great concern as they constitute the majority in healthcare and their dissatisfaction or replacement is costly as well as time-consuming. Studies in the past have reported a significant impact of TL at an individual level (Bottomley et al. 2016; Hackett et al. 2018; Nohe 2017; Judge & Piccolo, 2004). Especially on the JS of employees (Barun et al. 2013; Judge & Piccolo, 2004; Podsakoff et al. 1996; Podsakoff et al. 1990). Researchers across the globe have empirically demonstrated the effect of TL on JS, particularly in the healthcare system. Researchers have contended that TL has a strong positive influence on workplace empowerment, which in turn decreases burnout and stress, increases well being and job satisfaction of nurses (Boamah et al. 2018; Weberg 2010; Munir et al. 2012).

Accordingly, the following hypotheses have been set:

**Hypothesis 2** TL is positively related to JS.

### 2.4 Job satisfaction and organizational citizenship behaviour

JS is the general attitude of an employee towards his/ her job (Spector 1997). JS is the resultant of outcome received against outcome desired (Cranny et al. 1992). JS has been described by scholars as a multi-faceted construct containing both cognitive and affective

elements (Smith 1969; Locke, 1976; Spector 1997). Scholars have identified various elements of JS such as work content, exciting job, compensation, working conditions, recognition, management support, and opportunity for growth (Spector 1997); opportunity for social interaction, task identity, autonomy, skill variety, and knowledge of feedback (Hackman and Oldham 1976); perception about the job, performance in the job and performance of the organization (Christen et al. 2006). OCB needs employees to go the extra mile which is possible if the employees have a positive attitude towards their job. There are ample amount of researches that have demonstrated the relation between JS and OCB (Netemeyer et al. 1997; Begum et al. 2006; Lambert et al. 2015; Singh and Nayak 2015; Weikamp 2016; Kumar, 2017; Indarti et al., 2017; Singh, 2019; Nurjanah et al. 2020; Romi et al. 2020; Torlak et al. 2021; Leu and Wang 2021).

Accordingly, the following hypotheses have been set:

**Hypothesis 3** JS is positively related to OCB.

## 2.5 Job Satisfaction as the mediator

Almost every study has empirically demonstrated that employees are working under a TL culture display more OCB. Nevertheless, some studies have reported no or moderate relation between TL and OCB (Logomarsino and Cardona 2003; Cho and Danserau 2010; Lin and Hsiao 2014; Herman and Warren 2014). One of the plausible explanations for these findings may be that TL impacts OCB in the presence of JS. Many studies have highlighted this point. They contend that the indirect effect of TL on OCB through JS is a better explanation than the direct effect (Khalili 2017; Alfonso et al. 2016; James et al. 2010; Nguni et al. 2006; Nasra et al. 2015).

Based on the above discussion, the authors believe that TL enhances JS, which in turn, predicts OCB and propose the following hypothesis:

**Hypothesis 4** JS mediates the relation between TL and OCB.

## 2.6 Emotional intelligence as moderator

Emotion refers to a feeling and its distinctive thoughts, which, if well-exercised, act as wisdom and guide the actions; otherwise, they go awry. Salovey and Mayer (1990) offered the first formulation of EI and defined it as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions.” Goleman (1998) defined it as “knowing what you are feeling and being able to handle those feelings without having them swamp you, being able to motivate yourself to get the job done, be creative and perform at your peak, and sensing others what others are feeling and handling relationships effectively.” Wong and Law (2002) conceptualized EI with four components: self-emotional appraisal, others’ emotional appraisal, regulation of emotion, and use of emotion. Goleman (1998) conceptualized EI as five dimensions: self-awareness, self-regulation, motivation, empathy, and social skills.

EI has been found to be closely related to TL (Rajesh 2019; Barling et al. 2000; Majeed 2017; Wang 2018; Sayeed and Shanker 2009; Spano-Szekely et al. 2016; Wang et al., 2018); and OCB (Mysirlaki 2020; Bottomley et al. 2016; Ramachandran et al. 2011; Organ and Konovsky, 1989; Cote and Miners 2006; Vakola et al. 2004; Akerjordet and Severinsson 2007; Schutte et al. 2007; Isen et al. 1987; Alfonso et al. 2016). They have contended that high EI level employees better understand and manage themselves and others, better comprehend co-workers' feelings, and consequently create a positive working environment. While there are pieces of evidence of the impact of TL and EI as significant antecedents of OCB, research on the interaction effect of TL and EI has not been explored in the Indian context. Based on the above, the fifth hypothesis is suggested:

**Hypothesis 5** EI moderates the relationship between TL and OCB.

### 3 Research model

Based on the hypothesis, a direct effect moderation model (Edwards and Lambert 2007) was proposed for the study. Hypothesised model is depicted in Fig. 1.

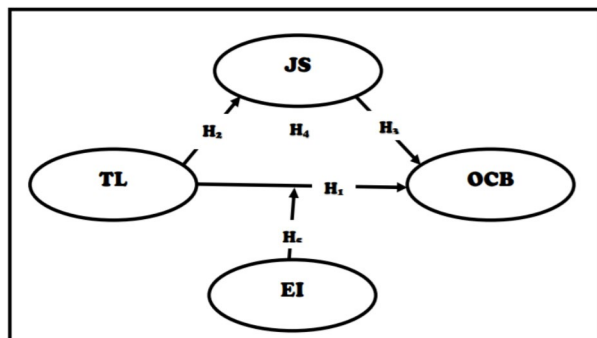
Figure 1 represents the research model that portrays the proposed hypotheses:

## 4 Research methodology

### 4.1 Sample collection

A self-administered questionnaire was shared with 600 nurses in various private or Government hospitals. According to various studies, a sample size of 300 or more has been suggested as appropriate provided the communality is greater than 0.7 and model has appropriate goodness of fit (Hair et al. 2006). A comprehensive list of 60 hospitals was prepared which were operational for more than 15 years. Hospitals were used as a stratum. Samples were selected on the ratio of the number of nurses in various hospitals. Thus, Proportionate Stratified Random Sampling Method was employed to collect the data. A minimum service of 3 years in the present organization was taken as the inclusion criteria for the sampling

Fig. 1 Research model



frame. All the instruments were in the English language that was easily comprehensible by the nurses. The participants were briefed about the purpose of the study and were assured of confidentiality. 415 samples that were complete and valid were received back, at a response rate of 69.1%. Participants belonged to ages ranging from 20 to 50 employed in Government as well as private hospitals. The profile of the respondents is given in Table 1. Scholars have opined that self-reported cross-sectional data collected from a single course at the same time may have inherent biases (Pearce and Sims 2002). As such, data regarding various constructs were collected at three different times to minimize the issue of common method bias. The data collection period was February 2021 to April 2021. Data related to TL was collected first during February 2021, related to OCB was collected after one month in March 2021, and related to EI and JS was collected after two months in April 2021.

## 4.2 Constructs used

This study used Self-reported measures to obtain the data on all the variables in the study. Instruments were adopted based on their usefulness in the context of Indian organizations as envisioned by researchers. TL was measured using 7 item inventories created by Podsakoff et al. (1990) (e.g. “In this organization, leaders have provided employees with new ways of looking at things which used to puzzle them”). EI was measured using 16- item instrument developed by Wong and Law (2002) (e.g. “I always set goals for myself and then try my best to achieve them”). JS was measured using 20 items short from Minnesota Satisfaction Questionnaire (Weiss et al. 1967) (e.g. “I always set goals for myself and then try my best to achieve them”). OCB was measured using 14 items questionnaire adopted from Podsakoff et al. (1990). Sample items include “I would like to buy the products or brands following their introduction by my friends on social networks.” Sample items include “I help others who have heavy workloads,” “I always focus on what’s wrong, rather than the positive side” and “I attend meetings that are not mandatory, but are considered important.”

## 4.3 Control variables

A variety of personal and organizational factors may influence perceptions of transformational leadership, JS, EI, and OCB (Khaola and Rambe 2020). As a result, data collected on

**Table 1** Demographic profile

|                   |                | Frequency | Percent |
|-------------------|----------------|-----------|---------|
| <b>Gender</b>     | Male           | 70        | 16.87   |
|                   | Female         | 345       | 83.13   |
| <b>Age</b>        | Up to 25 Years | 45        | 10.84   |
|                   | 25–35 Years    | 130       | 31.33   |
|                   | 35–45 Years    | 205       | 49.40   |
|                   | Above 45 Years | 35        | 8.43    |
| <b>Experience</b> | Up to 5Years   | 45        | 10.84   |
|                   | 5–10 Years     | 155       | 37.35   |
|                   | 10–15 Years    | 170       | 40.96   |
|                   | 15–20 Years    | 45        | 10.84   |

the respondent's age, gender, and experience were considered as controlled variables for the research. These were controlled using a dummy variable.

## 5 Result analysis

### 5.1 Descriptive statistics

Table 2 shows the mean, standard deviation, skewness, kurtosis of each variable in the study. The statistics confirm the conditions of normality (skewness and kurtosis within range), absence of multicollinearity (all VIF values less than 10), and excellent reliability and inter-item consistency for all constructs (alpha coefficient more than 0.7) (Tabachnick & Fidell, 2007; Nunnally, 1978)

### 5.2 Analytical approach

We used Confirmatory Factor Analysis (CFA) using AMOS 23.0 to evaluate the measurement model used in the study with statistics such as Normed Chi-square, confirmatory fit index, root mean square of error of approximation, Standardized root mean squared residual

**Table 2** Descriptive Statistics

| Descriptive Statistics |      |                | Pearson Correlation |         |         |      | Collinearity Statistics |       | Reliability    |
|------------------------|------|----------------|---------------------|---------|---------|------|-------------------------|-------|----------------|
| Construct              | Mean | Std. Deviation | TL                  | EI      | OCB     | JS   | Tolerance               | VIF   | Cronbach Alpha |
| <b>TL</b>              | 3.17 | 0.83           | 1.00                |         |         |      | 0.412                   | 2.426 | 0.71           |
| <b>EI</b>              | 3.08 | 0.76           | 0.577**             | 1.00    |         |      | 0.658                   | 1.520 | 0.75           |
| <b>OCB</b>             | 3.26 | 0.77           | 0.617**             | 0.307** | 1.00    |      |                         |       | 0.81           |
| <b>JS</b>              | 2.93 | 0.71           | 0.721**             | 0.483** | 0.656** | 1.00 | 0.473                   | 2.113 | 0.75           |

\*\*Correlation is significant at the 0.01 level (2-tailed)

Descriptive Analysis: Sign \*\*  $p < 0.01$ , \* $p < 0.05$ .

**Table 3** Goodness of fit table

| Measure | Estimate |
|---------|----------|
| CMIN    | 2757.705 |
| DF      | 1646     |
| CMIN/DF | 1.675    |
| CFI     | 0.931    |
| NFI     | 0.844    |
| RFI     | 0.838    |
| IFI     | 0.931    |
| TLI     | 0.928    |
| CFI     | 0.931    |
| SRMR    | 0.034    |
| RMSEA   | 0.039    |
| PClose  | 0.596    |



and PClose. The further bootstrap method using AMOS 23.0 was applied to assess the mediation effect using Amos v21.

Table 3 shows the statistics confirming an excellent model fit.

We also used Herman single factor test to ensure no issue of common method bias as a single method was used for the collection of data. This is done by extracting only one factor with eigenvalue of more than one and checking whether the Variance explained by the first factor is more than 50% or not. As the first factor explained only 43.67% variance, it can be confirmed that there is no issue of biasness (Table 4).

### 5.3 Confirmatory factor analysis

The model provided an excellent fit of data: [ $\chi^2(1646) = 2757.705, p < 0.001, \chi^2/df = 1.675, CFI = 0.931, NFI = 0.844, RFI = 0.838, IFI = 0.931, TLI = 0.928, RMSEA = 0.039, SRMR = 0.034, PClose = 0.596$ ]. Table 5 presents the statistics for checking construct validity of the constructs. The condition for construct validity has been suggested as below:  $CR > 0.7, AVE > 0.5, CR > \text{the corresponding AVE}, MSV < \text{the corresponding AVE}, \text{and square root of AVE} > \text{the correlation between other structures}$ . (Hair et al., 2010) As all the conditions were satisfied, it can be confirmed that there is no issue of validity.

For discriminant validity, Heterotrait-Monotrait criterion was used as Fornell and Larcker criterion is not sensitive enough to detect discriminant validity. The threshold value of 0.900 was set for checking discriminant validity. The table below shows the result that confirms the discriminant validity.

**Table 4** Hermann single factor test: Total variance explained using one factor only

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 7.861               | 43.672        | 43.672       | 7.861                               | 43.672        | 43.672       |

**Table 5** Construct validity

| Convergent Validity | Initial Eigenvalues |       |       | Fornell-Larcker Criterion |              |              |              |
|---------------------|---------------------|-------|-------|---------------------------|--------------|--------------|--------------|
|                     | CR                  | AVE   | MSV   | JS                        | OCB          | EI           | TL           |
| <b>JS</b>           | 0.895               | 0.516 | 0.449 | <b>0.718</b>              |              |              |              |
| <b>OCB</b>          | 0.871               | 0.547 | 0.386 | 0.621***                  | <b>0.740</b> |              |              |
| <b>EI</b>           | 0.878               | 0.531 | 0.304 | 0.456***                  | 0.298***     | <b>0.729</b> |              |
| <b>TL</b>           | 0.840               | 0.513 | 0.449 | 0.670***                  | 0.605***     | 0.551***     | <b>0.716</b> |

|     | TL  | OCB                                       | JS  | EI |
|-----|---|---|---|----|
| TL  |   |   |   |    |
| OCB | 0.63<br>CI <sub>.900</sub> [0.612, 0.652] |   |   |    |
| JS  | 0.58<br>CI <sub>.900</sub> [0.512, 0.552] | 0.48<br>CI <sub>.900</sub> [0.472, 0.461] |   |    |
| EI  | 0.73<br>CI <sub>.900</sub> [0.748, 0.774] | 0.51<br>CI <sub>.900</sub> [0.511, 0.553] | 0.87<br>CI <sub>.900</sub> [0.865, 0.885] |    |

**Table 6** Factor Loading

| Construct                                   | Item  | Std   | SE    | t-Value   |
|---|-------|-------|-------|-----------|
| <b>Job Satisfaction</b>                     | JS1   | 0.674 |       |           |
|   | JS2   | 0.704 | 0.078 | 13.617*** |
|   | JS3   | 0.727 | 0.074 | 14.03***  |
|   | JS4   | 0.724 | 0.076 | 13.979*** |
|   | JS5   | 0.738 | 0.074 | 14.222*** |
|   | JS6   | 0.713 | 0.076 | 13.777*** |
|   | JS7   | 0.745 | 0.078 | 14.333*** |
|   | JS8   | 0.715 | 0.074 | 13.824*** |
|   | JS9   | 0.687 | 0.077 | 13.32***  |
|   | JS10  | 0.717 | 0.079 | 13.85***  |
|   | JS11  | 0.728 | 0.076 | 14.045*** |
|   | JS12  | 0.733 | 0.075 | 14.121*** |
|   | JS13  | 0.724 | 0.076 | 13.966*** |
|   | JS14  | 0.69  | 0.076 | 13.381*** |
|   | JS15  | 0.704 | 0.077 | 13.625*** |
|   | JS16  | 0.718 | 0.075 | 13.861*** |
|   | JS17  | 0.715 | 0.077 | 13.809*** |
|   | JS18  | 0.711 | 0.074 | 13.74***  |
|   | JS19  | 0.672 | 0.079 | 13.059*** |
|   | JS20  | 0.714 | 0.076 | 13.792*** |
| <b>Organizational Citizenship Behaviour</b> | OCB1  | 0.739 |       |           |
|   | OCB2  | 0.747 | 0.065 | 15.858*** |
|   | OCB3  | 0.712 | 0.063 | 15.06***  |
|   | OCB4  | 0.755 | 0.063 | 16.048*** |
|   | OCB5  | 0.765 | 0.064 | 16.297*** |
|   | OCB6  | 0.709 | 0.064 | 14.989*** |
|   | OCB7  | 0.765 | 0.064 | 16.295*** |
|   | OCB8  | 0.74  | 0.062 | 15.709*** |
|   | OCB9  | 0.729 | 0.064 | 15.45***  |
|   | OCB10 | 0.766 | 0.063 | 16.311*** |
|   | OCB11 | 0.673 | 0.063 | 14.158*** |
|   | OCB12 | 0.718 | 0.062 | 15.207*** |
|   | OCB13 | 0.745 | 0.064 | 15.818*** |
|   | OCB14 | 0.688 | 0.064 | 14.517*** |
|   | OCB15 | 0.716 | 0.063 | 15.142*** |
|   | OCB16 | 0.727 | 0.064 | 15.395*** |
| <b>Emotional Intelligence</b>               | EI1   | 0.741 |       |           |
|   | EI2   | 0.709 | 0.063 | 15.032*** |
|   | EI3   | 0.743 | 0.064 | 15.827*** |
|   | EI4   | 0.756 | 0.064 | 16.139*** |
|   | EI5   | 0.716 | 0.065 | 15.194*** |
|   | EI6   | 0.748 | 0.065 | 15.941*** |
|   | EI7   | 0.734 | 0.063 | 15.606*** |
|   | EI8   | 0.742 | 0.063 | 15.789*** |
|   | EI9   | 0.751 | 0.064 | 16.016*** |
|   | EI10  | 0.737 | 0.063 | 15.689*** |
|   | EI11  | 0.736 | 0.065 | 15.658*** |
|   | EI12  | 0.677 | 0.065 | 14.306*** |

**Table 6** (continued)

| Construct                          | Item | Std   | SE    | t-Value   |
|------------------------------------|------|-------|-------|-----------|
| <b>Transformational Leadership</b> | EI13 | 0.764 | 0.065 | 16.307*** |
|                                    | EI14 | 0.705 | 0.063 | 14.937*** |
|                                    | EI15 | 0.733 | 0.063 | 15.582*** |
|                                    | EI16 | 0.727 | 0.062 | 15.447*** |
|                                    | TL1  | 0.714 |       |           |
|                                    | TL2  | 0.79  | 0.07  | 15.487*** |
|                                    | TL3  | 0.732 | 0.071 | 14.38***  |
|                                    | TL4  | 0.714 | 0.072 | 14.04***  |
|                                    | TL5  | 0.725 | 0.066 | 14.25***  |
|                                    | TL6  | 0.703 | 0.071 | 13.829*** |
|                                    | TL7  | 0.694 | 0.07  | 13.646*** |

Sign \*\*\*p<0.001

Table 6 shows the factor loading of each variable, confirming the convergent validity (all loadings being greater than 0.7)

### 5.4 Hypothesis Analysis

After satisfying all conditions (normality, multicollinearity, model fit), we used regression analysis to test the proposed hypotheses (Tables 7 and 8). Finally, Structural Regression Modelling was used to test mediation using AMOS software.

Table 7 presents the results of path analysis. Hypothesis 1 posited that TL is significantly associated with OCB. The standardized regression weight of 0.617 (SE = 0.035, t = 16.314, p-value < 0.001) affirms the significant impact of TL on OCB. This supports Hypothesis 1.

Similarly standardized regression weight of 0.721 (SE = 0.028, t = 21.6322, p-value < 0.001) and 0.656 (SE = 0.039, t = 18.082, p-value < 0.001) quantifies the significant relation between TL & JS and between JS & OCB respectively, supporting hypothesis 2 and 3 respectively.

Table 8 presents the result to test Hypothesis 4 that posited that JS mediates the relation between TL and OCB.

Mediation effect was tested using Barron and Kenny (1986) model that proposes the following conditions to establish the mediation effect: significant relation between the independent variable (TL) and dependent variable (OCB), significant relation between the independent variable (TL) and mediating variable (JS), significant relation between mediating variable (JS) and dependent variable (OCB) and the significant indirect effect (significant relation between the independent variable (TL) and dependent variable (OCB) through mediating variable (JS). It further postulates that the significant direct effect followed by significant indirect effect indicates partial mediation while the insignificant direct effect followed by significant indirect effect indicates complete mediation.

While the first three conditions have been proved in confirming Hypotheses 1, 2 and 3; Table 8 shows significant indirect effect (relation between TL and OCB through JS (path ab = 0.300, SE = 0.0402, t = 6.538\*\*\*). This confirms the role of JS as a mediator. Moreover, the direct relation between TL and OCB (path c' = 0.258\*\*\*) is also significant. Thus, it can be inferred that JS acts as a partial mediator in the relation between OJ and OCB. The findings are similar to Salanova et al. (2011).

**Table 7** Direct effect

| Hypothesis | Relationship      | Std. Beta | Std Error | t- Value | p-Value | Decision  |
|------------|-------------------|-----------|-----------|----------|---------|-----------|
| H1         | TL $\diamond$ OCB | 0.617     | 0.035     | 16.314   | 0.00    | Supported |
| H2         | TL $\diamond$ JS  | 0.721     | 0.028     | 21.6322  | 0.00    | Supported |
| H3         | JS $\diamond$ OCB | 0.656     | 0.039     | 18.082   | 0.00    | Supported |

**Table 8** Mediation analysis

| Hypothesis | Relationship                    | Direct Effect | Indirect Effect | Total   | Decision          |
|------------|---------------------------------|---------------|-----------------|---------|-------------------|
| H4         | TL $\diamond$ JS $\diamond$ OCB | 0.258**       | 0.300**         | 0.558** | Partial Mediation |

\*\*  $p < 0.001$

The empirical findings of the present research support the conceptual foundation that there is a direct as well as the indirect influence of TL on OCB. The stimulation, influence, consideration, and motivation by TL helps every member identify with the profession, understand the goals and accept it not as compliance but internalization, thereby evoking OCB. Being treated as a leader instills a feeling of satisfaction that fosters an atmosphere of citizenship behaviour among nurses.

Further, the study postulated that EI moderates the relation between TL and OCB. As shown in Table 9, EI significantly moderated the direct effect of TL on OCB (*Std b* = 0.1502, *SE* = 0.0245,  $p < 0.001$ ). The estimate indicates that the direct positive relationship of TL to OCB became stronger by 0.1502 for each one-unit increase in EQ. Additionally, conditional slopes for the direct effect of TL on OCB at different levels of EQ were estimated as suggested by Aiken and West (1991). As shown in Fig. 3, the estimated simple slopes were

**Table 9** Moderation analysis

| Hypothesis | Relationship | Std. Beta | Std Error | t- Value | p-Value | Decision  |
|------------|--------------|-----------|-----------|----------|---------|-----------|
| H4         | TL X EI OCB  | 0.1502    | 0.0245    | 3.103    | 0.00    | Supported |

**Fig. 2** Moderation effect

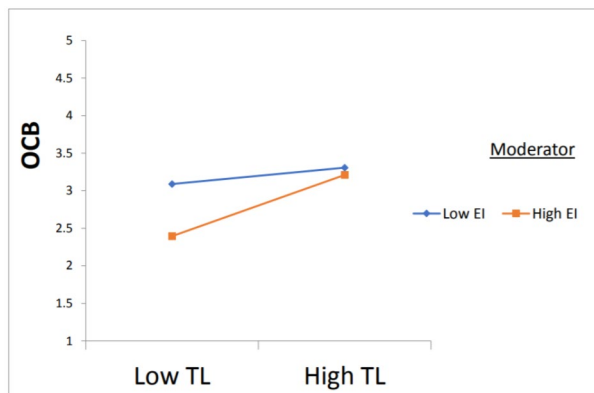
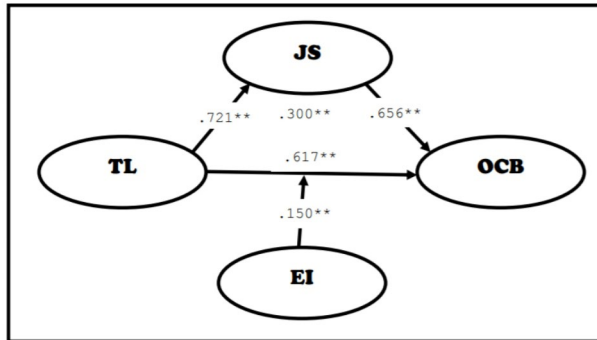


Fig. 3 Structural model



positive and statistically significant at all EQ levels. This implies that the relationship is significant at the full range of values of EQ (Fig. 2).

### 6 Discussion

The study hypothesized and investigated five propositions: relation between TL and OCB in nurses in India; the relation between TL and JS in nurses in India; the relation between JS and OCB in nurses in India, the role of nurses’ EI as a moderator on the TL–OCB and role of JS as a mediator in the relation between TL and OCB. The findings showed that JS mediates the relation between TL and OCB, and EI together with TL impacts the development of OCB among nurses in India. This present study showed that TL behaviours were directly associated with OCB among nurses. TL behaviours were also directly associated with JS. Moreover, our study found that the association between TL and OCB was mediated through JS and moderated through EI.

Nurses are playing an unprecedented significant role in the promotion, prevention, treatment, care, and rehabilitation of the healthcare system during this pandemic in India. They are not only meeting the stipulated standard of performance, but going beyond specific role requirements despite all odds such as long hours away from home, volatile work, marginal salary, and exposure to various contagious diseases. One of the major reasons for them displaying such extraordinary behaviour is the TL in the healthcare system in India. TL inspires nurses to engage in behaviours having positive outcomes for the work, worker as well as workplace. TL pervades a feeling of belongingness among employees for their organization through the transcendence of employees’ interests for organizational interests. TL strengthens employees’ intrinsic motivation, helps employees to think outside the box and promotes an innovative organizational culture where employees feel challenged and push themselves toward going the extra mile. Further, EI plays the role of strengthening the relationship. EI helps nurses understand and manage themselves as well as others. Thus, the idealized influence dimension of TL helps nurses know and manage their emotions; individualized consideration dimension help them empathize with the need of patients and their relatives, inspirational motivation dimension helps them understand and manage emotions of self and patients, and intellectual stimulation empower them and help them develop a feeling of self-worth and self-efficacy Together, all these enhances the subjective evaluation of nurses with various aspects of their jobs. Finally, The enhanced satisfaction results in OCB.

## 7 Implications

Besides, enriching the existing extant literature on TL, EI, JS and OCB; the present study also provides ample contribution to the administrators, researchers and scholars. The unprecedented and never expected novel corona that swept the entire globe last year and which is time and again recurring with various variations such as delta or omicron has necessitated boosting the healthcare system in the world. India along with other developing and underdeveloped countries in particular where the population, population density is more, budget on the healthcare system is less and there is an acute shortage of skilled medical practitioners needed to strengthen the entire healthcare. While every nook and corner of healthcare needs emphasis, one of the most important stakeholders is the nurses. Nurses need to the extra mile to ensure the proper functioning of the health care system and educate and persuade the patients and their relatives braving against all odds such as odd hours of work, the paucity in strength, the absence of any formal statutory body and meager salary structure. Under such a system, the onus rests on the hospital administrators and practicing doctors to take a proactive approach and promulgate OCB among nurses.

This study, besides emphasizing the need and importance of OCB, provides a model to hospital administrators and practicing doctors to suggest how OCB can be fostered, nurtured and made contagious. The study implies that enhancement of OCB can be done through TL through charisma (providing vision and sense of mission, instilling pride, gaining respect and trust), inspiration (communicating high expectation, expressing important purposes in simple ways), intellectual stimulation (promoting intelligence, rationality and careful problem solving), and individualized consideration (giving personal attention, treating each nurse individually, inculcating a sense of identity-based trust).

This study contends that the embracement of TL style together with an emphasis on the development of EI that includes self-awareness, self-management, self-motivation, empathy, and social skills can enhance OCB in nurses.

As such, the administrators should embrace TL style and identify measures to improve the EI of nurses.

## 8 Limitations

While every endeavor has been taken to ensure the completeness of the study, the researchers firmly believe that there is always room for improvement. The prominent limitations of the present work along with the future scope are given below. First, the present study has used a cross-sectional design. Results based on cross-sectional design cannot be inferred with certainty to generalize the causal relationship between the variables. Future research can explore the relations using a longitudinal study or experimental research. Second, while the Herman test had ensured the absence of common method bias in the present study; there can be instances of common method Variance when data regarding different variables such as OJ (independent variable), JS (mediating variable), and OCB (dependent variable) are collected from the same source. Future research must employ various sources of data collection, such as supervisory-rated response in addition to the employee-reported response. Further, while the present study has taken JS and EI as the mediator and moderator to explore the relationship between TL and OCB, future studies may consider other variables

for a better explanation of the relationship. In addition, the finding of the study is limited to nurses working in hospitals in North India. Further studies can be conducted on other locations in India as well as abroad on increased numbers so that the results can be generalized. Finally, while the scales adopted in the present study have been shown excellent reliability and validity, further research might use different scales to consolidate the findings.

## 9 Conclusions

An employee's sense of belongingness with his/her organization and willingness to go an extra mile exerting effort beyond those laid down in job description determines the organizational citizenship behaviour. The present study found that while transactional leadership extracts mere fulfilment of job description; TL motivates them to go extra mile displaying the OCB through elements of individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence. TL increases the job satisfaction of nurses providing task identity, job scope, regular feedback and job that inculcate a sense of belongingness, a feeling of job fulfilment rather than mere leans of livelihood. This helps them synchronize their personal values and goals with organizational values and goals and motivates them to exert effort beyond mechanical compliance with routine directives. Transformational leader provides vision and sense of mission, instil pride, communicate optimism, inculcate rationality and evoking identity-based trust. A Transformational leader provides meaning for the task, visualize their organization as a place to fulfill self-actualization needs and instilling a feeling of being transformers rather than mere extendable. A transformational leader thus increases job satisfaction, enhances emotional intelligence, and inculcates OCB. Further, it was found that nurses having high EI level better understand and manage themselves, the patients, their relatives and other colleagues, better comprehend co-workers' feelings, and consequently create a positive working environment impacting OCB among nurses.

**Funding** The authors received no funding for this project.

**Availability of data and material** The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

## Declarations

**Originality** This is an original work and it has not published earlier.

## References

- Aiken, L.S., West, S.G.: Multiple Regression: Testing and Interpreting Interactions. Sage, Newbury Park (1991)
- Akerjordet, K., Severinsson, E.: Emotional intelligence: A review of the literature with specific focus on empirical and epistemological perspectives. *J. Clin. Nurs.* **16**(8), 1405–1416 (2007)
- Alfonso, L., Zenasni, F., Hodzic, S., Ripoll, P.: Understanding the mediating role of quality of work life on the relationship between emotional intelligence and organizational citizenship behaviors. *Psychol. Rep.* **118**, 107–127 (2016)
- Aryee, S., Walumbwa, F.O., Zhou, Q., Hartnell, C.A.: Transformational leadership, innovative behavior, and task performance: Test of mediation and moderation processes. *Hum. Perform.* **25**(1), 1–25 (2012)

- Baber, A., Thurasamy, R., Malik, M.I., Sadiq, B., Islam, S., Sajjad, M.: Online word-of-mouth antecedents, attitude and intention-to-purchase electronic products in Pakistan. *Telemat. Inform.* **33**, No.(2), pp.388–400 (2016)
- Baik, D.W., Yom, Y.H.: Effects of social support and emotional intelligence in the relationship between emotional labor and burnout among clinical nurses. *J. Korean Acad. Nurs. Adm.* **18**(3), 271–280 (2012)
- Barling, J., Salter, F., Kelloway, E.K.: Transformational leadership and emotional intelligence: an exploratory study. *Leadersh. Organ. Dev. J.*, **21**(3), 157–161 (2000)
- Barney, J.B.: Strategic factor markets: Expectations, luck, and business strategy. *Manag. Sci.* **32** 1231–1241 (1986)
- Barney, J.B.: Firm resources and sustained competitive advantage. *J. Manag.* **17** 99–120 (1991)
- Barney, J.B.: Is the resource-based “view” a useful perspective for strategic management research? *Yes. Acad. Manage. Rev.* **26**, 41–56 (2001)
- Barun, S., Peus, C., Weisweiler, S., Frey, D.: Transformational Leadership, job satisfaction. And team performance: A multilevel mediation model of trust. *Leadersh. Quarterly* **24**(1), 270–283 (2013)
- Bass, B.M.: *Leadership and Performance Beyond Expectations*. Free Press, New York (1985)
- Bass, B., Avolio, B.: *Improving Organizational Effectiveness through Transformational Leadership*, Sage Publications, Thousands Oaks, CA (1994)
- Bateman, T.S., Organ, D.W.: Job satisfaction and the good soldier: the relationship between affect and citizenship. *Acad. Manag. Ann.* **26**, 587–595 (1983)
- Begum, N., Nadim, J., Muzahid, A.: The role of social power, procedural justice, Organizational commitment, and job Satisfaction to engender organizational Citizenship behavior. *Abac. J.* **26**(3), 21–36 (2006)
- Boamah, S.A., Spencer, L., Wong, C., Clarke, S.: ‘Effect of Transformational Leadership on job satisfaction and patient safety outcomes’. *Nurs. Outlook* **66**(2), 180–189 (2018)
- Bottomley, P., Mostafa, A.M.S., Williams, J.S.: The Impact of Transformational Leadership on Organizational Citizenship Behaviours: The Contingent Role of Public Service Motivation. *Br. J. Manag.* **27**(1), 390–405 (2016)
- Cohen, A., Eli Ben-Tura, Vashdi, Dana R. The relationship between social exchange variables, OCB, and performance: What happens when you consider group characteristics?. *Pers. Rev.* **41**(6), 705–731 (2012)
- Cho and Danserau: Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. *Leadersh. Q.* **21**(1), 409–421 (2010)
- Christen, M., Iyer, G., Soberman, D.: Job Satisfaction, Job Performance, and Effort: A Re examination Using Agency Theory. *J. Mark.* January **70**(1), 137–150 (2006)
- Cote, S., Miners, C.T.H.: Emotional intelligence, cognitive intelligence and job performance. *Adm. Sci. Q.* **51** No(1), 1–28 (2006)
- Cranny, C.J., Smith, P.C., Stone, E.: *Job satisfaction: How people feel about their jobs*. Lexington Press, New York (1992)
- Dinh, J., Lord, R., Gardner, W., Meuser, J., Liden, R.C., Hu, J.: Leadership theory and research in the new millennium : current theoretical trends and changing perspectives. *Leadersh Q.* **25**(1), 36–62 (2014)
- Edwards, J.R., Lambert, L.S.: Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. *Psychol. Methods* **12**(1), 1 (2007)
- El-Kassar, A.N., Yunis, M., El-Khalil, R.: The mediating effects of employee-company identification on the relationship between ethics, corporate social responsibility, and organizational citizenship behaviour. *J. Promotion Manage.* **23**(3), 419–436 (2017)
- Fahy, J., Smithee, A.: Strategic marketing and the resource based view of the firm. *Acad. Mark. Sci. Rev.* **10**(21), 1–21 (1999a)
- Ghafoor, A., Qureshi, T.M., Khan, M.A., Hijazi, S.T.: Transformational leadership, employee engagement and performance: mediating effect of psychological ownership. *Afr. J. Bus. Manag.* **5**(17), 7391–7403 (2011)
- Goleman, D.: *Working with Emotional Intelligence*. Bantam Books, New York (1998)
- Görgens-Ekermans, G., Brand, T.: Emotional intelligence as a moderator in the stress-burnout relationship: A questionnaire study on nurses. *J. Clin. Nurs.* **21**(15/16), 2275–2285 (2012)
- Hackett, R., Wang, A., Chen, Z., Cheng, B., Rarh, J.L.: Transformational Leadership and Organisational Citizenship Behaviour: A Moderated Mediation. *Appl. Psychol.* **67**(4), 617–644 (2018)
- Hackman, J.R., Oldham, G.: Motivation through the design of work: test of a theory. *Organizational Behav. Hum. Perform.* **16**, 250–279 (1976)
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E.: *Multivariate Data Analysis: Global Perspective*, 7th ed., Pearson Prentice Hall, Uppertsaddle River, NJ (2010)
- Hair, J.F., Tatham, R.L., Anderson, R.E., Black, W.: *Multivariate Data Analysis*, vol. 6. Pearson Prentice Hall, Upper Saddle River (2006)
- Herman, H.M., Tse, Warren, C.K.: Transformational leadership and Job Performance: A social identity perspective. *J. Bus. Res.* **67**, 2827–2835 (2014)



- Indarti, S.S., Fernandes, A.A.R., Hakim, W.: The effect of OCB in relationship between personality, organizational commitment and job satisfaction to performance. *Journal of Management Development*, 36(10), 1283–1293 (2017)
- Isen, A.M., Daubman, K.A., Nowicki, S.: Positive affect facilitates creative problem solving. *J. Personal. Soc. Psychol.* **52** No(6), 1122–1131 (1987)
- Jalilvand, M.R., Samiei, N.: The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran. *Mark. Intell. Plan.* **Vol. 30** No.4, pp.460–476 (2012)
- James, J.K., Velayudhan, A., Gayatrivedi, S.: Organizational citizenship behaviour and emotional intelligence of corporate executives. *J. Indian Acad. Appl. Psychol.* **36** No(2), 262–267 (2010)
- Judge, T. A., Piccolo, R.F.: Transformational and transactional leadership: A meta-analytic test of their relative validity. *J Appl Psychol.* **89**(5), 755–768 (2004)
- Khalili, A.: “Transformational leadership and organizational citizenship behavior: The moderating role of emotional intelligence”. *Leadersh. Organ. Dev. J.* **38**(7), 1004–1015 (2017)
- Khaola, P., Rambe, P.: The effects of transformational leadership on organisational citizenship behaviour: The role of organisational justice and affective commitment. *Manage. Res. Rev.* (2020). <https://doi.org/10.1108/MRR-07-2019-0323>
- Kumar, T.: Factors impacting job satisfaction among police personnel in India: A multidimensional analysis. *Int. Crim. Justice Rev.* **27** No.(2), 126–148 (2017)
- Lambert, E.G., Qureshi, H., Hogan, N.L., Klahm, C., Smith, B., Frank, J.: The association of job variables with job involvement, job satisfaction, and organizational commitment among Indian police officers. *Int. Crim. Justice Rev.* **25**(2), 194–213 (2015)
- Langitan, E.R.: Faktor-faktor yang mempengaruhi kejadian Turnover Perawat Pelaksana tahun 2009 di Rumah Sakit Bhakti Yudha Depok. Tesis Magister Ilmu Keperawatan Kekhususan Kepemimpinan dan Manajemen Keperawatan Universitas Indonesia (2010)
- Lin, J., Hsiao, K.: The Relationships between Transformational Leadership, Knowledge Sharing, Trust and Organizational Citizenship Behavior. *Int. J. Innovat. Manage. Technol.* **5**(3), 171–174 (2014)
- Locke, E.A.: The nature and causes of job satisfaction. In Dunnette, M.D. (Ed.), *Handbook of Industrial and Organizational Psychology*, Rand McNally, Chicago, IL, pp. 1297–1349 (1976)
- Logomarsino and Cardona.: Relationship among leadership, organizational commitment, and OCB in Uругuayan. *IESE Busin. School.* (2003)
- Liu, Y.Z., Wang, Y.J.: (2021) Self-control and organizational citizenship behavior: The role of vocational delay of gratification and job satisfaction. *Work*, vol. 68, 3, pp. 797–806
- Majeed, N.: Transformational leadership and organizational citizenship behavior: Modeling emotional intelligence as mediator. *Manage. Mark.* **12**(4), 571–590 (2017)
- Monoppo, V.P.: Transformational leadership as a factor that decreases turnover intention: a mediation of work stress and organizational citizenship behaviour. *TQM J.* **32**(6), 1395–1412 (2020)
- Munir, F., Neilsen, K., Garde, A.H., Albertsen, K., Carneiro, I.G.: Mediating the effects of work life conflict between transformational leadership and healthcare workers’ job satisfaction and psychological well being. *J. Nurs. Adm. Manag.* **20**(4), 512–521 (2012)
- Mysirlaki, S.: Emotional intelligence and transformational leadership in virtual teams: lessons from MMOGs. *Leadersh. Organ. Dev. J.* **41**(4), 551–566 (2020)
- Nasra, M.A., Heilbrunn, S.: Transformational Leadership and Organizational Citizenship Behavior in the Arab Educational System in Israel: The Impact of Trust and Job Satisfaction. *Educat. Manag. Admin. Leader.* **44**(3), 380–396 (2015)
- Netemeyer, R., Boles, J., McKee, D., McMurrian, R.: An investigation into the antecedents of organizational citizenship behaviors in a personal selling context. *J. Mark.* **61**(3), 85–98 (1997)
- Nguni, S., Slegers, P., Denessen, E.: Transformational and transactional leadership effects on teachers’ job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: the Tanzanian case. *School Eff. School Improv.* **17**(2), 145–177 (2006)
- Nohe, C., Hertel, G.: Transformational Leadership and Organizational Citizenship Behavior: A Meta-Analytic Test of Underlying Mechanisms. *Front. Psychol.* **8**(1) (2017)
- Nunnally, J.C.: *Psychometric Theory*, McGraw-Hill, New York, NY (1978)
- Nurjanah, S., Pebianti, V., Handaru, A.W.: The influence of transformational leadership, job satisfaction, and organizational commitments on Organizational Citizenship Behavior (OCB) in the inspectorate general of the Ministry of Education and Culture. *Cogent Bus. Manag.*, 7(1) 1–12 (2020)
- Oguz, E.: The relationship between the leadership styles of the school administrators and the organizational citizenship behaviours of teachers. *Procedia. Soc. Behav. Sci.* **9** 1188–1193 (2010)
- Organ, D.W.: *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington Books, Lexington (1988)

- Organ, D.W., Konovsky, M.: Cognitive versus affective determinants of organizational citizenship behavior. *J Appl Psychol.* **74**, 157–164 (1989)
- Pearce, C.L., Sims, H.P. Jr.: Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *G. Dynamic. Ther. Res. Pract.* **6**(2), 172–197 (2002)
- Peteraf, M., Barney, J.: Unraveling the resource-based tangle. *Manag. Decis. Econ.* **24**(4), 309–323 (2003)
- Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H., Fetter, R.: Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadersh. Quart.* **1** No(2), 107–142 (1990)
- Prasad, S., Sen, S.: Role of conviction in the impact of electronic word of mouth on purchase intention for financial products and services', *Indian Journal of Marketing*, Vol. **48** No. 1, pp. 47–60 (2018)
- Rajesh, J.J.: Follower emotional intelligence: A mediator between transformational leadership and follower outcomes. *Personnel Rev.* **48**(5), 1239–1260 (2019)
- Ramachandran, Y., Jordan, P.J., Troth, A.C., Lawrence, S.A.: Emotional Intelligence, Emotional Labour and Organizational Commitment Behaviour in Service Environments. *Int. J. Work Organisation Emot.* **4** No(2), 136–157 (2011)
- Ranjhan, S., Mallick, E.: Organizational citizenship behaviour creating competitive advantage in Indian health care industry: The moderating role of HR practices. *Global Bus. Rev.* **19**(5), 1275–1289 (2018)
- Roberts-Turner, R., Hinds, P.S., Nelson, J., Pryor, J., Robinson, N.C., Wang, J.: Effects of leadership characteristics on pediatric registered nurses' job satisfaction. *Pediatr. Nurs.* **40**(5), 236–256 (2014)
- Romi, M.S., Ahman, F., Disman, D., Suryadi, E., Riswanto, A.: Islamic work ethics-based organizational citizenship behavior to improve the job satisfaction and organizational commitment of higher education lecturers in Indonesia". *Int. J. High. Educat.* **9**(2), 78–84 (2020)
- Salanova, M., Lorente, L., Chambel, M.J., Martinez, I.M.: Linking Transformational Leadership to nurses; extra role performance. *J. Adv. Nurs.* **67**(10), 2256–2266 (2011)
- Salovey, P., Mayer, J.: Emotional intelligence. *Imagery. Cognit. Personal.* **9**(3), 185–211 (1990)
- Sayeed, O.B., Shanker, M.: Emotionally intelligent managers & transformational leadership styles. *Indian J. Industrial Relations* **44**(4), 593–610 (2009)
- Schutte, N.S., Malouff, J.M., Thorsteinsson, E.B., Bhullar, N., Rooke, S.E.: A meta-analytic investigation of the relationship between emotional intelligence and health. *Pers. Individ. Differ.* **42**(6), 921–933 (2007)
- Singh, R., Nayak, J.K.: Mediating role of stress between work-family conflict and job satisfaction among the police officials: Moderating role of social support. *Policing: An. International Journal. of Police Strategies & Management* **38**(4), 738–753 (2015)
- Singh, S.K., Singh, A.P.: Interplay of organizational justice, psychological empowerment, organizational citizenship behavior, and job satisfaction in the context of circular economy. *Manag. Decis.* Vol. **57** No. 4, pp. 937–952 (2019)
- Smith, P.C.: The measurement of satisfaction in work and retirement: A strategy for the study of attitudes. (1969)
- Spano-Szekely, L., Quinn Griffin, M.T., Clavelle, J., Fitzpatrick, J.J.: Emotional intelligence and transformational leadership in nurse managers. *J. Nurs. Adm.* **46**(2), 101–108 (2016)
- Spector, P.E.: *Job satisfaction- Application, assessment, cause, and consequences.* Sage, Thousand Oakes (1997)
- Tabachnick, B. G., Fidell, L.S.: *Using Multivariate Statistics* (5th ed.). New York: Allyn and Bacon (2007).
- Torlak, N.G., Kuzey, C., Dinc, M.S., Budur, T.: Links connecting nurses' planned behavior, burnout, job satisfaction, and organizational citizenship behavior. *J. Workplace Behav. Health* **36**(1), 77–103 (2021)
- Tu, Y.D., Lu, X.X.: How ethical leadership influence employees' innovative work behavior: A perspective of intrinsic motivation: Erratum. *J. Bus. Ethics*, **116**(2), 455–457 (2013)
- Vakola, M., Tsausis, I., Nikolaou, I.: The role of emotional intelligence and personality variables on attitudes toward organizational change. *J. Managerial Psychol.* **19**(1/2), 88–110 (2004)
- Vigoda-Gadot, E., Beerli, I.: Change-oriented organizational citizenship behavior in public administration: The power of leadership and the cost of organizational politics. *J Public Adm Res Theory* **22**, 573–596 (2012)
- Wang, L.: When nurse emotional intelligence matters: How transformational leadership influences intent to stay. *J. Nurs. Adm. Manag.* **26**(4), 358–365 (2018)
- Wang, L., Tao, H., Bowers, B.J., Brown, R., Zhang, Y.: When nurse emotional intelligence matters: How transformational leadership influences intent to stay. *J. Nurs. Manag.* Vol **26**(4), 358–365 (2018)
- Weberg, D.: Transformational leadership and staff retention: An evidence review with implications for health care systems. *Nurs. Adm. Q.* **34**(3), 246–258 (2010)
- Weikamp, J.G., Goritz, A.S.: Organizational citizenship behaviour and job satisfaction: The impact of occupational future time perspective. *Hum. relations* **1**(4), 1–25 (2016)

- Weiss, D.J., Dawis, R.V., England, G.W., Lofquist, L.H.: Manual for the Minnesota Satisfaction Questionnaire, vol. 22, Minnesota Studies in Vocational Rehabilitation: University of Minnesota, Industrial Relations Center. (1967)
- Wong, C.S., Law, K.S.: The effects of leader and follower emotional intelligence on performance and attitude: an exploratory study. *Leadersh. Q.* **13** No(3), 243–274 (2002)
- Yen, H.R., Niehoff, B.P.: Organizational citizenship behaviors and organizational effectiveness: examining relationships in Taiwanese banks. *J. Appl. Soc. Psychol.* **34**(8), 1617–1637 (2004)
- Yukl, G.A.: *Leadership in Organizations*, Prentice-Hall, Englewood Cliffs, NJ (1994)

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.