

## *Sustainable Practices: Organizational Citizenship Behavior and Psychological Contract*

### *Fulfillment*

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### **Abstract**

**Purpose:** Sustainable practices are the modern-day necessities for organizations as the world is becoming highly dynamic. The purpose of this study is to examine the influence of Sustainable Training and Creativity Practices (STP and SCP) on Organizational Citizenship Behavior (OCB-Individual and OCB-Organization) via the mediating role of psychological contract fulfillment (PCF).

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**Design/methodology/approach:** A sample of 326 white-collar Indian service industry employees was collected. The data are analyzed using Mediation (PROCESS HAYES) and Random Forest Regression Supervised Learning (RFRSL).

**Findings:** The findings indicate that Sustainable Training Practices (STP) had an indirect impact on Organizational Citizenship Behavior (OCB-I, OCB-O) via the mediating effect of Transactional (T-PCF) and Relational Psychological Contract Fulfillment (R-PCF). In terms of Sustainable Creative Practices (SCP), the impact on OCB-I was indirect due to T-PCF. In addition, R-PCF acts as a mediator between SCP and OCB-O. In the latter portion of the analysis, the RFRSL approach created a prediction model for T-PCF, R-PCF, OCB-I, and OCB-O, with demographic characteristics such as industry experience, gender, age playing a constructive role.

**Originality:** The study conducts a combination of both traditional and newer technology (machine learning) resulting in highlighting the uniqueness of the relationship between variables and the role of demographic variables.

**Keywords:** Sustainable training practices, sustainable creativity practices, psychological contract fulfillment, transactional, relational, organizational citizenship behavior

## Introduction

In today's dynamic business landscape, fostering a sustainable workforce is paramount for organisational success. A sustainable workforce not only enhances employee satisfaction and retention but also drives productivity, innovation, and brand reputation. This sustainability is achieved through implementing practices that prioritise employee well-being, development, and ethical compliance. One such major practice is “organisational citizenship behaviour” (OCB), as it plays a pivotal role in achieving a sustainable workforce in modern-day organizations. OCB encompasses behaviours such as helping colleagues, sharing knowledge, embracing change, and fostering a positive organisational culture (Spitzmuller *et al.*, 2008; Organ, 2014). When employees engage in OCB, they contribute to a supportive environment where collaboration thrives, innovation flourishes, and adaptability becomes ingrained. The concept of OCB comprises two discrete yet interrelated aspects: OCB-O and OCB-I. Employees who demonstrate OCB-O may also participate in uncompensated activities that enhance the organisation's overall success and efficiency, for instance, showing civic virtue and conscientiousness towards the organisation. Conversely, OCB-I places emphasis on discretionary actions undertaken by personnel within the institution, including but not limited to providing assistance, imparting expertise, mentoring novice staff, and exhibiting compassion towards fellow workers (Spitzmuller *et al.*, 2008; Organ, 2014; Henderson *et al.*, 2020). By integrating OCB into workforce practices, organisations create a culture of reciprocity, trust, and resilience (Cho *et al.*, 2022; Paul *et al.*, 2019). This culture not only enhances employee engagement and satisfaction but also drives customer loyalty and organisational performance. Ultimately, by prioritising sustainable workforce practices and leveraging OCB, organisations can build a thriving ecosystem that benefits employees, customers, and stakeholders alike,

ensuring long-term success in today's competitive landscape. To achieve a sustainable workforce through OCB, organisations must integrate sustainable training and creativity practices. Sustainable training involves fostering continuous learning through programs that promote ongoing skill development and industry awareness (Macke and Genari, 2019; Macini *et al.*, 2022). It also includes initiatives to encourage cross-training and mentorship, facilitate knowledge transfer, and foster a collaborative culture. Utilising sustainable learning platforms, such as eco-friendly online courses and virtual training sessions, further enhances accessibility and minimises environmental impact. Concurrently, sustainable creativity practices involve cultivating inclusive ideation environments where diverse perspectives are valued, supporting innovation channels, and embedding sustainability into projects (Lozano and Barreiro-Gen, 2022; Schaltegger *et al.*, 2022). By empowering employees with flexibility and autonomy to explore new ideas, organisations foster a culture of creativity and ownership. Integrating these practices equips employees with the skills, knowledge, and mindset necessary for OCB, fostering a resilient and adaptable workforce capable of driving long-term success in today's dynamic business landscape. When organisations invest in sustainable training and creativity practices, employees will perceive these efforts as favourable exchanges within the social framework of the workplace. Employees feel a sense of obligation to reciprocate these investments by engaging in OCB, such as assisting colleagues or contributing innovative ideas, as a form of positive reciprocity.

This study posits the concept of social exchange theory, which states that individuals engage in actions based on the principle of reciprocity, expecting mutual benefits from their interactions, and highlighting the role of psychological contract fulfillment (PCF). It comprises the reciprocal commitments, assurances, and anticipations that individuals hold with regard to their positions,

duties, and incentives within the institution (Rousseau, 1990). The PCF comprises trust, loyalty, and the perception of a fair exchange between the employee's effort and the organisation's rewards. Thus, it gets critical to acknowledge that the PC constitutes an implicit understanding that impacts the attitudes and behaviours of both employers and employees rather than a formal, legally enforceable agreement (Rousseau, 1995; Dixon-Fowler *et al.*, 2020; Kutaula *et al.*, 2020). These can be categorised as follows: (1) Transactional Contracts (T-PCF): short-term, specific, and monetizable; (2) Relational Contracts (R-PCF): long-term, general, and more focused on relationship-building (Rousseau, 1990). The term "transactional psychological contract" denotes an employment arrangement in which the employee and the employer primarily rely on brief, tangible, and explicit exchanges. The activities center around distinct objectives, tangible products, and monetary incentives. This particular form of PC is distinguished by its emphasis on transactional elements, including job responsibilities, compensation, and perks. For instance, fair pay in comparison to industry standards also means income according to the level of performance. Where, on the contrary, R-PCF is characterised by mutual trust, reciprocity, and a long-term focus on the socio-emotional aspects of the relationship between the employee and the organisation (Shore and Tetrick, 1994; Wu and Chen, 2015). For instance, an organisation might offer employees mentoring programs, training sessions, and a flexible work schedule to foster their growth and well-being within the company.

When sustainable training and creativity practices are combined with HRM principles, they foster the growth of a workforce that possesses not only the requisite expertise and understanding but also the confidence to engage in innovative thinking and make valuable contributions to the sustainability initiatives of the organisation (Almarzooqi *et al.*, 2019). This comprehensive approach to human capital development underscores the significance of harmonising

competencies, insights, and innovation with sustainability objectives. Over the last decade, HRM scholars have increasingly drawn attention to the challenge to develop more sustainable HRM systems to enhance human sustainability as well as HRM systems that support business organisations in reaching their corporate sustainability goals. Sustainable HRM includes practices that promote employee well-being, diversity, and inclusion, as well as contribute to organisational success while considering societal and environmental impacts. This approach acknowledges the role of HRM in addressing sustainability challenges and advancing organisational objectives in a multidimensional manner (Macini et al., 2022; Aust et al., 2020; De Stefano et al., 2018). In accordance with the overarching goals of sustainable HRM and poised to secure enduring success in the realms of environmental stewardship and sustainability, this theoretical correlation ultimately emphasises the pivotal significance of human capital development and innovation in propelling organisational sustainability.

Bringing notions from the previous studies who are exploring the avenue of training and creativity. Firstly, the studies have majorly focused on exploring the impact of these variables on organisational-level variables like organisational climate and organisational innovation (Bhawna *et al.*, 2019; Chaubey and Sahoo, 2019). The current study posits that moving away from organisational-level variables is crucial from a conceptual standpoint because it allows for a deeper understanding of the individual-level mechanisms driving OCB and sustainable HR practices. Secondly, they have used traditional methodologies to proof their model (Bhawna *et al.*, 2019; Chaubey and Sahoo, 2019; Shah *et al.*, 2021; Tamsah and Ilyas, 2021). Thirdly, the models have not been tested in the Indian context, specifically in the service sector (one of the largest service providers), which, due to its dynamism and disruption nature, necessitates sustainable training and creativity practices (Shah et al., 2021; Tamsah and Ilyas, 2021). By

142 focussing on individual-level constructs such as PCF, STP, and SCP within the Indian context,  
143 the study aims to contribute to the advancement of theoretical frameworks that capture the  
144 nuances of employee behaviour and HRM practices within diverse organisational settings.  
145 Additionally, identifying the impact of demographic variables on the cohesion of sustainable  
146 practices offers a valuable insight into employee behavior. The theoretical value of focussing on  
147 the Indian context lies in its unique socio-cultural and economic dynamics, which may influence  
148 the manifestation and impact of OCB and responsible HR practices. Fourthly, both the variables  
149 have not been cohesively evaluated (Bhawna *et al.*, 2019; Chaubey and Sahoo, 2019; Shah *et al.*,  
150 2021; Tamsah and Ilyas, 2021). Previous literature shows a dearth in exploring the impact of  
151 sustainable training practices as a separate concept rather, researchers have focused on  
152 incorporating it in sustainable HRM practices and their impact (Vihari and Rao, 2018; Sharma *et*  
153 *al.*, 2022; Piwowar-Sulej, 2021b). Though a review analysis done by Piwowar-Sulej (2021a)  
154 shows that training practices are the most important function of sustainable HRM to develop  
155 sustainable organisations, there is a lack of exploration of the direct role of STP on the  
156 behavioural outcomes of the employees. Subsequently, the need for creativity has been  
157 highlighted in previous studies to attain sustainable development goals, but how the impact of  
158 the practice channels is still unclear (Amabile and Pratt, 2016; Liu *et al.*, 2017; Nguyen *et al.*,  
159 2019). Dabić *et al.* (2023) highlight the need for more studies on sustainable HRM and creativity  
160 to better understand the impact on employee growth and creativity. Ren *et al.* (2023) suggest that  
161 the study highlights a deficiency of research in the Indian context, emphasizing the need for  
162 further research on sustainable HRM practices in non-Western settings, given that the majority of  
163 studies on these practices have taken place in Western regions (Ehnert *et al.*, 2016). Therefore,

the research attempts to find the impact of these practices via the psychological construct and address all the gaps highlighted.

This study is divided into two sections: the first examines the function of STP and SCP and their direct impact on employees' PCF. In addition, it examines the mediating influence of PCF on the OCB of employees. The second section focuses on developing a predictive model to establish the role of STP and SCP on T-PCF, R-PCF, OCB-I, and OCB-O.

## **Theoretical Background**

Psychological contract theory (PCT) is a concept derived from Blau's (1964) social exchange theory (SET), which focusses on the unwritten contract between employees and employers. PCT is based on expectations and obligations, whereas SET is a continuous exchange of fulfilling or non-fulfilling these expectations. The fulfilment or breach of these relationships determines expected reciprocity from the other party, i.e., employees (Shore and Tetrick, 1994). Establishing a sustainable framework is critical in incorporating sustainability principles into HR operations. Thus, the implementation of STP and SCP will aid in the fulfillment of the PC, which in turn influences OCB as viewed through the framework of social exchange theory. This conduct encompasses activities that surpass prescribed job duties in order to aid the organisation in its pursuit of sustainability objectives (Piwowar-Sulej, 2021b). This entails the incorporation of sustainable principles into a multitude of HR operations, such as employee development, performance management, and recruitment (Gupta et al., 2023). Assigning sustainability to HRM demonstrates an organisation's dedication to the environment as well as their social



responsibility. In recent years, the focus on sustainable HRM has had a significant impact on employee career growth and the psychological capital of individuals in the Chinese context. Furthermore, at an organisational level, it has been found to have a positive influence on environmental performance (Cheng et al., 2024; Peng et al., 2024).

According to a study conducted by Lu et al. (2023), the outcomes of in-role performance and employee engagement hold significant importance. These practices have significantly enhanced the creativity and entrepreneurial abilities of employees (Dabić et al., 2023). According to Järlström et al. (2024), one of the key themes that emerged was employee development, which aligns with the common good theory. Sypniewska et al. (2023) conducted research that demonstrates the significant improvement of employee satisfaction levels through the incorporation of sustainable HRM development practices and prioritisation of employee well-being. Gupta et al. (2024) have assessed sustainability reports to highlight ongoing sustainability practices based on ESG goals, emphasising their importance in current organisational setups. These practices help to build a strong psychological bond between the organisation and its employees. Regarding reciprocal obligations, the PCT places significant emphasis on the beliefs and perceptions of both parties. Positive PCF, due to the inclusion of sustainable training and creativity, results when employees perceive that the organisation is committed to sustainable HRM (Gupta et al., 2023; Khurshid et al., 2021). This can foster in employees a sense of commitment, loyalty, and trust (Dixon-Fowler et al., 2020).

The SET applies simultaneously, emphasising the reciprocal association between organisations and individuals. Employees are more likely to engage in pro-environmental initiatives,

voluntarily participate in sustainability projects, or advocate for an organisational culture that embraces sustainable innovation when they perceive that sustainable HRM honours their PCs (Organ, 2014; Sharma et al., 2022). Therefore, the fundamental process hinges on the interplay between sustainable HRM practices such as STP and SCP, as well as the fulfillment of the PC; these elements together cultivate confidence, mutual reliance, and dedication. Consequently, this should promote the development of organisational citizenship conduct that is in line with the sustainability objectives of the organisation, thereby establishing a reciprocal cycle of positive outcomes-based. In essence, the fulfillment of the PC is stimulated by sustainable HRM, sustainable training, and creativity practices. This fulfillment, when combined with social exchange theory, impacts the conduct of organisations as citizens in the realm of sustainability.

STP and SCP represent the employer's expected commitments that employees anticipate receiving. The study aims to examine the impact of fulfilling these obligations on the organisation's response behaviour (Rousseau, 1995). However, the impact of either PCT or SET on employee behavioural outcomes has not been examined. The current research aims to bridge the gap between sustainable practices and their influence on citizenship behaviours through the role of PCT.

-----Figure 1-----

As a vital HRM practice, training approaches have established a strong association with meeting employees' expectations in the hospitality industry and what employees anticipate from their employers (Sobaih *et al.*, 2019). Training techniques have been identified as one of the most significant sustainable HRM practices even during times like pandemic that, when applied, help

employees increase their productivity in their personal and professional life and feel more content in their professions (Piwowar-Sulej, 2021a).

PCT helps organisations manage employee expectations. Sustainable training strategies shape these expectations, focusing on industry-relevant skill sets and fostering shared commitment. These initiatives address immediate skill development needs and reinforce the organisation's investment in employees' long-term success. By establishing technical competencies through ongoing training initiatives, organisations signal a commitment to workforce development, fulfilling employee expectations and cultivating trust and loyalty (Agarwal and Gupta, 2018). This supports employees in recognizing their current shortcomings and efficiently addressing them (Ali *et al.*, 2020; Bashir *et al.*, 2021). Therefore, we propose:

H1 (a): STP should have a direct positive impact on the T-PCF of employees.

Moreover, STP not only helps individuals deal with present circumstances, but also prepares them for future endeavors (Matthews, 2019). Continuous identification of the need for training and frequent skill enhancement will increase total employee productivity, thereby satisfying the desire for learning and advancement (Deas and Coetzee, 2020; Piwowar-Sulej, 2021b).

PCT highlights the backgrounding effect of ongoing investments in employee development, which significantly impacts the relational aspect of the contract. Sustained learning opportunities communicate a sense of care and commitment from the organisation towards its employees. Consistently identifying and addressing training needs fosters a supportive and caring work environment, reinforcing the relational dimension of the PC. This proactive approach to training

needs identification and skill enhancement is a powerful mechanism for the continuous fulfillment of the PC, fostering a positive and reciprocal relationship between the organisation and its employees (Jha *et al.*, 2019; Ali *et al.*, 2020). Therefore, we propose:

H1 (b): STP should have a direct positive impact on the R-PCF of employees

SCP plays a crucial role in fostering sustainable growth for businesses and individuals by fostering creative work environments that encourage employees to develop better solutions and provide a competitive edge (Allahar, 2018; Ferreira *et al.*, 2020). Organisations that support these environments, such as those with better management support, have been found to increase employees' creativity, leading to increased job satisfaction and higher productivity (Zubair *et al.*, 2015; Yee *et al.*, 2014). This, in turn, results in improved problem-solving strategies, rewards, and satisfaction of expectations, ultimately enhancing organisational performance and giving organisations a competitive edge and also contributing to the fulfillment of the PC of employees. The PCT provides a valuable lens to understand the dynamics at play, with SCP significantly influencing the implicit expectations and obligations between employers and employees. The provision of psychological empowerment and the freedom for employees to exercise creativity at work aligns with the principles of the PC (Sangar and Rangnekar, 2014). Thus, reflecting the role of SCP in affecting the transactional side of contracts, particularly during challenging times, by granting employees autonomy, which reinforces trust and mutual commitment between employees and the organisation. Integrating SCP into organisational practices not only sparks creativity but also contributes to the positive backgrounding effect within the PC (Jaiswal and Dhar, 2017; Liao and Chen, 2018). Therefore, we propose:

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280 H2 (a): SCP will have a direct positive impact on the T-PCF of employees.

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282 Therefore, the relational aspect of the PC is achieved when employees feel valued and respected

283 by their employers. When organisations consistently encourage and support employees' creative

284 endeavors, a positive backgrounding effect is created within the PCT. This positive

285 reinforcement over extended periods is essential for achieving and maintaining the relational

286 aspect of the PC (Feng *et al.*, 2018; Noble-Nkrumah *et al.*, 2022). Therefore, we propose:

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288 H2 (b): SCP will have a direct positive impact on the R-PCF of employees.

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### 290 ***Effect of OCB***

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292 Employees' OCB are positively impacted by training and development activities in the banking

293 industry (Jehanzeb, 2021). This development perspective encourages the growth of employee

294 OCB, which has mediated the relationship between training and employee performance in the

295 education industry (Kadarningsih *et al.*, 2020).

296 To effectively manage human resources, STP involves identifying employees at the individual

297 level, evaluating their talents, and providing adequate training and development opportunities

298 fostering meaningful employee engagement with their job responsibilities (Piwowar-Sulej,

299 2021a). These nuanced training methods stimulate helpful behavior among employees, leading to

300 enhanced workplace governance, cooperative attitudes, and enthusiastic assistance in improving

301 operational efficiency within the organisation (Pradhan *et al.*, 2020; Mi *et al.*, 2019).

Consequently, it is hypothesized that self-assured executives who recognize a high level of sustainable practices may exhibit an optimal degree of citizenship behavior.

Therefore, we propose:

H3 (a): STP will have a direct positive impact on the OCB-I of employees.

Also, STP, which includes processes like periodically detecting training needs of staff and establishing various learning methodologies such as face-to-face seminars, courses, and Intranet-based training, serves as a catalyst for shaping employees' perceptions and behaviors. Employees exposed to such training initiatives may perceive their employers and managers, who oversee and implement these practices, as agents of the organisation. Consequently, influenced by SET, individuals may reciprocate the perceived organisational investment in their development by exhibiting OCB towards the organisation. This could manifest in actions such as actively participating in organisational initiatives, offering constructive suggestions for improvement, or volunteering for additional responsibilities. Thus, STP not only enhances employees' skills and knowledge but also fosters a sense of loyalty and commitment, prompting them to contribute positively to the organisation's welfare as a form of appreciation for the benefits derived from the training approaches implemented by the organisation.

Therefore, we propose:

H3 (b): STP will have a direct positive impact on the OCB-O of employees.

A study conducted by Obiora and Okpu (2015) in the hospitality industry showed that an environment that supported creativity led to higher levels of OCB in employees. When managers and organisations go beyond their roles to support their employees than based on SET, employees will respond by taking extra care of the organisation, i.e., beyond their role, such as OCB (Cop *et al.*, 2020). Thus, SCP develops a sense of trust between the employers and employees as the employees feel that they are being encouraged to take steps or propose their ideas for situations (Marques, 2016; Liao and Chen, 2018). When managers and employers develop such an environment employees feel more associated and responsible towards their work and thus will indulge in reciprocation of trust gained by them by showcasing their care and help towards other individuals of the organisation (Pitaloka and Sofia, 2014). Therefore, we propose:

H4 (a): SCP will have a direct positive impact on the OCB-I of employees.

In addition, the concept of SCP places emphasis on the acknowledgement granted by organisational leadership to personnel who exhibit creativity and demonstrate proactive behaviors in response to proposed ideas. This strategic approach is closely connected with the ideas of SET, where the reciprocal dynamics of acknowledgment and reward play a crucial role. The intentional acknowledgment by leaders not only acts as a motivating factor that drives employees towards productive actions for the organisation, but also creates a deep cognitive connection that leads to the internalization of a stronger sense of responsibility for the overall success of the entity (Cai *et al.*, 2020). Based on this, we suggest the following hypothesis:

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349 H4 (b): SCP will have a direct positive impact on the OCB-O of employees.

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351 ***Mediating role of PCF***

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353 The term "PCF" refers to the concept that one party in a mutually established relationship

354 between two parties meets the expectations of the other party in a manner consistent with their

355 expected levels. This expectation fulfillment is a reciprocal process, with both parties striving to

356 meet each other's expectations to establish a mutually beneficial and enduring relationship, as

357 posited by SET theory (Conway and Coyle-Shapiro, 2012; Kutaula *et al.*, 2020). The fulfillment

358 of these implicit expectations leads to an increased sense of trust and perceived support from

359 management, resulting in improved levels of both employee and organisational performance, as

360 indicated by recent research (Noble-Nkrumah *et al.*, 2022).

361

362 PCF has mediated diverse relationships between employees' expectations and desired

363 organisational outcomes, such as between HRM practices, organisational justice, perceived

364 organisational support, ethical leadership, training, mutual trust, change management such as

365 change information, work status, organisational career management, integrated communication,

366 and the outcomes such as increased OCB levels, organisational commitment, job satisfaction,

367 employee well-being, intention to leave, and sustained organisational performance (e.g., Sobaih

368 *et al.*, 2019; Deepa and Baral, 2021; Ahmad *et al.*, 2018; Alcover *et al.*, 2021).

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The present study posits that the implementation of PCF can mediate the relationships between STP and SCP on one hand, and both in-role (OCB-I) and extra-role (OCB-O) behaviors on the other. This proposition is based on previous research which suggests that PCF can foster an unconventional perspective towards the organisation among employees, owing to the autonomy and reinforcement provided to them (Jaiswal and Dhar, 2017).

#### *PCF vs STP*

Employees have unique PCs that reflect their values and factors. Organisations must focus on developing these PCs to foster short-term and long-term contracts. STP can play a significant role in accelerating this process by providing customized training programs, inhibiting autonomy, learning curves, career development, and continuous improvement (Susosmith, 2020; Savarimuthu and Rachael, 2017). Once the PC is fulfilled, employees can participate in extra-role behaviors towards their organisation and individuals (Hussein, 2022; Karatepe *et al.*, 2021). STP focuses on skill enhancement and skill level understating, developing training programs accordingly (Martín Gómez *et al.*, 2023). The concept of upskilling, as addressed in the paragraph, further exemplifies the role of SET. When organisations fulfill employees' expectations regarding skill development, a sense of mutual benefit is established. In the context of SET, this fosters a positive social exchange where employees, feeling valued and invested in, are motivated to reciprocate through altruistic behaviors and courteous actions.

By addressing these expectations, organisations can help employees fulfill their short-term expectations and engage in extra-role behaviors in return to their organisations (Brunetto *et al.*, 2017). Therefore, we propose:

H5 (a): T-PCF will positively mediate the relationship between STP and OCB-I of employees.

The evaluation of individual training needs and the execution of upskilling programs by an organisation demonstrate not only a deep attention to the comprehensive development of its employees but also instigate a mutually beneficial relationship consistent with SET. By upholding the SET principles, the organisation creates a foundation for reciprocal advantage by fulfilling its responsibilities to improve the skills and knowledge of its employees. Consequently, this acts as a highly effective encouragement, stimulating staff members to respond with increased levels of involvement and valuable contributions towards the goals of the organisation (Latorre et al., 2015). Hence, we posit the following hypothesis:

H5 (b): T-PCF will positively mediate the relationship between STP and OCB-O of employees.

The implementation of a STP can facilitate the acquisition of both soft and hard skills, leading to personal and professional development that meets the employees' expectations for growth (Ahmad *et al.*, 2018). The guidance provided by mentors, managers, and team leads can foster strong relationships between the involved parties, promoting employee engagement and incentivizing the reciprocation of the benefits gained through the STP's with subordinates and peers, thus reinforcing the employees' commitment to fulfilling their side of the bargain.

According to the tenets of SET, by fostering a network of exchange, the organisation and its employees not only strengthen their relationship, but also initiate a positive feedback cycle in which adherence to the PC stipulations becomes an intrinsic aspect of the corporate culture.

Therefore, we propose:

H5(c): R-PCF will positively mediate the relationship between STP and OCB-I of employees.

Creating a work environment that offers training and development opportunities can instill a sense of belonging in employees, meeting their expectations and fostering long-term relationships with the organisation (Ahmad *et al.*, 2018).

The potential for such initiatives to elicit a reciprocal reaction from employees exists, compelling them to demonstrate an increased level of dedication to the organisation. Consistent with the principles of SET, the organisation strategically endeavors to cultivate a supportive atmosphere that inspires employees with a sense of duty. Consequently, this responsibility motivates individuals to take an active role, advocating for and progressing the organisation's overarching goals and objectives as a demonstration of their mutual dedication.

Consequently, we propose:

H5 (d): R-PCF will positively mediate the relationship between STP and OCB-O of employees.

*PCF vs SCP*

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438 Firms today encourage inventive, creative, and innovative work behavior due to the  
439 unpredictable environment (Noble-Nkrumah *et al.*, 2022). SCP aims to enhance creativity and  
440 problem-solving skills in employees, fostering an environment where they are encouraged to  
441 bring new ideas and receive recognition and compensation. This work behavior contributes to  
442 employee empowerment and motivates them to go above and beyond their duties (Mitchell and  
443 Walinga, 2017; Rahi, 2021). By strategically motivating and judiciously rewarding employees  
444 for their work attitudes, employers foster an environment that is conducive to the development of  
445 OCBs and engage in an advanced level of social exchange. The intentional allocation of  
446 resources towards the welfare of employees, as stated by Amabile and Pratt (2016), functions as  
447 a bi-directional according to the principles of SET. Through the provision of such opportunities  
448 and interventions, the organisation not only fosters a culture of employee engagement and  
449 empowerment, but also fortifies long-lasting interpersonal connections. This advanced  
450 methodology not only generates immediate advantages but also lays the groundwork for  
451 enduring dedication and reciprocal behaviors, in accordance with the tenets of SET over an  
452 extended period of time. Therefore, we propose:

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454 H6 (a): T-PCF will positively mediate the relationship between SCP and OCB-I of employees.  
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456 Employees possess the anticipation of exercising independence and authority within their  
457 professional spheres. When individuals are empowered to make decisions and take proactive  
458 measures to address immediate challenges, a complex dynamic emerges that is influenced by  
459 SET. Autonomy delegation functions as a mechanism for mutual benefit exchange within the

context of the psychological employment partnership. When employees perceive this empowerment, they subsequently develop a sense of obligation towards the organisation, as stated by SET. By virtue of being granted autonomy, this sense of reciprocal commitment is fostered, which in turn creates a profound bond in which employees perceive themselves as having an obligation to dedicate their loyalty and discretionary effort to the organisation.(Amabile and Pratt, 2016; Ahmad *et al.*, 2018). Therefore, we propose:

H6 (b): T-PCF will positively mediate the relationship between SCP and OCB-O of employees.

By demonstrating trust and offering substantial support to their staff, employers demonstrate their dedication to fulfilling the mutual obligations outlined in the PC. By establishing an environment that promotes creative expression and conducts business with integrity, employers inspire employees to participate in activities beyond their designated responsibilities and cultivate a sense of reciprocity within the organisation. This form of involvement surpasses the limitations of individual involvement, exerting a constructive influence and effecting change on other constituents of the institution. The complex interaction among trust, reciprocity, and innovative motivation reflects the fundamental principles of SET. According to this theory, an organisation's investment generates a reciprocal dedication from its members, motivating them to surpass their designated responsibilities in service of the organisation as a whole (Feng *et al.*, 2018). Therefore, we propose:

H6 (c): R-PCF will positively mediate the relationship between SCP and OCB-I of employees.

The systematic implementation of SCP within an organisation establishes a cognitive contract between the employee and the organisation. The cognitive contract, which is grounded in the tenets of SET, functions as a psychological comprehension that motivates employees to engage in activities that not only promote personal development but also yield substantial benefits for the organisation as a whole. Based on the principles of SET, consciously adopting SCP cultivates a mutually beneficial association in which employees are motivated to engage in actions that improve the organisational milieu in return for the organisation's dedication to fostering creativity (Phuang and Takahashi, 2020). Therefore, we propose:

H6 (d): R-PCF will positively mediate the relationship between SCP and OCB-O of employees.

## **Methodology**

### ***Participants and Procedure***

This survey was done with a sample of 326 Indian service industry white-collar employees. The sample size has been calculated according to Kline's sample size calculator, wherein he suggests for a 20:1 sample size to parameter ratio making it suitable for ML estimation in SEM. Secondly, the dataset was collected in COVID times. Average participant age was 32.18. Men made up 69.6% of the population, while females made up 30.4%. Google forms were used to gather data for the training, creativity, PCF, and OCB variables in this study. The analysis needed fundamental understanding of Statistical Package for the Social Sciences (SPSS), AMOS, Microsoft Excel, Python, and Google Collab. The data set was collected in .xlsx file. The information was collected in India from a cross-industry sample. When analyzing the sample, the

environmental variable was maintained as the baseline constant. Given that the dataset was gathered during the COVID-19 pandemic, the stress, dynamism, and volatility of the environment remained consistent across all service-based industries.

The main objective of this study was to provide an examination of the model proposed in the experimental design. By utilizing a smaller dataset and employing learning techniques we aimed to analyze individual behavior in comparison to larger datasets (Nagaraja and Revathi, 2023). The advantage of using smaller datasets is that they enable us to identify correlated variables that can offer essential context for understanding the relationship between two variables. These two approaches together contribute to making the study more conclusive. Additionally, the random forest regression technique can effectively manage noise, outliers, and interactions between variables, it is very useful for finding individual behavior in small datasets. By creating several decision trees and averaging their results, it may produce reliable forecasts even with sparse data. This enhances the model's accuracy and generalizability while reducing overfitting, which makes it a good fit for small dataset analysis.

### ***Experimental design***

The current study uses the following steps:

1. First, the data is collected and is being prepared for SPSS for analysis.
2. In the next step, a variety of statistical techniques, including reliability analysis, correlation analysis, regression analysis is conducted on the complete data set.
3. Then, to test the theoretical model, path analysis and structural equation modeling (SEM) is conducted to help define the links between the variables.

4. In the next step, using AMOS, Mediation (PROCESS HAYES-Model 4) is performed on the dataset, to specifically understand the role of PCF variable.

5. Lastly, as Mediation and Structural Equation Modeling (SEM) approaches focus on discovering broad or general links, they may miss smaller and more complex relationships within the model. In order to overcome this, the RFRSL approach was utilized to emphasize these relationships.

### ***Measures***

*Independent variables:* The study measured organisation's STP used scale from Barrena-Martinez *et al.* (2019). It is a 4-item scale. Items were rated on 5-point Likert scale ranging from 1 (never) to 5 (always). Another dependent variable, i.e., SCP was measured Amabile and Gryskiewicz (1989). It is a 5-item scale formulated from a combination of two sub-dimensions, i.e., "Recognition" and "Creativity supports" from the scale. Items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). A five-point scale was used rather than seven-point scale for two reasons. Firstly, it makes it easier to compare our findings with other studies. Secondly, using a small scale can help improve the response rate and quality of the answers while reducing any frustration or confusion, for the respondents (Marton-Williams, 1986).

*Mediating variable:* The PCF scale, adopted from Liu *et al.* (2020), is an 8-item Likert scale with sub-dimensions T-PCF and R-PCF, ranging from 1(very dissatisfied) to 5(very satisfied).



*Dependent variable:* Henderson *et al.* (2020) developed the OCB scale, a 6-item Likert scale rated on a 5-point Likert scale from 1 (never) to 5 (always), examining organisational and individual characteristics.

### ***Statistical analysis***

#### *Path analysis and Covariance based-Structural Equation Modeling (CB-SEM):*

Path analysis is a technique that extends the regression model. Its purpose is to evaluate how the correlation matrix aligns, with causal models that are being compared by the researcher (Garson, 2008). Typically, these models are represented using a diagram with circles and arrows where headed arrows indicate causation. Similar to regression path analysis relies on assumptions. It is especially sensitive, to how the model's specified because omitting causal variables or adding unnecessary variables can greatly impact the path coefficients. These coefficients are used to assess the significance of direct and indirect paths leading to the dependent variable. On the other hand, by enabling individuals to investigate the relationships between latent variables—that is, unknown but conjectured variables—SEM both integrates CFA and expands path analysis. Two or more measurable variables are connected to every latent variable (Streiner, 2004). Consequently, every latent variable function as a mini-CFA unto itself, evaluating the small hypothesis that the variables under observation are, in fact, the quantifiable expressions of the latent one. The fact that SEM can account for the correlations between the measured variables—which serve as a measure of their reliability—provides an additional advantage. As a result,

measurement error-free relationships between the latent variables are reflected in their real correlations.

*Mediation (PROCESS HAYES 4):*

Hayes (2012) states that a mediation model explains the manner in which one or more possible intervening factors, or mediators (M), influence a dependent variable (Y) in relation to an independent variable (X). A lot of the analytical issues behavioral scientists interested in doing a mediation, moderation, or conditional process analysis commonly face are covered by PROCESS, a freely accessible computational tool for SAS and SPSS. With the X, M, and Y variables defined as per the instruction, SPSS is instructed to estimate an unmoderated mediation model using the model = 4 specification (Hayes, 2013). A bootstrap confidence interval for the indirect effect using 5,000 bootstrap samples is requested by the specification boot = 5000 (1,000 is the default for models with indirect effects). For indirect effects, PROCESS automatically produces bias-corrected confidence intervals (Efron, 1987; Efron and Tibshirani, 1995). The percent option can be used to get confidence intervals based on percentiles. Multiple mediators between X and Y running in parallel are permitted under ordinary (i.e., non-bootstrapping) PROCESS model 4.

*RFRSL technique:*

In "Random Forest Regression," several decision trees are used to predict continuous outcomes in a regression-style manner. In order to minimize overfitting and increase forecast accuracy,

each decision tree is trained on a different subset of the data. The final prediction is then derived by averaging the predictions of each individual tree.

"Random Forest Regression" is an exploratory technique that can reveal complicated links in the data. First, in order to evaluate the stability of the outcomes derived from the random forest analysis, robustness checks were carried out. To make sure our model applies well to fresh data, we have also cross-validated it. In order to provide context and guarantee that the results are not merely the result of chance or endogeneity, we have addressed the theoretical foundations of the correlations found by the random forest analysis.

For regression problems, a machine learning approach called Random Forest Regression is employed. It is an ensemble approach that predicts using several decision trees (Tzenios, 2020). Each tree in Random Forest has a random subset of characteristics chosen for it, and each node in the tree is split using the best split feature from that subset. This enhances the model's overall performance by producing a diversified range of trees that are not significantly connected with one another (Genuer and Poggi, 2020). The ability of Random Forest Regression to handle high-dimensional data and a large number of characteristics without overfitting the model is one of its main advantages. In order to comprehend the relative significance of every feature in the dataset, it additionally offers a feature importance measure. It can also handle both numerical and categorical data, and be applied to both regression and classification problems.

## **Results**

### ***Reliability Analysis***

The reliability analysis of the overall scale developed for the model is 0.931. Individual scales were tested for reliability. Cronbach's  $\alpha$  coefficient for STP is 0.834, for SCP came out to be 0.919, again T-PCF was 0.926, R-PCF was 0.915, OCB-I was 0.743, and lastly, OCB-O was 0.843. The internal consistency of all the variables was more than 0.7, indicating good reliability (Gliem and Gliem, 2003).

-----Table 1-----

### ***Correlation Analysis***

Correlation analysis defines the relationship between two variables (Goodwin and Leech, 2006). The results of the correlation analysis are represented in table 2. All the relations between the variables came out to be correlated. Then, the reliability and validity of the model were tested by conducting path analysis and SEM in the next phase.

-----Table 2-----

### ***Path Analysis and SEM***

The proposed model was established based on theoretical understanding and tested using structural equation modeling (SEM) using AMOS 23.0. SEM is a robust multivariate statistical tool that helps unravel complex relationships between constructs. The study used the maximum likelihood approach, which is a factor-based approach. SEM analysis involved path analysis and confirmatory factor analysis (Asosega *et al.*, 2022). The goodness of fit indices was acceptable and excellent, with CMIN/DF equaling 2.2, CFI 0.95, RMSEA 0.06, and PClose 0.07 are

explained in table 3. The model's validity and reliability were confirmed through path analysis and SEM (Figure 2).

-----Table 3-----

-----Figure 2-----

### *Summary of mediating effects*

In complex behavioral and psychological constructs, different variables have different roles. Those variables are antecedents, consequences, mediators, moderators. Mediators affect the relationship between two variables (an antecedent and a consequence) (MacKinnon *et al.*, 2007). In the following section, the study determines how PCF mediates the relationship between STP, SCP and OCB. The study has segmented the role of PCF into two, i.e., transactional, and relational. To determine the mediating role of T-PCF and R-PCF between STP, SCP, and OCB-I, OCB-O, Hayes process 4.0 was conducted in SPSS 25.0. Table 4 depicts the summary of mediating effects and the loadings of the model. The table could be evaluated as, for the case of T-PCF mediating between STP and OCB-I: The direct effect of STP on OCB-I came out to be insignificant ( $\beta=0.1390$ ,  $p>0.01$ ). The direct effect of STP on T-PCF was significant ( $\beta=0.4441$ ,  $p<0.01$ ). The total effect is  $0.1390+0.0933= 0.2323$ . For mediation to be significant, the bootstrapped CI values (BootLLCI=1.1555, BootULCI=2.0102) should not include zero. The direct effect of STP on OCB-I was insignificant, but the indirect effect (with T-PCF) was significant, which means that this is a case of full mediation. Further in case of partial mediation,

both direct and indirect effect are significant and in case of no mediation, direct effect is significant. Table 5 shows the combined results of hypotheses.

-----Table 4-----

-----Table 5-----

### ***Limitations of SEM and Mediation model:***

SEM evaluates the model holistically, ignoring the significance of the individual connections. The fact that the link is tested using the researcher's presumptions and knowledge is one of the important problems (Raman and Pramod, 2021). The method finds it harder to understand when faced with more complicated content. The fact that PROCESS can only be used to analyze dependent variables (Y) that are appropriately modeled using logistic regression or OLS, i.e., continuous (or roughly so) or binary outcomes, is perhaps its most evident constraint. It does not include any approaches for modeling multicategorical outcomes or categorical mediators correctly (Hayes, 2012).

### ***RFRSL Technique***

Compared to the conventional technique, which overlooked the important roles played by the variables because it was unable to understand the complexity of the data, the prediction technique paints a clearer picture (Wang and Zhang, 2020). RFRSL is a prediction algorithm. It is a collection of classifiers that have outperformed all the other classifiers. The functionality of the forest technique is that it collects the output of all the decision trees and then yields the best

result. This technique increases the predictive power and makes the model faster (Tarsha *et al.*, 2021).

In this section, the study discusses the RF technique that segments the data into two segments, 50% for “training” and 50% for “testing” the data. Figure 3 contains the actual and predicted data with a high level of accuracy. A random forest regressor was used instead of another regressor as it can understand the hidden relationships despite the complexity of the data (Hammou, 2019). The resultants T-PCF, R-PCF, OCB-I, and OCB-O yielded predictive models with the accuracy of 98%, 98%, 98% and 96% respectively, where every data item was taken as input.

Results are depicted with accuracy ( $R^2$  value) in table 6. Each "Y" shows how they are the results of the combination of different "X." The results show what variables (along with demographic variables) affect the results of T-PCF, R-PCF, OCB-I, and OCB-O. The developed predictive models can anticipate the determinants with the provided data set.

-----Figure 3-----

-----Table 6-----

## Discussion

The results are consistent with ongoing research on STP and SCP that emphasises the importance of aligning training programs and fostering a sustainable creative environment with employee development and organisational goals. Firstly, the incorporation of feedback mechanisms within training programs emerges as pivotal not only for enhancing employee motivation but also for

facilitating progress tracking. This aligns with SET, as employees reciprocate organisational efforts to provide them with constructive feedback by actively engaging in learning and development initiatives (Gupta et al., 2023). Additionally, the emphasis on promoting diversity and inclusion in training initiatives resonates with SET, as employees reciprocate the organisation's commitment to creating inclusive environments by demonstrating increased engagement and creativity (Dagar et al., 2022; Kraak and Griep, 2022; Susomrith, 2020). Furthermore, the emphasis on workspace design and its role in fostering creativity underscores the importance of organizational investment in conducive work environments (Loewenberger, 2013).

The current study strengthens the understanding that employees actively engage in OCB when PCF mediates STP and SCP, demonstrating a robust relationship between them through the concept of SET. According to SET and PCT, employees reciprocate such investments by engaging in OCB through sustained commitment and innovative contributions. The PCT posits that T-PCF fosters a sense of obligation and trust, boosting employee satisfaction. It also emphasises the importance of fair treatment and equity in maintaining a positive psychological contract. It also suggests that R-PCF fosters deeper emotional bonds and long-term commitment to the organisation, fostering a sense of belonging and mutual respect. Also, encouraging creative work through praise and rewards is in line with SET principles, since employees respond to praise for their creative work by continuing to be innovative and dedicated, as Luu (2023) and Song et al. (2019) both point out. Cross-disciplinary collaboration emerges as another key driver of sustainable creativity, breaking down silos and fostering diverse perspectives. This collaborative ethos resonates with SET, where employees reciprocate organizational efforts to encourage collaboration by contributing diverse ideas and perspectives. Finally, the emphasis on



training programs aimed at enhancing creative thinking skills and fostering a cultural environment that supports risk-taking and experimentation highlights the interconnectedness of sustainable initiatives. In summary, the reviewed findings not only contribute to advancing our understanding of sustainable learning and creativity within organisations, but they also offer insights into the reciprocal relationship between organisational investments in these areas and employees' willingness to contribute positively, thus enriching our understanding of organisational effectiveness and success in light of SET principles.

Furthermore, STP and SCP, when mediated by PCF, positively impacted OCB within the framework of the SET and PCT, creating a mutually beneficial relationship to both the employee and employer sides. Suggesting a strong dedication to sustainability can improve employees' sense of purpose and identification with the organisation, resulting in a greater willingness to voluntarily contribute to the organisation's objectives. According to SET and PCT, the clear connection between effort and reward motivates employees to engage in positive reciprocal activities. T-PCF helps manage and align employee expectations with organisational deliverables, reducing frustration and enhancing positive relationships. PCT adds to the emotional attachment of employees to the organisation, which is bolstered by the R-PCF, which in turn encourages them to exhibit helpful behaviours. Organisations benefit from increased OCB, while employees feel valued and supported, fostering a positive work environment. This synthesis aligns with the core principles of SET, which emphasise the interdependence of social exchanges in shaping organisational dynamics and employee behaviours. This study highlights the significant mediating role of PCF in the relationship between STP and OCB towards both the organisation and the individual. STP does not directly impact employees'

OCB, but when mediated by PCF, it has a significant positive effect. Thus, showcasing that employee training programs that fulfill both the transactional and relational PCs of employees have a positive impact on their OCB. Employees who undergo STP become aware and perceive that their organisation has invested in their development, resulting in enhanced relationships with the organisation and their peers. This is consistent with prior research on sustainable practices, which emphasises reciprocity and employee-centric training programs, thus enhancing their psychological wellbeing (Dagar *et al.*, 2022; Kraak and Griep, 2022; Xerri *et al.*, 2022; Susomrith, 2020).

SCP and OCB were mediated by T-PCF and R-PCF and had a significant positive impact. T-PCF leads employees to turn to their colleagues for support, as they feel that helping others is a way to reciprocate their organisation's investment in their creativity and decision-making abilities. This sense of obligation, reward, and autonomy for being creative motivates them to encourage others to behave in the same way (Jaiswal and Dhar, 2017; Griep *et al.*, 2017). R-PCF mediates the relationship between SCP and OCB towards the organization, motivating them to engage in activities that demonstrate their commitment to the organisation. The study underscores the significance of cultivating a work environment that nurtures individual creativity, serving as an organization's SCP and aiding in upholding employees' long-term commitments. In addition, the focus on creating a conducive work environment for individual creativity is crucial in fostering an organisational context that values innovation. SCP, which encourages idea generation, experimentation, and innovation, contributes to this environment. Organisations investing in these practices represent a "give" in the social exchange relationship, as employees are more likely to reciprocate positive actions with positive behaviours, such as increased creativity and

OCB. Employees who appreciate the organisation's commitment to sustaining creativity are more likely to engage in discretionary behaviours beyond their formal roles, contributing to the overall success of the organisation. SCP also fulfill employees' psychological contracts, as they perceive this investment as a commitment to their professional growth and well-being. This fulfillment enhances the social exchange dynamic and motivates employees to contribute to the organisation through OCB, such as helping colleagues, contributing to team projects, or suggesting improvements in processes. Therefore, a supportive and creative work environment is crucial in promoting both types of employee citizenship behaviours. Creating an environment that nurtures employee development and creativity helps establish a long-term relationship with employees, providing them with psychological safety, comfort, and care.

The pathways of digitalization and sustainable practices intersect in addressing the issue of ensuring a sustained supply of skilled workers in the industry (Nayal et al., 2021). The research methodologies employed in this study yielded consistent findings that highlight the importance of sustainable training and creative practices in positively influencing both the psychological and citizenship processes of employees. We applied path analysis, SEM, and mediation techniques to provide a comprehensive development of citizenship processes, while the RFRSL method offered valuable insights into the precise combination of components needed to understand psychological and citizenship behaviours.

The study uses machine learning techniques to overcome the limitations of traditional statistical analyses such as SEM, as well as artificial intelligence and machine learning to help organizations transition to a digitalized era. These tools enable organizations to analyse the

demands of existing employees, providing insights into the essentials needed to attract new employees. This approach helps organisations stay ahead of data-driven trends and make informed decisions about employee recruitment, attraction, cost reduction, and more (Gulliford and Dixon, 2019; Ben-Gal, 2019; Gupta et al., 2024). The study also investigates the impact of gender on the T-PCF construct, showcasing the potential of these analytical tools for improved strategies and well-informed human resources decisions. Studies by Birtch et al. (2016) have highlighted the crucial importance of understanding how men and women perceive pay differently. Various industry types, such as public and private, shape an employee's psychological perception of their work environment. Demographic factors, such as age, gender, and industry types, can help classify and analyse employee behaviour within an organisation. The study emphasises the importance of various components that aid in employee retention, such as treatment, work environment, and professional growth. Organisations must recognise the significance of intangible components in ensuring employee sustainability, which can provide a competitive edge in attracting and retaining employees (Surpur *et al.*, 2022; Gamage and Wickramaratne, 2022). By retaining employees, organisations can save on the costs of rehiring and those incurred due to the non-availability of trained individuals in projects.

## **Conclusion**

Research has suggested that employees are more likely to display commitment to their organisation when managers engage in sustainable activities such as performance reviews, identifying training needs, and sharing knowledge (Wu and Chen, 2015; Harrington and Lee, 2015). Furthermore, short-term creative support or assignments tend to elicit employee help

towards their colleagues or individuals, while long-term support for a creative work environment encourages employees to act in ways that are beneficial for the organisation, thereby improving its overall performance. These findings have significant implications for managers seeking to cultivate a productive and committed workforce.

### *Theoretical implications*

An integrated perspective, based on the SET, can enhance the ongoing discussion on sustainable HRM and OCB. This synthesis explores the interdependent connection between sustainable practices, specifically STP and SCP, and employees' engagement in OCB, with a particular emphasis on the mediating influence of PCF (Olya *et al.*, 2021). SET draws upon sustainable practices, considering them as valuable resources that are exchanged between the organisation and its employees. Sustainable HRM initiatives, particularly in training and creativity, are viewed by the organization as investments that stimulate a positive social exchange dynamic. Based on the principles of SET, individuals respond to positive actions by reciprocating with positive behaviours. Given this situation, it is probable that employees who recognise the importance of sustainable practices will participate in OCB as a means of reciprocation.

The mediating mechanism of PCF is crucial in comprehending the impact of sustainable practices on social exchange relationships. The PC, which refers to implicit expectations between employees and the organisation, is satisfied when sustainable practices are in accordance with these expectations. This sense of fulfillment further enhances the social exchange relationship, as employees experience a feeling of reciprocity and dedication to exceed their formal

responsibilities within the organisation. This integration makes a substantial contribution to the current knowledge base in multiple ways (Baruch and Rousseau, 2019). It enhances the comprehension of social exchange dynamics, offering a context-specific perspective for the implementation of SET in current organisational difficulties. The relationship between sustainable HRM and OCB, which is influenced by PCF, enhances the understanding of SET literature by explaining the internal mechanisms through which sustainable practices impact employee behavior. The comprehensive approach to Sustainable HRM, which includes training and creativity practices, acknowledges the complex nature of sustainable initiatives and their influence on different aspects of employee behaviour (De Prins, 2011).

### *Managerial implications*

Any organization adopting a change must ensure it will foster growth and enhance their overall performance, efficiency, efficacy, and sustainability (Chams and Gracia-Blandon, 2019). Over the past three decades, studies have been dedicated to identifying measures that can help in achieving long-term goals by implementing a more "human" approach (De Waal, 2020). And, a more "human" approach doesn't necessarily mean that any actor, i.e., the employee or the organisation, needs to compromise at any level, it is about reaching towards a common path to achieve goals that are cohesively beneficial. In order to achieve this, the role of the intermediary, i.e., the manager, needs to be creative in selecting the approach because the major challenge is to strike a balance between the employee and the organisation. Therefore, the more the manager understands what motivates and encourages employees to contribute to the organization, the more they can approach achieving balance.

872

873 From an employee perspective, offering STP and SCP demonstrates that an organisation is not  
874 solely concerned with employee performance but also values the individual contributions that  
875 each employee brings. Such practices enable employees to enhance their competitive advantage  
876 in their current organisation or in any other organisation, while also feeling motivated and valued  
877 when they feel that the organisation is actively taking care of their future. On the other hand,  
878 from an organisational perspective, incorporating sustainable practices into the work  
879 environment can reduce costs at multiple levels, including recruitment, rehiring, and losses  
880 incurred due to employee attrition (Gamage and Wickramaratne, 2022). Furthermore, when  
881 employees feel secure in their work environment, they are more likely to perform additional  
882 work without prompting and with full motivation. When both parties perceive the adoption of  
883 STP and SCP as a mutually beneficial situation, it leads to a sustainable organisation with a  
884 healthy, motivating, and supportive work environment that provides a competitive edge to all  
885 stakeholders. Overall, the incorporation of sustainable practices into an organisation's talent and  
886 career management strategies can foster an environment that values and invests in employees,  
887 resulting in increased employee motivation, reduced turnover, and improved organisational  
888 outcomes (Huseynova, 2022).

889

890 Furthermore, the practical implications of this comprehensive viewpoint provide practical  
891 approaches for organizations seeking to improve OCB through sustainable HRM initiatives. By  
892 integrating sustainable practices that meet employees' expectations and fulfill their PC,  
893 organisations can promote a more sustainable and engaged workforce, thereby fostering a  
894 positive social exchange dynamic. Essentially, this comprehensive viewpoint not only enhances

the theoretical depth of SET but also offers a practical structure for organisations aiming to navigate the convergence of sustainable practices, social exchange dynamics, and employee behaviours in the changing landscape of modern workplaces.

### *Societal implications*

In contemporary times, all establishments strive to achieve sustainability, and in the process, they endeavor to integrate the United Nations Sustainable Development Goal 8 (The 17 goals, 2022), which aims to facilitate sustainable economic growth through the promotion of dignified employment opportunities. Therefore, if an entity incorporates strategies to foster decent work conditions based on the principles of sustainability, it can contribute to a better future, enhanced mental health and overall well-being, create a more contented society, and ultimately engender sustainable economic growth (Cop *et al.*, 2020).

### *Limitations and Future scope*

There are certain limitations and potential avenues for future research that should be noted with respect to this study. Firstly, the study was restricted to the Indian context, and in the future, the framework could be applied in different cultural contexts to gauge its relevance and applicability. Secondly, while the study focused on the relationship between training and creativity, further empirical investigations could incorporate other sustainable HRM practices, such as those pertaining to sociological and psychological perspectives, including justice, equality, work-life balance, and compensation (De Prins, 2011). Additionally, it would be beneficial to explore the



same variables from an employer's perspective, thereby highlighting potential implementation and understanding gaps. Thirdly, it would be insightful to examine the study through the lens of various sustainable theories, such as the top management perspective, resource-based view, ROC model, among others (Järlström *et al.*, 2018; De Prins, 2011; De Prins, 2014). Lastly, it would be valuable to test the mediating effects of PCT with other variables of the employee-employer relationship, such as perceived organisational support, mutual trust, and role, and to examine the role of Relational-Leader Member Exchange in achieving sustainable HRM goals (Lee, 2020; Kim *et al.*, 2018).

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1479 **Figures**

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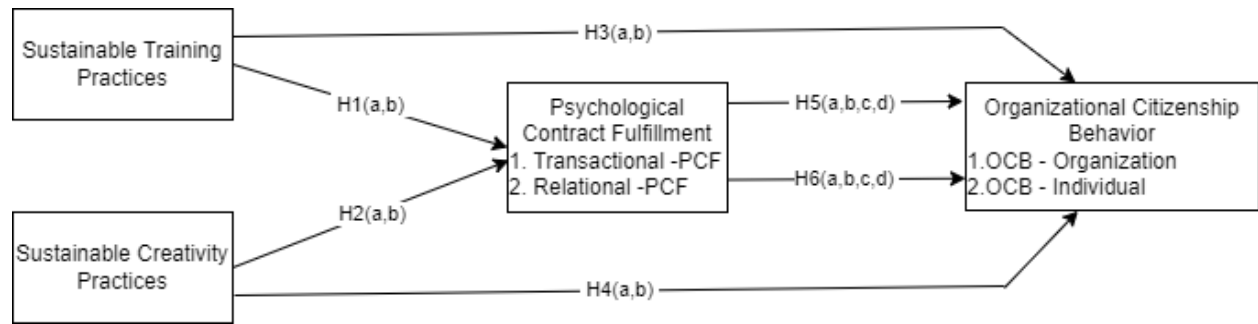


Figure 1: Theoretical Background

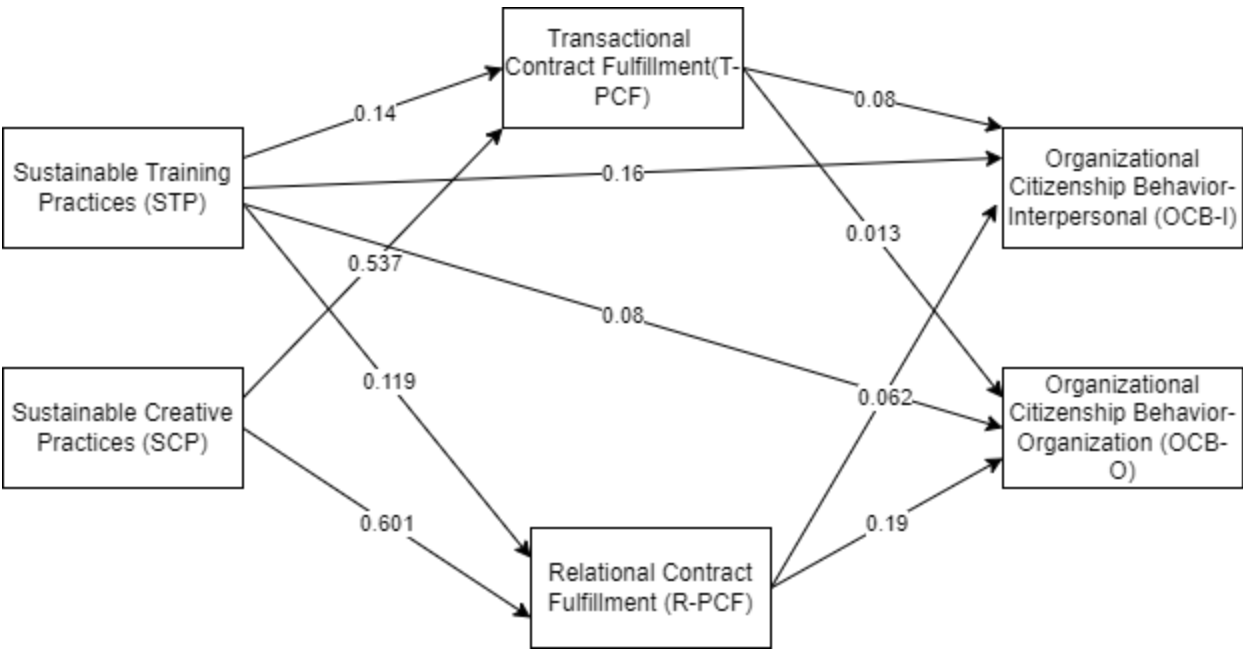
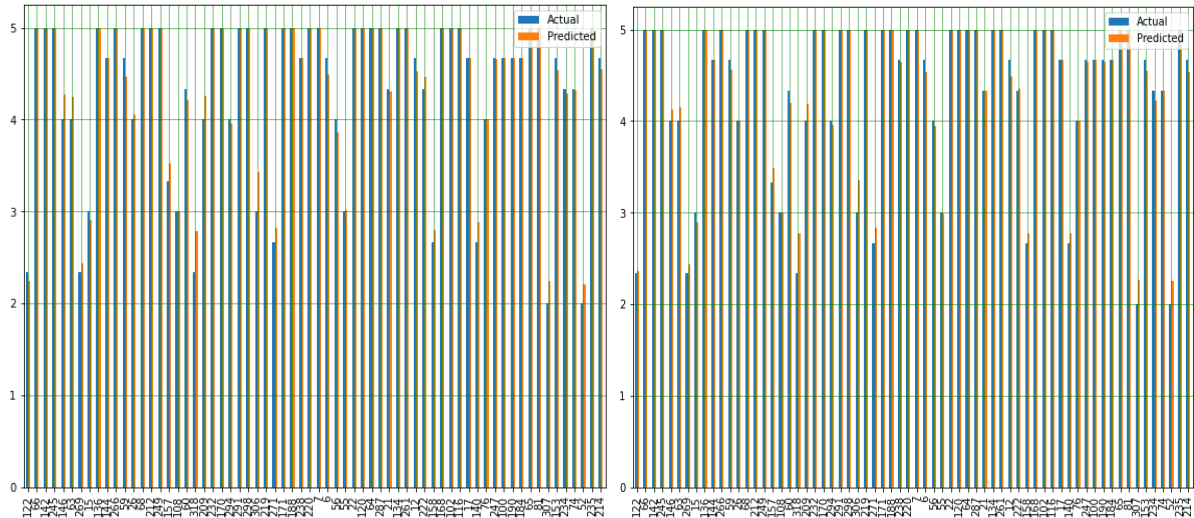


Figure 2: Path Analysis and Structural Model



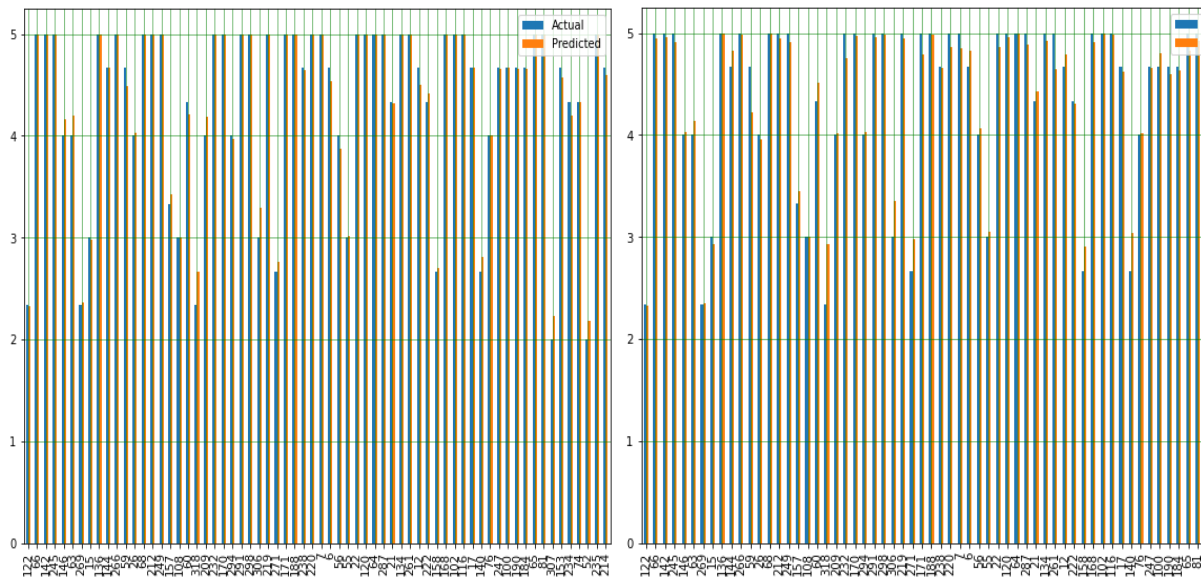


Figure 3: Actual Vs. Predicted data

1514 **Tables**

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Variables	Items	Cronbach alpha
<b>STP</b>	4	0.834
<b>SCP</b>	5	0.919
<b>T-PCF</b>	4	0.926
<b>R-PCF</b>	4	0.915
<b>OCB-I</b>	3	0.743
<b>OCB-O</b>	3	0.843

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Table 1: Reliability Analysis

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	<b>STP</b>	<b>SCP</b>	<b>T-PCF</b>	<b>R-PCF</b>	<b>OCB-I</b>	<b>OCB-O</b>
<b>STP</b>	1					
<b>SCP</b>	0.551**	1				
<b>T-PCF</b>	0.396**	0.555**	1			
<b>R-PCF</b>	0.438**	0.607**	0.750**	1		
<b>OCB-I</b>	0.240**	0.338**	0.301**	0.272**	1	
<b>OCB-O</b>	0.230**	0.314**	0.245**	0.288**	0.474**	1

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Note: \*\*P&lt;0.001, indicating a significant level

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Table 2: Pearson correlation matrix of each variable

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Measure	Estimate	Threshold	Interpretation
<b>CMIN</b>	467.898	--	--
<b>DF</b>	211	--	--
<b>CMIN/DF</b>	2.2	Between 1 and 3	Excellent
<b>CFI</b>	0.95	>0.95	Acceptable
<b>RMSEA</b>	0.06	<0.06	Acceptable
<b>PClose</b>	0.07	>0.05	Excellent

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Table 3: Model fit

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Mediating variable	Independent Variable	Dependent Variable	Direct Effect ( $\beta$ ) ( $p < 0.01$ )	Indirect Effect ( $\beta$ ) ( $p < 0.01$ )	Total Effect	BootL LCI	BootUL CI	Mediation
T-PCF	STP	OCB-I	0.1390	0.4441*	0.2323	1.1555	2.0102	Full
T-PCF	STP	OCB-O	0.1439*	0.3957*	0.2098	0.0193	0.1204	Partial
R-PCF	STP	OCB-I	0.1447	0.4382*	0.2323	0.0351	0.1434	Full
R-PCF	STP	OCB-O	0.1173	0.4686*	0.2098	0.0333	0.1678	Full
T-PCF	SCP	OCB-I	0.2263*	0.5874*	0.3089	0.0240	0.1477	Partial
T-PCF	SCP	OCB-O	0.2214*	0.5874	0.2703	-	0.1138	No
						0.0108		
R-PCF	SCP	OCB-I	0.2503*	0.6130	0.2503	-	0.1318	No
						0.0084		
R-PCF	SCP	OCB-O	0.1899	0.6130*	0.2703	0.0034	0.1688	Full

Table 4: Summary of Mediating Effects

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Hypotheses	Effect	Accepted/Rejected
H1(a): STP should have a direct impact on the T-PCF of employees.	0.4441*	Accepted
H1(b): STP should have a direct impact on the R-PCF of employees	0.4686*	Accepted
H2(a): SCP will have a direct impact on the T-PCF of employees.	0.5874*	Accepted
H2(b): SCP will have a direct impact on the R-PCF of employees.	0.6130*	Accepted
H3(a): STP will have a direct impact on the OCB-I Of employees.	0.2323	Rejected
H3(b): STP will have a direct impact on the	0.1439	Rejected

OCB-O Of employees.

H4(a): SCP will have a direct impact on the OCB-I of employees. 0.3089\* Accepted

H4(b): SCP will have a direct impact on the OCB-O of employees 0.2214\* Accepted

H5(a): T-PCF will mediate the relationship between STP and OCB-I of employees. 0.0933\* Accepted

H5(b): T-PCF will mediate the relationship between STP and OCB-O of employees. 0.0658\* Accepted

H5(c): R-PCF will mediate the relationship between STP and OCB-I of employees. 0.0876\* Accepted

H5(d): R-PCF will mediate the relationship between STP and OCB-O of employees. 0.0924\* Accepted

H6(a): T-PCF will mediate the relationship between SCP and OCB-I of employees. 0.0826\* Accepted

H6(b): T-PCF will mediate the relationship between SCP and OCB-O of employees. 0.0488 Rejected

H6(c): R-PCF will mediate the relationship between SCP and OCB-I of employees. 0.0586 Rejected

H6(d): R-PCF will mediate the relationship between SCP and OCB-O of employees. 0.0804\* Accepted

\*P<0.01

Table 5: Summary of Hypotheses

Y	X (Predictors)	Root Mean Square Error	R <sup>2</sup> Value
T-PCF	Gender+IT+STP+SCP+R-PCF+OCB-I+OCB-O	0.124	0.981
R-PCF	Gender+STP+SCP+T-PCF+OCB-I+OCB-O	0.106	0.986
OCB-I	CO+IT+STP+SCP+T-PCF+R-PCF+OCB-O	0.093	0.989
OCB-O	STP+SCP+T-PCF+R-PCF+OCB-I	0.166	0.966

Table 6: Predictor table