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RESEARCH ARTICLE

The Power of Psychological Safety: Investigating its Impact on Team Learning, Team Efficacy, and Team Productivity

Rajeshwari Patil[1], Deepali K Raheja[1], Lakshmi Nair[1], Amruta Deshpande[2] and Amit Mittal[3,*]

[1]Department of Management, Sri Balaji University, Pune, India
[2]Indira School of Business Studies PGDM, Pune, India
[3]Chitkara Business School, Chitkara University, Punjab, India

Abstract:

Background:

The key to success is to banish fear and create a thriving environment that allows people to speak their minds without any fear, an environment that allows people to be vulnerable. This environment, known as psychological safety, when present at the workplace, makes people feel comfortable with them, ask bold questions, share concerns, and ask for help, resulting in high team performance and lower team conflicts. A lack of psychological safety at work impacts the team's performance and the organization's bottom line.

Aims:

This research shows the effect of psychological safety on team learning and team efficacy. The study is done on regular employees and finds the relation of aforementioned. Psychological safety, too, is critical for a team's success, which is the backbone of today's businesses. To improve workplace psychological safety, leaders must first go within to comprehend and incorporate their feelings and concerns and then look outside to help others. Since the research only focuses on team learning and team efficacy, it can further be researched on Team Leadership, Mentoring/coaching.

Objectives:

The objective of the study was to investigate whether there is a correlation between learning behaviours, Team Efficacy, and Team Productivity. And also, to study the relationship between these variables and psychological safety. Team psychological safety refers to the shared belief among team members that they can take interpersonal risks without fear of negative consequences. This study also examined the impact of team psychological safety on team efficacy.

Methods:

The study was conducted with a sample size of 101 respondents. Snowball and convenience sampling were found appropriate for this study as the study focused on team efficacy and learning behavior. Regression analysis was used to study the impact of Team psychological safety on learning behavior and team efficacy and test the hypothesis.

Results:

The result of this study was that team dynamics are significantly impacted by psychological safety, team learning, and team efficacy in teams and, thereby productivity. It was also found that the Team's psychological safety is favourably correlated with organizational work teams. The Team's effectiveness is positively impacted by team psychological safety.

Conclusion:

This study contributes significantly to the literature on the concept of psychological safety. Adding significant value to Leading management thinkers, consultants, and psychologists. The research concludes that team dynamics are significantly impacted by psychological safety, team learning, team efficacy, and productivity in teams. Moreover, this study aimed to promote psychological safety, which is also essential for team success and is the foundation of today's enterprises.

Keywords: Psychological safety, Team learning, Productivity, Team efficacy, Hypothesis, Consultants, Psychologists.

1. INTRODUCTION

In today's rapidly changing business environment, teamwork has become integral to organizational success. Effective collaboration among team members is essential for achieving organizational goals and objectives. However, creating a teamwork and collaborative culture requires team members to feel comfortable sharing their opinions and ideas, making mistakes, and taking risks without fear of repercussions or judgment. This is where psychological safety comes into play. It is a significant factor in increasing team learning, team efficacy, and team productivity. By creating an environment where team members feel safe, respected, and supported, a culture that encourages collaboration, innovation, and continuous improvement can be fostered.

Psychological safety is the notion that taking interpersonal risks within a team is safe. When team members have psychological safety, they are more likely to engage in open conversation, ask for help, share ideas, and experiment without fear of the consequences. Team members can learn from one another, work well together, and ultimately generate high-quality work because of this feeling of safety. Many studies have shown a positive correlation between psychological safety, team learning, and team effectiveness. We can learn about the precise mechanisms through which psychological safety influences these outcomes.

Psychological safety is particularly important in today's workplace, clouded by volatility, ambiguity, complexity, and uncertainty, for several reasons; one of the most important reasons that cannot be ignored is the hybrid work model and the pressing demand for organizations to continuously innovate. Psychological safety foster's a culture where employees can fail faster and learn faster, try new approaches, and learn from both successes and failures. It creates a culture of continuous learning and improvement, where mistakes are seen as opportunities for growth rather than reasons for punishment or blame. When team members feel psychologically safe, they are more likely to communicate openly, honestly, and transparently. They trust that their opinions will be heard and respected, leading to improved collaboration, better relationships, and stronger team cohesion.

The absence of psychological safety stifles creativity, innovation, and constructive feedback within the organization. Without it, individuals may be hesitant to collaborate or share information with others. There may be a lack of trust in colleagues' intentions and abilities, hindering teamwork and cooperation. This can lead to silos, reduced knowledge sharing, and decreased efficiency.

In an environment lacking psychological safety, employees may hesitate to take risks or experiment with new ideas. They may avoid seeking feedback or admitting mistakes, fearing negative consequences. As a result, opportunities for learning and personal development are limited, and individuals may become stagnant in their roles. This shows that a lack of culture where employees can speak their minds not only hampers organizations' growth but also creates stagnation for the employees.

* Address correspondence to this author at the Chitkara Business School, Chitkara University, Punjab, India; E-mail: amit.mittal@chitkara.edu.in

According to a study, diversity of thought increases an organization's effectiveness. Groups of people having various life experiences, as opposed to those with the same life experiences, are better equipped to identify issues and suggest innovative solutions. Nevertheless, what if certain team members are apprehensive about speaking up? They may not express their apprehensions, ask provocative questions, or put forth original ideas because they fear rejection.

The Fearless Organization by Amy Edmondson [1,2] Fostering Psychological Safety at Work for Learning, Creativity, and Development details that the assurance that you will not suffer penalties or endure humiliation for sharing your opinions, concerns or mistakes is known as psychological safety. "Harvard Business School professor Amy Edmondson [3] coined psychological safety." She describes it as "a shared understanding that the team is safe for interpersonal risk-taking." According to Edmonson & Jeff Polzer of the Harvard Business School [1,3,4], norms are crucial for psychologically safe workplaces and encouraging participation. When people feel uncomfortable discussing unproductive initiatives, the Organization cannot avoid disaster. When employees are completely engaged, the Organization can leverage all its people's skills. This is possible only when organizations encourage employees to speak fearlessly.

Consequently, this study paper examines how psychological safety affects team learning, team efficacy, and Productivity. The study aims to add to the body of knowledge by elucidating the complex relationship between psychological safety and these significant consequences. This study may have been used for businesses looking to foster a culture of cooperation and teamwork that results in high-caliber output and team effectiveness.

2. LITERATURE REVIEW AND HYPOTHESES

Members of the Team have grounded reason, with which team leaders may directly interact *via* a leadership process of discovery [5]. The author does this by using a case-based argument. The investigation proves that leaders may more and more successfully adapt their leadership behaviours to boost trustworthiness, psychological safety, and teamwork when they use relationship discovery techniques. The notion that dyadic-level research is more psychologically secure and consistently productive than team research in the majority of a study of dyadic and Team discovery instances lends support to work team setups. This is a significant discovery because numerous "actions" and "organization development" techniques now use group-level interventions to identify individual-level rationality [5, 6].

The internal psychological psychosocial working condition, which mainly studies further, investigates issues pertinent at the team level of Analysis. A study by [4] found that a vital component of comprehending cooperation and learning in businesses is knowing how individuals view the interpersonal atmosphere in the teams with whom they collaborate. Mutual respect and trust, the book's overarching theme, are essential to this social atmosphere. In this chapter, I demonstrate how such an environment, which the author refers to as one of psychological safety, encourages individuals to

contribute their thoughts and behaviors to group projects willingly. In a later section, the author argues that psychological safety is crucial for small groups, just as trust is crucial for dyadic interactions. The statements made by individuals participating in team activities can be used to infer the presence or absence of psychological safety. In response to an open-ended question inquiry like, "How is it to work in this team?" team members almost instantly provide remarks that show the presence or lack of psychological safety in their teams.

Two dyadic psychological safety concepts are presented. Psychological safety for oneself and other people mitigated the effects of supervisor threat sensitivity on the likelihood that a subordinate will voice a disagreement, give direct feedback, and point out problems to a supervisor [7]. It also moderated the effects of supervisor face giving on acknowledging mistakes and asking for help. Additionally, it simulates how "team efficacy" and "team psychological safety" affect learning and performance [8] in collaborative organizational work teams. According to a study that looked at antecedent, process, and outcome variables for 51 work teams in a manufacturing organization, learning behavior is related to the Team but not to team performance.

Relational coordination is one way in which high-quality partnerships are specifically expressed [5]. The author investigated the relationship foundations of learning from mistakes in companies by referring to the idea of high-quality connections. We investigate how the relational components of relational coordination objectives, mutual respect, and shared knowledge— pursue psychological safety and allow members to encourage in learning from mistakes. Our mediation model, which considers the outcomes of two studies, lends credence to the idea that psychological safety influences the link between good relationships and effective organizational learning.

Study was conducted with 894 employees and 222 direct supervisors in a prominent US financial institution to look at ethical leadership's causes and effects. Conscient- iousness and agreeableness were positively correlated with direct reports' assessments of the leader's ethical leadership, although neuroticism was not [9]. According to their immediate superiors, leaders' moral integrity affects the verbal behavior of their followers. The followers' assessments of their psychological safety were a mediating factor in the association between these two variables. There are discussions about the implications for future research on ethical leadership and strategies for strengthening both leaders' and non-leaders ethical behavior [4]. Organizational practices for failure learning are examined. The failure-based learning approaches include a social and psychological safety component. In Israel, data were collected from 138 people from 32 groups representing various industries. The study shows that psychological safety and behavior based on learning from failure may occur in high social capital organizations. Additionally, it was discovered that social capital is associated with failure-based learning behaviors both directly and indirectly through psychological safety. The methods organizations employ to increase Analysis were done on learning capacities and how they affected personal levels. The

effects of organizational learning and failure are then looked at.

To fully engage employees' creative potential and take advantage of valuable distributed information, organizational communities of practice (OCoPs) are being used increasingly [10]. As OCoPs' reach expands globally, they must rely on electronic communication channels to draw global work involvement [11] and abilities. Can the variety of these worldwide OCoPs' nationalities improve or worsen their performance? Information on group performance in a Fortune 100 US-based multinational mining and minerals processing corporation was gathered from more than 200 respondents of 30 worldwide OCoPs. According to this study, the degree of use of a rich communication medium and psychological safety reduced the curvilinear link. When groups displayed more excellent psychological safety and media use for communication, the scale altered from favorable at the top to less terrible at the bottom, strengthening the relationship between nationality diversity and performance [2]. Teams today experience enormous change; therefore, learning and adjusting to it is essential. However, a crucial learning component entails questioning presumptions and openly discussing disagreements within a community - actions that could embarrass or endanger others. How can team leaders create a climate where team members feel comfortable taking risks with one another to grow? Findings revealed that psychological Teams with mastery goal instructions demonstrated higher levels of safety and learning behavior than teams with performance goal instructions or no goal instructions, according to a study of 71 teams. The psychological safety of the group acted as a bridge between learning behavior, performance goal instructions, and mastery. We can better understand the relationship between leader-assigned goals, psychological safety, and team members' learning behaviors thanks to results that also provide solutions for fostering these processes.

Further, Understanding how to encourage employees' voice behavior has received much research [12]. However, because they have not adequately considered the mediating role of cognitive and mental processes, previous studies have yet to explore the voice behavior process. To close this gap, this work constructs and tests a theoretical model that emphasizes Using psychological safety as a buffer between speech and social interactions. The largest express transportation company in Taiwan's 652 employees provided the data. The study's hypotheses were tested through an examination of structural equation modeling. According to empirical findings, there is a connection between speech behavior and employees' perceptions of their connections with managers and co-workers. Future research topics are suggested, and the implications for management and research in practice are discussed [13]. Participants are at risk for accidents and dangers due to the nature of building projects and how they are delivered. Employees can make sense of workplace safety measures and modify their behavior by using the safety atmosphere as a frame of reference. Although there is much research on safety climate, more must be done to look into how a safety climate develops. An excellent place to start would be to investigate. How can safety climate be operationalized at the personal level or psychological safety climate? This research

creates a conceptual framework for creating a psychologically safe environment and offers a preliminary validation, taking the stance that projects are social activities. According to the model, management can make efforts from structural, perceptual, interaction, and cultural aspects to establish the ideal psychological safety climate. Further empirical studies can be developed on the model to present a more detailed and convincing illustration of the variables influencing safety behavior.

The instructors' assessment of the learning environment had higher psychological safety levels and more variation than the students [3]. The psychological well-being of pupils and teachers' opinions of their psychological safety were significantly correlated; positive aspects of students' well-being, such as emotional comfort, self-assurance, and increased cognitive activity, were established in classrooms where teachers felt a high level of psychological safety [14] Age diversity is associated with learning in on-site industrial training groups in a negative manner that is only moderated by knowledge sharing and psychological safety climate (perceived but not objective).

Employees are comfortable taking interpersonal risks in psychologically safe environments, such as calling out errors. A strong correlation was found between reporting intentions and psychological safety, so this climate aspect can significantly help enhance patient security and reduce costs.

Psychological safety influenced transformational learning outcomes, which included social support, an attitude towards ambiguity, and criticality [15]. This was the first time the term "transformational learning" was in workplace research and examined the connection between transformational learning and psychological safety.

There is an increasing interest in explaining the complex relationships among the variables of the study.

2.1. Team Psychological Safety and Team Learning

Learning is essential to continuing to succeed in the moment's corporate geography. There is constant pressure to adapt and change more advanced than ever – and that burden often rests on the shoulders of brigades. Brigades are groups of people that cooperate to accomplish a shared objective. Groups have devised a formula to predict the number of brigades that will be effective in the field.

When brigades do not learn, the association will likely suffer. For illustration, brigades that do not learn will require more time to develop a something request. Thus, it is pivotal to comprehend team literacy in practice and academia and improve performance across the association.

Argues that intuition is critical in team learning and decision-making [16]. Klein defines intuition as recognizing patterns and making quick judgments based on experience and expertise. He argues that intuition can be a valuable source of information in complex and uncertain environments [17] and that teams can develop intuitive expertise through deliberate practice and reflection.

'The Power of Psychological Safety: Exploring Its Effect on Team Learning, Work Quality, and Efficacy' is a significant paper that examines the idea of psychological safety in teams and its influence on group learning, work quality, and efficacy. The article is still frequently mentioned today and has established itself as a classic in organizational behavior. The essay offers theoretical and empirical reasons in support of the significance of psychological safety and offers managerial and leadership implications that may be put into practice.

The profusion of the term team learning exploration in recent times has revealed two crucial team learning challenges & team-literacy processes. People frequently refer to how a team's intelligence has changed over time and how this has altered their capacity to operate together as having "team-learning" and "team-literacy perspectives," respectively.

Furthermore, this claim distinguishes between three sorts of collaborative learning activities (*i.e.*, behaviors that encourage the formation of shared knowledge): intra-team, inter-team, and abecedarian literacy acts. Teams must be understood from the perspective of the time since team learning is by its very nature an activity that develops over time, *e.g.*, [18]. Input must be discussed, debated, and contextualized to prior knowledge in need for group learning to occur. It needs to be stored in some fashion to retrieve it later. This process takes place through several interactions rather than in a single instant. Even yet, some of these earlier team models included these elements. This dynamic team learning model offers a strong foundation for understanding when, how, and what teams learn across time see, for instance [19].

The two goals were achieved in the ways listed below. The study starts with a thorough overview of team learning. The phrase "team learning" has been utilized to describe various characteristics of the team learning process, including learning-facilitating behaviors, changes in the group's collective knowledge, and gains in performance over time. Learning in the team takes place through a series of activities such as seeking feedback, sharing information, asking for help, talking about errors, and being open to criticism. In a national organization setting, learning may be hampered; particularly those who can initiate learning find themselves in a risk position, especially when asking for help or admitting mistakes, may be looked at as incompetent and damage the reputation and thus reluctant to disclose errors. Therefore, if team learning is to be successful, an environment where agreement and disagreements are encouraged.

Psychological safety fosters open communication, knowledge sharing, constructive feedback, and learning from failure and establishes a learning culture within the team. When team members feel safe to take risks, share their knowledge, and learn from one another, team learning flourishes, leading to enhanced creativity, innovation, and problem-solving capabilities.

2.1.1. Hypothesis 1

H1: Team psychological safety is positively related to team learning activity.

2.2. Team Psychological Safety and Team Efficacy

The concept of self-efficacy and how it affects motivation, learning, and behavior are described by Albert Bandura. He contends that self-efficacy beliefs play a significant role in shaping human behavior and that individuals are likely to succeed in their endeavors with higher levels of self-efficacy. Since members with high levels of team efficacy are more likely to believe their Team can achieve its goals, teams can use this concept. The term "collective efficacy" is used by [6] to describe the consensus among team members that their group can successfully carry out activities and accomplish its objectives. The authors argue that collective efficacy is a critical determinant of team performance and provide a conceptual framework for understanding the factors contributing to collective efficacy.

Work habits have changed over the past 20 years, and most firms now rely on teams to execute tasks. Additionally, there has been an upsurge in team effectiveness theory and study. Influential team members have common ideals and have complicated and challenging tasks to complete [20]. Companies must ensure that team members believe they can work productively to finish tasks. In order to ensure that teams are effective at their job, this CQ Dossier focuses on team efficacy and how organizations may influence and improve it. The notion that one can perform effectively in a particular domain is known as self-efficacy [21] Most studies have gathered evidence to support the usefulness of self-efficacy on individual performance since it strongly emphasizes the individual It might be challenging to tell individual actions from team actions; because teams focus on interactive tasks and operate interdependently towards a common goal.

In order to distinguish between team efficacy and individual efficacy, [suggests that collective efficacy affects the tasks that employees complete as a team, the effort they put forth into meeting team goals, and their motivation and persistence when group efforts fall short of their intended goals. Individuals' perspective shifts from themselves to the Team, which results in the shift from individual to team level.

Team efficacy is a critical determinant of team performance, and highly cited authors in organizational behavior have extensively studied this concept. The works reviewed here provide a comprehensive understanding of the factors that contribute to team efficacy and practical strategies for enhancing team efficacy and performance. One such major factor that contributes immensely to increasing self-efficacy and collective team efficacy is the presence of an environment where admission of error and reaching out for help is not deemed as incompetency but rather reduces the obstacles to progress and increases the team's confidence to achieve team goals.

2.2.1. Hypothesis 2

H2: Team psychological safety is positively related to team efficacy.

2.3. Team Learning and Team Productivity

Team learning promotes the sharing of knowledge and expertise among team members. When Team members build trust and rapport by engaging in learning activities together, their understanding of the task at hand [22]. This shared knowledge pool allows the team to make more informed decisions and find innovative solutions to problems. By tapping into the team's collective intelligence, productivity can be increased as tasks are completed more efficiently [23]. Team learning allows team members to develop new skills and expand their knowledge. As individuals learn from one another, they can acquire new techniques, methods, and approaches that improve their individual capabilities. When team members possess a broader range of skills, they can contribute more effectively to the team's goals, leading to higher productivity.

Team learning encourages collaboration and cooperation among team members [24]. Team members build trust and rapport by engaging in learning activities together, which fosters effective teamwork. When team members trust and support each other, they are more likely to share ideas, ask for help when needed, and work together to achieve common objectives. This collaborative environment creates synergy, where the combined efforts of the team members result in productivity gains that surpass what could be achieved individually. Team learning promotes a culture of continuous improvement within the team. Through reflection, feedback, and evaluation of past performance, team members can identify areas for improvement and implement changes accordingly. This iterative learning process allows teams to adapt and refine their work methods over time, leading to increased efficiency and productivity [25].

To enhance team productivity through team learning, it is important to encourage open communication, foster a learning culture, facilitate knowledge-sharing platforms, structure learning activities, and encourage diversity. By promoting open communication channels and active listening, team members can freely share knowledge and ideas. Establishing a learning culture that values continuous growth and provides training opportunities supports ongoing development. Utilizing technology tools and platforms for easy knowledge sharing enhances collaboration. Structured learning activities, such as regular sessions and peer coaching, provide dedicated time for team members to learn from each other. Lastly, embracing diversity within the team fosters a wider range of perspectives and ideas, leading to more innovative and effective solutions.

2.3.1. Hypothesis 3

H3: Team learning activity is positively related to team productivity.

2.4. Team Efficacy and Team Productivity

Team efficacy refers to the collective belief of the members of the team, that they have the ability to complete the task with efficiency and work well as a team. When a team has high levels of efficacy, they are typically more motivated, engaged and generally perform better as a collective. Team productivity, on the other hand, refers to the team's ability to achieve the goals and objective of the team. It refers to the

efficient use of resources and coordinated efforts. Team members develop a high level of self-confidence when the team environment is conducive to sharing knowledge, and asking for help without any feeling of fear. Fear and feeling of being powerless or weak reduce the efficacy of the individual, thereby impacting his/her contribution to the team goals.

2.4.1. Hypothesis 4

Team efficacy is positively related to team productivity.

Members of the Team have grounded reason, with which team leaders may directly interact *via* a leadership process of discovery [20]. The author does this by using a case-based argument. The investigation proves that leaders may more and more successfully adapt their leadership behaviours to boost trustworthiness, psychological safety, and teamwork when they use relationship discovery techniques. The notion that dyadic-level research is more psychologically secure and consistently productive than team research in the majority of a study of dyadic and Team discovery instances lends support to work team setups. This is a significant discovery because numerous "action" and "organization development" techniques now use group-level interventions to identify individual-level rationality [6].

The internal psychological psychosocial working condition, which mainly studies further, investigates issues pertinent at the team level of Analysis. A study by [4] found that a vital component of comprehending cooperation and learning in businesses is knowing how individuals view the interpersonal atmosphere in the teams with whom they collaborate. Mutual respect and trust, the book's overarching theme, are essential to this social atmosphere. In this chapter, I demonstrate how such an environment, which the author refers to as one of psychological safety, encourages individuals to contribute their thoughts and behaviors to group projects willingly. In a later section, the author argues that psycho-logical safety is crucial for small groups, just as trust is crucial for dyadic interactions. The statements made by individuals participating in team activities can be used to infer the presence or absence of psychological safety. In response to an open-ended question inquiry like, "How is it to work in this team?" team members almost instantly provide remarks that show the presence or lack of psychological safety in their teams.

Two dyadic psychological safety concepts are presented [7]. Psychological safety for oneself and other people mitigated the effects of supervisor threat sensitivity on the likelihood that a subordinate will voice a disagreement, give direct feedback, and point out problems to a supervisor. It also moderated the effects of supervisor face giving on acknowledging mistakes and asking for help. Additionally, it simulates how "team efficacy" and "team psychological safety" affect learning and performance [15] in collaborative organizational work teams. According to a study that looked at antecedent, process, and outcome variables for 51 work teams in a manufacturing organization, learning behavior is related to the Team but not to team performance.

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partnerships are specifically expressed [5]. The author investigated the relationship foundations of learning from mistakes in companies by referring to the idea of high-quality connections. We investigate how the relational components of relational coordination objectives, mutual respect, and shared knowledge— pursue psychological safety and allow members to encourage in learning from mistakes. Our mediation model, which considers the outcomes of two studies, lends credence to the idea that psychological safety influences the link between good relationships and effective organizational learning.

Study was conducted with 894 employees and 222 direct supervisors in a prominent US financial institution to look at ethical leadership's causes and effects [26]. Conscient- iousness and agreeableness were positively correlated with direct reports' assessments of the leader's ethical leadership, although neuroticism was not. According to their immediate superiors, leaders' moral integrity affects the verbal behavior of their followers. The followers' assessments of their psychological safety were a mediating factor in the association between these two variables. There are discussions about the implications for future research on ethical leadership and strategies for strengthening both leaders' and non-leaders ethical behavior [4]. Organizational practices for failure learning are examined. The failure-based learning approaches include a social and psychological safety component. In Israel, data were collected from 138 people from 32 groups representing various industries. The study shows that psychological safety and behavior based on learning from failure may occur in high social capital organizations. Additionally, it was discovered that social capital is associated with failure-based learning behaviors both directly and indirectly through psychological safety. The methods organizations employ to increase Analysis were done on learning capacities and how they affected personal levels. The effects of organizational learning and failure are then looked at.

To fully engage employees' creative potential and take advantage of valuable distributed information, organizational communities of practice (OCoPs) are being used increasingly [27]. As OCoPs' reach expands globally, they must rely on electronic communication channels to draw global work involvement [28]. and abilities. Can the variety of these worldwide OCoPs' nationalities improve or worsen their performance? Information on group performance in a Fortune 100 US-based multinational mining and minerals processing corporation was gathered from more than 200 respondents of 30 worldwide OCoPs. According to this study, the degree of use of a rich communication medium and psychological safety reduced the curvilinear link. When groups displayed more excellent psychological safety and media use for communication, the scale altered from favorable at the top to less terrible at the bottom, strengthening the relationship between nationality diversity and performance [29]. Teams today experience enormous change; therefore, learning and adjusting to it is essential. However, a crucial learning component entails questioning presumptions and openly discussing disagreements within a community - actions that could embarrass or endanger others. How can team leaders

create a climate where team members feel comfortable taking risks with one another in order to grow? Findings revealed that psychological Teams with mastery goal instructions demonstrated higher levels of safety and learning behavior than teams with performance goal instructions or no goal instructions, according to a study of 71 teams. The psychological safety of the group acted as a bridge between learning behavior, performance goal instructions, and mastery. We can better understand the relationship between leader-assigned goals, psychological safety, and team members' learning behaviors thanks to results that also provide solutions for fostering these processes.

Further, Understanding how to encourage employees' voice behavior has received much research throughout the years. However, because they have not adequately considered the mediating role of cognitive and mental processes, previous studies have yet to explore the voice behavior process. To close this gap, this work constructs and tests a theoretical model that emphasizes. Using psychological safety as a buffer between speech and social interactions. The largest express transportation company in Taiwan's 652 employees provided the data. The study's hypotheses were tested through an examination of structural equation modeling. According to empirical findings, there is a connection between speech behavior and employees' perceptions of their connections with managers and co-workers. Future research topics are suggested, and the implications for management and research in practice are discussed [30]. Participants are at risk for accidents and dangers due to the nature of building projects and how they are delivered. Employees can make sense of workplace safety measures and modify their behavior by using the safety atmosphere as a frame of reference. Although there is much research on safety climate, more must be done to look into how a safety climate develops. An excellent place to start would be to investigate. How can safety climate be operationalized at the personal level or psychological safety climate? This research creates a conceptual framework for creating a psychologically safe environment and offers a preliminary validation, taking the stance that projects are social activities. According to the model, management can make efforts from structural, perceptual, interaction, and cultural aspects to establish the ideal psychological safety climate. Further empirical studies can be developed on the model to present a more detailed and convincing illustration of the variables influencing safety behavior.

The instructors' assessment of the learning environment had higher psychological safety levels and more variation than the students [31]. The psychological well-being of pupils and teachers' opinions of their psychological safety were significantly correlated; positive aspects of students' well-being, such as emotional comfort, self-assurance, and increased cognitive activity, were established in classrooms where teachers felt a high level of psychological safety [32]. Age diversity is associated with learning in on-site industrial

training groups in a negative manner that is only moderated by knowledge sharing and psychological safety climate (perceived but not objective).

Objective Employees are comfortable taking interpersonal risks in psychologically safe environments, such as calling out errors. The Higher psychological safety and the reasons mentioned earlier mean. Power is a crucial consideration for those in supervisory roles. A strong correlation was found between reporting intentions and psychological safety, so this climate aspect can significantly help enhance patient security and reduce costs.

Psychological safety influenced transformational learning outcomes, which included social support, an attitude towards ambiguity, and criticality [31]. This was the first time the term "transformational learning" was in workplace research and examined the connection between transformational learning and psychological safety.

2.5. Research Questions

What is the relation between Team psychological safety and team learning activity?

What is the relation between Team psychological safety and team efficacy?

What is the relation between Team learning activity and team productivity?

What is the relation between Team efficacy and team productivity?

2.6. Objectives of the Study

To study the relationship between Team psychological safety and team learning activity.

To study the relationship between Team psychological safety and team efficacy.

To study the impact of Team learning activity and team productivity.

To study the relationship between Team efficacy and team productivity.

2.7. Hypothesis

H1: Team psychological safety is positively related to team learning activity.

H2: Team psychological safety is positively related to team efficacy.

H3: Team learning activity is positively related to team productivity.

H4: Team efficacy is positively related to team productivity.

2.8. Conceptual Model

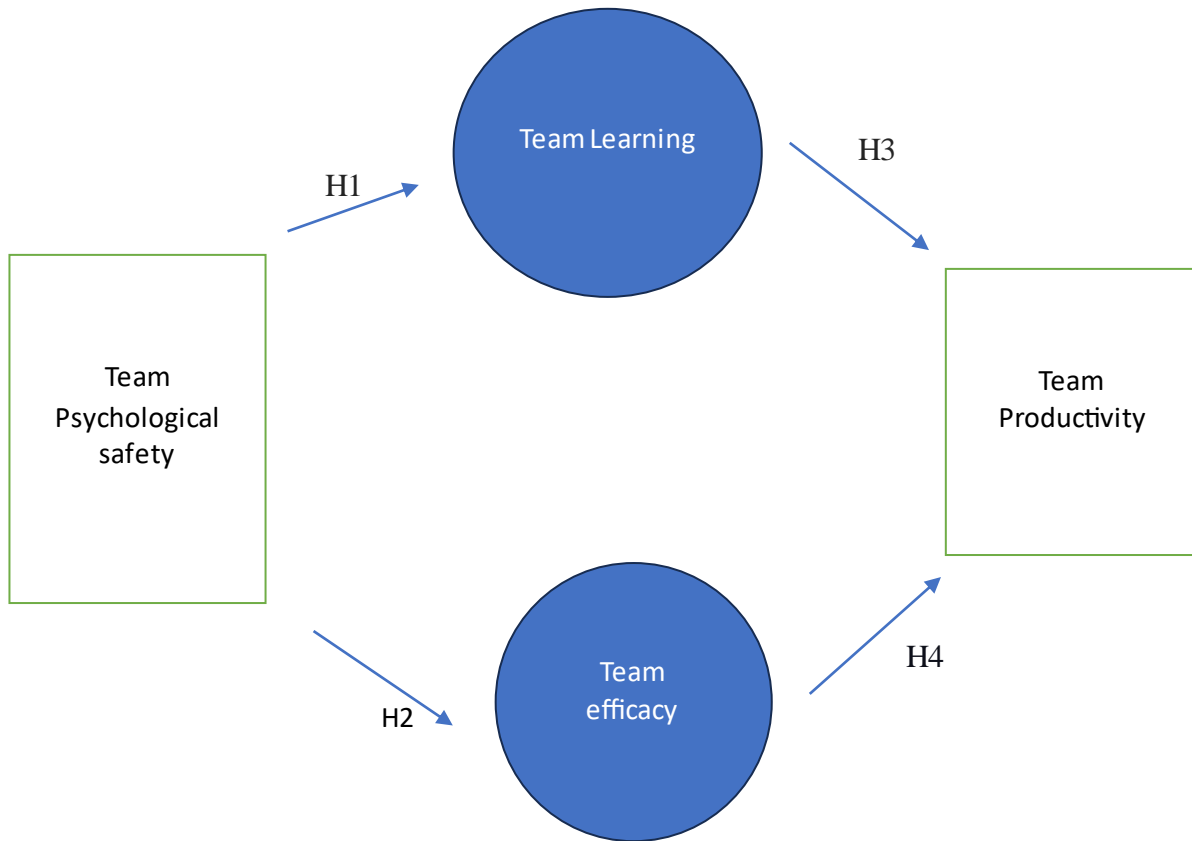The conceptual model is described in Fig. (**1**).

Fig. (1). Conceptual model.

3. RESEARCH METHODOLOGY

The quantitative research method was used in this study with the objective of establishing the correlation and impact of Psychological safety (independent variable) and Team Efficacy, team productivity, and team learning behavior (dependent variable.) A questionnaire consisted of statements using the 5-point Likert scale that covered all the constructs. Questions on psychological safety were the modifications of Dr. Edmondson's original 7 statements (Table **1**).

To assess the construct's dependability, Cronbach's alpha was determined. The table below provides the details.

Table 1. Reliability test using cronbach's alpha.

Construct	Cronbach's Alpha	No. of Items
Psychological Safety	.85	9
Team Efficacy	.74	4
Team learning	.83	7
Team Productivity	.55	3

Source: Prepared by the author.

Table 2. - Descriptive statistics and correlation .

Variables	Mean	SD	1	2	3	4
1. Team Psychological safety	3.8	1.68	1	0.66	0.64	0.38
2. Team learning activity	3.7	1.12	0.66	1.00	0.61	0.51
3. Team efficacy	3.8	1.11	0.64	0.61	1.00	0.24
4. Team Productivity	1.02	0.4	0.38	0.51	0.24	1.00

Source: Prepared by the author.

Table 3. Summary of the three models using regression analysis.

IV	Team Learning Activity	Team Efficacy	Team Productivity
	Model 1	Model 2	Model 3
Team Psychological safety	0.889* (.478)	.270*(.541)	1.244* (.188)
Team learning activity	-	.270*(.398)	1.244* (.583)
Team efficacy	-	-	1.244* (-.158)

Source: Prepared by the author.

The questionnaire was distributed to a sample of 150 participants. Snowball sampling and convenience sampling were used to gather the sample. These sampling strategies are non-probability ones by using a questionnaire. Also, the respondents were requested to share the Google form with their peers, supervisors, and subordinates. However, the criteria that the participant should be a team member was employed, after which the sample size was reduced to 101. Regression analysis was employed to test the hypothesis (Table **2**).

4. DATA ANALYSIS

From the above table, it can be inferred that there is a strong correlation between Team psychology safety and team learning activity and team efficacy. But the relation with team productivity is weak. However, team productivity and team learning are moderately coordinated.

Regression Analysis was used to predict the Outcome (Team learning, Team Efficacy, and Team productivity) on the value of Team psychological safety. Similarly, 2nd model was generated to predict team efficacy and team productivity from the values of team learning. 3rd model was generated to predict team productivity using the values of Team Psychological (Table **3**).

The significance level of all the models where p<000, which indicates that the models were very well predicted the outcome.

5. FINDINGS AND RECOMMENDATIONS

From this research study, we can see that:

> (1) An increase in work quality is favorably correlated with learning behavior in teams.
> (2) Learning behavior and the Team's psychological safety are favorably correlated in organizational work teams.
> (3) The Team's effectiveness is positively impacted by team psychological safety.

The research aims to check if psychological safety affects learning behavior, team efficacy, and Quality of work on general employees. When employees believe they can be themselves without fear of repercussions, especially in a team environment, they have reached psychological safety. Due to the pandemic, it became increasingly clear that employees should work in a setting that allows them to be themselves without fear of reprisal. A more open environment was necessary as businesses and employees had to adapt to various situations.

Building psychological safety will pay off greatly for any organization, whether it be a start-up, a multinational corporation, a charitable organization, or a governmental entity. Creating psychological safety within your business offers several tangible benefits, such as boosting innovation, creating better ideas and products that delight your customers, and lowering the likelihood of failures, infractions, and non-compliance.A joyful workforce increases the bottom line of your business or organization by taking more measured risks, raising issues earlier, sticking with the Team longer, and being more flexible to change and outside difficulties. You can achieve your goals and build happier, more engaged employees by fostering psychological safety, regardless of whether your organization is more risk-averse and conservative or quick-moving and inventive.

6. SUGGESTIONS FOR INCREASING PSYCHOLOGICAL SAFETY IN THE WORKPLACE

Developing an inclusive and supportive environment at work is critical to promote psychological safety. Top management should aggressively seek employee opinion, participate in decision-making, and avoid becoming defensive while hearing feedback. Listening to all points of view, expressing thanks, and admitting mistakes all contribute to a culture of progress. Avoid domineering dialogues, promote evaluation and guidance, and assist team members from other teams. Encourage employee growth and best efforts by supporting underrepresented individuals and involving the entire workforce in critical conversations. Avoid discussing others with select personnel and ensure equitable task distribution. By applying these suggestions, a workplace can create psychological safety and empower individuals to excel.

Ask for input as frequently as you can, especially if you are in the top leadership.

Participate with your Team in decision-making.

When receiving feedback, resist the need to become hostile or resentful.

Actively listen to all viewpoints and concerns, and always respond to others with gratitude.

Openly acknowledge your errors and promote growth from them.

Refrain from taking over the conversation (particularly if you encourage everyone to participate).

Urge others to evaluate you.

Ask for guidance from others while you work on your areas of development and improvement.

Even team members from other teams should be checked

on.

People should be asked how you can support their growth and best efforts at work.

Sponsor or mentor underrepresented employees, even those from other teams.

Include your entire staff in crucial conversations whenever you can.

Refrain from discussing other team members, including other employees, with one or a few team members.

Make sure top performers are not "rewarded" with additional work while other team members are given more straightforward assignments by regularly checking your Team's workloads.

7. RESULTS AND DISCUSSION

The findings of this research study provide valuable insights into the relationship between psychological safety, learning behavior, work quality, and team efficacy in organizational settings. The results indicate several important correlations highlighting the importance of fostering psychological safety within teams.

The study found a positive correlation between work quality and team learning behavior. This suggests that when team members feel psychologically safe, they are more likely to engage in continuous learning, share knowledge, and strive for higher work quality. This finding aligns with previous research emphasizing the role of psychological safety in promoting a learning-oriented culture within teams.

Secondly, the study revealed a positive correlation between learning behavior and team psychological safety. This implies that when teams perceive a high level of psychological safety, they are more likely to engage in learning behaviors such as open communication, constructive feedback, and knowledge sharing. This finding emphasizes the role of psychological safety as a facilitator of learning processes within teams.

Lastly, the research demonstrated that psychological safety positively impacts team effectiveness. Teams that perceive a higher level of psychological safety are more likely to experience improved efficacy in their work. This finding underscores the significance of creating an environment where team members feel safe to take risks, voice their opinions, and contribute their unique perspectives.

The current study aimed to explore the influence of psychological safety on learning behavior, team efficacy, and work quality among general employees. Given the challenges posed by the pandemic, the importance of psychological safety in the workplace has become increasingly evident. Creating an environment where employees can be themselves without fear of reprisal is crucial for their well-being and productivity.

Building psychological safety within organizations offers numerous tangible benefits. It promotes innovation, enhances the generation of ideas, improves product development, and reduces the likelihood of failures and non-compliance. Furthermore, fostering psychological safety leads to a more joyful workforce that takes measured risks, raises concerns promptly, exhibits greater loyalty, and adapts more effectively to change.

To increase psychological safety in the workplace, several suggestions can be considered. Leaders should actively seek employee input, participate in decision-making processes, and respond to feedback with gratitude. They should also create an atmosphere of open dialogue, encourage self-reflection, and support personal growth and development. Additionally, it is essential to include all team members, even those from different teams, in important conversations and foster a culture of respect and fairness.

In conclusion, this study contributes to understanding psychological safety and its impact on team dynamics and performance. The findings emphasize the need for organizations to prioritize psychological safety to foster learning, improve work quality, and enhance team efficacy. By implementing the suggested strategies for increasing psychological safety, organizations can create a positive and inclusive work environment that benefits both employees and the organization's overall success.

8. LIMITATIONS

This study's primary shortcoming is that it was conducted with a small sample of participants, along with it convenience sampling technique was used. The study can be done on a large scale with a significant sample size. The study could be done in other various fields like educational institutions. The study might not have accounted for all potential confounding variables that could influence the relationships being examined. Factors like organizational culture, team dynamics, or individual differences might have influenced the results. Future research could consider controlling for or including these variables to enhance the validity of the findings.

9. THEORETICAL AND PRACTICAL IMPLICATIONS

Understanding the impact of psychological safety on quality work, team learning, and team efficacy can help organizations establish a climate that supports cooperation, risk-taking, and creativity. This, in turn, can lead to enhanced team performance and production. Psychological safety fosters a friendly and inclusive work atmosphere where employees feel comfortable expressing their thoughts, concerns, and opinions. This can lead to enhanced employee well-being, job satisfaction, and engagement. Researching psychological safety can provide insights into fostering trust, open communication, and constructive feedback within teams. This understanding can help leaders and managers develop strategies to build and maintain positive team dynamics. Organizations prioritizing psychological safety are likely to attract and retain top talent. When employees feel safe and supported, they are more likely to stay in the organization, reducing turnover costs and increasing employee loyalty.

This study on psychological safety and its impact on various team outcomes can contribute to developing and refining psychological safety theory. It can further help researchers deepen their understanding of how psychological safety influences team performance and effectiveness.

By investigating the relationship between psychological safety, quality work, team learning, and team efficacy, the study also contributes to the existing body of knowledge on team effectiveness. It can provide empirical evidence and insights into the factors that promote positive team outcomes.

Psychological safety is a critical aspect of organizational behavior. The study's findings can inform future research in areas such as team dynamics, leadership [33], and organizational culture, shedding light on the role of psychological safety in shaping these factors.

Overall, studying the power of psychological safety and its impact on quality work, team learning, and team efficacy has the potential to inform practical interventions in organizations while advancing theoretical understanding in the field of organizational behavior.

CONCLUSION

All businesses depend on people to succeed, which is the one thing they have in common. Moreover, psychological safety is necessary for individuals and teams to operate effectively (perhaps now more than ever) in distributed and hybrid work environments). Leading management thinkers, consultants, and psychologists have all continued to research psychological safety, including how to create it and how it changed throughout and after the pandemic. With this in mind, the research concludes that team dynamics are significantly impacted by psychological safety, team learning, and team efficacy in teams. Psychological safety is essential for group effectiveness since it involves brainstorming with colleagues. With no fear in them to speak out, they would be able to give their ideas, which may or may not be helpful for the organization.

Team learning is also affected by psychological safety as in every organization; knowledge transfer exercises are conducted; during these exercises, if the individual/employee may not be able to speak up that they could not understand something or answer a simple thing, it affects the job he/she/they are doing which in turn affects the Team Productivity of work.

Since the research only focuses on team learning, Quality of work, and team efficacy, it can further be researched on Team Leadership, Mentoring/coaching [33 - 35].

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the Ethics Committee of the Sri Balaji University,

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committees and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from all subjects involved in the study.

AVAILABILITY OF DATA AND MATERIALS

Not applicable.

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CONFLICT OF INTEREST

Dr. Amit Mittal, a co-author, serves on the editorial board member of the Open Psychology Journal.

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