



Do distributive and procedural justice matter in the services sector? Exploring the role of intrapreneurs

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ARTICLE INFO

Keywords:
Distributive
justice, procedural
justice,
intrapreneur,
innovative work
behavior

ABSTRACT

This study looked at how innovative work behavior is affected by procedural and distributive justice. In addition, the study looked at how intrapreneurial personality affects each aspect of justice and innovative work behavior. This study evaluated the moderating role of intrapreneurial personality in the connection between the component of justice and innovative work behavior in the Pakistani services industry using a questionnaire survey method. To test the hypothesis and investigate the moderating role, SPSS has utilized hierarchical regression. The findings demonstrated a significant correlation between innovative work behavior and distributive and procedural justice. In addition, their relationship is significantly and positively altered by the intrapreneurial personality. Later, the study concludes by discussing implications and present future directions.

Introduction

Innovation has become integral to organizations' sustainability in the contemporary business environment. Therefore, to sustain an uncertain and volatile business environment, organizations look to address possibilities and opportunities for reaching innovation (Shah et al., 2022). Keeping up with the change through innovation will allow organizations to compete and flourish in difficult times—distressed economic and fluctuating business conditions. Organizations can keep their existence in the business environment when they use innovation as an integral component of their

operations. Innovation cannot be achieved in delusions. Therefore, when organizations adopt fairness, they tend to achieve innovativeness.

The notion of fairness in organizations refers to the concept of organizational justice. Organizational justice indicates a person's perception of the reward fairness offered by the organization. Literature has identified four dimensions of justice in an organization, but most of the studies have been conducted considering three organizational justice dimensions. The two most studied dimensions are procedural justice and distributive justice. Colquitt (2001) mentions that procedural justice means the

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Received 4, Oct 2022;

Received in revised form 12, Oct 2022

Accepted 13, Oct 2022

The material presented by the authors does not necessarily represent the viewpoint of the editor(s) and the management of the Khadim Ali Shah Bukhari Institute of Technology (KASBIT) as well as the authors' institute.

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implications of the perceived fairness of the procedures and means used for determining resource allocation. In contrast, distributive justice is about perceived fairness regarding organizational resource allocation. Justice theorists have suggested that when an organization is likely to be deemed fair, employees are likely to be engaged in those beneficial activities, such as innovative work behaviour.

Albert Einstein famously said, "we cannot solve the problem with the same thinking we used when we created them". Hence, employees require different thinking levels to generate creative ideas and propose innovative solutions to be innovative. In other words, keeping conventional ways of problem-solving and processes to reach solutions will lead organizations nowhere, and their problems will hinder success (Salam & Senin, 2022). It is also argued that employees who possess entrepreneurial skills are idea generators and think outside the box. Therefore, organizations have realized they can harness competition by building entrepreneurial capabilities in their employees. It has made intrapreneurs an eye-catcher for business growth and accomplishing innovative goals. Intrapreneurs are enablers of innovation by portraying corporate entrepreneurial skills. Organizations are now making their way by recognizing the value of intrapreneurs and making the most of it.

Literature shows that the relationship between organizational justice and innovative work behaviour is studied at the group level. Accordingly, it still lacks a clear understanding of how distributive justice and procedural justice are linked with innovative work behaviour at the individual level. Additionally, previous studies implicitly assumed that intrapreneurs are enablers of innovativeness. However, its role as a catalyst for innovative work behaviour is less established by far. Therefore, in this study, we focus on innovation at the individual level within the service sector organizations. Correspondingly, it sought to find how procedural and distributive justice impact innovative work behaviour and how intrapreneurial personality moderates the relationship between them.

Literature Review

Innovative work Behavior and its determinants

De Jong (2010) described innovative work as "individual" behaviours aimed at initiating and purposefully introducing novel and helpful ideas, processes, products, or procedures within a work role, group, or organization. It is a multifaceted work behaviour that entails developing, promoting and implementing novel ideas meant for a particular work function, group, or organization to enhance organizational performance (Janssen, 2004). The three stages of innovative work behaviour occur sequentially (Scott & Bruce, 1998). At each step, individuals may participate in any or a mixture of these distinct behaviours at any given time. When employees have new ideas on existing work-related difficulties, they must obtain support for implementing ideas through idea promotion. However, they also expect new ideas to be implemented by applying them to their work, group or organization to complete the entire work process of innovation (Janssen, 2004).

According to De Jong & Den Hartog (2010), innovative behavior generally entails offering novel solutions, sharing one's knowledge with others, and approaching the issue in novel ways. Other examples of innovative behavior include considering issues with existing working methods, people's unmet needs, or signs of shifting trends. In contrast to creativity, which typically involves developing, applying, and creating new ideas, creativity involves more than just creativity. More and more businesses are attempting to increase employee innovation at work to survive and thrive in an environment that is becoming ever more turbulent and complicated. The role of a group or organizational climate in predicting innovative behavior has been the subject of previous research. They have demonstrated a positive correlation between innovative working behavior and a work environment that is perceived as supportive, mentally empowering, and full of smooth communication. Following our research, our goal was to determine whether employees' innovative working practices are influenced by humble leadership at various levels (Janssen, 2004; Scott and Bruce, 1998).

According to De Jong & Den Hartog (2010), if an organization wants to keep the flow of individual innovations going, it needs to make sure that employees are willing and able to innovate. As a



result, the factors that influence creative behavior at work have been pinpointed by researchers. The overview of these determinants conveys the scope of the research conducted in this area. However, there is still a lack of research in this area. There are four categories of factors that influence creative behavior at work. Individual, job, relationship, and organizational are the categories. Individual characteristics can influence innovative work behavior.

Researchers believe that personality is an aspect of individual characteristics that enable innovative work behavior. One of the personalities discussed in the literature is the intrapreneur personality. Amo and Kolvereid (2005) discussed that intrapreneur employees are more involved in innovative work behavior than those without such personalities. Another personality discussed in the literature is proactive (Seibert et al., 2001). It is argued that innovative work behavior is influenced by the same employee's proactive behavior (Åmo & Kolvereid, 2005; Seibert et al., 2001). Since innovation is considered an extra role, proactive employees are more likely to perform innovative work behavior (Seibert et al., 2001). It is also discussed that the cognitive features of an employee influence innovative work behavior. Such as, higher-educated employees display more innovative work behavior (Janssen, 2000). As well as these individual characteristics, like, as problem-solving style (Scott & Bruce, 1998), learning goal orientation (Bouwhuis, 2008), self-efficacy (Michael et al., 2011), and employability (Shipton et al., 2006), also influence innovative work behavior. However, it is also argued that individual characteristics do not solely influence individual innovation. It may be affected by the perception regarding outcomes and risks of the performance (Yuan & Woodman, 2010).

Organizational factors, especially climate and strategy, are given attention in the literature. It is argued that organizational factors develop employee perception to enhance innovative work behavior because these factors signal the extent to which the organization supports innovation. For example, it is discussed that when organizational climate supports innovation, employees perform more innovative work behavior (Bos-Nehles & Veenendaal, 2019). Besides, it is also discussed that individual behavior toward innovation can also be stimulated by rewards (Ramamoorthy et al., 2005). From this, it may also be assumed that distribution and reward allocation procedures may significantly impact innovative work behavior.

Considering antecedents of innovative work behavior and analyzing the factors, this study incorporates intrapreneurship from individual factors and justice from organizational factors. The comparative side of innovative work behavior is widely used in manufacturing (Bos-Nehles & Veenendaal, 2019). However, the service sector still demands more research (Li & Hsu, 2016).

Organizational Justice

The concept of justice is over sixty years old (Rowland & Hall, 2012). However, Greenberg's (1986) workplace description of justice led to the concept of organizational justice. According to Greenberg (1986), "to test principles of justice in general social interaction, not organizations in particular" is the definition of organizational justice. Theorists and academics could differentiate between two primary types of justice—procedural justice and distributive justice—in later years when this idea remained in the discussion for many years. Distributive justice in an organization is fairness regarding outcomes and results. However, procedural justice is persistent fairness in reaching results or outcomes or procedural transparency.

Homans (1958) defines organizational justice as how individuals perceive their time and effort invested in the business. Organizational justice is thought to be linked to motivation and has been systematized, according to Homans' conceptualization (Homans, 1958). An individual feels justified when the investment and reward ratios are balanced to achieve performance. On the other hand, people become aware of injustice and are dissatisfied when the reward-to-input ratio does not match. Homans (1958) also emphasized that people try to lower the cost of joining a connection with other members of an organization while simultaneously maximizing the profits from that connection. As a result, a definition of justice can be derived from an individual's expectation regarding the distribution of rewards and inputs between individuals and organizations (Özkan, 2022). Social exchange theory-based research on organizational justice has initially focused on input and (Rice & Luse, 2022; Zhou et al., 2022) performance equity with a primary focus on distributive justice. Their research has been primarily concerned with distributive justice.

As a consequence, Rowland (2012) regarded organizational structure, promotions, and wages as indicators of an organization's internal justice. As defined by Greenberg in 1986, distributive justice is the degree to which members believe that



organizational decisions are made fairly. In other words, distributive justice examines how well an organization compensates its members for their time, money, and effort.

Adams (1965) says that even though people's result-to-input ratios are typically comparable to others to some extent, it could be considered unfair if they are significantly different. Recent research has demonstrated that members' conceptions of justice influence the method and procedure for determining distribution and compensation (Lee et al., 2015). As a result, procedural justice issues have been emphasized. Procedural justice is the degree to which members perceive the methods to allocate compensation fairly. The allocation of compensation, the organization's decision-making procedure, and the method by which their presence is identified are all essential for organizational involvement, according to Greenberg (1993). Consequently, procedural justice is more closely associated with procedure and objective than distributive justice.

Intrapreneurial personality

People's personalities, experiences, and backgrounds are all unique. It may explain why individuals respond differently to diverse stimuli and the same stimulus. Personality dimensions are traits, and personality is defined as a reasonable, stable personal characteristic in a particular setting. A recurring theme is that people are motivated, given meaning, and guided by their personalities. There are several personality traits and environmental factors that are thought to have an impact on intrapreneurship (Hernández-Perlines et al., 2022). Proactivity is one of these personality traits. According to Rivera (2017) and Pinchot (1985b), very few academics believe that people are fundamentally proactive and want to influence their surroundings. This behavior is driven by their desire to learn and develop. According to Pinchot (1985a), the individual plays a significant role in implementing organizational innovation, as stated by several authors (Amo and Kolvareid, 2005). They suggest that the individual should have the freedom and motivation to locate organizational opportunities to advocate for novel products and processes.

An intrapreneur is a bouncy, active, and persistent internal change agent who initiates action rather than reacts to circumstances. Proactivity is one of the characteristics of intrapreneurship, according to Pinchot (1985b). According to Pinchot (1985b), intrapreneurs are motivated by action. Furthermore, Neessen et al. 2019, proactivity and entrepreneurship

share characteristics like a desire to influence the environment, according to Pinchot (1985a). An intrapreneur, as defined by Pinchot (1985b, 1985a), is someone who works both within and outside the system to realize their vision and is skilled at persuading others to support that goal. Rivera (2017) says it aligns with the personal disposition toward proactive behavior in that it tries to figure out how different people affect their environments differently.

Intrapreneurs are valuable as they make innovative ideas to fruition by leading from the bottom (Bogatyeva et al., 2022). They make it happen by having the capability to balance creativity with analysis (Rivera, 2017). It is also discussed that the initial innovation stage (i.e., idea generation) demands more creative and intuitive thinking. In contrast, the later stage (i.e., idea implementation) requires rational thought and execution (Olson & Bosserman, 1984; Rivera, 2017). Intrapreneurship has been studied as an individual construct in literature extensively. However, it is not widely determined as a catalyst for innovative work behavior. The role of intrapreneurial personality as a moderator of innovative work behavior is less established by far.

Hypotheses development

Organizational justice is considered a vital motivational factor for employees to decide whether to depict a particular behavior or not (Colquitt & Rodell, 2011). If a feeling of unfair treatment exists, employees may not find it obligatory to perform the task effectively (Akram et al., 2016), and their contribution to work will decrease. Since innovative work behavior is individually driven, it requires a motivational drive (Agarwal, 2014; Biswas & Kapil, 2017) to perform an extra-role behavior (innovative work behavior), and organizational justice serves as the drive to regulate it. Therefore, organizational justice may influence it either positively or negatively.

There are numerous dimensions in which the distribution rules differ. They differ in the elements that are considered essential to the distribution of justice (income, capital, assets, work, health, and utility, to name a few) and the essence of the distribution beneficiaries (individuals, groups, and comparison classes, to name a few) and on what basis (equality, maximization, based on individual characteristics, free transactions, to name a few) the distribution can be made (Colquitt & Rodell, 2011). The distribution of economic benefits and burdens among employees in an organization is the primary



focus of this study. In social psychology, distributive justice is defined as the perceived fairness of distributing rewards and costs among group members (Colquitt & Rodell, 2011). For instance, group members will believe that the organization lacks distributive justice if some employees work longer hours but receive the same pay. The people have always looked to their community's behavioral norms (group and departmental norms) to assess if there has been distributive justice. In compliance with distributive justice, groups receive rewards or punishments according to predefined organizational criteria.

The concept of procedural fairness has also been extended to non-legal domains in which a machine is used to settle a dispute or to separate rewards or burdens. For example, theorists and practitioners have adopted the concept of procedural justice in organizational behavior. These theorists have studied procedural justice with in the context of the organization (Greenberg, 1993). Besides, the traces of procedural justice (or fairness of procedures in an organization) can also be found in social psychology, economics, and social behavior. Literature compares procedural justice to distributive justice (fairness in

influence how people perceive procedural fairness (Colquitt & Rodell, 2011).

Oftentimes, innovation processes are often controversial as they pose a serious threat to corporate interests and generate inevitable competition between firms. As per the study by Li & Hsu (2016), innovative workers can process their constructive ideas to other people involved procedurally and ensure their fair solution. In addition, procedural justice is also considered to influence employees' perceptions of a relationship's duration with an organization. On the other hand, when assessing distribution fairness, employees consider the balance between the effort they expect in the future and the rewards they will receive in addition to their ongoing efforts and rewards. Using social exchange theory, Colquitt (2011) states that applying fair procedures and distributing resources may influence the employee's perception of justice in an organization, particularly as a credible exchange partner. Therefore, as long as fairness (between employee and organization) is maintained, employees are likely to ensure that the organization corrects ongoing distributive unfairness and restores a fair rate of return for long-term efforts.

the distribution of privileges or resources) and retributive justice (fairness in the punishment of wrongs), which is defined as the equity and accountability of the procedures under which judgments are reached. To achieve fairness and ensure that a procedure can be regarded as procedurally correct, it may be deemed necessary to evaluate both distributive and procedural aspects. Prior research in procedural justice found that equal practice contributes to reasonable outcomes even when distributive or restorative justice conditions are not met. Literature has suggested that better interpersonal experiences frequently encountered during achieving justice are the source of fairness in procedures. These experiences have been shown to have a greater impact on the sense of equity throughout the dispute. Researchers have found that studies at the individual level have received significantly more attention than studies at the group level in the extensive literature on procedural fairness (Pan et al.,2018). As a result, numerous academics have deduced from the literature that procedural justice fosters innovative work behavior and other positive organizational work behaviors. Additionally, it is argued that the organization's procedural justice-related policies, procedures, and processes will

Using the lens of social exchange theory (Cook et al., 2013), several empirical studies have shown that when employees feel that the organization is reasonably rewarding their work, they are more creative in responding to higher-level job needs and showing the highest responses to stress (such as anxiety and burnout). In case of violation of the procedures and fairness in the distribution, the reciprocation is negative; it does not include creativity or avoidance of innovativeness and is experiencing moderate to high stress. Others referred to innovative work behavior and reported that fair distribution and procedural justice were positively associated with favorable employee behavior. However, literature is very scant, featuring exchange relationships among facets of justice, including procedural and distributive justice, when examining the relationship between innovative work behavior and justice perceptions.

Concerning the discussion mentioned above, this study proposes that:

H1: Procedural justice will relate positively with IWB in services sector organizations in Pakistan.



H2: Distributive justice will relate positively with IWB in services sector organizations in Pakistan.

In most cases, intrapreneurs are highly motivated individuals who possess particular skill sets, leadership abilities, and an innovative vision that others in the company can support. Even though intrapreneurs may have their "day job" and regular responsibilities in addition to their new venture, they are willing to take certain risks and interpret market trends to envision the next steps that a company may require to innovate or remain competitive.

Most workers innovate their responsibilities; usually, they adopt one of the two streams to improve—either bringing incremental improvements or adjustments. However, both streams lead to solving the problem or overcoming obstacles employees are experiencing performing routine tasks. Instead, self-employed entrepreneurs surpass usual trends, become more reactive, and even exceed self-control. Instead, domestic (in-house) entrepreneurs are pretty relatable to independent entrepreneurs. That is, to benefit their current organization through innovation, they exhibit similar behaviors and adopt identical actions to independent entrepreneurs (Ilonen & Hytönen, 2022).

For this reason, in-house entrepreneurs seek opportunities that benefit the entire organization, not just one job. Following the study of Augusto and Rodrigues (Janssen, 2004), they actively seek to empower, create new value for customers, and motivate new businesses to work, thus supporting ground-breaking bottom-up innovation. Entrepreneurs have an innate incentive to try new products, services, production, or management techniques. Similarly, in-house entrepreneurs, termed intrapreneurs, consciously think outside of their responsibilities or outside of their position to create new business platforms for their organizations in the current situation.

Employees with strongly intrapreneurial characteristics usually think of themselves as intelligent, knowledgeable, and in charge of their jobs (Pinchot, 1985). These employees consider themselves independent and self-worthy, manage their roles, and treat circumstances as compatible with their optimistic self-images and prospects (Tuncdogan et al., 2017). They will thoroughly update their characteristics to fulfill daunting demands and play a significant role in creating innovative solutions, demonstrating innovative working methods, and boosting the current goods and services status with novel ideas (Lukes & Stephan,

2017). Employees with strong intrapreneurial personalities are more likely to take advantage of opportunities and create a sense of responsibility for generating innovative ideas (Yariv & Galit, 2017). Research has also shown that highly intrapreneurial employees persevere in creating and implementing innovative solutions to give companies more pathways and help them achieve their innovative goals, which helps the company meet its growth targets.

In comparison, low intrapreneurial personality in employees appears to feel inexperienced, less able to cope with problems, and unable to control their performance (Yariv & Galit, 2017). They prefer to experience new risks and expect additional challenges and psychological pressures in their work. Thus, innovative solutions (generating and implementing novel ideas) are less likely to be developed and introduced by low intrapreneurial personalities.

Therefore, concerning the discussion mentioned above, this study proposes that:

H3: Intrapreneurial personality positively moderates the relation between IWB and procedural justice in a way that employees with high intrapreneurial personality intensify the relation mentioned above.

H4: Intrapreneurial personality positively moderates the relation between IWB and distributive justice in a way that employees with high intrapreneurial personality intensify the relation mentioned above.

Methodology

The study is quantitative, and a cross-sectional design has been used to collect data using the pen-and-paper questionnaire survey method. The data has been collected using convenience sampling techniques from professionals working in different services sector organizations in Karachi, Pakistan. To begin with, a pilot study comprised 60 respondents; based on feedback from the pilot study, some modifications were carried out before distributing questionnaires for further analysis. The modifications were made to the construct items' language, layout, and instructions to fill out the questionnaire. All the improvements were made with experts' consultation, including two professors from academia, two language specialists, and two research experts (in Karachi). The final version of the questionnaire was approved by all experts unanimously.



The questionnaires were sent to 850 individuals. The inclusion criteria were (1) employed in the services sector, (2) holds full-time employment status, (3) have at least completed 1 year in the current organization and have received one performance appraisal, and (4) at least holds a graduate degree. The respondents were asked to answer close-ended questions about demographics (i.e., gender, age, experience), procedural justice, distributive justice, intrapreneurial personality, and innovative work behavior. Care has been taken in a controlled fashion to input data into a spreadsheet. Questionnaires were dropped due to (1) incompleteness (e.g., 20 questionnaires) (2) following a specific pattern (e.g., 9 questionnaires), and (3) marking multiple options where only an option is required (e.g., 17 questionnaires). Later, multivariate outlier detection tests based on Mahalanobis D2 and leverages (Herdiani et al., 2019) were also conducted, which did not identify any inconsistent cases. After a thorough screening, 704 questionnaires were considered for further analysis.

The items for procedural justice consist of 7 items, and distributive justice consists of 4 items. Items for procedural and distributive justice were adopted from Colquitt (2001). Intrapreneurial personality was measured through a 12-item scale adapted from Amo and Kolvereid (2005). The innovative work behavior was assessed using a 9-items scale developed by Janssen (2004). All items were measured using a 5-point Likert scale.

Data Analysis

At first, in SPSS 25 (IBM, Armonk, NY, USA), Exploratory factor analysis (EFA) was conducted considering maximum likelihood (Cudeck & O'Dell, 1994; Herdiani et al., 2019) and Promax (oblique rotation) (Fabrigar et al., 1999) to identify whether each research item load on the respective construct. Items had an eigenvalue greater than 1, and factor loading greater than 0.5 was retained (Kaiser, 1974). In EFA results, all items met the decided threshold and were loaded in their respective constructs. Kaiser-Meyer-Olkin (KMO) and Bartlett test of sphericity were considered to validate item loadings on their respective measures. The results of KMO scores were high and were in the acceptability range;

similarly, Bartlett's test scores were also highly significant and within the acceptable range.

The current study data was collected on a self-report using a cross-sectional design; therefore, common method variance (CMV) may exist (Lindell & Whitney, 2001). Potential bias can be reduced by employing procedural and statistical remedies (Podsakoff et al., 2012). Procedural remedies were already taken before collecting data, like assuring confidentiality and anonymity (Podsakoff et al., 2012) and using previously validated scales as they are less sensitive to potential bias (Doty & Glick, 1998). To adopt a statistical remedy, Harman's single-factor test was conducted (Podsakoff et al., 2003) in SPSS. The result showed that only 18.83% of the covariance is explained by the single fixed factor below the threshold of 50% (Kutner et al., 1996). In addition to Harman's single-factor test, a common latent factor (CLF) (Conway & Lance, 2010) was also conducted in AMOS. The result of CLF revealed that there is a 2.25% of common variance below the threshold of 50%. Hence, CMV is not a critical threat for further analysis.

Next, in AMOS 24, Confirmatory factor analysis (CFA) was carried out with each construct's convergent and discriminant validity to analyze whether the measurement model is statistically significant for further analysis. The CFA outcome exhibited that $\chi^2 = 1345.87$, $df = 331$, goodness-of-fit index (GFI) was 0.91, comparative fit index (CFI) was 0.91, Standard RMR (SRMR) was 0.04 and root mean square error of approximation (RMSEA) was 0.05. Hence, the obtained values fit well between latent variables and their measures (Hu & Bentler, 1999). The convergent and discriminant validity was calculated following procedures recommended by Fornell and Larcker (1981). Similarly, composite reliability (CR) and Cronbach's alpha (α) were also considered to establish the model's validity and reliability. The results of the reliability analysis showed that the composite reliability (CR) and Cronbach's alpha values were greater than the threshold of 0.7 (Fornell & Larcker, 1981); likewise, the average variance extracted (AVE) values were also greater than the threshold of 0.5 (Hair et al., 2019) signifying convergent validity.



Results

Table 1 contains the demographic profile of the respondents.

Table 1 Demographic Profile

Variables	Dimensions	Frequency
Gender	Male	532
	Female	172
Age	20-24 years	150
	25-29 years	362
	30-34 years	138
	35-39 years	32
	40-44 years	20
	45 and above	2
	Experience	Less than 2 years
2-4 years		112
5-7 years		39
8-10		18
Above 10 years		12
Marital status	Single	120
	Married	169

Table 2 indicates descriptive statistics, Mean and Standard Deviation (SD). The mean score of Procedural justice (PJ) indicates that on a scale of 5, the average score of the respondents is 3.11, and the

mean score of Distributive justice (DJ) is 3.45. Likewise, the mean score for Innovative work behavior (IWB) and Intrapreneurial personality (IP) is 3.43 and 3.24, out of 5, respectively. Similarly, the standard deviation for PJ is 0.71, DJ is 0.85, IWB is 0.80, and IP is 0.67.

Table 2: Descriptive statistics

	Mean	Std. Deviation
PJ	3.11	0.71
DJ	3.45	0.85
IWB	3.43	0.80
IP	3.24	0.67

Table 3 shows Pearson correlation, AVE, CR, Discriminant validity, and Cronbach's alpha values. The Pearson correlation, in Table 3, shows that the magnitude of all variables is between low and moderate, and the direction of the relationship is positive. Each variable is positively related to one another in a low to moderate manner, and all correlations are significant at a 0.01 level (2-tailed). In addition, Table 3 also shows the values for the average variance extracted (AVE). All values of the

variables are greater than the threshold of 0.5 (Hair et al., 2010), signifying convergent validity. In addition to that, Table 3 shows the values related to composite reliability (CR) and Cronbach's alpha (α) which are greater than the threshold of 0.7 (Fornell & Larcker, 1981). Also, the square root of AVE is shown diagonally, confirming the Discriminant validity. It is noted that the convergent and discriminant validity was calculated following procedures recommended by Fornell and Larcker (1981).



Table 3: Correlation, AVE, CR, and Cronbach's alpha

	PJ	DJ	IP	IWB	AVE	CR	α
PJ	0.72*				0.53	0.89	0.72
DJ	0.55**	0.74*			0.56	0.84	0.79
IP	0.44**	0.44**	0.74*		0.56	0.93	0.82
IWB	0.46**	0.48**	0.58**	0.71*	0.51	0.90	0.88

** Correlation is significant at 0.01 level (2-tailed); * Sq. root of AVE

Source: Data collected by the author

Regression analysis using SPSS was conducted to test the first hypothesis. Table 4 represents the effect of procedural justice (independent variable) on innovative work behavior (dependent variable). The result indicates that procedural justice significantly

predicts innovative work behavior ($\beta = 0.52$, $t = 14.04$, and $p < 0.001$). Besides, the overall model is statistically significant, $R^2 = 0.21$, $F(1, 702) = 197.31$, $p < 0.001$. Therefore, hypothesis 1 is supported.

Table 4: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	1.794	0.120		14.992	0.000
PJ	0.525	0.037	0.468	14.047	0.000
F			197.319		
R Square			0.219		
Adjusted R Square			0.218		

a. Dependent Variable: IWB

Source: Data collected by the author

Regression analysis using SPSS was conducted to test the second hypothesis. Table 5 represents the effect of distributive justice (independent variable) on innovative work behavior (dependent variable). The result indicates that distributive justice predicts

innovative work behavior ($\beta = 0.454$, $t = 14.743$, and $p < 0.001$). Besides, the overall model is statistically significant, $R^2 = 0.23$, $F(1, 702) = 217.35$, $p < 0.001$. Therefore, hypothesis 2 is supported

Table 5: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	1.863	0.110		16.983	0.000
DJ	0.454	0.031	0.486	14.743	0.000
F			217.354		
R Square			0.236		
Adjusted R Square			0.235		



a. Dependent Variable: IWB

Source: Data collected by the author

Table 6 represents the effect of procedural justice on innovative work behavior and the moderating role of intrapreneurial personality between them. The results indicate that, in combination, procedural justice and intrapreneurial personality predict innovative work behavior and are statistically significant. For example, in model 2, ($\beta_{PJ} = 0.253$, $t=70.68$ and $p < 0.001$), ($\beta_{IP} = 0.472$, $t=140.38$ and $p < 0.001$), and the overall model values are statistically significant, $R^2 = 0.400$, $F(6, 697) = 77.422$, $p < 0.001$. Similarly, the interaction term, in model 3, ($\beta = 0.101$, $t = 3.368$ and $p < 0.01$) and the overall model are both statistically significant, $R^2 = 0.410$, $F(7, 696) = 68.968$, $p < 0.001$. Further, the interaction between procedural justice and intrapreneurial personality (model 3) accounts for more variance than just procedural justice and intrapreneurial personality (model 2) itself, $\Delta R^2 = 0.010$, $\Delta F(1, 696) = 11.34$, $p < 0.01$.

Table 6: Model summary

	Model 1 (Controls)	Model 2 (Predictors)	Model 3 (Interaction)
Gender	0.025	0.020	0.014
Age Group	-0.065	-0.001	-0.008
Marital status	0.077	0.027	0.029
Experience	0.072	0.055	0.058
PJ		0.253***	0.246***
IP		0.472***	0.455***
PJ x IP			0.101**
R ²	0.010	0.400	0.410
ΔR^2		0.390	0.010

Notes: n = 704. Standardized coefficients are shown. *p < 0.05; **p < 0.01; ***p < 0.001

Source: Data collected by the author

The moderating role of intrapreneurial personality is further shown in Figure 5-1 by plotting the interactional effect at high and low levels of the moderator. The plotted interaction effect at different intrapreneurial personality levels explains that

procedural justice's positive effect on innovative work behavior is stronger for employees with high intrapreneurial personality compared to employees with low levels of intrapreneurial personality. Hence, our third hypothesis is supported.

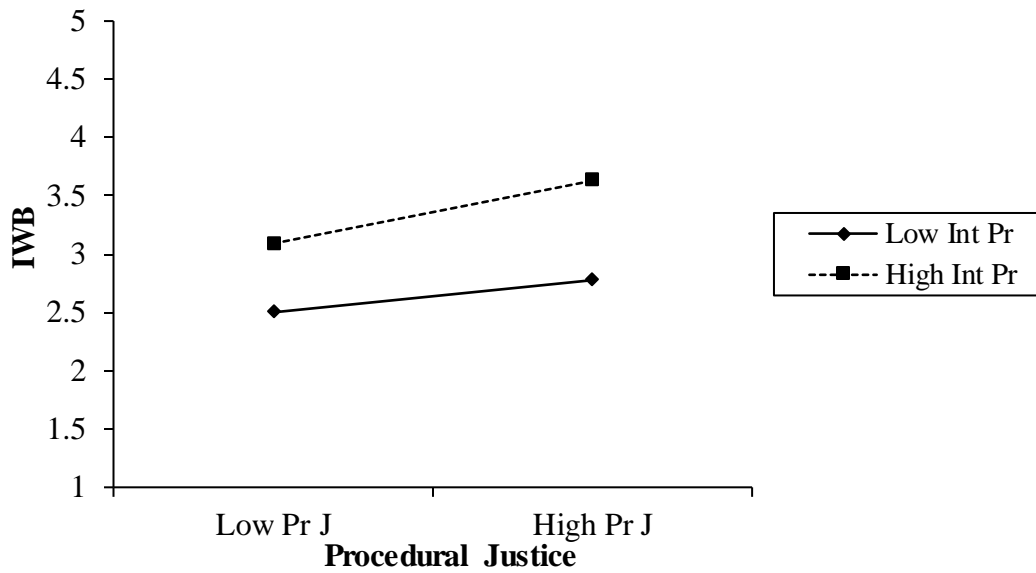


Fig 2

Interaction effect between PJ and IP

Table 7 represents the effect of distributive justice on innovative work behavior and the moderating role of intrapreneurial personality between them. The results indicate that, in combination, distributive justice and intrapreneurial personality predict innovative work behavior and are statistically significant. For example, in model 2, ($\beta_{DJ} = 0.274$, $t=8.241$ and $p < 0.001$), ($\beta_{IP} = 0.463$, $t=14.134$ and $p < 0.001$), and the overall model values are statistically significant, $R^2 =$

0.407, $F(6, 697) = 79.680$, $p < 0.001$. Similarly, the interaction term, in model 3, ($\beta = 0.151$, $t = 4.382$ and $p < 0.01$) and the overall model are both statistically significant, $R^2 = 0.408$, $F(7, 696) = 68.461$, $p < 0.001$. Further, the interaction between distributive justice and intrapreneurial personality (model 3) accounts for more variance than just distributive justice and intrapreneurial personality (model 2) itself, $\Delta R^2 = 0.001$, $\Delta F(1, 696) = 1.089$, $p < 0.01$.

Table 7: Model summary

	Model 1 (Controls)	Model 2 (Predictors)	Model 3 (Interaction)
Gender	0.025	0.009	0.012
Age Group	-0.065	0.009	0.012
Marital status	0.077	0.021	0.023
Experience	0.072	0.033	0.032
DJ		0.274***	0.280***
IP		0.463***	0.472***
DJ x IP			0.151**
R^2	0.010	0.407	0.408
ΔR^2		0.397	0.001

Notes: $n = 704$. Standardized coefficients are shown. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Source: Data collected by the author

The moderating role of intrapreneurial personality is further shown in Figure 7 by plotting the interactional

effect at high and low levels of the moderator. The plotted interaction effect at different intrapreneurial



personality levels explains that distributive justice's positive effect on innovative work behavior is stronger for employees with high intrapreneurial

personality than employees with low intrapreneurial personality. Hence, our fourth hypothesis is supported.

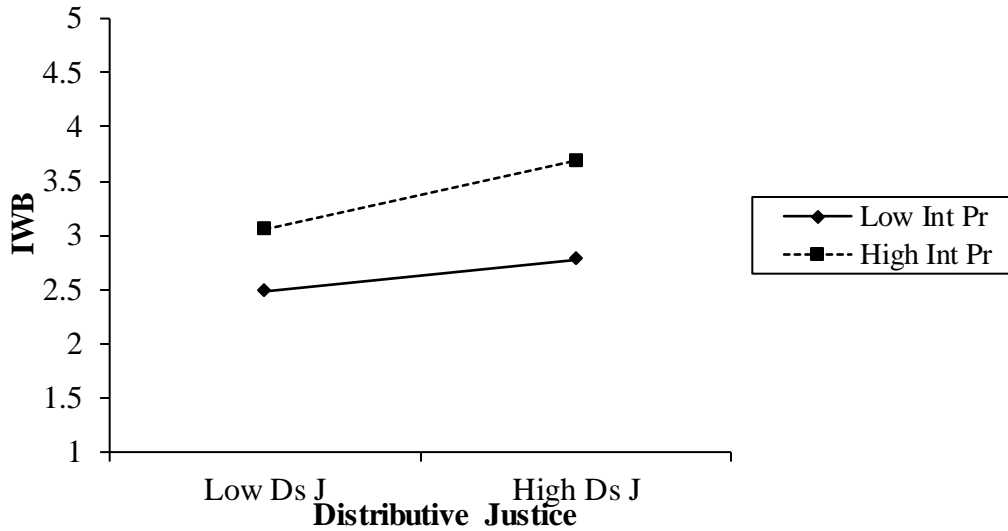


Fig 3 Interaction effect between DJ and IP

Table 7 represents the combined effect of all independent and moderating variables on innovative work behavior (dependent variable). The results indicate that each facet of justice (PJ and DJ), and intrapreneurial personality combined, predict innovative work behavior positively and are statistically significant. For example, in model 3, distributive justice ($\beta_{DJ} = 0.135$, $t=3.534$ and $p < 0.001$), and ($\beta_{PJ} = 0.124$, $t=3.270$ and $p < 0.001$)

impacts significantly and positively on innovative work behavior. Similarly, the interaction terms with intrapreneurial personality in model 3 also positively impact innovative work behavior. For example, distributive justice and intrapreneurial personality ($\beta_{DJ \times IP} = 0.239$, $t=4.322$ and $p < 0.001$) and procedural justice and intrapreneurial personality ($\beta_{PJ \times IP} = 0.096$, $t=2.130$ and $p < 0.05$) has positive moderating effect on innovative work behavior

Table 7: Model summary

	Model 1 (Controls)	Model 2 (Predictors)	Model 3 (Interactions)
Gender	0.025	0.017	0.024
Age Group	-0.065	0.009	0.008
Marital status	0.077	0.026	0.043
Experience	0.072	0.027	0.019
Procedural Justice		0.134***	0.121**
Distributive Justice		0.145***	0.135***
Intrapreneurial Personality		0.424***	0.079*
PJ x IP			0.096*
DJ x IP			0.239***
R ²	0.010	0.444	
ΔR^2		0.434	



Notes: n = 704. Standardized coefficients are shown. *p < 0.05; **p < 0.01; ***p < 0.001

Source: Data collected by the author

Discussion

The purpose of the study has three-fold. First, to analyze the impact of each facet of justice on innovative work behavior in the service sector. Second, to explore the moderating role of intrapreneurial personality in each facet of justice in the services sector. Last, to analyze the combined effect in an overarching model. The current study showed that each stated hypothesis was supported.

The results are definitive from the regression analysis framework applied for the research's investigative aspect, the correlation of the independent and dependent variables. The results indicated significant differences and similarities between previous results conducted in the West and those from Eastern Nations. Concerning the relationship between procedural justice and innovative work behavior, the first hypothesis, the result of the research, indicated a positive correlation between the two variables in Pakistan's services sector. This result is also supported in the literature. For example, using a sample from Korea comprising 400 respondents, Kim and Park (2017) concluded a significant positive relationship between procedural justice and innovative work behavior. They have concluded their study using social exchange theory, resulting in a reciprocal/exchange relation between procedural justice and innovative work behavior. When an employee perceives procedural justice, s/he tends to reciprocate with an extra role behavior, such as innovative work behavior.

Similarly, another study in Indonesia using a sample from four and five-star hotels concluded that procedural justice is positively related to innovative work behavior (Noerchoidah & Harjanti, 2019). They also utilized social exchange theory to analyze the relationship between procedural justice and innovative work behavior and concluded a reciprocal relation between the abovementioned constructs. Similarly, another study in Semarang city, using the proportional random sampling technique, concluded that procedural justice has a significant and positive relation with innovative work behavior (Sari & Palupiningdyah, 2020). Their study concluded through the lens of social exchange theory and demonstrated a reciprocal relationship between the variables. Their study discussed that when the workers are dealt with decently and are given complete knowledge of the procedures, the

representatives thus bring down the propensity to propose novel ideas and lead them to demonstrate innovative work behavior.

Another finding of this analysis is that administrators and managers consider fairness in the procedures of the department and organization (procedural justice). They are more likely to be imaginative, share original thoughts, communicate with their peers, and help inculcate fresh ideas into subordinates' minds. Consequently, the employees perceive fairness and depict innovative work behavior. The results of this study are also consistent with other research, such as Akram et al. (2016) in the Telecommunication industry of China, Hsu and Wang (2015) in the hospitality industry of China, Lee et al. (2015) in the restaurant industry of East Asia— are a few to mention.

The second hypothesis results also showed a positive relationship between distributive justice and innovative work behavior in the service sector of Pakistan. This result is also supported in the literature. For example, using a sample from the Chinese telecommunication sector comprising 345 respondents, Akram et al. (2020) concluded a significant positive relationship between distributive justice and innovative work behavior. They have concluded their study using social exchange theory, resulting in a reciprocal/exchange relation between procedural justice and innovative work behavior. When employees perceive distributive justice, they tend to reciprocate with an extra role behavior, such as innovative work behavior.

Further, Blau's principle of social exchange (Cook et al., 2013) indicated that people usually want to meet others that give any value in exchange. This reciprocation establishes the discretionary duty to respond favorably and reply more valuably. This reciprocal behavior arises in workplace environments where workers obtain equal care from their institutions in the form of distributive justice and therefore appear to exhibit positive working conduct in response, i.e., innovative work behavior (Akram et al., 2020; Hernández et al., 2007).

Similarly, another study in China, using a sample of 235 respondents, concluded that distributive justice



positively relates to innovative work behavior (Akram et al., 2016). They have utilized equity theory to analyze the relationship between distributive justice and innovative work behavior. However, their study discussed a reciprocal relation between the constructs mentioned above. Similarly, another study in Jordan, collecting a sample from 1000 employees in 20 industries, concluded that distributive justice has a significant and positive association with innovative work behavior (Suliman, 2001). Likewise, another study using convenience sampling from 400 respondents concluded a positive relationship between distributive justice and innovative work behavior (Gozukara & Yildirim, 2016).

As stated in Hypothesis 2, the present study's result identified a strongly positive relationship between distributive justice and innovative work behavior. For Organizations, innovation is essential since it plays a crucial role in a company's growth and longevity. Current companies, demanding continual transformation and diversification, experience growing pressures, developments, and dynamic sector shifts. For this reason, organizations ought to build and deliver new goods and services, and their workers' creative working actions can be a beneficial resource. However, a rational distribution of resources and performance within a business is also a distributive justice that is necessary for workers because it needs to produce the best results over the long run (Colquitt & Rodell, 2011; Rego et al., 2017).

Conclusion

In conclusion, the present study adds to established literature by studying and validating linkages empirically across four research variables (i.e., procedural justice, distributive justice, intrapreneurial personality, and innovative work behavior). The findings of the analysis indicate empirically that positive relationships are all statistically significant across four tested variables. The direct relations show that organizational justice (procedural and distributive justice) positively affects innovative work behavior. Furthermore, the findings of the moderating effect demonstrate that intrapreneurial personality positively interacts with procedural justice and distributive justice and effect innovative work behavior positively.

Theoretical implications

Social exchange theory, in this study, explains the beneficial interaction between organizational factors (i.e., organizational justice) to innovative work behavior. Employees in high-quality exchange

relationships offer adequate input and have the independence and encouragement to take decisions. It addresses their desire for individuality and a sense of identity and helps them fulfill their job objectives. In return for these benefits, workers become creative in their jobs. This research also explores the moderating role of intrapreneurs in organizational justice and innovative behavior. This research shows intrapreneurial employees' attitudes and behavioral contributions to their organizations. This research suggests that intrapreneurial employees promote organizational efficiency by demonstrating discretionary IWBs. The positive moderating effect of the intrapreneurial personality on innovative behavior is consistent with the notion of reciprocation, i.e., social exchange theory. Collectively, these are significant theoretical addition to the research that makes it apparent that organizational factors (organizational justice) and employee personality (intrapreneurial personality) interactions play an essential role in fostering behavioral performance such as innovative work behavior.

Managerial implications

Organizations must constantly take precautions to sustain and improve employees' innovative actions, shaped by organizational justice (i.e., distributive and procedural) and human (personality) factors. Specifically, human resources (HR) practitioners could suggest designing or changing HR policies (i.e., benefits for innovative work behavior) to connect inventive actions with economic success and establish successful organizations. In that case, organizations should suggest supplying employees with valuable opportunities to maximize operational efficiency. Likewise, reasonable clarification of procedures plays a significant role, at a very general level, in leading employees toward innovative behavior. Employees shall be offered appropriate and detailed descriptions of their performance evaluation.

Similarly, judgments on the grant of incentives or fines shall be given with prompt and appropriate reviews. It encourages workers to support managers and to improve their loyalty. Also, managers are highly encouraged to exchange necessary and due information with employees. Therefore, the employer and the employee shall communicate openly and transparently. It creates confidence between the employee and the employer. A healthy perception of fairness would increase employee satisfaction at work. Consequently, it will enhance the employees' productivity while adopting innovative behavior.



Based on the research findings, future studies will be able to reproduce the proposed research model in other environments and expand the implications of this study by adding other antecedent and subsequent factors about organizational factors to explain further and generalize the effects of this study. In addition, with a clear refinement of the role of the personality with the help of current literature, studies may use a quantitative or qualitative method to examine the dynamics of innovative working behavior in diverse contexts (e.g., individual/team/organizational and at numerous positions/levels). Also, the study concludes that intrapreneurial personality plays a vital interactional role with organizational justice facets (i.e., procedural justice and distributive justice), enhancing innovative conduct among service employees.

Conflict of interest

The authors declare no conflict of interest.

References

- Agarwal, U. A. (2014). Linking justice, trust, and innovative work behavior to work engagement. *Personnel Review*, 43(1), 41–73. <https://doi.org/10.1108/PR-02-2012-0019>
- Akram, T., Lei, S., & Haider, M. J. (2016). The impact of relational leadership on employee innovative work behavior in the IT industry of China. *Arab Economic and Business Journal*, 11(2), 153–161. <https://doi.org/https://doi.org/10.1016/j.aebj.2016.06.001>
- Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2020). The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing. *Journal of Innovation & Knowledge*, 5(2), 117–129. <https://doi.org/https://doi.org/10.1016/j.jik.2019.10.001>
- Åmo, B. W., & Kolvereid, L. (2005). Organizational strategy, individual personality and innovation behavior. *Journal of Enterprising Culture*, 13(01), 7–19. <https://doi.org/10.1142/S0218495805000033>
- Biswas, S., & Kapil, K. (2017). Linking perceived organizational support and organizational justice to employees' in-role performance and organizational cynicism through organizational trust. *Journal of Management Development*, 36(5), 696–711. <https://doi.org/10.1108/JMD-04-2016-0052>
- Bogatyeva, K., Laskovaia, A., & Osiyevskyy, O. (2022). Entrepreneurial activity, intrapreneurship, and conducive institutions: Is there a connection? *Journal of Business Research*, 146, 45–56. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.03.062>
- Bos-Nehles, A. C., & Veenendaal, A. A. R. (2019). Perceptions of HR practices and innovative work behavior: the moderating effect of an innovative climate. *The International Journal of Human Resource Management*, 30(18), 2661–2683. <https://doi.org/10.1080/09585192.2017.1380680>
- Bouwhuis, L. (2008). Verklaren innovatief gedrag van docenten : een onderzoek naar de individuele variabelen, self-efficacy en leerdoelori ntatie en de inzet van HRM-instrumenten. <http://essay.utwente.nl/58871/>
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. In *Journal of Applied Psychology* (Vol. 86, pp. 425–445). American Psychological Association. <https://doi.org/10.1037/0021-9010.86.3.425>
- Colquitt, J. A., & Rodell, J. B. (2011). Justice, trust, and trustworthiness: a longitudinal analysis integrating three theoretical perspectives. *The Academy of Management Journal*, 54(6), 1183–1206. <http://www.jstor.org/stable/41413615>
- Conway, J. M., & Lance, C. E. (2010). What Reviewers Should Expect from Authors Regarding Common Method Bias in Organizational Research. *Journal of Business and Psychology*, 25(3), 325–334. <https://doi.org/10.1007/s10869-010-9181-6>
- Cook, K. S., Cheshire, C., Rice, E. R. W., & Nakagawa, S. (2013). Social Exchange Theory BT - Handbook of Social Psychology (J. DeLamater & A. Ward (eds.); pp. 61–88). Springer Netherlands. https://doi.org/10.1007/978-94-007-6772-0_3



Cudeck, R., & O'Dell, L. L. (1994). Applications of standard error estimate in unrestricted factor analysis: Significance tests for factor loadings and correlations. In *Psychological Bulletin* (Vol. 115, pp. 475–487). American Psychological Association. <https://doi.org/10.1037/0033-2909.115.3.475>

De Jong, J., & Den Hartog, D. (2010). Measuring Innovative Work Behavior. *Creativity and Innovation Management*, 19(1), 23–36. <https://doi.org/https://doi.org/10.1111/j.1467-8691.2010.00547.x>

Doty, D. H., & Glick, W. H. (1998). Common methods bias: does common methods variance bias results? *Organizational Research Methods*, 1(4), 374–406. <https://doi.org/10.1177/109442819814002>

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. In *Psychological Methods* (Vol. 4, pp. 272–299). American Psychological Association. <https://doi.org/10.1037/1082-989X.4.3.272>

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>

Gozukara, I., & Yildirim, O. (2016). Exploring the link between distributive justice and innovative behavior: organizational learning capacity as a mediator. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(2), 61–75.

Greenberg, J. (1993). Justice and organizational citizenship: A commentary on the state of the science. *Employee Responsibilities and Rights Journal*, 6(3), 249–256. <https://doi.org/10.1007/BF01419448>

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*,

31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>

Herdiani, E. T., Sari, P. P., & Sunusi, N. (2019). Detection of Outliers in Multivariate Data using Minimum Vector Variance Method. *Journal of Physics: Conference Series*, 1341(9), 92004. <https://doi.org/10.1088/1742-6596/1341/9/092004>

Hernández-Perlines, F., Ariza-Montes, A., & Blanco-González-Tejero, C. (2022). Intrapreneurship research: A comprehensive literature review. *Journal of Business Research*, 153, 428–444. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.08.015>

Hernández, P. M., Salanova, M., & Peiró, J. M. (2007). Job demands, job resources, and individual innovation at work: Going beyond Karasek's model? *Psicothema*, 19(4), 621–626.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>

Ilonen, S., & Hytönen, K. (2022). Why Should I Become an Intrapreneur? Introducing the Concept of Intrapreneurial Outcome Expectations. *Entrepreneurship Education and Pedagogy*, 25151274221091692. <https://doi.org/10.1177/25151274221091692>

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>

Janssen, O. (2004). How fairness perceptions make innovative behavior more or less stressful. *Journal of Organizational Behavior*, 25(2), 201–215. <https://doi.org/https://doi.org/10.1002/job.238>

Jiun-Lan, H. S. U., & Jeng-Hwan, W. (2015). Exploring the effects of organizational justice on employees' innovative behavior in Hospitality Industry from the aspect of organizational



support. *Revista de Cercetare Si Interventie Sociala*, 49, 113.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36. <https://doi.org/10.1007/bf02291575>

Kim, W., & Park, J. (2017). Examining Structural Relationships between Work Engagement, Organizational Procedural Justice, Knowledge Sharing, and Innovative Work Behavior for Sustainable Organizations. In *Sustainability* (Vol. 9, Issue 2). <https://doi.org/10.3390/su9020205>

Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (1996). *Applied linear statistical models*. In Irwin series Operations and decision sciences (5th ed.). McGraw-Hill.

Lee, Y.-K., Kim, S., Son, M.-H., & Kim, M.-S. (2015). Linking Organizational Justice to Job Performance: Evidence from the Restaurant Industry in East Asia. *Asia Pacific Journal of Tourism Research*, 20(sup1), 1527–1544. <https://doi.org/10.1080/10941665.2015.1016052>

Li, M., & Hsu, C. H. C. (2016). A review of employee innovative behavior in services. *International Journal of Contemporary Hospitality Management*, 28(12), 2820–2841. <https://doi.org/10.1108/IJCHM-04-2015-0214>

Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121. <https://doi.org/10.1037/0021-9010.86.1.114>

Lukes, M., & Stephan, U. (2017). Measuring employee innovation. *International Journal of Entrepreneurial Behavior & Research*, 23(1), 136–158. <https://doi.org/10.1108/IJEER-11-2015-0262>

Michael, L. h s u, Hou, S., & Fan, H. (2011). Creative Self-Efficacy and Innovative Behavior in a Service Setting: Optimism as a Moderator. *The Journal of Creative Behavior*, 45(4), 258–272. <https://doi.org/https://doi.org/10.1002/j.2162-6057.2011.tb01430.x>

Noerchoidah, N., & Harjanti, D. (2019). Exploring the relationship between procedural justice and innovative work behavior in the hospitality industry. *Jurnal Manajemen Dan Kewirausahaan*, 21(1), 21–31.

Olson, P. D., & Bosserman, D. A. (1984). Attributes of the entrepreneurial type. *Business Horizons*, 27(3), 53–56. [https://doi.org/https://doi.org/10.1016/0007-6813\(84\)90027-2](https://doi.org/https://doi.org/10.1016/0007-6813(84)90027-2)

Özkan, A. H. (2022). Organizational justice perceptions and turnover intention: a meta-analytic review. *Kybernetes*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/K-01-2022-0119>

Pinchot, G. (1985). *Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur*. The University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>

Ramamoorthy, N., Flood, P. C., Slattery, T., & Sardesai, R. (2005). Determinants of Innovative Work Behavior: Development and Test of an Integrated Model. *Creativity and Innovation Management*, 14(2), 142–150. <https://doi.org/https://doi.org/10.1111/j.1467-8691.2005.00334.x>

Rego, A., Owens, B., Leal, S., Melo, A. I., Cunha, M. P. e, Gonçalves, L., & Ribeiro, P. (2017). How leader humility helps teams to be humbler, psychologically stronger, and more effective: A moderated mediation model. *The Leadership Quarterly*, 28(5), 639–658.



<https://doi.org/https://doi.org/10.1016/j.leaqua.2017.02.002>

Rice, D. B., & Luse, W. (2022). How organizational justice impacts the supervisor's bottom-line mentality? The role of the institutionalization of ethics. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, No Pagination Specified-No Pagination Specified. <https://doi.org/10.1007/s12144-021-02605-7>

Rivera, M. J. (2017). Leveraging innovation and intrapreneurship as a source for organizational growth. *International Journal of Innovation Science*, 9(2), 137–152. <https://doi.org/10.1108/IJIS-12-2016-0057>

Salam, S., & Senin, A. A. (2022). A Bibliometric Study on Innovative Behavior Literature (1961–2019). *SAGE Open*, 12(3), 21582440221109588. <https://doi.org/10.1177/21582440221109589>

Sari, F., & Palupiningdyah, P. (2020). The Effect of Mediation Work Engagement to Procedural Justice and Organizational Learning on the Innovative Behavior. *Management Analysis Journal*, 9(2) SE-Articles). <https://doi.org/10.15294/maj.v9i2.37011>

Scott, S. G., & Bruce, R. A. (1998). Following the leader in R&D: the joint effect of subordinate problem-solving style and leader-member relations on innovative behavior. *IEEE Transactions on Engineering Management*, 45(1), 3–10. <https://doi.org/10.1109/17.658656>

Seibert, S. e, Kraimer, M. l, & Crant, J. M. (2001). What do proactive people do? a longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54(4), 845–874. <https://doi.org/https://doi.org/10.1111/j.1744-6570.2001.tb00234.x>

Shah, S. T. H., Shah, S. M. A., & El-Gohary, H. (2022). Nurturing Innovative Work Behavior

through Workplace Learning among Knowledge Workers of Small and Medium Businesses. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-022-01019-5>

Shipton, H., West, M. A., Dawson, J., Birdi, K., & Patterson, M. (2006). HRM as a predictor of innovation. *Human Resource Management Journal*, 16(1), 3–27. <https://doi.org/https://doi.org/10.1111/j.1748-8583.2006.00002.x>

Suliman, A. M. T. (2001). Are We Ready to Innovate? Work Climate-Readiness to Innovate Relationship: The Case of Jordan. *Creativity and Innovation Management*, 10(1), 49–59. <https://doi.org/https://doi.org/10.1111/1467-8691.00190>

Tuncdogan, A., Acar, O. A., & Stam, D. (2017). Individual differences as antecedents of leader behavior: Towards an understanding of multi-level outcomes. *The Leadership Quarterly*, 28(1), 40–64. <https://doi.org/https://doi.org/10.1016/j.leaqua.2016.10.011>

Yariv, I., & Galit, K. (2017). Can Incivility Inhibit Intrapreneurship? *The Journal of Entrepreneurship*, 26(1), 27–50. <https://doi.org/10.1177/0971355716677386>

Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: the role of performance and image outcome expectations. *The Academy of Management Journal*, 53(2), 323–342. <http://www.jstor.org/stable/25684323>

Zhou, L., Kachie, A. D. T., Xu, X., Quansah, P. E., Epalle, T. M., Ampon-Wireko, S., & Nkrumah, E. N. K. (2022). COVID-19: The effects of perceived organizational justice, job engagement, and perceived job alternatives on turnover intention among frontline nurses. *Frontiers in Psychology*, 13.