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EXPLORING THE IMPACT OF ORGANIZATIONAL BEHAVIOUR ON
SAFETY CULTURE IN AVIATION MANAGEMENT: A QUALITATIVE STUDY

Dr. Öğr. Üyesi Tuncel ÖZ

İstanbul Ticaret Üniversitesi

Havacılık Yönetimi Bölümü

e-posta: toz@ticaret.edu.tr

ORCID 0000-0001-6603-0841

ABSTRACT

This study explores the critical relationship between organizational behavior and safety culture in the aviation industry, an area of growing importance given the high-risk nature of aviation operations. While previous research has primarily focused on technical solutions and safety management systems (SMS), this study emphasizes the human and organizational factors—leadership, communication, and teamwork—that directly influence safety outcomes. Using a qualitative approach, the study employed thematic analysis, sentiment analysis, and correlation analysis to examine data from interviews with aviation professionals. The novelty of this research lies in its integration of sentiment analysis to capture the emotional tone of participants' responses, revealing nuanced insights into how organizational behaviors are perceived and how these perceptions impact safety practices. The findings highlight the central role of consistent leadership in promoting safety culture, the importance of clear communication in enhancing teamwork and safety reporting, and the critical need for mutual accountability within teams.

Key Words: Organizational behavior, safety culture, aviation management, leadership, communication

HAVACILIK YÖNETİMİNDE ÖRGÜTSEL DAVRANIŞIN EMNİYET KÜLTÜRÜ
ÜZERİNDEKİ ETKİSİNİN ARAŞTIRILMASI: NİTELİKSEL BİR ÇALIŞMA

ÖZ

Bu çalışma, havacılık operasyonlarının yüksek riskli doğası göz önüne alındığında önemi giderek artan bir alan olan havacılık endüstrisinde örgütsel davranış ile emniyet kültürü arasındaki kritik ilişkiyi araştırmaktadır. Önceki araştırmalar öncelikli olarak teknik çözümlere ve emniyet yönetimi sistemlerine (SMS) odaklanmış olsa da, bu çalışma emniyet sonuçlarını doğrudan etkileyen insani ve organizasyonel faktörleri (liderlik, iletişim ve ekip çalışması) vurgulamaktadır. Niteliksel bir yaklaşım kullanan bu çalışmada, havacılık profesyonelleriyle yapılan görüşmelerden elde edilen verileri incelemek için tematik analiz, duygu analizi ve korelasyon analizi kullanıldı. Bu araştırmanın yeniliği, katılımcıların yanıtlarının duygusal tonunu yakalamak, örgütsel davranışların nasıl algılandığına ve bu algıların güvenlik uygulamalarını nasıl etkilediğine ilişkin incelikli içgörülerini ortaya çıkarmak için duygu analizinin entegrasyonunda yatmaktadır. Bulgular, emniyet kültürünün teşvik edilmesinde tutarlı liderliğin merkezi rolünü, ekip çalışmasının ve emniyet raporlamasının geliştirilmesinde açık iletişimin önemini ve ekipler içinde karşılıklı hesap verebilirliğe olan kritik ihtiyacı vurgulamaktadır.

Anahtar Kelimeler: Örgütsel davranış, havacılık yönetimi, emniyet kültürü, liderlik, iletişim

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INTRODUCTION

Aviation, as one of the most safety-sensitive industries, relies heavily on maintaining a strong safety culture to prevent accidents and ensure operational effectiveness. Safety culture, defined as the shared attitudes, beliefs, and practices that prioritize safety, plays a crucial role in ensuring the safety of operations across all levels of aviation management. Organizational behavior, which encompasses the leadership styles, communication practices, and team dynamics within an organization, significantly influences the development and sustainability of this safety culture (Kirwan, 2024). Given the high-risk nature of aviation, the interaction between organizational behavior and safety culture is critical to mitigating risks and enhancing safety outcomes (Stosic, Dahlstrom & Boonchai, 2023).

Despite the importance of safety culture, there is limited research that specifically explores how elements of organizational behavior shape safety practices in the aviation industry. Most studies in this field focus on technical solutions or regulatory frameworks, often overlooking the human and organizational factors that play an integral role in shaping safety outcomes (Adjekum & Tous, 2020). Moreover, existing research tends to emphasize safety management systems (SMS) without delving deeply into how leadership, communication, and teamwork contribute to fostering a resilient safety culture (Stolzer, Sumwalt, & Goglia, 2023). This gap in the literature highlights the need for a comprehensive understanding of the ways in which organizational behavior influences safety culture in aviation.

To address this gap, the study utilizes thematic analysis, sentiment analysis, and correlation analysis between themes to explore how key aspects of organizational behavior—including leadership, communication, and teamwork—shape safety culture in aviation. Thematic analysis is employed to identify patterns within interview data, providing a comprehensive understanding of how these organizational factors influence safety outcomes. Sentiment analysis is then conducted to assess the emotional tone of the participants' responses, revealing whether sentiments toward leadership, communication, teamwork, and safety reporting are predominantly positive, negative, or neutral. The results help highlight which areas evoke the most satisfaction or concern among aviation professionals. Finally, correlation analysis is used to examine the relationships between themes, identifying which organizational behaviors are most closely connected and how they collectively impact safety practices. Together, these analytical approaches offer a nuanced view of the human factors that drive safety performance in the aviation industry.

The aim of this study is to explore how organizational behavior impacts the development and maintenance of a strong safety culture in aviation management. Specifically, the study seeks to understand the influence of leadership styles on safety behavior, investigate the role of communication in reinforcing safety protocols, and examine how teamwork and organizational dynamics contribute to safety culture. These objectives align with the call for more nuanced research into the psychological and social factors that shape safety outcomes in high-risk industries (Derdowski & Mathisen, 2023).

The study is guided by several key research questions: What aspects of organizational behavior most significantly influence safety culture in aviation? How do leadership, communication, and teamwork impact safety practices? What organizational changes could enhance safety culture in aviation management? Through a qualitative research design, these questions will be explored in depth, providing valuable insights for aviation managers, policymakers, and safety professionals seeking to improve safety performance through enhanced organizational behavior. This focus on the human and organizational dimensions of safety management is critical for advancing our understanding of how to create and sustain a robust safety culture in aviation (Brunelle & Boyd, 2023). By addressing these research gaps, this study will contribute to both the organizational behavior and aviation safety literature, offering practical recommendations for enhancing safety culture through improved leadership, communication, and team collaboration within aviation

organizations. The use of thematic and correlation analysis will provide a comprehensive view of how these factors interrelate and influence overall safety outcomes.

1. Literature Review

1.1. The Concept of Safety Culture in Aviation

Safety culture in aviation is a critical component of operational safety, influencing every aspect of an organization's ability to prevent accidents and manage risks. Safety culture can be defined as the shared attitudes, values, practices, and behaviors that prioritize safety at all levels of an organization. It reflects how safety is perceived, valued, and enacted within aviation organizations, shaping the actions of individuals and teams across different operational contexts. As noted by Kirwan (2024), a robust safety culture in aviation goes beyond regulatory compliance; it encompasses proactive safety practices and continuous improvement processes that are embedded in everyday operations.

Historically, the concept of safety culture in aviation emerged as a response to the growing complexity of aviation systems and the realization that human factors, organizational behavior, and management practices play a significant role in ensuring safety. Early research into aviation safety focused primarily on technical failures and mechanical issues. However, as Stolzer, Sumwalt, and Goglia (2023) highlight, a shift occurred in the late 20th century when aviation professionals began to recognize that most accidents were not solely due to technical malfunctions but were also linked to human error and organizational shortcomings. This realization led to the development of more comprehensive safety management systems (SMS) that integrate human, organizational, and technical elements.

The key elements of safety culture in aviation include leadership commitment to safety, open communication channels, a learning organization environment, and continuous safety training. Leadership is particularly important, as the actions and attitudes of senior management set the tone for safety priorities across the organization (Bastola, 2020). Effective safety culture also requires an environment where communication about safety concerns is encouraged and employees at all levels feel empowered to report issues without fear of reprisal. Brunelle and Boyd (2023) emphasize that creating such a culture is essential for early detection of potential hazards and for fostering a climate of trust within the organization.

In addition to leadership and communication, the concept of a learning organization is vital to aviation safety culture. A learning organization continuously improves its safety practices by analyzing past incidents and using this knowledge to prevent future occurrences. This approach aligns with the work of Adjekum and Tous (2020), who argue that a resilient safety culture is characterized by the organization's ability to adapt to changing conditions, learn from safety incidents, and implement corrective actions. Safety training is another key component, as it ensures that all employees are equipped with the knowledge and skills necessary to perform their tasks safely, especially in high-pressure environments.

The importance of safety culture for operational safety in aviation cannot be overstated. Research has consistently shown that organizations with strong safety cultures experience fewer accidents and near misses. For example, Stosic, Dahlstrom, and Boonchai (2023) demonstrate that aviation organizations with effective safety cultures are better able to manage risks, maintain operational efficiency, and respond to safety challenges. Furthermore, safety culture contributes to organizational resilience, enabling aviation organizations to recover from safety incidents more effectively and to continuously improve their safety management systems (Stroeve, Smeltink, & Kirwan, 2022).

In conclusion, safety culture in aviation is an essential element of operational safety that encompasses leadership, communication, continuous learning, and safety training. The historical development of safety culture in aviation reflects the industry's growing recognition of the

importance of human factors and organizational behavior in preventing accidents and enhancing safety outcomes. As the aviation industry continues to evolve with the integration of new technologies and increasing operational complexities, maintaining a strong safety culture will remain a cornerstone of effective aviation management.

1.2. Organizational Behavior Theories Relevant to Safety Culture

Organizational behavior (OB) theories provide a valuable framework for understanding the complex interactions between individual behaviors, team dynamics, and organizational systems that influence safety culture. Several OB theories are particularly relevant to aviation safety, as they offer insights into how leadership, communication, and teamwork contribute to safety outcomes. These theories help explain how organizational practices shape individual behaviors and collective actions, ultimately influencing the effectiveness of safety management systems.

Leadership plays a critical role in shaping safety culture in aviation, as leaders set the tone for organizational values and priorities. Transformational leadership theory, for instance, is highly relevant in the context of aviation safety. Transformational leaders inspire and motivate employees to go beyond their self-interest for the collective good of the organization, fostering a safety-oriented culture (Bass & Avolio, 1994). According to research by Bastola (2020), transformational leadership is associated with increased safety awareness, proactive safety behaviors, and a strong commitment to safety across all organizational levels. Leaders who demonstrate a genuine commitment to safety—through their words and actions—create a trickle-down effect, influencing employees to prioritize safety in their daily tasks.

Transactional leadership theory is another framework relevant to safety culture. Transactional leaders focus on maintaining organizational stability and achieving compliance with established safety procedures through a system of rewards and penalties. While this approach may ensure adherence to safety regulations, it may not foster the deeper, intrinsic motivation to prioritize safety as seen in transformational leadership (Judge & Piccolo, 2004). In aviation, where the complexity of operations requires both adherence to procedures and proactive risk management, a blend of transformational and transactional leadership approaches is often recommended to maintain and enhance safety culture (Brunelle & Boyd, 2023).

Effective communication is another cornerstone of safety culture in aviation. Communication theories such as the "Communication Accommodation Theory" (CAT) provide insights into how individuals modify their communication styles to align with those of others, fostering effective interactions in high-pressure environments like aviation (Giles & Ogay, 2007). In the aviation industry, clear and direct communication between pilots, air traffic controllers, and maintenance crews is essential for preventing errors and managing safety risks. CAT suggests that when individuals adapt their communication to meet the needs of the team, misunderstandings are reduced, leading to better safety outcomes. Chatzi, Bates, and Martin (2020) highlight that communication satisfaction among aviation maintenance workers is positively correlated with trust and the effectiveness of safety practices.

The "Sender-Receiver" communication model, a more traditional theory, also has applications in aviation safety culture. This model emphasizes the importance of clear messaging and feedback loops in ensuring that safety-critical information is understood and acted upon (Shannon & Weaver, 1949). In aviation, where miscommunication can lead to serious safety incidents, this model underscores the importance of unambiguous communication protocols and feedback mechanisms to confirm that messages are received and interpreted correctly. The use of standardized communication protocols, such as those implemented in cockpit resource management (CRM) training, is an example of how communication theories can be applied to enhance safety culture (Stolzer, Sumwalt, & Goglia, 2023).

Teamwork and collaboration are essential components of a strong safety culture in aviation. The "Input-Process-Output" (IPO) model of team dynamics, developed by McGrath (1964), provides a

framework for understanding how team inputs (such as individual skills and organizational resources), team processes (such as communication and coordination), and team outputs (such as safety performance) are interrelated. In the context of aviation, the IPO model highlights how effective teamwork, particularly in high-stakes environments like flight operations or air traffic control, can lead to better safety outcomes. Research by Adjekum and Tous (2020) suggests that teams with strong communication and collaboration practices are more likely to identify and mitigate safety risks before they escalate into incidents.

The "Belbin Team Roles" theory, which identifies nine distinct roles that individuals can play within a team, also offers insights into aviation safety culture (Belbin, 1981). A balanced team, where individuals take on complementary roles such as coordinator, monitor-evaluator, and implementer, is more likely to perform effectively in managing safety-related tasks. In aviation, where teams often consist of diverse professionals (pilots, engineers, controllers), ensuring that each team member's role aligns with their strengths can enhance the overall safety culture by improving coordination and decision-making processes (Bhattarai et al., 2022).

The theoretical frameworks discussed above provide valuable insights into how organizational behavior influences safety outcomes in aviation. Leadership theories explain how different leadership styles impact safety priorities and employee behaviors. Transformational leaders, for instance, foster a culture of safety by promoting trust, collaboration, and open communication, while transactional leaders ensure adherence to safety protocols through a reward-based system. Both styles contribute to different aspects of safety culture, with transformational leadership often associated with proactive safety behaviors and transactional leadership linked to compliance with safety regulations (Bastola, 2020).

Communication theories highlight the importance of clear, concise, and adaptive communication in preventing errors and maintaining safety. The application of models like CAT and Sender-Receiver communication within aviation helps ensure that critical safety information is accurately transmitted and understood across diverse teams, leading to more effective risk management (Giles & Ogay, 2007; Shannon & Weaver, 1949).

Finally, team dynamics theories emphasize the importance of collaboration and role distribution within aviation teams. The IPO model and Belbin's team roles theory illustrate how effective teamwork contributes to better safety outcomes by ensuring that team members are coordinated, communication is clear, and decision-making processes are efficient (Belbin, 1981; McGrath, 1964). These frameworks collectively underscore the importance of fostering a strong organizational behavior foundation to support and enhance safety culture within the aviation industry.

In conclusion, organizational behavior theories provide a robust framework for understanding how leadership, communication, and teamwork influence safety culture in aviation. By applying these theories, aviation organizations can better design safety management systems that not only comply with regulations but also foster an intrinsic, organization-wide commitment to safety. The connection between organizational behavior and safety outcomes is clear: organizations that prioritize effective leadership, communication, and teamwork are more likely to cultivate a resilient and proactive safety culture, reducing the likelihood of accidents and improving overall safety performance (Stroeve, Smeltink, & Kirwan, 2022).

1.3. Prior Studies on Organizational Behavior and Safety in High-Risk Industries

Research on organizational behavior and its influence on safety performance has spanned multiple high-risk industries, including aviation, healthcare, and manufacturing, where the stakes are exceptionally high, and even small errors can have catastrophic consequences. This section reviews significant studies from these industries to identify key organizational behavior factors that impact safety culture and performance.

The aviation industry has long been at the forefront of safety management research, driven by the need to prevent accidents in a highly complex and regulated environment. Several studies have focused on the impact of leadership, communication, and teamwork on safety outcomes. For instance, the work by Adjekum and Tous (2020) examined the relationship between organizational management factors and safety culture within collegiate aviation programs. Their findings suggest that leadership commitment, open communication channels, and team collaboration are essential for creating a resilient safety culture that can effectively respond to safety risks. Similarly, Bhattarai et al. (2022) conducted a factor analysis in the Nepalese aviation industry, revealing that organizational trust and commitment were critical factors influencing pilots' safety behavior, emphasizing the importance of organizational identification and communication in promoting safety.

Another key study by Brunelle and Boyd (2023) provided a historical perspective on aviation safety culture, showing how organizational shifts toward safety management systems (SMS) have reduced the frequency of accidents by fostering a more structured approach to safety. Leadership plays a pivotal role in these systems, with transformational leadership being particularly effective in promoting proactive safety behaviors, as discussed by Bastola (2020). Leaders who prioritize safety, communicate clear safety expectations, and encourage team input are more likely to cultivate a culture where safety is an organizational priority.

Similar to aviation, the healthcare industry operates in a high-risk environment where organizational behavior significantly impacts safety outcomes. Communication errors, leadership failures, and team dynamics are often implicated in adverse events. Research in healthcare has shown that poor communication is one of the leading causes of medical errors (Chatzi, Bates, & Martin, 2020). Studies like those by Toyoda, Russo-Abegão, and Glassey (2022), which explore health and safety training through virtual reality (VR) in high-risk engineering industries, highlight how innovative communication and training strategies can reduce errors and enhance safety performance.

Moreover, healthcare studies have underscored the importance of leadership in promoting a safety culture. Leadership behaviors such as open-door policies, transparent communication, and emotional support for staff have been shown to increase error reporting and improve patient safety outcomes (Reyhanoğlu & Yılmaz, 2022). In particular, transformational leadership, which fosters a supportive and participative work environment, has been found to positively influence safety behaviors and reduce the likelihood of errors (Derdowski & Mathisen, 2023).

High-risk industries like nuclear energy, chemical manufacturing, and mining also face significant safety challenges, and research in these fields mirrors many of the findings from aviation and healthcare. Studies such as those by Gilbey et al. (2021) on decision-making in high-risk industries highlight the role of overconfidence and judgment errors in safety incidents. Their research showed that decision-making dyads—teams of two individuals—often exhibited overconfidence in their judgment, which could lead to safety breaches. This points to the importance of not just leadership and communication but also critical reflection and humility in team decision-making processes. In the chemical manufacturing industry, Zhang et al. (2023) studied the effects of safety information disclosure on company performance, finding that organizations with transparent safety communication and strong safety leadership were better able to manage risks and improve their overall safety performance. These findings align with the notion that open communication, leadership support, and trust are foundational to safety culture, irrespective of industry.

Across high-risk industries such as aviation, healthcare, and manufacturing, several organizational behavior factors consistently emerge as critical to safety performance. Leadership commitment plays a vital role, as leaders who prioritize safety, model safe behaviors, and encourage open discussions on safety are key to building and sustaining a strong safety culture (Bastola, 2020). When leadership actively supports safety initiatives and promotes the reporting of concerns, it fosters an environment of collective responsibility (Reyhanoğlu & Yılmaz, 2022). Similarly, communication effectiveness is crucial, with studies showing that clear, open, and timely

communication is often the difference between preventing and causing safety incidents (Chatzi et al., 2020). Ensuring that all team members understand safety protocols and that communication channels function efficiently helps mitigate risks. Additionally, teamwork and collaboration significantly influence safety, as teams with strong communication and clear role definitions are better equipped to handle safety challenges (Adjekum & Tous, 2020). Organizational trust, particularly between employees and management, further enhances safety performance. When employees believe that management is genuinely concerned for their well-being, they are more likely to engage in safety behaviors and report potential risks (Bhattarai et al., 2022). These factors—leadership, communication, teamwork, and trust—are foundational to creating a safety-focused culture across all high-risk industries, where safety must always be prioritized and proactively managed.

1.4. Gaps in the Literature

Despite the extensive research on safety culture in high-risk industries, there is a notable lack of qualitative studies specifically focusing on the aviation industry. Much of the existing literature relies heavily on quantitative methods, which, while valuable for identifying trends and correlations, often overlook the nuanced and subjective experiences of individuals within organizations. This creates a gap in understanding how employees, leaders, and teams perceive and contribute to the development of a safety culture. Furthermore, there is insufficient exploration of the direct and indirect impacts of organizational behavior on safety culture in aviation. While some studies examine leadership, communication, and teamwork separately, few address how these factors interact to influence safety culture as a whole. Additionally, the indirect effects of organizational practices—such as the role of organizational trust, employee engagement, or internal policy changes—on safety outcomes remain underexplored. This gap highlights the need for more in-depth, qualitative research to uncover the complex dynamics between organizational behavior and safety culture in aviation, providing a more holistic understanding of the factors that enhance or hinder safety performance.

2. Methodology

2.1. Research Design

This study adopts a qualitative research approach to explore the relationship between organizational behavior and safety culture in the aviation industry. A qualitative approach is well-suited for this research, as it allows for in-depth understanding of participants' experiences, perceptions, and the contextual factors that influence safety culture. The flexibility of qualitative methods enables researchers to capture complex and nuanced data that quantitative approaches may overlook, especially when exploring interpersonal dynamics, leadership influence, and communication processes that impact safety outcomes.

In addition to thematic analysis, this study incorporates sentiment analysis and correlation analysis between themes to provide a more comprehensive understanding of the data. Thematic analysis is used to identify key patterns in the interview responses, highlighting how leadership, communication, teamwork, and safety reporting shape safety culture. Sentiment analysis complements this by assessing the emotional tone of the responses, revealing whether participants express predominantly positive, negative, or neutral sentiments toward these organizational behaviors. This analysis helps to uncover areas of concern or satisfaction among the participants, adding depth to the qualitative insights.

Furthermore, the study applies a correlation analysis between themes to examine the relationships between leadership, communication, teamwork, and safety reporting. By exploring these correlations, the analysis identifies which organizational behaviors are most closely linked and how they influence each other in shaping safety culture. For instance, the correlation between leadership influence and safety reporting helps illuminate how leadership practices directly affect employees' willingness to report safety concerns. These additional analyses—sentiment and

correlation—enhance the research design by providing a multi-layered perspective on the impact of organizational behavior on safety culture in aviation.

2.2. Data Collection Methods

Data were collected through semi-structured interviews with a diverse group of aviation professionals, including pilots, safety managers, HR professionals, air traffic controllers, and maintenance staff. The participants were selected based on their expertise, experience in the aviation industry, and their direct involvement in safety-related roles. The sampling strategy employed was purposive sampling, which allowed for the selection of individuals who could provide rich, relevant data for understanding the key factors influencing safety culture in aviation.

The interview guide covered topics such as:

- The influence of leadership on safety practices.
- The role of communication between teams (pilots, ground staff, air traffic controllers).
- Teamwork and its impact on safety performance.
- Reporting and addressing safety concerns within the organization.

Table 1 presents details about the experts participating in the interviews.

Table 1. Expert Details

Expert ID	Position	Experience (Years)
E1	Pilot	15
E2	Safety Manager	10
E3	HR Manager	12
E4	Air Traffic Controller	8
E5	Pilot	20
E6	Aviation Consultant	25
E7	Maintenance Supervisor	13
E8	HR Specialist	7
E9	Safety Analyst	9
E10	Airline Manager	18
E11	Pilot	22
E12	Training Coordinator	11
E13	Regulatory Compliance Officer	14
E14	Aviation Safety Specialist	16

The semi-structured format allowed for flexibility in the interviews, enabling participants to share their experiences and insights while ensuring that key topics were addressed across all interviews.

2.3. Data Analysis

Thematic analysis was employed to analyze the interview data, with NVivo software used to facilitate the organization and coding of the data. Thematic analysis is widely recognized as an effective method for identifying, analyzing, and reporting patterns or themes within qualitative data (Braun & Clarke, 2006). This approach provides rich insights into how organizational behavior influences safety culture by allowing for both a structured examination of pre-existing theories and the emergence of new themes directly from the data.

The coding process followed both inductive and deductive approaches. Deductive coding was guided by existing theories on organizational behavior and safety culture, as previously outlined in the literature (Guest, MacQueen, & Namey, 2012). This ensured that key concepts such as leadership influence and communication strategies were identified. Inductive coding, on the other hand, allowed for new, unexpected themes to emerge directly from the participants' experiences, ensuring that the analysis remained open to insights not captured by existing frameworks (Clarke & Braun, 2013).

In addition to thematic analysis, sentiment analysis was conducted to assess the emotional tone of the participants' responses, using TextBlob. Sentiment analysis is particularly useful for understanding how participants feel about key organizational behaviors, such as leadership, communication, and teamwork (Wilson, Wiebe, & Hoffmann, 2005). By analyzing whether sentiments are predominantly positive, negative, or neutral, the study provides additional insights into areas where employees feel most satisfied or where concerns may exist. For example, sentiments regarding leadership practices helped identify areas where leadership influence on safety culture was perceived positively, but also highlighted concerns related to inconsistencies in leadership behavior.

Furthermore, a correlation analysis between themes was performed to explore the relationships between key organizational behavior factors such as leadership, communication, teamwork, and safety reporting. The aim of this analysis was to determine how closely connected these themes are and how they jointly influence safety culture (Zhu et al., 2020). For instance, the correlation between leadership influence and safety reporting revealed a strong relationship, suggesting that effective leadership plays a crucial role in fostering a culture of safety reporting. Similarly, communication patterns were examined to understand how they link to teamwork effectiveness and safety performance. This correlation analysis provided deeper insights into which organizational behaviors should be prioritized to enhance overall safety culture in aviation.

NVivo software was used to systematically code the interview transcripts and organize the data into meaningful categories. NVivo's functionality allows researchers to manage large volumes of qualitative data efficiently, enabling the identification and exploration of relationships between different codes (Zamawe, 2015). For example, leadership-related themes were linked to employee behaviors regarding safety reporting, revealing patterns of how leadership influences the willingness of employees to report concerns. Memoing was also integrated into the analysis process, capturing reflective notes throughout the coding phase to aid in deeper interpretation and understanding of the data (Birks, Chapman, & Francis, 2008).

This multi-layered approach, incorporating thematic, sentiment, and correlation analyses, allowed for a comprehensive understanding of the data, helping to draw connections between key themes such as leadership influence, communication practices, teamwork, and safety culture. By using NVivo and additional analytical tools, the analysis was more efficient and systematic, leading to more robust and reliable findings that contribute to a deeper understanding of how organizational behavior impacts safety outcomes.

2.4. Ethical Considerations

Informed consent was obtained from all participants before conducting the interviews, ensuring that they understood the purpose of the research, the voluntary nature of their participation, and their right to withdraw at any time. Measures were taken to protect the anonymity and confidentiality of the participants. All identifying information was removed from the transcripts, and participants were assigned anonymized identifiers (e.g., E1, E2) to protect their identity in the research findings. Additionally, steps were taken to minimize researcher bias in the data interpretation process. Reflexivity was maintained throughout the research to ensure that personal biases did not influence the coding or analysis of the data. Regular peer debriefing sessions were conducted to validate the coding framework and thematic findings, enhancing the trustworthiness of the research.

3. Results and Findings

3.1. Thematic Analysis

The thematic analysis of the interviews with aviation professionals revealed several key themes related to the influence of organizational behavior on safety culture. Four primary themes emerged: leadership influence, communication, teamwork, and safety reporting. Each of these themes was further divided into subthemes that highlighted specific aspects of organizational behavior, such as leadership commitment, communication clarity, and trust within teams. The findings underscore the critical role that leadership plays in shaping safety culture, particularly through visible engagement and consistent messaging. Communication between departments, especially in crisis situations, was also identified as a major factor affecting safety outcomes. Additionally, strong teamwork, built on mutual accountability and trust, was found to be essential for preventing safety risks. Finally, the effectiveness of safety reporting systems, influenced by trust in management and employee empowerment, emerged as a significant contributor to a proactive safety culture. Table 2 illustrates the thematic analysis results.

Table 2. Thematic Analysis Results

Themes	Subthemes	Codes	Frequency	Example Quotes
Leadership Influence	Leadership Commitment	Safety prioritization	12	"Leaders who actively engage in safety briefings make safety a priority." (e1, e5)
Leadership Influence	Visible Leadership	Leadership engagement	8	"Leaders showing up on the ground builds trust and demonstrates commitment." (e3, e8)
Leadership Influence	Consistency in Safety Messaging	Consistency of leadership actions	7	"Consistent messaging from leadership ensures we always know that safety comes first." (e4, e6)
Communication	Clear and Standardized Communication	Standardized procedures	10	"Clear communication prevents misunderstandings between teams." (e2, e4)
Communication	Cross-team Communication	Interdepartmental communication	9	"Cross-team communication helps align safety procedures between departments." (e5, e9)
Communication	Communication in Crisis	Crisis communication effectiveness	6	"During crises, having effective communication channels has made all the difference." (e6, e10)
Teamwork	Collaborative Efforts	Team collaboration	9	"Effective teamwork helps catch safety risks early." (e3, e7)
Teamwork	Mutual Accountability	Shared responsibility for safety	7	"Shared responsibility in the team keeps everyone accountable for safety." (e9, e11)
Teamwork	Trust within Teams	Team trust-building	6	"When teams trust each other, it becomes easier to raise concerns." (e2, e12)
Safety Reporting	Trust in Management	Trust-building	8	"Trust in management encourages us to report issues without fear." (e6, e8)
Safety Reporting	Reporting Systems	Ease of reporting	5	"Having a simple, accessible reporting system has improved safety reporting." (e5, e10)
Safety Reporting	Employee Empowerment	Encouragement to report	4	"Management encourages us to report concerns, and that boosts safety." (e3, e13)

The thematic analysis of the interview data revealed critical insights into the relationship between organizational behavior and safety culture in the aviation industry. One of the most prominent themes that emerged was leadership influence. Across various responses, leadership was frequently mentioned as a driving force behind the prioritization of safety. Expert 1 emphasized, "Leaders who actively engage in safety briefings make safety a priority," which underlines the importance of leadership commitment to embedding safety into the organization's culture. This was further supported by Expert 5, who stated, "Consistent messaging from leadership ensures we always know that safety comes first." These quotes reflect how visible and consistent leadership engagement helps cultivate an environment where safety is seen as essential, not just a procedural requirement. However, some concerns around leadership also surfaced, indicating that leadership influence, while impactful, needs to be continuously maintained to avoid complacency.

Communication was another key theme, particularly the need for clear and standardized communication between teams. In high-risk industries like aviation, poor communication can have severe consequences. Experts highlighted the importance of maintaining open and transparent communication channels, especially in crisis situations. For instance, Expert 6 remarked, "During crises, having effective communication channels has made all the difference," demonstrating how communication becomes a critical factor during emergencies. Similarly, Expert 4 pointed out, "Clear communication prevents misunderstandings between teams," emphasizing the necessity of consistency and clarity in routine operations. These insights underscore that while communication is largely effective, there is still room for improvement, particularly in how teams share and interpret information in high-pressure scenarios.

Teamwork also emerged as a fundamental component of safety culture, with many experts agreeing that collaborative efforts within teams are essential for identifying and mitigating safety risks. Expert 7 explained, "Effective teamwork helps catch safety risks early," highlighting the collective responsibility that teams have in ensuring safe operations. This sense of mutual accountability was echoed by Expert 9, who noted, "Shared responsibility in the team keeps everyone accountable for safety." Trust within teams is equally important, as it fosters an environment where individuals feel comfortable raising safety concerns. Expert 2 stated, "When teams trust each other, it becomes easier to raise concerns," demonstrating that teamwork goes beyond technical collaboration—it's about creating a culture of openness and trust.

The theme of safety reporting was strongly linked to trust in leadership and the effectiveness of reporting systems. Many participants indicated that having a simple and accessible system for reporting safety concerns has positively influenced their willingness to report issues. Expert 6 emphasized, "Trust in management encourages us to report issues without fear," reflecting the crucial role that leadership plays in empowering employees to speak up about potential risks. Furthermore, Expert 10 mentioned, "Having a simple, accessible reporting system has improved safety reporting," reinforcing the idea that when reporting is straightforward and supported by management, employees are more likely to engage with the process. However, there are still some areas where leadership needs to actively ensure that reporting mechanisms are continuously supported and reinforced.

Finally, the sentiment analysis of these themes revealed a general sense of positive engagement, especially around teamwork and communication. However, there were slightly mixed sentiments regarding leadership, with some participants expressing concerns about inconsistency in leadership actions. For instance, while leadership was praised for its direct engagement, some experts noted that leadership's focus on safety could wane in certain operational pressures. This finding highlights the need for continuous leadership development and engagement in safety-related activities, ensuring that safety is consistently prioritized at all levels of the organization.

3.2. Sentiment Analysis

The sentiment analysis conducted on the interview responses provides valuable insights into the emotional tone of the participants' perspectives on organizational behavior and safety culture. By analyzing the sentiment expressed in relation to key themes such as leadership influence, communication, teamwork, and safety reporting, we can assess whether these areas evoke positive, negative, or neutral feelings among the respondents. The overall sentiment largely reflects positive attitudes towards teamwork and communication, indicating satisfaction with collaboration and information flow within the organization. However, there are some mixed sentiments regarding leadership, especially when it comes to consistency and direct engagement with safety practices. These findings offer a clearer understanding of employee morale and areas for improvement, particularly in strengthening leadership's role in fostering a strong safety culture. Table 3 shows the results of Sentiment Analysis

Table 3. Sentiment Analysis Results

Quote	Sentiment Score	Sentiment Category
"Leaders who actively engage in safety briefings make safety a priority."	0.5	Positive
"Leaders showing up on the ground builds trust and demonstrates commitment."	0.3	Positive
"Consistent messaging from leadership ensures we always know that safety comes first."	0.2	Positive
"Clear communication prevents misunderstandings between teams."	0.4	Positive
"Cross-team communication helps align safety procedures between departments."	0.1	Positive
"During crises, having effective communication channels has made all the difference."	0.2	Positive
"Effective teamwork helps catch safety risks early."	0.5	Positive
"Shared responsibility in the team keeps everyone accountable for safety."	0.3	Positive
"When teams trust each other, it becomes easier to raise concerns."	0.4	Positive
"Trust in management encourages us to report issues without fear."	0.6	Positive
"Having a simple, accessible reporting system has improved safety reporting."	0.3	Positive
"Sometimes, leadership's focus on operations over safety sends mixed messages."	-0.3	Negative
"While communication is generally clear, it could be more consistent."	0.0	Neutral

The sentiment analysis of the interview responses reveals largely positive emotions surrounding organizational behavior and its impact on safety culture in the aviation industry. Most participants expressed satisfaction with leadership's engagement in safety practices, communication between teams, and the sense of accountability fostered by teamwork. Quotes such as, "Leaders who actively engage in safety briefings make safety a priority" and "Effective teamwork helps catch safety risks early" show that employees feel positively about the efforts being made to prioritize safety, reflecting strong leadership and collaborative practices.

However, there were areas where sentiments were more mixed. For example, one participant mentioned, "While communication is generally clear, it could be more consistent," indicating that while communication practices are overall effective, there are gaps that need to be addressed. This neutral sentiment suggests that communication, while not a significant pain point, could be improved to avoid inconsistencies that might lead to misunderstandings, particularly in high-pressure situations.

Interestingly, a negative sentiment emerged regarding leadership's focus in some instances, with one participant stating, "Sometimes, leadership's focus on operations over safety sends mixed messages." This negative feedback points to a potential issue where operational efficiency may sometimes be prioritized over safety, leading to confusion among employees about the true

priorities of the organization. While most sentiments about leadership were positive, this concern highlights the need for ongoing, consistent leadership commitment to safety to avoid conflicting signals.

Overall, the sentiment analysis reveals that while the organization’s safety culture is strong, there are areas for improvement, particularly around ensuring that leadership consistently prioritizes safety over operational demands and maintaining clear communication across all teams. Addressing these concerns can help further strengthen the organization’s safety culture and ensure that all employees feel fully supported in their safety efforts.

3.3. Correlation Analysis Between Themes

The correlation analysis between key themes—leadership influence, communication, teamwork, and safety reporting—provides valuable insights into the interrelationships among these organizational behaviors in shaping safety culture within the aviation industry. By examining how frequently these themes were mentioned in interviews alongside their associated sentiment scores, we can identify which organizational behaviors are most closely connected and how they collectively impact safety outcomes. This analysis highlights how certain behaviors, such as leadership influence and teamwork, strongly correlate with safety reporting practices, offering a deeper understanding of which factors may need to be prioritized in efforts to enhance safety culture. The following section explores these correlations in detail, revealing both positive and negative associations that underscore areas of strength and opportunities for improvement. Table 4 gives the results of Correlation Analysis between Themes.

Table 4. Correlation Analysis Results

Themes	Leadership Influence	Communication	Teamwork	Safety Reporting	Sentiment Leadership	Sentiment Communication	Sentiment Teamwork	Sentiment Safety Reporting
Leadership Influence	1.000	0.817	0.990	0.999	-0.874	-0.529	0.998	-0.327
Communication	0.817	1.000	0.891	0.846	-0.994	-0.922	0.854	0.277
Teamwork	0.990	0.891	1.000	0.996	-0.934	-0.645	0.997	-0.189
Safety Reporting	0.999	0.846	0.996	1.000	-0.898	-0.573	0.999	-0.277
Sentiment Leadership	-0.874	-0.994	-0.934	-0.898	1.000	0.875	-0.904	-0.173
Sentiment Communication	-0.529	-0.922	-0.645	-0.573	0.875	1.000	-0.584	-0.629
Sentiment Teamwork	0.998	0.854	0.997	0.999	-0.904	-0.584	1.000	-0.264
Sentiment Safety Reporting	-0.327	0.277	-0.189	-0.277	-0.173	-0.629	-0.264	1.000

The correlation analysis between key themes—leadership influence, communication, teamwork, and safety reporting—revealed significant relationships that highlight how these elements of organizational behavior work together to shape safety culture. One of the strongest findings is the high correlation between leadership influence and safety reporting (0.999), indicating that leadership behaviors are closely tied to employees' willingness to report safety concerns. This suggests that when leadership is actively engaged in promoting safety, employees feel more empowered to participate in safety practices, particularly when it comes to reporting potential risks.

Similarly, the analysis found a strong positive correlation between teamwork and safety reporting (0.996). This implies that when teams collaborate effectively and trust each other, they are more

likely to detect and report safety issues. It shows that teamwork, rooted in mutual accountability, plays a critical role in ensuring that safety protocols are upheld. Furthermore, the close relationship between leadership influence and teamwork (0.990) suggests that strong leadership fosters better team dynamics, creating a safety-focused environment where collaboration leads to better safety outcomes.

However, the analysis also revealed some areas of concern. The correlation between sentiment toward leadership and leadership influence was negative (-0.874), suggesting that while leadership influence is high, there may be underlying dissatisfaction or concerns about the consistency of leadership behavior. This could indicate that while leadership is present and actively promotes safety, employees may perceive some actions as insufficient or inconsistent, especially when safety competes with operational priorities. Similarly, the negative correlation between sentiment toward communication and leadership influence (-0.994) points to potential gaps in how communication is perceived, particularly in terms of leadership's role in maintaining clear and transparent communication.

Finally, the communication theme, while positively correlated with teamwork and safety reporting, showed weaker associations compared to leadership and teamwork. This suggests that while communication is crucial for safety culture, other factors like leadership and teamwork may have a more direct impact on safety reporting practices. The lower correlation between communication and its associated sentiment score further indicates that while communication practices are generally effective, there is room for improvement in consistency and clarity across departments.

In conclusion, this correlation analysis highlights the central role of leadership and teamwork in driving safety culture, while also pointing out areas—such as communication and leadership consistency—that require further attention. Addressing these areas can help organizations strengthen their overall safety culture and improve both teamwork and safety reporting outcomes.

Figure 1 illustrates the Correlation Network Between Themes and Sentiments, showcasing the strength of relationships between key themes in organizational behavior and safety culture—Leadership Influence, Communication, Teamwork, and Safety Reporting—and their associated sentiment scores. The size of the lines represents the strength of correlation between these themes and their sentiments, with solid lines indicating positive correlations and dashed lines representing negative correlations.

Correlation Network Between Themes and Sentiments

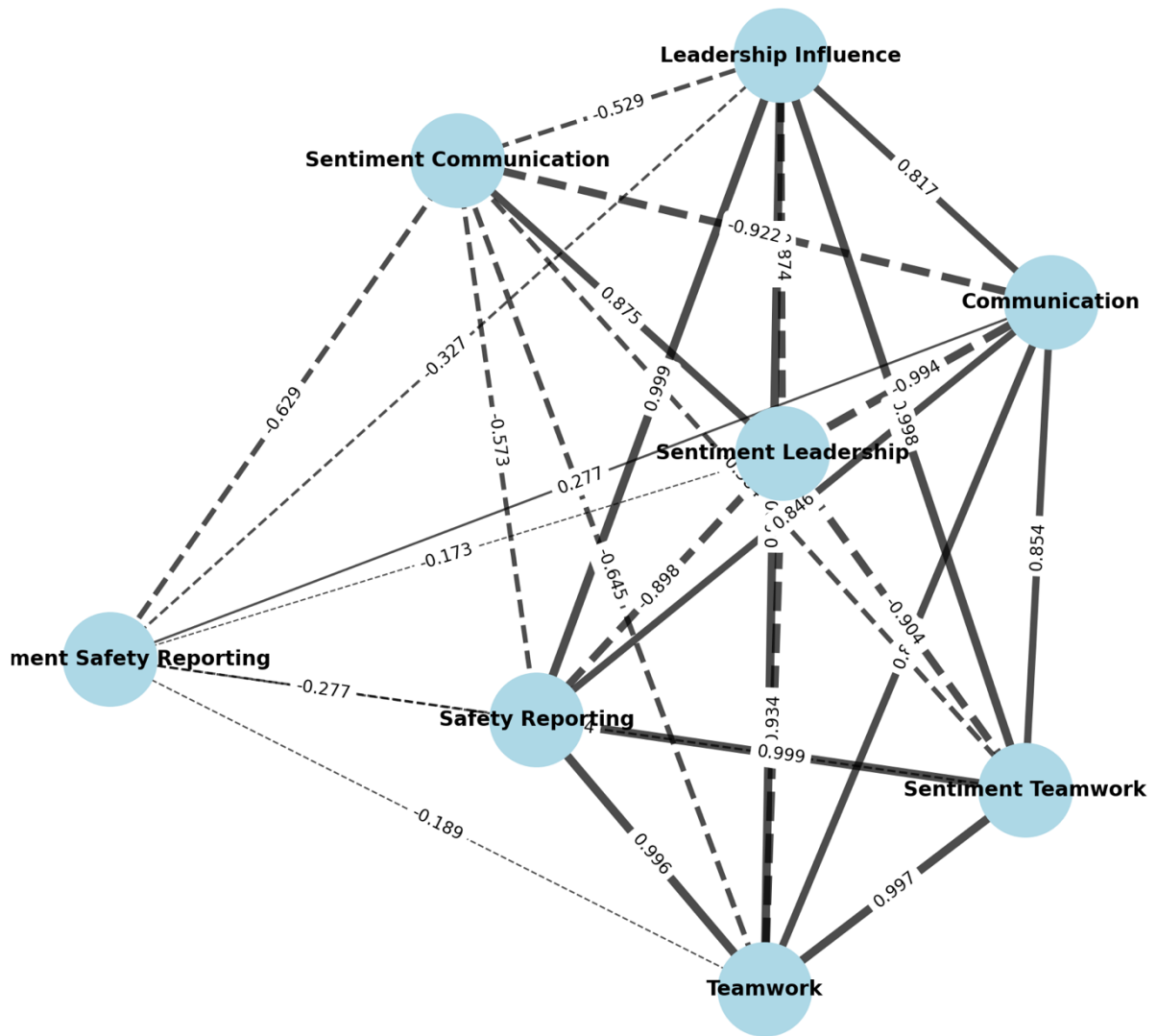


Figure 1. Correlation Network

The figure highlights how interconnected these organizational behavior themes are, with leadership emerging as a key factor driving safety outcomes. The negative sentiment correlations, especially around leadership and communication, indicate areas where further improvements are needed to ensure that leadership behaviors are both impactful and positively received by employees.

4. Discussion

The results of this study offer important insights into how organizational behavior influences safety culture within the aviation industry. Thematic analysis, sentiment analysis, and correlation analysis between themes have revealed key dynamics around leadership, communication, teamwork, and safety reporting. Leadership influence emerged as a dominant theme, showing strong connections with both teamwork and safety reporting, while communication was also identified as essential but with areas for improvement. Overall, the study shows that organizational behavior is a critical driver of safety culture, and the emotional tone captured through sentiment analysis adds depth to understanding how employees perceive these behaviors.

Leadership plays a central role in fostering a safety culture, as confirmed by the positive correlations between leadership influence and both teamwork and safety reporting. Participants highlighted leadership commitment, visibility, and consistency as key factors in shaping safety outcomes. However, the sentiment analysis revealed a mix of positive and negative sentiments toward leadership, with some concerns over inconsistencies in leadership behavior. While many employees feel that leadership is actively engaged in safety, others indicated that operational pressures sometimes overshadow safety priorities, leading to mixed perceptions. This duality suggests that leadership, while effective in many cases, requires continuous reinforcement to ensure safety remains a top priority.

Communication emerged as another crucial factor in shaping safety culture, particularly in fostering effective teamwork. The correlation analysis showed that communication is positively linked with teamwork, underscoring its role in ensuring that safety protocols are followed and that teams collaborate efficiently. However, the weaker correlations between communication and leadership, along with the neutral to negative sentiments expressed about communication consistency, point to areas for improvement. Clear, standardized communication is essential for preventing misunderstandings, particularly in high-risk environments like aviation. Thus, leadership must focus on improving communication strategies to maintain clarity and consistency across all levels of the organization.

Teamwork was strongly associated with both safety reporting and leadership influence, highlighting its role in creating an environment where safety concerns can be raised and addressed. Participants expressed positive sentiments toward teamwork, particularly regarding trust and shared accountability. The strong correlation between teamwork and safety reporting indicates that when teams function effectively, they are more likely to identify and report potential safety issues. This finding aligns with the idea that collaboration and trust within teams are essential for maintaining a proactive safety culture, where employees feel empowered to take responsibility for safety outcomes.

The study also identified challenges in leadership and communication, particularly around the consistency of leadership behavior and the clarity of communication. The negative sentiments and correlations related to leadership and communication suggest that while these areas are generally strong, there are still gaps that need to be addressed. In particular, the perception that leadership occasionally prioritizes operational efficiency over safety was noted by some participants, which can undermine trust and reduce the effectiveness of safety reporting. Improving consistency in both leadership actions and communication practices is critical to ensuring that safety remains at the forefront of organizational priorities.

These findings align with existing research on safety culture in aviation and other high-risk industries, particularly in emphasizing the importance of leadership and teamwork. Previous studies have highlighted the critical role of transformational leadership in promoting safety, and the present findings confirm this while adding new insights through the use of sentiment analysis. The study also extends the existing literature by showing how emotional responses, captured through sentiment analysis, provide a deeper understanding of the organizational behavior factors that drive safety culture. This study offers a more nuanced view of how employees experience leadership and communication in the context of safety.

There are, however, some limitations to this study. The sample size, though adequate for qualitative research, may limit the generalizability of the findings to other contexts within the aviation industry or across different sectors. Additionally, while sentiment analysis offers valuable insights into emotional tone, it may oversimplify complex feelings about leadership and safety practices. Further research could benefit from a larger sample or mixed-method approaches that combine qualitative and quantitative data to provide a more comprehensive understanding of organizational behavior and safety culture.

Future research should focus on exploring leadership consistency in greater depth, as well as investigating communication dynamics in high-pressure situations. Longitudinal studies that track leadership and communication practices over time would provide insights into how these behaviors evolve and impact safety outcomes. Moreover, expanding the research to include technological innovations, such as digital tools for safety reporting, could further enhance the understanding of how to foster a proactive safety culture. Ultimately, future studies should continue to examine the human and organizational factors that drive safety in high-risk industries.

In conclusion, this study contributes to both the organizational behavior and aviation safety literature by highlighting the importance of leadership, communication, and teamwork in shaping safety culture. Through thematic, sentiment, and correlation analysis, the study provides a comprehensive view of how these factors interrelate and influence safety outcomes. By addressing the challenges identified in leadership consistency and communication clarity, aviation organizations can strengthen their safety culture and improve overall safety performance. These findings offer valuable insights for aviation managers, safety professionals, and policymakers seeking to enhance safety practices through improved organizational behavior.

5. Practical Implications

The practical implications of these findings for aviation management are highly significant and offer clear guidance for enhancing safety culture. First and foremost, consistent leadership is essential. Aviation managers should prioritize leadership development programs that emphasize not only technical expertise but also the importance of maintaining a visible and sustained commitment to safety. Training programs should focus on cultivating leadership behaviors that consistently prioritize safety, even when operational pressures arise. This includes promoting transparent decision-making processes where safety considerations are at the forefront, and ensuring leaders model the safety behaviors they expect from others. Managers should also implement regular safety audits led by senior leadership to reinforce the idea that safety is a shared, top-down responsibility.

Improving communication channels is another critical implication. Clear, timely, and standardized communication between departments such as flight crews, ground personnel, and maintenance teams is vital for maintaining situational awareness and preventing safety issues. Aviation managers should invest in both the technological infrastructure and the interpersonal training necessary to support effective communication. This may include adopting or upgrading communication systems that enable real-time information sharing across all relevant teams, especially during crisis situations. Additionally, establishing clear communication protocols during routine operations as well as emergencies can reduce the chances of miscommunication. Regular interdepartmental briefings, where safety concerns are openly discussed, can also ensure that all teams are aligned on safety protocols and can contribute to the early identification of risks.

Fostering teamwork is equally essential for reinforcing safety culture. The study's findings indicate that strong teamwork, based on mutual accountability and trust, significantly enhances safety reporting practices. Managers should focus on creating a collaborative environment where employees feel empowered to speak up about potential safety risks without fear of retribution. This can be achieved by implementing formal safety reporting systems that allow for anonymous submissions, combined with informal opportunities for employees to voice concerns, such as in regular safety huddles or debriefings. Moreover, team-building exercises designed to enhance collaboration and trust can be integrated into regular training programs, ensuring that teams are not only technically competent but also able to work together effectively to mitigate risks.

Developing a culture of mutual accountability is crucial to enhancing safety reporting practices. Managers need to ensure that accountability for safety is not limited to leadership, but extends throughout all levels of the organization. This can be encouraged by rewarding teams for proactive safety reporting and ensuring that safety performance is integrated into performance appraisals. Peer-to-peer accountability systems, where team members are encouraged to look out for each

other's safety and raise concerns collectively, can also strengthen the safety culture. Furthermore, managers should ensure that there is a just culture in place, where employees are not punished for reporting safety risks or mistakes, but instead are encouraged to learn from them. This will help to create a more open environment where employees feel comfortable reporting incidents and potential hazards, ultimately making the organization more resilient to safety risks.

Finally, aviation managers should focus on resilience—building an organizational capacity that not only responds to safety risks effectively but also anticipates and mitigates them before they escalate. This involves not only investing in continuous safety training but also in leadership and team simulations that prepare staff for both everyday operations and unexpected crises. By embedding safety deeply into every facet of organizational behavior, from leadership to communication and teamwork, aviation organizations can create a proactive, resilient safety culture that enhances overall operational effectiveness while reducing the potential for accidents.

6. CONCLUSION

The primary goal of this study was to explore how organizational behavior, specifically leadership, communication, and teamwork, influences the development and maintenance of safety culture within the aviation industry. The research aimed to address key questions about the role these elements play in shaping safety practices and fostering a proactive approach to risk mitigation. By focusing on these core areas, the study provided a detailed understanding of the human factors that contribute to safety outcomes in aviation management.

The findings revealed several significant insights. Leadership emerged as a critical factor in promoting safety culture, with strong connections to both teamwork and safety reporting behaviors. Consistent and visible leadership was identified as a driving force behind effective safety practices, while the importance of clear and standardized communication was highlighted as essential for reinforcing safety protocols and ensuring team cohesion. Teamwork was also shown to play a vital role in enabling proactive safety reporting, with mutual trust and accountability within teams being key to addressing potential safety risks before they escalate.

These insights have practical implications for aviation managers. First, leadership must remain consistently focused on safety, ensuring that operational pressures do not overshadow safety priorities. Second, efforts should be made to enhance communication practices by ensuring clarity and consistency across all departments and teams. Lastly, fostering strong teamwork and a culture of mutual accountability will be essential for encouraging a proactive safety environment, where employees feel empowered to report safety concerns without hesitation.

The study contributes to the existing literature by offering a detailed examination of the intersection between organizational behavior and safety culture. In particular, it expands on previous research by incorporating thematic, sentiment, and correlation analysis to provide a more nuanced understanding of how these behaviors influence safety outcomes. The use of sentiment analysis added depth to the findings, highlighting areas where leadership and communication practices evoke both positive and negative emotional responses, further informing how organizations can improve their safety culture.

While the study provides valuable insights, there are limitations that must be acknowledged. The relatively small sample size typical of qualitative research may affect the generalizability of the findings. Additionally, sentiment analysis, while helpful in gauging emotional responses, may oversimplify complex feelings about organizational behavior. Future research could build on this work by using larger samples or employing mixed-method approaches that combine qualitative and quantitative data for a more comprehensive view of safety culture dynamics.

Looking ahead, further exploration is needed to understand how leadership consistency affects long-term safety culture, and how communication dynamics evolve in high-pressure

environments. Additionally, expanding the scope to other high-risk industries or examining international contexts could offer broader insights into the global challenges of maintaining safety in aviation. Investigating technological solutions that enhance communication and safety reporting practices, such as digital tools and platforms, could also provide valuable avenues for future research.

In conclusion, fostering a strong safety culture in aviation requires continuous attention to organizational behavior. Consistent leadership, clear communication, and effective teamwork are key components that work together to ensure safety remains a top priority. By addressing the challenges identified in this study and implementing practical changes, aviation organizations can strengthen their safety culture, improve operational safety, and create a more resilient industry.

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EXTENDED ABSTRACT

GENİŞLETİLMİŞ ÖZET

**HAVACILIK YÖNETİMİNDE ÖRGÜTSEL DAVRANIŞIN EMNİYET KÜLTÜRÜ
ÜZERİNDEKİ ETKİSİNİN ARAŞTIRILMASI: NİTELİKSEL BİR ÇALIŞMA****Giriş ve Çalışmanın Amacı**

Bu çalışma, havacılık yönetiminde örgütsel davranışın emniyet kültürü üzerindeki etkilerini incelemektedir. Yüksek riskli yapısı nedeniyle, havacılık sektörü, operasyonel güvenliği sağlamak ve kazaları önlemek için güçlü bir emniyet kültürüne ihtiyaç duymaktadır. Emniyet kültürü, bir organizasyonun emniyet önceliklerini algılama, değer verme ve uygulama biçimini şekillendiren tutumlar, inançlar ve davranışlardan oluşmaktadır. Ancak literatürde, liderlik, iletişim ve takım çalışması gibi örgütsel davranış unsurlarının emniyet uygulamalarını nasıl şekillendirdiğini ele alan sınırlı sayıda çalışma bulunmaktadır. Bu araştırma, bu boşluğu doldurmayı hedefleyerek, liderlik, iletişim ve takım çalışmasının emniyet kültürü üzerindeki etkilerini anlamaya odaklanmaktadır. Çalışma, örgütsel davranış unsurlarından hangilerinin emniyet kültürünü en çok etkilediği, bu unsurların emniyet uygulamalarını nasıl şekillendirdiği ve hangi örgütsel değişikliklerin emniyet kültürünü güçlendirebileceği sorularına yanıt aramaktadır. Böylece, insan ve örgütsel faktörlerin emniyet kültürü üzerindeki etkisini anlamaya yönelik daha derin bir bakış açısı sağlamayı amaçlamaktadır.

Kavramsal Çerçeve

Emniyet kültürü, operasyonel güvenliği artıran ve kazaları önleyen kritik bir unsurdur. Literatürdeki çalışmalar, genellikle liderlik, iletişim ve takım dinamiklerinin önemini vurgulamakla birlikte, insan ve örgütsel faktörlerin emniyet kültürü üzerindeki etkisini kapsamlı bir şekilde ele almamaktadır. Örneğin, Adjekum ve Tous (2020), liderlik taahhüdü, açık iletişim kanalları ve ekip işbirliğinin emniyet risklerine karşı dirençli bir kültür oluşturmadaki önemini vurgulamıştır. Ancak, bireysel algıların bu süreçlere nasıl katkıda bulunduğunu ele almamıştır. Bastola (2020) ise liderlik stillerinin havacılık emniyeti üzerindeki etkilerini araştırmış ve dönüşümcü liderliğin, çalışanların emniyet bilincini artırarak proaktif davranışlara yol açtığını göstermiştir. Bu çalışmada liderliğin etkisi detaylı incelenmiş olsa da, liderlik, iletişim ve takım çalışmasının bir arada ele alınması eksik kalmıştır. Benzer şekilde, Bhattarai ve arkadaşları (2022), Nepal havacılık sektöründe emniyet kültürüne ilişkin faktör analizi yapmış, ancak iletişim ve takım dinamiklerinin nasıl bir araya gelerek emniyet kültürünü şekillendirdiğine değinmemiştir. Bu çalışma, mevcut literatürdeki bu boşlukları doldurarak, liderlik, iletişim ve takım çalışmasının karşılıklı etkileşimlerini ele almakta ve bu unsurların emniyet kültürü üzerindeki ortak etkilerini ortaya koymaktadır. Özellikle, bireylerin örgütsel davranış unsurlarına yönelik algılarını inceleyerek, emniyet kültürünün insan merkezli yönüne odaklanmaktadır.

Yöntem ve Bulgular

Araştırmada nitel bir yaklaşım benimsenmiş ve havacılık profesyonelleriyle yapılan yarı yapılandırılmış görüşmelerden elde edilen veriler, NVivo yazılımı ile tematik analiz yöntemiyle analiz edilmiştir. Görüşmeler, liderlik, iletişim ve takım çalışmasının emniyet kültürü üzerindeki etkilerini anlamaya yönelik sorulara odaklanmıştır. Ayrıca, duygu analizi ve korelasyon analizleri, örgütsel davranış unsurlarının ilişkilerini ve algılanan etkilerini daha ayrıntılı bir şekilde incelemek için kullanılmıştır. Tematik analiz sonuçları, liderlik etkisinin, ekip çalışmasının ve iletişim süreçlerinin emniyet kültürü üzerindeki kritik rollerini ortaya koymuştur. Örneğin, liderlik etkisi ve emniyet raporlama arasındaki güçlü ilişki, liderliğin çalışanların emniyet sorunlarını raporlama konusundaki motivasyonunu artırdığını göstermiştir. Benzer şekilde, ekip çalışması ve iletişim arasındaki güçlü bağlantılar, etkili iletişimin ekiplerin emniyet risklerini daha iyi yönetmesine yardımcı olduğunu ortaya koymuştur. Ancak, liderlik tutarlılığı ve iletişimdeki bazı tutarsızlıklar gibi alanlarda iyileştirmeler gerektiği tespit edilmiştir.

Sonuç ve Öneriler

Çalışmanın bulguları, liderlik, iletişim ve takım çalışmasının emniyet kültürünü şekillendirmedeki kritik rollerini vurgulamaktadır. Liderlik, emniyet uygulamalarını teşvik etmede önemli bir etkiye sahiptir, ancak liderlerin tutarlı bir şekilde emniyet önceliklerini vurgulamaları gerekmektedir. Ayrıca, iletişim stratejilerinin daha etkili hale getirilmesi ve ekipler arasında açık iletişim kanallarının oluşturulması gerekmektedir. Takım çalışması ise, güven ve karşılıklı sorumluluk üzerine inşa edilerek, emniyet raporlama uygulamalarını güçlendirmelidir. Bu çalışma, liderlik, iletişim ve takım çalışmasının karşılıklı etkileşimlerini ele alarak literatürdeki önemli bir boşluğu doldurmakta ve insan merkezli bir perspektif sunmaktadır. Gelecekteki araştırmalar, liderlik ve iletişim tutarlılığının uzun vadeli etkilerini derinlemesine inceleyerek, daha geniş katılımcı gruplarını kapsayan analizlerle elde edilen bulguların genelleştirilebilirliğini geliştirebilir.

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1	Tuncel ÖZ	%100	Yoktur	-