

The Mediating Effect of Trust on Psychological Safety and Job Satisfaction

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This research aims to assess the relationship of psychological safety and trust on employee job satisfaction. Individual job satisfaction is essential to personal and professional accomplishments, impacting team success, and achieving optimal organizational performance. A safe environment is a critical factor to achieve job satisfaction. When employees feel safe, learning occurs more quickly, peers rely on each other, and team performance improves. Trust in peers and management influences psychological safety development. Therefore, understanding the role of psychological safety and trust in the development of engaged employees is essential. In this paper, we approach the idea that psychological safety is a prerequisite to trust, and we believe trust mediates the relationship between psychological safety and job satisfaction. A quantitative approach using correlation and mediation tested the theory of the effect trust has on psychological safety and job satisfaction. Responses from 283 nurses at a large teaching hospital revealed that psychological safety is linked to job satisfaction and mediated by trust. Overall, this study suggests that psychological safety precedes trust and collectively increases individual job satisfaction. Managers can draw upon the potential, but frequently untapped benefits, of cultivating a safe space by developing a sincere and trusting relationship with employee-partners thus increasing job satisfaction.

When applying for a job, candidates often research the prospective employer by reviewing why someone would or would not want to work for the organization, they gather general information on the culture, professional growth opportunities, and/or pay. A limitation of this approach is that the prospective employee cannot evaluate the true characteristics and behaviors of the hiring manager. Despite interviewing with the manager, the prospective employee may not be able to determine the type of manager they will be working for.

Once hired, the employee will experience both the good and bad traits of the leader and will interact with peers and managers regularly. These interactions either solidify the belief that leadership supports the concept that people are the greatest asset (increasing job satisfaction) or that other business activities take precedence (decreasing job satisfaction). An employee's engagement increases when management behaviors are supportive and decreases when employees feel less important (Mitterer & Mitterer, 2017). This change in engagement does not occur at once, but slowly over time.

Predictors of job satisfaction include psychological safety, and trust. When managers are unaware of the factors that impact an individual's level or degree of satisfaction, the individual and team cannot achieve maximum potential. Contrary to the manager's belief, it is their behavior that often affects an individual's contributions and the team's success. Ultimately, the manager's behavior can create positive or negative mindsets that influence job satisfaction and organizational success.

Research must look at the individual employee as the starting point for understanding the impact on team performance. This study examines the mediating impact of trust on the relationship between psychological safety and job satisfaction. Without understanding that the individual employee is psychologically safe in their work environment, there cannot be an aggregated perception of psychological safety at the team level.

Theoretical Foundation

The social exchange theory is the central foundation of this study and posits that one party repays another party's good deeds through a process of reciprocity (Cropanzano et al., 2017) and the quality of the social exchange influences the quality of the relationship (Chernyak-Hai & Rabenu, 2018). The nature of exchanges between parties seeking contributions from one another generate psychological states, like trust and safety. These psychological states influence variables, such as job satisfaction, that in turn have performance consequences. The theory of Reciprocated Social Exchange (RSE) suggests that trust plays an integral role in the relationship with supervisors as opposed to an exchange of work for pay via an economic contract (Dirks & Ferrin, 2002).

Literature Review

Psychological Safety Defined

Articles on research involving psychological safety appeared half a century ago in the organizational science field. At that time, the majority of the literature relied on

Edmondson's (1999a) definition of psychological safety as the feelings and experiences of being safe, to be oneself in one's workplace without fear of judgment, ridicule, or experiencing subtle slights while feeling respected and accepted as an individual.

Further research introduced the concept that psychological safety has a direct influence on work performance (Baer & Frese, 2003; Schaubroeck et al., 2011). Current literature reveals a further broadened understanding of psychological safety. More research shows that organizational support, safety climate, and performance are unquestionably related, suggesting that psychological safety is a condition where individuals perceive that positive interpersonal risk-taking is acceptable (Christian et al., 2011; Rich et al., 2010).

A psychologically safe workplace supports a climate where the focus is on preventing problems and reaching common goals. Because individuals are less predisposed to focus on self-protection, subtle slights will not exist, and respect for others' ideas are accepted. Psychologically safe employees report positive well-being and feel comfortable voicing opinions and challenging ideas. When employees feel psychologically safe, performance at both the individual and team levels increase (Garrick et al., 2014; Hall et al., 2013; Kitts, 2013).

Employee psychological health is considered an essential part of organizational success (Deloitte Centre for Health Solutions, 2017). When effectively contributing to organizational goals, employees need to feel comfortable and safe to express themselves. Autonomous-supportive work climates (i.e., organizations that provide opportunities for initiative and idea recognition along with non-controlling feedback) bear a striking resemblance to the conditions which define psychological safety (Edmondson, 1999b).

Preventing problems or suggesting new ways to achieve better results requires risk-taking on the part of an employee. Risk-taking activities consist of multiple steps. First, an individual develops an idea or suggestion that they feel is important. Second, the individual feels safe to share the idea or suggestion, knowing that if a suggestion or idea is made, it is also safe to discuss. Finally, the individual is safe to become vulnerable to express one's feelings about the idea. Perceived psychological safety is an expectation that a positive experience will occur when taking a risk or sharing a new idea.

Employees must also feel secure that others will not isolate them due to characteristics or actions that may not fit into group norms. When people feel they have low status within a group, they are less likely to feel psychologically safe. Risk-taking moments that are public, unclear, have pronounced hierarchies, or challenge identities may necessitate greater psychological safety to foster individuals' active engagement in developmental opportunities. Managers should create an environment where employees do not have to internally question or worry about the implications of sharing their thoughts, opinions, or

ideas. Additionally, managers should look to support an environment with the expectation that all employees are free to share those ideas without fear of judgment, ridicule, or experience subtle slights from the manager or peers.

Psychological safety is inherently interpersonal, meaning that it can be breached or violated. Damage to psychological safety would necessitate repair to continue to reap the benefits from the employee. Determining the conditions under which employees feel psychologically safe is a necessary and critical first step in creating a psychologically safe environment. Psychological safety captures a sense of being comfortable in the immediate setting and a tacit belief about the ability to act in the presence of others (Edmondson, 2002).

From an organizational perspective, a climate of psychological safety is where employees perceive that the organizational structure promotes, upholds, and values employees' psychological well-being and safety. A safe psychosocial environment refers to the shared perceptions of the organization's policies, practices, and procedures to protect members' psychological health and safety (Dollard et al., 2012). To summarize, psychological safety is "a condition in which one feels (a) included, (b) safe to learn, (c) safe to contribute, and (d) safe to challenge the status quo, without fear of being embarrassed, marginalized or punished in some way" (Clark, 2019, p. 1).

Psychological safety shares common elements with well-established conceptualizations of trust, but psychological safety has a different focus. Employees are not afraid of taking interpersonal risks when they perceive a high level of psychological protection. Employees believe that others, including management, will not take advantage of them. An experience of psychological safety resembles the feeling of being trusted and trusting others.

Trust Defined

Trust is a judgment of the intentions, character, actions, and an appraisal of the level of risk involved with engaging in interpersonal interactions in a given situation. Indeed, both psychological safety and trust potentially expose a person to vulnerability and interpersonal risk (Edmondson et al., 2004; Newman et al., 2016); however, the distinction between the two constructs lies in the exposure direction. The trustor (the person giving trust) gives the trustee (the individual receiving the trust) the benefit of the doubt that the trustee is worthy of trust, based on assessments of action or character.

One of the oldest definitions of trust belongs to Barber (1983), who saw trust as a set of socially learned and confirmed expectations that people share. According to McAllister (1995), trust refers to the extent a person is confident and willing to act on the words, actions, and decisions of another. To provide an integrative model of organizational trust, Mayer et al. (1995) developed perhaps the most widely used definition of trust, as the "willingness of a party to be vulnerable to the actions of

another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712).

Although there is no unanimously accepted definition, there are three common elements. First, trust is an expectation or a belief that the other person is well-intended. Second, a person cannot control or force another person to behave according to his/her expectation. Third, trust involves a certain level of dependency. Therefore, it is believed that the actions of one person can influence the responses of another person (Costa et al., 2001; Spector & Jones, 2004; Tan & Lim, 2009).

Trust is closely linked to what some researchers call social exchange relationships. According to Fulmer and Gelfand (2012), positive social exchange relationships increase psychological safety. Relating to the perspective of social exchange theory, employees will reciprocate the trust shown to them by trusting those around them, including management. Researchers have highlighted that trust in leadership is a central issue in the social context of work that shapes employee attitudes and behavior (Dirks & Ferrin, 2002; Schneider et al., 2010).

Trust in Management

Ernest Hemingway once said, “[t]he best way to find out if you can trust somebody is to trust them” (McManus & Mosca, 2015, p. 38). The point that Hemingway was making is that trust is reciprocal; you must establish trust with employees first if you want employees to trust you (McManus & Mosca, 2015). Trust is a leadership behavior, and creating trust is an essential facet of leadership (Fulmer & Gelfand, 2012). The fundamental element of leadership is trust, and it is critical between employees and their direct supervisors. Trust in management is necessary for creating positive employee attitudes and behaviors in the workplace.

If a manager believes they can trust a follower’s abilities, the leader communicates confidence by empowering staff through self-directed decision-making. Empowered employees take ownership of their jobs (Avey et al., 2012). Employees who embrace their job create a more vital organization because they are invested in their roles and responsibilities. Simply put, an employee will reciprocate with a higher level of trust in their supervisors if the supervisor has exhibited care and consideration for the employee.

Management research has determined that, when leaders reliably demonstrate trusting relationships, staff respond by increasing their commitment and loyalty (Simha & Pandey, 2020). We trust our supervisors if we feel they have our best interests in mind. Interpersonal trust stimulates the satisfaction and dedication of employees and is a fundamental method of enhancing organizational effectiveness. Fulmer and Gelfand (2012) found the importance of trust in leaders to be an essential aspect of high-powered organizations. Increasing the trust between leader and follower is driven by the manager’s desire to

boost the staff’s well-being and avoid self-interest.

Immediate supervisors are an essential resource for employees (Swanberg et al., 2011). They provide direction and access to needed resources, emotional support, and protection. According to Li and Tan (2013), when supervisory trust is present, employees are free from many of the distractions that may cause roadblocks to employee job performance. Supervisory trust is linked to crucial job attitudes such as job satisfaction and organizational commitment (Bowling, 2007; Li & Tan, 2013; Mulki et al., 2015). When leaders encourage employee growth and development and promote work-life balance, trust perception is enhanced (Gordon et al., 2014). Given that supervisors have the authority to make impactful decisions related to an employee’s work-life balance (e.g., promotions, pay, work schedule, responsibilities, and terminations), perceptions of supervisor trust are critical to an employee’s willingness to engage at work (Dirks & Ferrin, 2002).

Building a culture of trust requires commitment from the top. Nothing destroys trust faster than hypocrisy from management. Leaders must demonstrate integrity and genuine concern for people to build trust. To foster trust, managers must lead by example through a commitment to honest and ethical business practices (Trevino et al., 2003). Understanding the mechanisms that influence leader-follower dynamics and how a leader’s trust affects organizational outcomes is vital to building a trust culture. Leader trustworthiness is instrumental to building quality leader-follower relationships and a necessary component for the development of trusting relationships (Fulmer & Gelfand, 2014). Fulmer and Gelfand (2012) suggested that trust in a manager mediated the relationship between turnover intention and loyalty, withdrawal behavior, and commitment. Longenecker and Longenecker (2014) emphasized the critical connection between organizational outcomes with goal achievement and trust in the leader. When people did not trust their leaders, they were unlikely to provide maximum effort to their work.

Psychological Contract and Trust

A psychological contract is an individual’s beliefs about the reciprocal exchanges between a person and another party (Rousseau, 1989). It focuses on an individual’s beliefs in the interpretation of a promissory contract. A psychological contract depends on social and psychological factors specific to the employment relationship in which it occurs (Morrison & Robinson, 1997). Trust may significantly contribute to the subjective experience of a psychological contract. Trust lies at the heart of relationships and contracts, influencing each party’s behavior toward the other (Blau, 1964; Deutsch, 1958; Zand, 1972).

Trust is an essential ingredient for any stable social relationship (Blau, 1964; Simmel, 1978). Trust comes, in part, from judgments about integrity based on the consistency of another’s actions and the extent these actions are congruent with their words (Mayer et al., 1995). In this sense, trust cognitively establishes the beliefs about

another's future actions based on past behaviors or experiences (Lewis & Weigart, 1985). Trust comes not entirely from a particular party's actions but from the relational bonds between the parties and the implicit assumptions that others have respect and concern for one's welfare (Barber, 1983; Gambetta, 1988; Lewis & Weigert, 1985). These implicit assumptions are primarily taken for granted and unacknowledged until violated (Luhmann, 1979; Zucker, 1986). When the employee believes that a breach occurred, regardless of whether that belief is valid or whether an actual infringement took place, it has an impact on their behavior and attitudes.

A psychological contract breach occurs as a result of two psychological dynamics: unmet expectations and a loss of trust, both of which mediate the relationships between a psychological contract breach and employees' behavioral reactions. A psychological contract breach is a subjective experience based not only (or necessarily) on the employer's actions or inactions but an individual's perception of those actions or inactions within a particular social context. Unmet expectations research has repeatedly demonstrated that when employees fail to receive something they had expected to receive, they experience reality shock, a sense of discrepancy, and thus dissatisfaction with the current situation, which in turn lowers performance and increases turnover (Wanous et al., 1992).

Edmondson et al. (2004) noted that team members' psychological contract with the leader is needed to develop psychological safety. The contract is based on trust and is not related to rational expectations but rather is conceived in a relational way in which "choices are more effective and intuitive rather than calculative" (Edmondson et al., 2004, p. 243). When members have a strong and favorable emotional connection with the leader, this positively influences the team members to be open in sharing information with the team (team members and leader) to promote team performance (Schaubroeck et al., 2011). Such trust is associated with the expectation that the leader supports the team, based on respect, allowing members to speak up without fear of recriminations from each other or from the leader.

When an employee perceives a contract breach by the employer, they perceive an inconsistency between the employer's words and actions. The infraction may make the employee question the validity of these assumptions, which undermines the relationship's foundation. As a result, the employee loses confidence that today's contributions will be reciprocated, as promised, by the employer. The link between performance and outcomes is undermined, and the employee's motivation to contribute to the firm declines (Katz, 1964; Porter & Lawler, 1968).

If promises are broken, trust is shattered, the relationship dissolves, and the employee pulls away from it, less willing to invest further in the relationship and less inclined to act in ways that serve to maintain it. Trust plays a mediating role because psychological breach weakens two conditions leading to trust: judgments of integrity and

belief in benevolence, resulting in a reduction of the employee's contributions.

Trust and Psychological Safety During Orientation

After hiring an employee, the relationship framework becomes a psychological contract between the two parties. In this situation, the contract is an unwritten agreement that reflects the parties' reciprocal obligations (Robinson & Rousseau, 1994; Rousseau, 1998). The meaning of an implied contract between employers and employees has evolved over several decades (Pfeffer, 1998). A growing body of evidence confirms that employers who create relationships with employees, based on high trust and high commitment, create organizational cultures in which employees exhibit more creative and innovative behaviors (Caldwell et al., 2014).

Throughout employment, individuals are faced with the need to grow, to maintain resilience, and to regulate loss (Baltes et al., 1998). Management research affirms the importance for management in organizations to invest in employee relationships and support employees' social development within the organization (Goleman et al., 2013; McKee et al., 2008; Schein, 2016). The employment relationship is inherently an interpersonal relationship with profound ethical implications associated with Human Resource Management (HRM) (Hosmer, 1987). This relationship is based on the social exchange theory, where the employer pays money to the employee in exchange for services which begins during the onboarding stages of employment.

Onboarding is the process of introducing a new employee to his or her new job, acquainting that employee with the organization's goals, values, rules, policies, and procedures while socializing the employee into an organizational culture (Watkins, 2016). Organizations typically struggle with the onboarding process because their focus is on the organization and its outcomes, rather than on incoming employees' needs (Bauer, 2010; Snell, 2006). Bauer (2010) noted that effective onboarding has short-term and long-term benefits for both the new employee and the organization. Employees that have experienced quality onboarding and effectively assimilated to the environment, have increased job satisfaction, higher organizational commitment, decreased turnover rates, and a shorter learning curve. In contrast, poor onboarding leads to higher job dissatisfaction, increased training and retention costs, and lower productivity.

When employees have an emotional connection with the leader, characterized by trust, individual performance positively influences the mediating effect of psychological safety. Leader-staff trust increases the followers' respect for the leader. When employees trust their leader, an emotional connection intensifies, providing staff with a higher degree of psychological safety, and allowing for an increase in openness and sharing of information with others (Li & Tan, 2013). Psychological safety results in higher management and organizational commitment levels (Detert & Burris, 2007; O'Neill & Arendt, 2008). Satis-

fied employees work more effectively, tend to be more collaborative, and are more committed to pursuing team and organizational goals (Albrecht et al., 2015; Gupta & Sharma, 2016; Kumar & Pansari, 2015).

Decrease in Psychological Safety, Trust, Engagement, and Job Satisfaction

One way of developing meaningful organizations is to create work environments that provide opportunities to maximize employee potential. Evidence indicates that many organizations struggle to keep their employees satisfied. Job satisfaction can be divided into three concepts: highly satisfied, just not satisfied, and actively dissatisfied. The Global Workforce Study (Towers Watson, 2014) reported that satisfied employees comprised only 40% of worldwide employees. Newer studies showed approximately 54% of employees were satisfied (Conference Board, 2019). However, the most recent data shows that 36% of U.S. employees are satisfied in their work and workplace -- which matches Gallup's composite percentage of satisfied employees in 2020.

The percentage of actively dissatisfied employees is up slightly in the U.S. from 14% in 2020 to 15% through June 2021 (Gallup, 2021). Actively dissatisfied employees report miserable work experiences and are generally poorly managed. The remaining 40% – 60% of employees are ambivalent (just not satisfied) with their employer. In other words, half of the employees are detached and may feel unsupported in the workplace, posing a serious threat to their organization's success. These employees are at a critical juncture as they consider leaving the organization but have not yet acted on their uncertainty (turnover intention). Turnover intention is the probability that an individual will leave an organization at some point in the future (Mitterer et al., 2019). Price (2001) found that there was a significant relationship between turnover intention and actual turnover.

Job satisfaction is important because of its relationship with turnover intention. Job satisfaction is a behavior revealing contentment or the extent to which people like or dislike their jobs (Mitterer et al., 2019). An employee with high levels of job satisfaction experiences lower turnover intention, decreased voluntary turnover, and increased productivity resulting in improved organizational performance. Individual experiences and expectations, work environment, management style, workload, and level of communication are important factors in determining job satisfaction and reducing turnover intention.

A lack of psychological safety prevents employees from spontaneously saying and doing what seems appropriate to improve their job. Research indicates that managers who undermine power-sharing by punishing mistakes, negating employees' self-worth, or dismissing alternative perspectives create disengagement in high-performing employees (Morrison & Milliken, 2000; Quinn & Spreitzer, 1997).

Employees who suffer abusive supervision are more likely to perceive their leaders' behavior as disrespectful

and, as a result, they become distrustful (Chan & McAllister, 2014). Since managers are the organization's spokesperson, their words and deeds represent the organization's attitude toward staff. When an employee feels disrespected, unimportant, and that their ideas are devalued by their manager or peers, and this activity is not addressed by managers, the employee will become disengaged.

Hypothesis

Research is clear that there is a relationship between trust, psychological safety, and job satisfaction (Mitterer et al., 2019). However, what is absent is the degree and power of these relationships. In other words, what variable influences the other variables more significantly. To determine this influence, the hypothesis measured was:

H1: Trust positively mediates the relationship between psychological safety and job satisfaction.

Method and Research Design

A quantitative approach using correlation and mediation was the most effective way to test the theory of the effect that trust has on psychological safety and job satisfaction. A benefit of a correlational study is that variables are assessed without altering the outcomes, as they naturally occur (Ingham-Broomfield, 2015). Mediation focuses on the mechanism that functions between two predictor variables and an outcome (Barron & Kenny, 1986). Researchers have used mediation to determine the effect one variable has on another. Examples that have been studied are grit and performance (Duckworth et al., 2011), the effect of psychological capital on grit and performance (Luthans et al., 2019), and psychological safety and trust engagement (Basit, 2017).

Original quantitative research conducted determined if, and to what extent, a relationship existed between four discrete independent variables that encompassed leadership characteristics and the dependent variable job satisfaction and turnover intention (Mitterer et al., 2019). The purpose of this study is to narrow the review, advancing those findings, and assess whether trust mediates the relationship of the variable psychological safety and the impact this has on job satisfaction (Mitterer et al., 2019). The mediator variable is trust, the independent variable is psychological safety, and the dependent variable is job satisfaction. Mediation analysis will assess the influence and significant relationship between the variables.

Participants

Survey participants for this research study were staff nurses and nurse managers, employed at a Magnet certified, Level II trauma center located in Pennsylvania. Nurse participants chose to complete the survey on a voluntary basis and could withdraw at any point and personally identifiable information was not collected. No physical, psychological, economic, or legal harm resulted from the study and an option to leave the survey without completing it was available to all participants.

The prospective frame of sampling of study participants

was derived from the hospital population of 719 staff nurses and nurse managers. We received valid data from 283 nurses (39.3% response rate). Inclusion criteria for participation consisted of both male and female staff nurses who had completed hospital orientation, had worked longer than 6 months for the manager being assessed and were not in disciplinary action.

Measures

This study utilized a Likert-type survey instrument to determine the existence of a relationship, and to what extent, between two discrete independent variables trust and psychological safety, and the dependent variable job satisfaction. Survey methodology was used to produce numerical descriptions of specific aspects of the study population. There was no one survey available that was applicable to this research for the data needed, thus several statements from different surveys were utilized to provide a new survey of 56 unique statements. Participants were asked to rank the statements on a 7-point Likert-type scale (1 = Strongly Disagree to 7 = Strongly Agree with a mid-range of a 4 = Neutral response).

An example of statements used comes from Yang and Mossholder's (2010) Trust in Leaders Instrument. This survey consisted of 20 statements across four subscales: cognitive trust in management, affective trust in management, cognitive trust in supervisor, and affective trust in supervisor. A seven-point Likert scale was used to measure feeling valued (Statement: 26): Regarding your manager's effort to develop you as an employee, my manager: does what he/she can to make my job easier. For the measurement of atmosphere of safety (Statement: 36) asked; regarding your manager's trust in you, my manager: gives me the freedom to handle difficulty situations in a way I feel is best.

Another example focusing on job satisfaction was from Warr, Cook, and Wall's (1979) Job Satisfaction Survey. This instrument provides a wide range satisfaction scale, which permitted ratings of satisfaction from an individu-

al's perspective. The survey was a cognitive scale instrument that measured both intrinsic and extrinsic characteristics of the job and consisted of 15 items, seven measured intrinsic and eight measured extrinsic characteristics. Five statements were used for the present research. A seven-point Likert scale was used to measure empowerment (Statement: 12); legitimized development (Statement: 23); loyalty (Statements: 41, 43); job satisfaction (Statement: 51) with scoring ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

Demographic Profile

Data collected through participant response were analyzed and summarized using descriptive statistics (Mitterer et al., 2019). A test for normality was performed to determine if the data were well modeled by a normal distribution. Ordinal scale data management and statistical analysis was performed using Microsoft Excel version 15.25 and the Statistical Package for Social Sciences (SPSS) software, Version 23.0. Table 1 represents the demographic profile of the participants (Mitterer et al., 2019).

Results

The hypothesis was investigated using regression analysis, the analysis of variance, the F-test, the P (two-tail) test, and the R-squared statistic. Additionally, mediation analysis was performed to determine if trust mediated the relationship between psychological safety and job satisfaction.

Descriptive Statistics and Correlations

The mean, standard deviation, and Cronbach alpha for psychological interreliability between trust and job satisfaction were performed (Mitterer et al., 2019). The Cronbach alpha scores indicated all items had relatively high internal consistency. Table 2 provides detailed reliability data for the variables.

Basic parametric assumptions were evaluated, with the

Table 1

Demographic Profile of Participants

Shift Worked	Frequency		Percent	
First	114		40.3	
Second	50		17.7	
Third	119		42.0	
Total	283		100.0	
Gender	Total Number		Frequency	
Male	42		14.8	
Female	241		85.2	
Education level	ADN	BSN	MSN	Other
	120	151	12	0
	Minimum	Maximum	Mean	Std. Deviation
Age	21	66	34.74	11.185
Years worked for manager	1	31	2.95	3.36

Table 2*Means, Standard Deviations, Correlations and Internal Reliabilities*

		Mean	Std Dev	1	2	3
1	Job Satisfaction	24.456	5.015	0.607		
2	Trust	41.032	10.505	.494**	0.949	
3	Psychological Safety	22.717	5.447	.426**	.769**	0.678

Note. Cronbach Alpha internal reliabilities are shown on the diagonal.

** $p < 0.01$ (2-tailed).

assumption of normality analyzed using Q-Q scatterplots for each variable. Deviations were mild, and normality assumptions were met for each variable. A histogram was reviewed to assess normality of the dependent variable (skewness -.601, kurtosis .399). Assumptions of linearity and homoscedasticity were met using the evidence in the residual P-P scatterplot.

Mediation Analysis

Mediation focuses on the mechanism that functions between two predictor variables and an outcome. The results were analyzed to examine the mediating effect of trust on psychological safety and job satisfaction. To test this mediation, three conditions or steps need to be present (Judd & Kenny, 1981). First, the independent variable must affect the mediator in the first equation. Second, the independent variable must be shown to affect the dependent variable in the second equation. Third, the mediator must affect the dependent variable in the third equation.

Additionally, if the above conditions are present, in the predicted direction, the effect of independent variable on the dependent variable must be less in the third equation than in the second equation (Barron & Kenny, 1986). The effect of the independent variable on the dependent variable shrinks with the addition of the mediator to the model. Partial mediation is shown when the independent variable's effect is reduced in magnitude, but still significant when the magnitude is controlled. Full mediation occurs if a significant relationship between the independent variable and the dependent variable becomes insignificant after controlling the effect of the mediating variable (in this study trust).

For the mediating effects to be statistically significant,

the indirect effect must show significance in the relationship of the independent variable to the dependent variable. If only the indirect effect is significant, it is a full-mediation effect. In a partial-mediation model, both indirect and direct effects are significant.

Simple mediation analysis was performed using the PROCESS add-on tool in SPSS (Bootstrap 5,000, CI 95%) to determine if trust mediated the relationship between psychological safety and job satisfaction. A Sobel test was used to cross validate the mediation analysis (Barron & Kenny, 1986).

The outcome variable for analysis was job satisfaction, the predictor variable was psychological safety, and the mediator variable was trust. There was a significant indirect effect of psychological safety on job satisfaction through trust ($B = 0.2897$, 95% CI [.1580 - .4235]). Table 3 through Table 5 provide a visual representation of the mediation effects.

A Sobel test was also conducted and used to cross validate the mediation analysis. The goal of a Sobel test was to check whether the reduction in the effect of the independent variable on the dependent variable via the mediator was a significant reduction, and therefore, whether the mediation effect was statistically significant. The Sobel test found mediation in the model ($z = 4.89$, $p = 8e-7$). Table 6 provides a visual representation of the Sobel test analysis, with the Figure displaying each path and effect.

There is sufficient evidence to conclude that trust has a partial mediating effect between psychological safety and job satisfaction, thus the hypothesis is supported. When measuring mediation, the analysis determined that there was a significant effect of trust on psychological safety and job satisfaction.

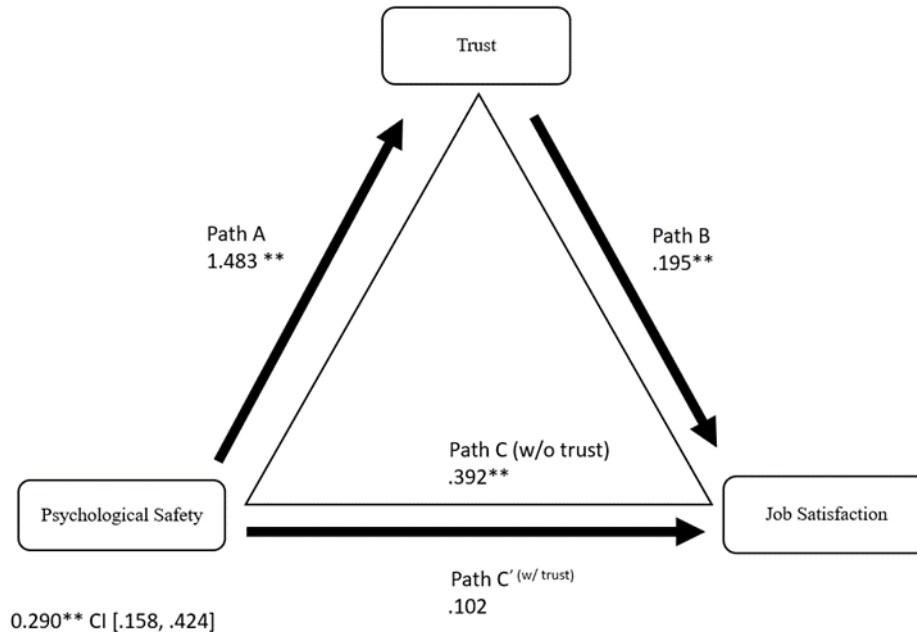
Table 3*Statistical Output Verifying the Basic Relationship Psychological Safety to Job Satisfaction*

Model	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
(Constant)	15.555	1.161	13.397	0.000
Psychological safety	0.392	0.050	7.882	0.000***

*** $p < 0.01$.

Figure

Mediation Analysis: Trust Mediating the Relationship Between Psychological Safety and Job Satisfaction.



** $p < 0.01$.

Discussion

This paper explored how psychological safety influences job satisfaction. This research incorporated the mediating role of trust between psychological safety and job satisfaction adding to the limited research that exists. The research model was found to have a partial mediating effect. Psychological safety did have a direct and indirect effect on the dependent variable, job satisfaction. The results did support our hypotheses that trust positively mediates the variables of psychological safety and job satisfaction.

Research often focuses on team interaction and goal achievement; however, one must look at the contribution of individuals to understand the cumulative effect on team results. If individuals experience an unsafe environment, do not trust other team members or the manager due to

subtle slights or judgments, and are not included in group interactions, productivity decreases for the individual and the team. Building an environment of psychological safety and trust begins at orientation and slowly increases over time. It does not occur suddenly nor does it disappear quickly unless a major infraction occurs.

Based on the social exchange theory, we have found the crucial role of reciprocity and the quality of the social exchange, and how this exchange influences the quality of the relationship. Additionally, the theory of Reciprocated Social Exchange (RSE) helps us understand an employee's trust relationship and how this trust relationship, with supervisors, is integral in increasing job satisfaction. Since perception begins with the individual, there are important theoretical and practical implications associated with identifying determinants of psychological safety. From a theoretical perspective, considerable research

Table 4

Statistical Output of Psychological Safety Predicting Trust (First Regression)

Model	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
(Constant)	7.338	1.718	4.270	0.000
Psychological Safety	1.481	0.074	20.163	0.000***

*** $p < 0.01$.

Table 5*Output of Psychological Safety and Trust Predicting Job Satisfaction (Second Regression)*

Model	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
(Constant)	14.122	1.149	12.290	0.000
Psychological safety	0.102	0.075	1.369	0.172
Trust	0.195	0.039	5.053	0.000***

*** $p < 0.01$.**Table 6***Output from Sobel Test*

	Input		Test statistic	<i>SE</i>	<i>p</i>
Path a	1.483	Sobel Test	4.8953510	0.05917226	8e-7
Path b	0.195				
Standard error path a = sa	0.074				
Standard error path b = sb	0.039				

links psychological safety to important organizational outcomes.

To date, little research has investigated the effect of psychological safety and trust on job satisfaction. Some have looked at the variables of psychological safety and job outcomes, such as Liu et al. (2020) who reviewed the incivility of supervisors and the effect on psychological safety in the workplace. They examined the trickle-down effect of incivility through the hierarchical levels to understand the effect on psychological safety for employees. Others, such as Simha and Pandey (2020), studied how trust and the ethical climate impact turnover intention and used mediation to show the degree of this interaction. Researchers have studied similar variables, but few have performed studies on psychological safety, trust, and job satisfaction.

An individual's psychological safety increases their job satisfaction, when trust in the supervisor is strong, which ultimately increases team performance and achievement of organizational goals. It may be inferred from these findings that, not only does the employee's perceived fit contribute to perceptions of psychological safety but trust also plays an integral role in the relationship processes necessary for employees to perceive they are safe to express themselves in the organizational context, which increases employee job satisfaction.

Implications

The research results may provide several important implications for practice. First, the findings point to the vital role that a psychologically safe environment can act as a performance enabler in an organization. Second, managers that emphasize the importance of psychological safety are desirable when looking at factors that improve job satisfaction. Third, trust is an essential variable when building strong, cohesive relationships that lead to greater

job satisfaction. When a safe environment is prioritized, employees develop strong bonds with supervisors, especially when trust is encouraged. This bond creates mutual respect, loyalty, and team cohesion, resulting in greater productivity. When the environment is psychologically safe, employees have more confidence in themselves as they feel their managers and peers will not embarrass them, reject ideas outright, or punish them, either directly or indirectly, for expressing ideas. This sense of security allows for brainstorming, reporting errors, and seeking innovative methods for improvement.

Limitations

The results demonstrated how trust and psychological safety increased job satisfaction in the healthcare industry. However, there are some limitations in this research. The sample was collected using a self-report instrument, from nurses in a hospital environment. The industry's unique characteristics and extenuating factors might have impacted the generalizability of the results. However, the lack of engagement, high turnover intention, and lack of job satisfaction in nursing follow similar trends in other industries. Based on the unchanging national and international work engagement surveys, one could surmise that the findings of this research could be applied to other industries.

Conclusion

Employee turnover is a very serious problem in many organizations and managers need to be aware of the importance of developing a safe and trusting environment. Wang and Hsieh (2013) reported meaningful, positive relationships between leaders who are trusted and an increase in follower job satisfaction, job performance, and organizational commitment. Wong and Laschinger (2013) discussed how trust in the organization improves work environmental factors, commitment, and job satisfaction. Wong and Laschinger (2013) also discussed how organi-

zational trust improves the perception of unit-level productivity.

Significantly less research has been advanced to expand the field's understanding of the determinants of psychological safety, thus contributing to a more refined understanding of the ways that psychological safety may be enhanced or inhibited at the individual level. From a practical perspective, identifying facilitators of psychological safety enables a more tailored approach to the development and implementation of organizational programs, policies, and/or interventions designed to increase employee psychological safety and thus organizational performance.

Organizations in general, and managers specifically, need to understand the relationship between psychological safety, trust, job satisfaction, loss of production, turnover intention, and ultimately, turnover. When employees feel psychologically safe AND trust their peers, manager, and the organization, job satisfaction, and productivity increase, resulting in a decrease in turnover intention and actual turnover. When BOTH psychological safety and trust are low, employees feel less inclined to want to stay with the organization. They may stay out of necessity, but their engagement and productivity will be lower, and if another job opportunity presents itself, employees are more likely to leave. This is true regardless of whether or not the employee was a high performer.

Therefore, leaders need to develop strategies that promote psychologically safe climates and stimulate trusting interactions between individual employees and peers, individuals and managers, and individuals and leadership. Our results suggest that employees will feel more psychologically safe, experience less turnover intention, and have greater job satisfaction when managers actively create a safe and trusting work environment.

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