

## **Investigating the Mechanism through which Transformational Leadership Influences Change-Oriented Organizational Citizenship Behavior: The Role of Job Crafting and Employee Resilience**

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### **ABSTRACT**

#### **Keywords:**

*Transformational Leadership, Change-Oriented Organizational Citizenship Behavior, Organizational Citizenship Behavior, Job crafting, Employee Resilience, Structural Resources, Job Challenges, Social Resources, Job redesign.*

There has been a growing interest in investigating change-oriented organizational citizenship behaviors of employees. These behaviors drive continuous organizational change and ensure innovative potential of organizations. The purpose of the current study is to examine the effect of transformational leadership on change-oriented organizational citizenship behaviors of employees. Moreover, the mediating effect of job crafting (structural resources, social resources, and job challenges) is also investigated. Another purpose of the study is to test the moderating effect of employee resilience on the link between transformational leadership and change-oriented organizational citizenship behaviors. Data has been collected from 328 employees working in software houses. The study is quantitative in nature and cross-sectional surveys were used to collect data. Data analysis shows that transformational leaders enhance change-oriented organizational citizenship behaviors of employees. Job crafting mediates the effect of transformational leadership on change-oriented organizational citizenship behavior. The study also confirms that resilient employees are more readily involved in change-oriented organizational citizenship behaviors under transformational leaders.

## **INTRODUCTION**

The landscape for organizations is continuously changing due to rapid technological advancements, globalization, increased competition, regulatory pressures, and fierce rivalry. In such competitive environment, it is important for organizations to understand the pivotal role that change can play (Malik, 2024). Organizations need to continuously look for ways to improve existing systems, processes, products, services, and functions. Without bringing continuous change, it is difficult to survive in long run. Organizations that focus on change and keep on challenging status quo are better placed as compared to those organizations that

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do not favor change and believe in status quo (Naeem et al., 2021). Employees are a great source of introducing new ideas, bringing the changes on regular basis, and challenging the status quo. It is ultimately the individuals working in organizations that initiate and implement new and novel ideas. One of the most effective way in this regard is to encourage employees to engage in change-oriented organizational citizenship behavior (COCB). It refers to extra-role, voluntary, and discretionary behaviors that employees engage in to initiate and sustain new ideas related to existing organization's practices, policies, processes, procedures, and systems (Malik, 2024). COCB is different from classic OCB because the focus here is not just to help coworkers or show altruistic behaviors but to champion and sustain improvements in existing processes and bringing positive change and remaining proactive.

COCB is crucial for organizational success as it ensures continuous innovation and first mover advantage in the marketplace. Researchers have recently started focusing on antecedents of COCB. Among various antecedents that have been examined, little attention is paid to the role of leadership, particularly transformational leadership in this regard (Malik, 2024). Transformational leadership refers to a style of leadership that focuses on giving freedom, flexibility, empowerment, and inspiration to followers so that they can try out new ideas without any fear of failure (Althnayan et al., 2022; Gurmani et al., 2021; Hermanto, Srimulyani, & Pitoyo, 2024; Qatali et al., 2022; Lee et al., 2024). The basic premise around which transformational leaders work is to challenge the status quo. They always provide inspiration to subordinates and individual consideration is given to each subordinate so that he/she can try out new ideas. If new ideas are tried and failed, transformational leaders do not put fear in minds of individuals. Transformational leadership due to its roots in inspirational motivation, individual consideration, and intellectual stimulation, is an ideal leadership style that can encourage employees to champion improvements and new ideas, initiate and implement novel processes, raise voice without any fear, and proactively seek new ways of doing things. This study proposes that transformational leadership enhances COCB.

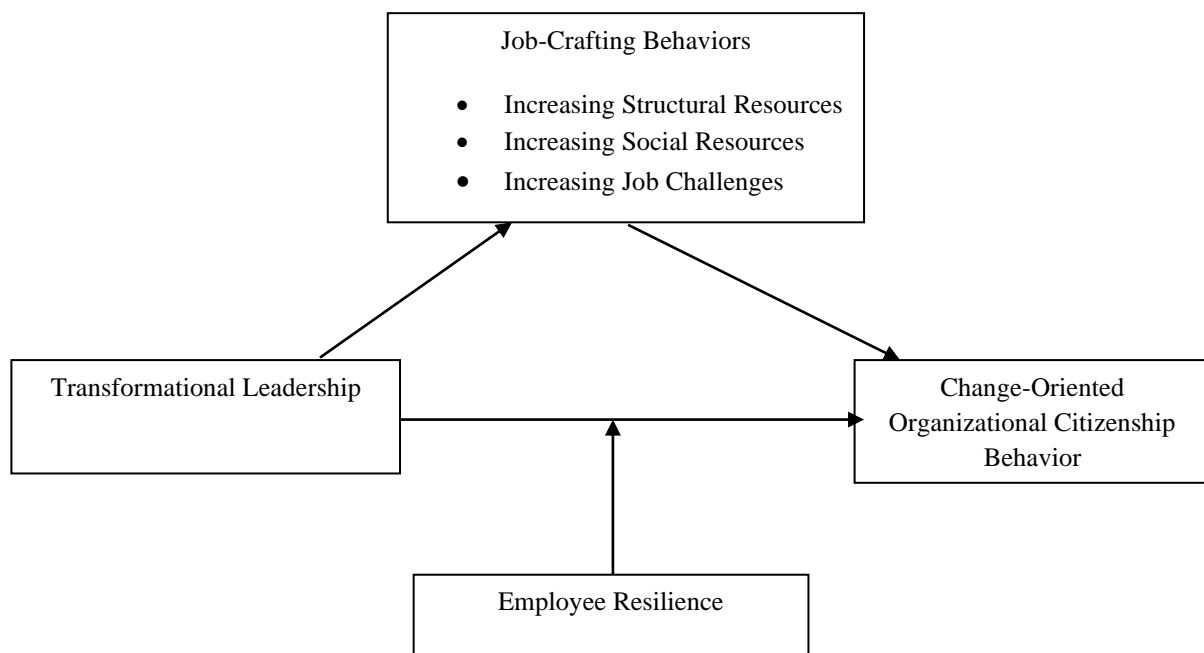
The relationship between transformational leadership and COCB is not straight forward. There are mediating and boundary conditions involved in explaining how transformational leaders encourage their subordinates to engage in COCB. One key mediating mechanism that is crucial but minimally investigated is the role of job crafting. Job crafting refers to the cognitive and physical modifications that employees make to their job roles and relational boundaries, allowing them to reframe the meaning of their work and experience it in a more fulfilling manner (Malik, 2024). Job crafting helps employees to restructure their tasks, redefine them, and flexibly redesign them to meet job demands and exert extra efforts such as

COCB. The job crafting framework proposed by Wrzesniewski and Dutton (2001) suggests that job routines are usually monotonous in organizational setting and employees feel emotional exhaustion and job burnout while performing routine tasks. They need flexibility in redefining these tasks so that they can pay attention to other tasks and contribute to the organization in more effective ways. Employees do not feel fulfilled and meaningful while performing routine tasks. In order to achieve a greater feeling of meaningfulness, they need job crafting. Consistent with this view, drawing on the Job Demands–Resources (JD-R) theory, Chen et al. (2024) demonstrated that transformational leaders do provide flexible work arrangements and allow employees to craft their jobs that can lead to enhanced COCB. Specifically, when employees engage in job crafting, they proactively redefine their job tasks and social interactions, which minimizes the salience of job stressors and maximizes the perceived value and significance of their work. This positive reframing enhances employees' self-efficacy and motivation to initiate and support constructive changes at work, thereby increasing their likelihood of exhibiting COCB.

This study also suggests that there are boundary conditions that should also be investigated in order to better understand the link between transformational leadership and COCB. Given that COCB entails proactive, discretionary, and often risk-laden actions aimed at challenging the status quo (Bettencourt, 2004), employees are more likely to engage in such behaviors when they possess sufficient psychological resources to cope with uncertainty and adversity. One such critical resource is employee resilience, defined as “an adaptive and resource-utilizing capacity that enables employees to effectively respond to change and workplace adversity” (Hodliffe, 2014, p. 11). Resilience allows employees to adapt to ever changing situations, perform under pressure, take risks without worrying about the outcomes of their actions, and evolving as and when needed (Ahmad et al., 2021; Aguiar-Quintana et al., 2021; Liang & Cao, 2021; Lu et al., 2023; Santoro, Messeni-Petruzzelli, & Del Giudice, 2021). In this regard, when employees perceive themselves as resilient, they are more confident in their ability to manage the risks associated with COCB, thereby increasing the likelihood of engaging in such behavior.

This study has three main objectives. First, the relationship between transformational leadership and COCB is investigated. Second, the mediating role of job crafting on the effect of transformational leadership on COCB is examined. Third, the moderating role of employee resilience on the relationship between transformational leadership and COCB is explored.

Figure 1 presents the theoretical framework of the current study.



**Figure 1.** *Theoretical framework*

## HYPOTHESES DEVELOPMENT

### *Transformational leadership and change-oriented OCB*

Transformational leadership is grounded in value-based exchange, mutual development, and shared goals that elevate the moral standards of both leaders and followers. Transformational leaders act as role models that inspire followers to follow footsteps of their leaders. They challenge status quo and guide their followers through the process of organizational change with mutual trust and effectiveness (Afsar & Umrani, 2020). By articulating a compelling vision and establishing norms driven by altruistic motives, transformational leaders—acting as “givers”—can effectively guide organizations toward achieving collective goals and delivering positive outcomes for employees as “receivers” (Afsar et al., 2019; Gurmani et al., 2021). Transformational leaders actively attend to the needs and aspirations of their subordinates, thereby enabling them to pursue personal growth and self-fulfillment. In return, the organization benefits through enhanced performance and innovation, while leaders themselves are inspired to continuously improve. Such leadership encourages individuals to transcend self-interest and commit to shared goals, fostering a culture of continuous improvement and COCB.

Transformational leadership comprises four core components: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation (Bass & Avolio, 1993). They give confidence to their subordinates and builds trust among them. They are visionary and inspirational. They provide support at individual level, helps in developing

employees' skills and abilities, and always ask them to think proactively and suggest solutions of problems thinking out of the box (Cho & Kao, 2022; Khaola & Rambe, 2021). They encourage employees to think and try out new things. They provide confidence to employees to readily share their mistakes and best practices. Employees feel that if an idea is successful, the credit and rewards would be given to the one who initiated the idea. On the other hand, if the idea is not successful, the blame would not be shifted to the one who originated the idea (Jha, 2014; Khalili, 2017; Nohe & Hertel, 2017; Purwanto, 2022). In transformational leadership, the relational dynamic between leader and follower is not transactional but developmental, supported by both material and social exchanges that shape the organizational climate and influence employee behavior. Employees, in turn, reciprocate by offering constructive feedback and contributing to organizational improvement. As such, individual status and recognition are earned through merit and contribution, not through negotiated exchanges.

The process of COCB is inherently uncertain, primarily due to the extended time required to move from idea conception to execution. This uncertainty is further intensified by potential resistance from peers, top management, and other stakeholders, which can amplify the fear of the unknown (George & Zhou, 2007). Such fears can significantly demotivate employees from engaging in COCBs. Research consistently demonstrates a positive relationship between transformational leadership and innovative performance (Afsar & Umrani, 2020; Messmann, Evers, & Kreijns, 2022). Transformational leaders prioritize collective vision over personal gain, thereby nurturing a shared sense of purpose among team members. COCBs reflect proactive efforts aimed at improving organizational functioning by questioning the status quo and initiating positive change (Choi, 2007). Such behaviors involve creative and innovative actions that go beyond formal job requirements to improve one's tasks or organizational processes (Seppälä et al., 2012). COCBs are instrumental in driving organizational adaptation and transformation (Lopez-Domínguez et al., 2013). COCBs carry interpersonal risk, as they often disrupt established norms and social structures within the workplace. By deviating from role expectations and proposing alternatives, employees engaging in COCB may be perceived as threatening or non-conforming (Han, Sears, & Zhang, 2018; Kao, 2017; López-Domínguez et al., 2013; Vigoda-Gadot & Beerli, 2011). Transformational leaders play an important role in such situations. They encourage employees to be proactive without worrying about the conformity. Mutual trust, respect, and loyalty help employees to overcome resistance as well as any possible threats due to engagement in COCBs. These behaviors challenge hierarchical authority, raise dissent, and

require significant psychological and social resources (Hermanto, Srimulyani, & Pitoyo, 2024; Qatali et al., 2022).

Current literature provides robust empirical evidence linking diverse leadership styles with COCB (Choi, Ha, & Choi, 2022; Iqbal et al., 2022; Jang, 2021; Lang et al., 2022; Malik, 2024; Masih et al., 2025; Ye et al., 2022; Younas et al., 2021). These studies underline the critical role of organizational context, particularly leadership, in shaping employees' discretionary behaviors aimed at workplace improvement. For instance, Jang (2021) established that transformational leadership can enhance COCB through improved leader–member exchange quality. In line with this, several scholars have empirically tested the direct association between transformational leadership and COCB (e.g., Iqbal et al., 2022; Jang, 2021; Lang et al., 2022; Malik, 2024), demonstrating that transformational leadership enhances proactive and change-oriented behaviors. Transformational leaders attend to the unique developmental needs of each employee, offering personal support and guidance (Hermanto, Srimulyani, & Pitoyo, 2024). Such leaders cultivate trust and encourage followers to reframe their personal goals in alignment with higher-order organizational objectives (Althnayan et al., 2022; Gurmani et al., 2021; Qatali et al., 2022; Lee et al., 2024). This nurturing environment promotes psychological safety and intrinsic motivation—factors known to drive change-related initiatives at work.

COCBs are frequent in organizations where transformational leaders promote nurturing and supportive environment. Followers are encouraged to question existing norms, reframe problems, and develop novel solutions (Gurmani et al., 2021; Qatali et al., 2022). Intellectually stimulating leaders foster cognitive flexibility and a tolerance for ambiguity, which are essential for engaging in COCB. By promoting reflective thinking and encouraging employees to challenge the status quo, such leaders empower their subordinates to proactively reshape job boundaries and initiate work improvements. Transformational leaders facilitate the development of strong interpersonal bonds among team members, fostering a climate of cooperation and mutual respect (Aguiar-Quintana et al., 2021; Liang & Cao, 2021; Lu et al., 2023). This relational support enables employees to feel confident in proposing and executing change, despite the inherent risks.

Transformational leaders, by emphasizing personal growth and a shared vision, create an environment in which employees are intrinsically motivated to exceed their performance expectations and challenge conventional ways of working (Afsar et al., 2019). They communicate a compelling vision of the future that aligns individual and collective goals, which helps mitigate employee resistance to change (Malik, 2024). Through this process, they not only reduce skepticism (Iqbal et al., 2022; Jang, 2021; Lang et al., 2022) but also



foster commitment to change, making employees more adaptable. According to Bass and Avolio (1993), a fundamental tenet of transformational leadership theory is that such leaders inspire followers to transcend self-interest and perform beyond standard expectations. By reinforcing followers' self-concept and identification with organizational values, transformational leaders lay the foundation for sustained engagement in COCB. Hence, we propose:

**H1:** *There is a positive relationship between transformational leadership and COCBs.*

### ***Mediating role of job crafting***

According to job crafting theory (Wrzesniewski & Dutton, 2001), employees are not passive recipients of job designs but actively reshape their task and relational boundaries to align their roles with personal strengths, values, and goals. Tims and Bakker (2010), extending this framework, classified job characteristics into two broad categories: job demands and job resources. Job demands—such as work overload, emotional strain, or conflicting expectations—require sustained effort and are typically associated with emotional exhaustion and diminished well-being. In contrast, job resources—including autonomy, feedback, social support, and development opportunities—facilitate employee motivation, engagement, and performance. Employees engage in job crafting by seeking challenges, increasing job resources, and minimizing hindering demands, thereby enhancing the meaningfulness and satisfaction of their work (Bavik, Bavik, & Tang, 2017; Ding et al., 2020; Harju, Schaufeli, & Hakanen, 2018; Lee & Yang, 2017; Luu, 2020; Shusha, 2014). Empirical evidence suggests that job crafting behaviors such as seeking resources, embracing job challenges, and reducing hindering demands lead to favorable outcomes, including greater work engagement (Harju, Schaufeli, & Hakanen, 2018), enhanced work identity (Ding et al., 2020), and improved well-being and job performance (Tims & Bakker, 2010). Within this context, transformational leadership acts as a key enabler of job crafting. Transformational leaders, by challenging the status quo and advocating change through their followers (Afsar, Badir, & Saeed, 2014), foster an environment where employees feel empowered to proactively shape their jobs.

Transformational leaders openly share resources with their followers. They develop employees through training programs, and provide all necessary resources needed to initiate and implement changes in organizational settings. They also provide employees with psychological resources which are extremely critical in coming forward and trying out new things (Lee & Yang, 2017; Luu, 2020). Employees understand that their leaders have provided all possible support so that they can work with flexible work arrangements and suggest new and novel ideas. Job crafting is a consequence of transformational leadership because when an employee perceives that his/her growth needs, job enrichment, and

development are taken care of, he/she needs to go beyond routine tasks (Bavik, Bavik, & Tang, 2017). Employees tend to pursue challenging roles when they perceive a strong fit between their personal competencies and organizational expectations. Transformational leaders support employees in developing structural and social resources required for innovation. Through regular, meaningful interactions, they serve as sources of inspiration and mentorship, prompting employees to craft their social environments—whether by seeking feedback, requesting guidance, or observing leader behavior as a model for growth. These behaviors collectively foster a culture of self-initiated job design and continuous development.

According to Luu (2020), employee motivational states serve as critical mediating mechanisms through which transformational leadership influences COCBs. Specifically, these motivational states—categorized as “*can do*” (self-efficacy), “*reason to*” (purpose and value), and “*energized to*” (positive affect)—are significantly shaped by transformational leadership and serve to activate COCBs. Drawing on this perspective, it can be posited that job crafting, a self-initiated form of job redesign, reflects a motivational orientation that is stimulated under transformational leadership and in turn promotes COCBs. Transformational leaders provide resources that are needed to redesign jobs and as a result they engage in activities that promote openness, flexibility, and new ideas (Malik, 2024). Transformational leaders articulate a clear sense of direction, emphasize the need for change, and communicate the broader purpose behind organizational transformation. By doing so, they not only create an aspirational vision but also empower employees with autonomy and psychological safety to strive for that vision. They actively remove uncertainties, address individual concerns, and cultivate high levels of interpersonal trust, thereby reducing resistance to change and enhancing change acceptance (Naeem et al., 2021). When employees perceive that their doubts are acknowledged and that change initiatives align with both personal and organizational goals, their commitment to change is likely to increase.

Transformational leaders stimulate job crafting by encouraging employees to seek new challenges, acquire valuable resources, and develop new work strategies, all of which are instrumental in fostering COCB. In dynamic and uncertain work environments, job crafting becomes a facilitator of adaptation, enabling employees to align their roles with evolving organizational needs. Qalati et al. (2022) argue that such proactive behavior is essential for navigating change. Supporting this view, Malik (2024) found that employees who exhibit a strong willingness to change are more likely to engage in resource-seeking and challenge-seeking activities—core dimensions of job crafting. Therefore, the study hypothesizes:

**H2:** *Job crafting mediates the effect of transformational leadership on COCBs.*



***The moderating role of employee resilience***

The contextual antecedents of COCBs are well-documented in prior studies (e.g., Han, Sears, & Zhang, 2018; Kao, 2017; López-Domínguez et al., 2013; Vigoda-Gadot & Beerli, 2011). However, what is still unknown is how underlying psychological mechanism relates with the contextual antecedents and COCBs. COCBs are risky in nature as coworkers might perceive them with negativity. They are discretionary and hence the motivation to engage in such behaviors is limited. Due to uncertainty associated with COCBs as to how others would react to change driven initiatives, it is important to provide psychological resources to employees who are willing to engage in COCBs (López-Domínguez et al., 2013; Vigoda-Gadot & Beerli, 2011). Thus, the likelihood of employees engaging in such discretionary behavior increases when they possess adequate psychological resources to manage the associated risks and ambiguity (Aguiar-Quintana et al., 2021; Liang & Cao, 2021). Employee resilience is one such set of resources that can help in explaining the effect of transformational leadership on COCBs. When an employee possesses greater level of resilience, the effect of transformational leadership on COCBs strengthens. This is because resilient employees do not fear about the negative repercussions of COCBs. They know that their leaders have provided enough resources, inspiration, motivation, individualized consideration, and intellectual stimulation and now they need not to worry about risk, uncertainty, and resistance from others (Lu et al., 2023; Santoro, Messeni-Petruzzelli, & Del Giudice, 2021). They are always hopeful that their initiatives towards creating positive changes would be in favor of the organization as well as those working in it. They are optimistic about the changes and thus, they do not fear the outcomes. In such contexts, employees' beliefs about their own resilience and coping abilities become pivotal in deciding whether they are willing to challenge the status quo or conform to the prevailing norms. On the contrary, those who are not resilient, they become pessimist and lose hope to engage in COCBs. They are psychologically weak to engage in COCBs.

While several scholars have examined the positive relationship between transformational leadership and OCBs (Choi, Ha, & Choi, 2022; Iqbal et al., 2022; Jang, 2021; Lang et al., 2022; Malik, 2024; Masih et al., 2025; Ye et al., 2022; Younas et al., 2021), limited empirical work has explored how employee resilience moderates this link. Transformational leaders provide individualized consideration to each employee that helps in building confidence, sense of control, and meaningfulness (Masih et al., 2025; Ye et al., 2022). They become better in handling adversities, negative situations, uncertainties, and fears. COCB is inherently risky, and not all employees may feel equally equipped or inclined to initiate change, especially in high-stakes environments (Malik, 2024). Therefore, the present study

argues that employee resilience, defined as the capacity to effectively adapt and recover from setbacks, serves as a critical boundary condition in this relationship. Resilient employees are more likely to view uncertain situations as surmountable and to remain committed to their goals in the face of adversity. Consistent with prior research, resilient individuals have been found to navigate change more effectively, demonstrating greater emotional stability and persistence when confronting workplace challenges (Ahmad et al., 2021; Aguiar-Quintana et al., 2021). Based on these arguments, this study proposes:

**H3:** *Employee resilience moderates the effect of transformational leadership on COCBs such that greater level of resilience among employees further strengthens the relationship between transformational leadership and COCBs.*

## METHODOLOGY

### *Participants and Procedure*

This study is quantitative in nature. Deductive approach was used since the purpose of the study was to test hypotheses. The research context of the study was software companies in Pakistan. Software companies were selected because the nature of work is often stressful as teams have to meet deadlines and satisfy clients' demands.

The population of the study was employees working on projects in software houses. We selected only those employees who had successfully completed at least five projects. This is because they were in a better position to understand the variables of this study. The study hence selected software houses located in Islamabad and Rawalpindi. A convenience sampling technique was used and surveys were distributed among 550 respondents. Before distributing surveys, we briefed the concerned officials about the purpose of the research and asked for their permission. A total of 177 software houses were approached and 121 agreed to participate in the study. Surveys were distributed among employees in these 121 companies. Researchers visited offices and conveniently gave surveys to 550 participants. Out of 550, we were able to get back 328 surveys. The average age of respondents was 28.7 years. 68% of the respondents were male.

### *Measures*

All scales were measured on a five point Likert scale. The questionnaires were adopted from previous studies. To assess transformational leadership, a 20-items scale developed by Podsakoff et al. (1990) was used. Employees' resilience was measured using 20 items from the "Resilience at work" scale developed by Winwood et al. (2013). COCB was measured using 10 items from the scale developed by Morrison and Phelps (1999). To measure job crafting, a 15 item scale developed by Slemp and Vella-Brodrick (2014) was used. The survey had 65 questions related to key constructs of the study. Part from these 65 questions,

some demographic details such as age, gender, marital status, education, income, and experience were also gathered.

## RESULTS

This study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the proposed hypotheses. Despite recent scholarly critiques—such as its limited model fit indices and inability to fully account for measurement error—PLS-SEM remains a robust analytical technique under specific conditions (Sarstedt et al., 2016). Specifically, it is well-suited for models incorporating higher-order latent constructs (Hair et al., 2014), as well as those with complex structural path relationships, numerous measurement items per construct, and moderating variables. Before conducting the structural analysis, we assessed the distributional properties of the data by examining skewness and kurtosis for all variables included in the model. The values ranged between  $\pm 0.021$  and  $\pm 1.34$ , which fall well within the acceptable threshold of  $\pm 2$ , indicating that the data approximated normal distribution (Sarstedt et al., 2016). We then evaluated the reliability and validity of the first-order measurement model. Item loadings on their respective latent constructs ranged from 0.65 to 0.93, exceeding the acceptable threshold of 0.6. Cronbach's alpha and composite reliability (CR) values for all constructs were above 0.70, confirming internal consistency. Subsequently, we examined the second-order reflective constructs. Each first-order construct loaded significantly onto its respective higher-order factor, with all loadings exceeding the 0.70 cutoff. Similarly, Cronbach's alpha and composite reliability for each second-order construct were above 0.70, and AVE values ranged from 0.519 to 0.653—again surpassing the recommended minimum of 0.50. These findings confirm the reliability and validity of the second-order constructs, enabling us to proceed with evaluating the structural model and testing the hypothesized relationships.

Descriptive statistics, correlations, and reliability coefficients are presented in Table 1, with Cronbach's alphas ranging from .81 to .91. As expected, transformational leadership showed significant positive correlations with COCB ( $r = 0.49$ ,  $p < .001$ ), increasing structural job resources ( $r = .39$ ,  $p < .01$ ), increasing social resources ( $r = .46$ ,  $p < .01$ ), and increasing job challenges ( $r = .26$ ,  $p < .001$ ).

**Table 1.** Mean, Standard Deviation, Reliabilities, and Correlations

|   | Variables        | Mean<br>(SD)  | $\alpha$ | 1    | 2    | 3   | 4    | 5 | 6 | 7 | 8 | 9 | 10 |
|---|------------------|---------------|----------|------|------|-----|------|---|---|---|---|---|----|
| 1 | Age              | 28.7<br>(4.8) |          | 1    |      |     |      |   |   |   |   |   |    |
| 2 | Gender           | .67(.11)      |          | .02  | 1    |     |      |   |   |   |   |   |    |
| 3 | Experience       | 6.8(4.2)      |          | .18* | .01  | 1   |      |   |   |   |   |   |    |
| 4 | Education        | 16.4(1.8)     |          | .17* | .01  | .05 | 1    |   |   |   |   |   |    |
| 5 | Transformational | 3.91(.31)     | .82      | -.01 | .13* | .02 | -.01 | 1 |   |   |   |   |    |

|    |   |           |     |      |      |     |      |        |       |       |      |     |   |
|----|---|-----------|-----|------|------|-----|------|--------|-------|-------|------|-----|---|
| 6  | leadership<br>Increasing structural job resources   | 3.62(.32) | .84 | -.06 | .12* | .05 | -.03 | .39**  | 1     |       |      |     |   |
| 7  | Increasing social resources                         | 3.73(.32) | .81 | .11  | .09  | .02 | -.01 | .46**  | .16   | 1     |      |     |   |
| 8  | Increasing job challenges                           | 3.84(.26) | .87 | .02  | .04  | .06 | -.04 | .26*** | .16   | .14   | 1    |     |   |
| 9  | Employee resilience                                 | 4.04(.19) | .91 | -.01 | .08* | .01 | -.02 | .31**  | .11   | .04   | .05  | 1   |   |
| 10 | Change-oriented organizational citizenship behavior | 4.25(.34) | .89 | .02  | .02  | .02 | .04  | .49*** | .34** | .26** | .23* | .13 | 1 |

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Table 2 presents the results of the model testing. First, transformational leadership was found to exert a significant positive impact on employees' change-oriented organizational citizenship behavior ( $\beta = 0.59$ ,  $p < .001$ ), thereby supporting Hypothesis 1. Additionally, evidence supports that transformational leadership significantly influenced increasing structural job resources ( $\beta = 0.44$ ,  $p < .001$ ), increasing social resources ( $\beta = 0.29$ ,  $p < .01$ ), and increasing job challenges ( $\beta = 0.32$ ,  $p < .001$ ). Moreover, increasing structural job resources ( $\beta = 0.15$ ,  $p < .001$ ), increasing social resources ( $\beta = 0.16$ ,  $p < .01$ ), and increasing job challenges ( $\beta = 0.21$ ,  $p < .001$ ) are positively associated with employees' change-oriented organizational citizenship behavior. To examine the mediating effect, the total effect of transformational leadership on change-oriented organizational citizenship behavior was compared with the indirect effect through job crafting dimensions.

**Table 2.** Direct and mediating effects

|   | Coefficient | t-value | Percentile |       |
|---|-------------|---------|------------|-------|
|   |             |         | Lower      | Upper |
| Total effect                                    |             |         |            |       |
| TL → COCB                                       | 0.59***     | 73.29   |            |       |
| Direct effect                                   |             |         |            |       |
| TL → COCB                                       | 0.32***     | 62.56   |            |       |
| TL → Increasing structural job resources        | 0.44***     | 93.61   |            |       |
| TL → Increasing social resources                | 0.29**      | 57.69   |            |       |
| TL → Increasing job challenges                  | 0.32***     | 60.32   |            |       |
| Increasing structural job resources → COCB      | 0.15***     | 47.49   |            |       |
| Increasing social resources → COCB              | 0.16**      | 48.63   |            |       |
| Increasing job challenges → COCB                | 0.21***     | 55.86   |            |       |
| Indirect effect                                 |             |         |            |       |
| TL → COCB                                       | 0.24**      | 4.86    | 0.149      | 0.363 |
| TL → Increasing structural job resources → COCB | 0.08*       | 2.75    | 0.033      | 0.146 |
| TL → Increasing social resources → COCB         | 0.06*       | 2.53    | 0.012      | 0.097 |
| TL → Increasing job challenges → COCB           | 0.12*       | 2.97    | 0.034      | 0.236 |

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

As previously discussed, the total effect of transformational leadership on employees' change-oriented organizational citizenship behavior was significant and distinct from zero, indicating a direct positive relationship between the two constructs. When job crafting behaviors—namely, increasing structural job resources, increasing social resources, and increasing job challenges—were introduced as mediators, the direct effect of transformational leadership on Change-oriented organizational citizenship behavior was reduced. Moreover, the bootstrap analysis of the indirect effects revealed that the mediating pathways were statistically significant and different from zero. Based on the criteria outlined by Preacher and Hayes (2004), these findings provide empirical support for Hypotheses 2, confirming that the relationship between transformational leadership and change-oriented organizational citizenship behavior is partially mediated by job crafting.

Hypothesis 3 proposed that employee resilience moderates the relationship between transformational leadership and change-oriented organizational citizenship behavior. The analysis revealed a significant interaction effect (TL  $\times$  employee resilience;  $\beta = 0.35$ ,  $p < .01$ ), indicating that the influence of transformational leadership on innovative behavior is strengthened when employees engage in higher levels of employee resilience. Thus, Hypothesis 3 is supported.

## DISCUSSION

This study has five findings. First, transformational leaders do help employees to engage in COCBs. When there are transformational leaders in organization, their followers' propensity to engage in COCBs increase. This finding is supported by previous studies that show that transformational leadership enhances citizenship behaviors, innovative work behavior, and positive extra-role behaviors (Choi, Ha, & Choi, 2022; Iqbal et al., 2022; Jang, 2021; Lang et al., 2022; Malik, 2024; Masih et al., 2025; Ye et al., 2022; Younas et al., 2021). Second, the study found that transformational leaders build employees' job crafting dimensions. When transformational leaders are present in organization, followers tend to redesign and accumulate their structural job resources, social resources, and job challenges. Transformational leadership provides autonomy and freedom to make decisions about how to do one's work. Tasks can be scheduled independently and employees feel that they have enough opportunities for development. Employees can avoid monotony in job responsibilities and they have clear understanding of job responsibilities and expectations. Transformational leaders regularly consult on changes that affect one's work (Bavik, Bavik, & Tang, 2017; Ding et al., 2020; Harju, Schaufeli, & Hakanen, 2018; Lee & Yang, 2017; Luu, 2020; Shusha, 2014). Third, job crafting mediates the effect of transformational leadership on COCBs. Transformational leaders provide support and guidance, encouragement, or

emotional backing. They play role of mentor which helps employees to build social resources and as a consequence, they engage more readily in COCBs. As employees share information and knowledge within the team and seek input to improve skills or work outcomes, their inclination to engage in COCBs increase. Fourth, job challenges help employees to engage in COCBs under transformational leaders. By working on new projects or tasks, software companies' employees volunteer for assignments outside one's routine duties. Their task complexity is high and that is why they choose to work on tasks that are more cognitively demanding under transformational leaders (López-Domínguez et al., 2013; Vigoda-Gadot & Beerli, 2011). Followers seek roles that require problem-solving or strategic thinking and acquire knowledge to expand role capabilities.

Fifth, resilient individuals have been found to navigate change more effectively, demonstrating greater emotional stability and persistence when confronting workplace challenges. Employee resilience is one such set of resources that can help in explaining the effect of transformational leadership on COCBs. When an employee possesses greater level of resilience, the effect of transformational leadership on COCBs strengthens (Aguiar-Quintana et al., 2021; Liang & Cao, 2021; Lu et al., 2023; Santoro, Messeni-Petruzzelli, & Del Giudice, 2021). This is because resilient employees do not fear about the negative repercussions of COCBs. They know that their leaders have provided enough resources, inspiration, motivation, individualized consideration, and intellectual stimulation and now they need not to worry about risk, uncertainty, and resistance from others. They are always hopeful that their initiatives towards creating positive changes would be in favor of the organization as well as those working in it. They are optimistic about the changes and thus, they do not fear the outcomes. In such contexts, employees' beliefs about their own resilience and coping abilities become pivotal in deciding whether they are willing to challenge the status quo or conform to the prevailing norms. On the contrary, those who are not resilient, they become pessimist and lose hope to engage in COCBs. They are psychologically weak to engage in COCBs.

### ***Practical Implications***

Organizations need to continuously look for ways to improve existing systems, processes, products, services, and functions. Without bringing continuous change, it is difficult to survive in long run. Transformational leadership is the most effective way to ensure continuous change in organization. The critical role that transformational leaders play in bringing innovations and keeping employees motivated to initiate new changes is important for the management to understand. Therefore, training managers to become more and more transformational is considered crucial. Organizations that focus on change and keep on



challenging status quo are better placed as compared to those organizations that do not favor change and believe in status quo. Employees are a great source of introducing new ideas, bringing the changes on regular basis, and challenging the status quo. It is ultimately the individuals working in organizations that initiate and implement new and novel ideas. COCB is crucial for organizational success as it ensures continuous innovation and first mover advantage in the marketplace. Researchers have recently started focusing on antecedents of COCB.

The basic premise around which transformational leaders work is to challenge the status quo. They always provide inspiration to subordinates and individual consideration is given to each subordinate so that he/she can try out new ideas. If new ideas are tried and failed, transformational leaders do not put fear in minds of individuals. Transformational leadership due to its roots in inspirational motivation, individual consideration, and intellectual stimulation, is an ideal leadership style that can encourage employees to champion improvements and new ideas, initiate and implement novel processes, raise voice without any fear, and proactively seek new ways of doing things. In software companies, managers should provide more autonomy, flexibility, and resources to employees so that they can design their tasks according to their own desires.

#### ***Limitations and Future Research Areas***

Data has been collected from software companies only. COCBs are crucial in other industries as well such as hospitality, universities, pharmaceutical companies, automobile industry, and hospitals. Future studies should investigate these relationships in other industries so that generalizability of the study can be established. Moreover, COCBs have been reported by employees themselves. Future studies should take opinions from coworkers and supervisors about COCBs in order to establish robustness of the study as well as to remove personal biasness. Another limitation of the study is about the underlying psychological mechanism. This study considered job crafting as a mediating variable. There are other potential mediators such as psychological empowerment, psychological contract, and personal values and we suggest future researchers to investigate these underlying mechanisms.

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