

Psychological Safety and Employee Mental Health: A Systematic Literature Review of Risks, Protection, and Outcomes (2015–2025)

Putri Aurel Rizkia Arfyani, Zamralita & Reza Fahlevi
Universitas Tarumanagara

Mental health problems significantly affect organizational productivity and employee well-being, yet organizations frequently prioritize physical safety protocols while overlooking psychological safety. This study systematically analyzed the impact of psychological safety on employee mental health and identified the specific risk and protective factors involved. Despite growing awareness, a comprehensive synthesis of the evolving risk and protective factors of psychological safety, and of specific mental health outcomes across diverse organizational settings, is lacking. A systematic literature review following Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines was conducted. Sixteen peer-reviewed articles published between 2015 and 2025 were selected from Scopus, PubMed, and APA PsycNet, and appraised using Joanna Briggs Institute critical appraisal tools. The review identified 18 factors influencing psychological safety, including risk factors (e.g., enforced remote work, work pressure) and protective factors (e.g., humble leadership). A further 21 impacts were identified: high psychological safety was associated with work engagement and well-being, whereas low psychological safety was associated with psychological distress, depression, anxiety, and burnout. Organizations therefore need to cultivate a robust psychosocial safety climate, and inclusive leadership together with transparent communication is essential to safeguard employee well-being and organizational sustainability. This review contributes a multidisciplinary framework bridging organizational psychology and clinical mental health, offering consolidated evidence on how psychosocial climates determine behavioral health outcomes and supporting organizational efforts to prioritize sustainable human capital development.

INTRODUCTION

Employee mental health has become a critical concern in organizational behavior, as it directly dictates productivity and long-term sustainability. The World Health Organization (2019) estimates an annual global loss of one trillion US dollars due to reduced productivity from

Author info: Correspondence should be sent to: Zamralita Zamralita, Faculty of Psychology, Universitas Tarumanagara, Jl. Letjen S. Parman No. 1, Jakarta 11440, Indonesia. *Email:* zamralita@fpsi.untar.ac.id

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depression and anxiety. In Indonesia, data from *RISKESDAS* (2018) and *SAKERNAS* (2019) indicate a significant prevalence of emotional disturbances among the workforce, which can escalate into severe psychological conditions if left unaddressed. Recent studies published in behavioral science highlight that organizational resources, such as social support and empowering leadership, play a vital role in mitigating job burnout and enhancing engagement among Indonesian employees (Komalasari et al., 2025; Woranetipo & Chavanovanich, 2021). While traditional workplace safety often prioritizes physical protocols (e.g., K3 or OSHA standards), there is a growing necessity to address the “invisible” dimension of safety: psychological safety. This construct, defined as a shared belief that the work environment is safe for interpersonal risk-taking, serves as a fundamental pillar for fostering employee resilience and mental well-being in the modern corporate landscape. Furthermore, psychological safety has been recognized as a key mediator that links organizational support to positive work behaviors and innovation within the Indonesian professional context (Rahmaningtyas et al., 2022).

Despite its importance, there is a significant research gap, as current literature often focuses on specific high-risk industries or narrow measurement scales, failing to provide a comprehensive synthesis of the evolving risk and protective factors in the post-pandemic era (2015–2025). Furthermore, there is a lack of systematic integration between psychological safety antecedents and specific mental health outcomes across diverse organizational settings.

The primary purpose of this review is to systematically analyze the impact of psychological safety on employee mental health, as well as to identify and categorize the specific antecedents (risk and protective factors) that shape psychological safety in the workplace. In doing so, this study aims to provide actionable insights for organizations seeking to develop robust psychosocial safety climates that promote both individual well-being and organizational efficacy.

REVIEW METHOD

Aims of the Review

The primary objective of this systematic literature review is to synthesize empirical findings regarding the impact of psychological safety on employee mental health. Specifically, this review aims to:

1. Identify and evaluate the key antecedents, comprising 15 protective factors and 3 risk factors. That foster or undermine psychological safety in organizational environments.

2. Analyze the direct and indirect outcomes of high versus low psychological safety across 21 mental health and organizational metrics.
3. Examine the mediating and moderating variables influencing these relationships, address existing research gaps, and heighten awareness of embedding psychological safety within corporate frameworks.

Conceptual Framework

The conceptual framework of this review illustrates the relationship between psychological safety and employee mental health through three main components: factors, psychological safety as the core variable, and impacts. Factors are categorized into protective factors, such as humble leadership and management commitment, and risk factors, such as enforced remote work and work pressure. Psychological safety acts as a predictor influenced by moderators such as enacted managerial support, and mediated by variables such as job resources or co-worker support. The framework ends with the resulting impacts, where high psychological safety leads to positive outcomes such as work engagement and psychological well-being, while low psychological safety results in negative outcomes such as psychological distress, anxiety, and depression.

Design

This study uses a systematic literature review method registered with PROSPERO under the registration code CRD420251089930. The research process adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to ensure a clear and systematic procedure for combining research results on similar topics. This method involves a rigorous four-stage process: identification, screening, eligibility assessment, and inclusion of final studies for data synthesis.

Search Strategy and Data Sources

A comprehensive literature search was conducted across three primary academic databases: PubMed, Scopus, and APA PsycNet. The search was limited to studies published over the last 10 years, specifically from January 1, 2015, to July 9, 2025. The search strategy employed a combination of Boolean operators and keywords: (“mental health” OR “well-being”) AND (“psychosocial safety” OR “psychological safety”) AND (“employee” OR “co-worker”). This strategy was designed to ensure broad coverage of literature accommodating various terminologies and theoretical connections between the variables.

Search Outcomes

The initial search across the three databases identified a total of 9,096 records. Specifically, 7,877 articles were retrieved from PubMed, 933 from Scopus, and 286 from APA PsycInfo. After removing 1,056 duplicate articles using the Rayyan AI platform, 8,568 unique records remained for title and abstract screening. Following the screening process, 20 articles were sought for full-text retrieval. After detailed evaluation of the full texts, 16 articles were selected as the final studies to be included in the extraction and synthesis process.

Eligibility Criteria and Study Selection

The selection of studies followed a strict evaluation process based on the PICOS framework (Population, Intervention/Exposure, Control, Outcome, and Study Design) to ensure relevance to the research objectives.

Inclusion Criteria

Studies had to focus on adult employees or working populations (≥ 18 years) in various work environments. Articles had to be published in English between January 2015 and July 2025. The study design could be quantitative, qualitative, mixed methods, or a literature review exploring the impact of psychological safety on mental health outcomes such as stress, burnout, or well-being.

Exclusion Criteria

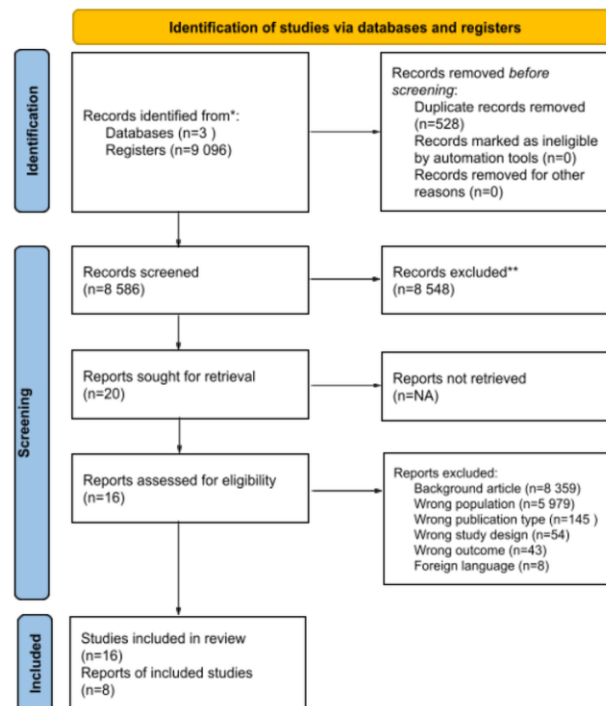
Studies focused exclusively on non-working populations, such as students or unemployed individuals, were excluded. Articles not published in English, studies that were not open access, and participants under 18 years of age were also disqualified. Additionally, the review excluded conference proceedings, editorials, protocols, and reports that did not use validated tools to measure the relationship between psychological safety and mental health.

Data Extraction

Data from the 16 selected articles were extracted systematically using Google Sheets to record essential information. The extracted data included article titles, authors, publication years, countries of study, participant numbers, demographic data, research methods, measurement instruments used, and key findings relevant to the research questions. The entire selection and screening process is documented in a PRISMA flow diagram (Figure 1) to ensure transparency and replicability of the results.

Figure 1

PRISMA Flow Diagram of the Identification, Screening, and Selection Process



Quality Appraisal

All articles included for data extraction underwent a quality assessment tailored to their specific research designs. The appraisal was conducted using the Joanna Briggs Institute Critical Appraisal Tools, which provide specific guidelines for evaluating various study types, including analytical cross-sectional and cohort studies. The assessment focused on several criteria: clear inclusion criteria, detailed descriptions of subjects and settings, the use of valid and reliable exposure and outcome measurements, and the appropriateness of the statistical analysis.

Data Analysis and Synthesis

The synthesized data were integrated to answer the research questions concerning the impacts and factors of psychological safety on employee mental health. The synthesis involved mapping the characteristics of the included studies and identifying consistent patterns in the results. Factors

were synthesized and categorized into protective and risk factors, while impacts were grouped into high and low psychological safety impacts based on the empirical evidence found across the 16 studies. This process allowed for the identification of the most significant variables affecting workplace mental health across different industries and career stages.

RESULTS

The results of this systematic literature review provide a comprehensive overview of the current empirical evidence regarding psychological safety and its relationship with employee mental health. This section details the descriptive characteristics of the 16 included studies, evaluates their methodological quality, and synthesizes the findings to address the primary research objectives concerning influencing factors and specific mental health impacts.

Characteristics of Included Studies

A total of 16 articles met the eligibility criteria and were published between 2015 and 2025. Methodologically, 15 studies used quantitative designs, including three longitudinal cohort studies (Inoue et al., 2023; Juutinen et al., 2023; Ulusoy et al., 2016), and one study employed a mixed methods approach (McLinton et al., 2018). Geographical distribution shows a dominance of research from Asia, with four studies (25%) conducted in Japan (Inoue et al., 2023, 2025; Kumagaya et al., 2025; Ojio et al., 2025). Other regions include China, Vietnam, Iran, Malaysia, Australia, and various European countries such as Germany, Finland, and the Netherlands. Participant samples ranged widely, with the largest study involving 6,230 healthcare employees in the Netherlands (Bronkhorst, 2015). Summary characteristics of the included studies are presented in Table 1.

Table 1
Characteristics, Populations, and Key Findings of the 16 Included Studies (2015–2025)

Author (Year)	Country	Design	Population	Key Findings
Ojio et al. (2025)	Japan	Quant.	541 athletes	High PS correlates with mental toughness ($\beta = 0.539$).
Liu, Lei, & Gan (2025)	China	Quant.	266 hotel employees	PS positively affects employee loyalty ($\beta = 0.412$) and subjective well-being.
Nguyen et al. (2025)	Vietnam	Quant.	238 construction workers	Management commitment and priority are protective factors against mental ill health.
Inoue et al. (2025)	Japan	Quant.	2,200 employees	PS moderates the effect of job demands on psychological distress.
Kumagaya et al. (2025)	Japan	Quant.	1,088 public servants	Humble leadership fosters PS, reducing anxiety and depression.
Manogna et al. (2024)	India	Quant.	286 IT professionals	Safety climate significantly predicts psychological well-being ($R^2 = 0.703$).
Liu & Zhou (2024)	China	Quant.	227 employees	Sense of power enhances PS, reducing emotional exhaustion ($\beta = -0.18$).
Juutinen et al. (2023)	Finland	Quant.	442 university staff	Enforced remote work is a risk factor reducing PSC.
Inoue et al. (2023)	Japan	Quant.	2,200 employees	PSC positively correlates with work engagement ($\beta = 0.383$).
Zadow et al. (2021)	Australia	Quant.	1,084 employees	Low PS predicts new major depression symptoms ($\beta = -1.15$).
McLinton, Dollard, & Tuckey (2018)	Australia	Mixed	27 healthcare workers	Group expectations and manager support are key protective factors.
Afsharian et al. (2019)	Iran	Quant.	247 hospital staff	PSC negatively correlates with emotional exhaustion.
Havermans et al. (2017)	Netherlands	Quant.	277 healthcare workers	PSC is negatively associated with stress ($\beta = -0.21$).
Yulita, Dollard, & Idris (2017)	Malaysia	Quant.	109 teachers	Congruence between espoused safety climate and enacted support affects engagement.
Ulusoy et al. (2016)	Germany	Quant.	1,969 employees	Immigration background is a risk factor; PS correlates with affective commitment ($\beta = 0.31$).
Bronkhorst (2015)	Netherlands	Quant.	6,230 healthcare workers	Work pressure acts as a risk factor ($\beta = -0.04$) for psychosocial safety behavior.

Note. PS = psychological safety; PSC = psychosocial safety climate; Quant. = quantitative; Mixed = mixed methods; β = standardized regression coefficient; R^2 = coefficient of determination.

Risk of Bias Assessment

All 16 articles underwent a methodological quality check using the JBI Critical Appraisal Tools. Based on this assessment, the majority of the studies were found to be of high quality and were deemed appropriate for inclusion. A recurring weakness identified across several cross-sectional studies was the failure to explicitly identify or handle confounding factors, which may affect the validity of the causal relationships observed. Despite this, the valid and reliable measurement of exposures and outcomes in most studies supports the overall integrity of the synthesized findings.

Systematic Report of Main Results

The analysis identified 18 factors influencing psychological safety, 21 specific impacts on employee mental health, and variables that mediate or moderate the relationship between psychological safety and mental health. The synthesized framework depicting antecedents, mechanisms, and outcomes is presented in Figure 2 (see Appendix A).

Influencing Factors of Psychological Safety (Antecedents)

The synthesized literature reveals 18 distinct factors influencing psychological safety, categorized into protective factors ($n = 15$) and risk factors ($n = 3$):

Protective factors. Leadership styles and managerial commitment serve as primary protective drivers of workplace psychological safety. *Humble leadership* significantly enhances psychological safety by fostering leader self-awareness, appreciation of team contributions, and openness to feedback ($\beta = 0.47, p < .01$). Employees' *sense of power* acts as a buffer against emotional exhaustion ($\beta = 0.40, p < .001$) by elevating personal agency and interpersonal confidence. At the macro-organizational level, *management commitment* ($\beta = -0.334, p < .01$) and *management priority* ($\beta = -0.307, p < .01$) directly mitigate mental ill-health in high-strain work environments. Additional structural protective factors include *group expectations*, *top-level management involvement*, *procedural justice and transparency*, *effective organizational communication*, and the active alignment between *espoused psychological safety climate* and *enacted managerial support*, all of which contribute to an environment where employees feel trusted and valued.

Risk factors. Three primary organizational risk conditions significantly suppress psychological safety. *Enforced remote work* was shown in longitudinal studies to consistently reduce the psychosocial safety climate due to communication isolation and blurred work-life boundaries. High *work pressure* demonstrated a significant negative relationship with psychosocial safety behavior ($\beta = -0.04, p < .01$), indicating that excessive workload demands prompt employees to sacrifice

safety behaviors. Finally, an *immigrant background* functions as a contextual risk factor, where cultural distance and marginalization contribute to lower perceived interpersonal safety compared to native employees.

Impacts of Psychological Safety on Mental Health

The impacts are categorized based on the level of psychological safety present in the workplace.

High psychological safety impacts. High safety levels result in 11 positive impacts. Work engagement is the most consistent impact, reported across multiple studies (Afsharian et al., 2019; Inoue et al., 2023; Juutinen et al., 2023; Kumagaya et al., 2025). Furthermore, psychological safety has a strong impact on psychological well-being (path coefficient = 0.839; Manogna et al., 2024) and mental toughness ($\beta = 0.539, p < .001$; Ojio et al., 2025). Positive team outcomes and social belonging also emerge from high levels of safety.

Low psychological safety impacts. Low safety levels lead to 10 negative impacts. The most prominent impact is psychological distress, which showed significant negative correlations with psychological safety in four different studies (Afsharian et al., 2019; Inoue et al., 2023, 2025; Ojio et al., 2025). Low psychological safety is also a strong predictor of major depression symptoms ($\beta = -1.15, p < .001$; Zadow et al., 2021) and increased anxiety ($\beta = -0.16, p = .02$; Kumagaya et al., 2025).

Subgroup Analysis: Cultural Background and Industry Context

A targeted subgroup analysis demonstrates that the mechanisms and impacts of psychological safety vary significantly across cultural backgrounds and industry sectors.

Cultural Background Dynamics. Cross-cultural occupational settings reveal that cultural distance creates distinct vulnerabilities regarding psychological safety. Immigrant Turkish workers in Germany reported lower psychological safety and lower affective commitment ($\beta = 0.31, p < .001$) than native German workers, illustrating how minority social status and integration barriers weaken interpersonal security. Conversely, in East Asian collectivist settings, specifically in Japan, which accounted for 25% of the included studies high-demand organizational environments rely heavily on *humble leadership* and a strong *psychosocial safety climate* to buffer against severe psychological distress and maintain work engagement.

Industry-Specific Variations. In high-demand sectors such as healthcare and construction, psychological safety operates through distinct structural mechanisms. Healthcare environments frequently exhibit a structural disconnect between senior executive communication and frontline operational strain, making *immediate supervisor support* and *transparent justice* critical for preventing job burnout. In the construction industry, top-down *management commitment* and *safety prioritization* serve as the vital determinants in reducing overall mental ill-health.

Table 2

Subgroup Comparison of Psychological Safety Antecedents and Mental Health Outcomes

Subgroup Category	Primary Antecedents / Risk Factors	Key Psychological Safety & Mental Health Impacts	Representative Studies
Immigrant / Culturally Diverse Workforce	Cultural distance, integration barriers, minority status	Lower perceived safety, lower affective commitment, diminished social belonging	Ulusoy et al. (2016)
Japanese / Collectivist High-Pressure Sector	Heavy job demands, organizational hierarchy, humble leadership	Mitigated psychological distress, enhanced work engagement, protected mental toughness	Inoue et al. (2023, 2025); Kumagaya et al. (2025); Ojio et al. (2025)
Healthcare & Clinical Sector	Operational work pressure, executive disconnect, supervisor style	Reduced emotional exhaustion, increased psychosocial safety behavior	Bronkhorst (2015); Havermans et al. (2017); McLinton et al. (2018)
Construction & Industrial Sector	Hazard exposure, management commitment & priority	Reduced mental ill-health, lower psychological demands	Nguyen et al. (2025)

DISCUSSION AND CONCLUSION

Discussion of Main Results

This systematic review identified 18 risk and protective factors and 21 impacts of psychological safety on employee mental health. The findings confirm that psychological safety serves as a crucial predictor of workplace mental health, as evidenced by positive impacts such as work engagement and negative impacts such as depression (Afsharian et al., 2019; Kumagaya et al., 2025). A significant theoretical observation is the varied use of constructs: five studies used Dollard and Bakker's (2010) psychosocial safety climate framework, which emphasizes macro-level

organizational policies, whereas other studies followed Edmondson's (1999) or Kahn (1990) interpersonal, team-level safety definitions. Furthermore, the dominance of Japanese studies (25%) in this review reflects the cultural urgency for mental health protection in high-pressure work environments, suggesting that psychological safety is a vital intervention tool in such contexts (Inoue et al., 2023; Kumagaya et al., 2025). Furthermore, the empirical synthesis highlights *humble leadership* as a pivotal protective antecedent for employee well-being. This finding aligns closely with Kofman (2006) theoretical framework of *ontological humility*, which posits that effective organizational leaders must acknowledge the limitations of their own perspectives, remain open to alternative viewpoints, and model authentic vulnerability. When leaders demonstrate ontological humility, they normalize vulnerability within team interactions, thereby creating a psychologically safe climate where employees feel secure expressing mental health challenges, acknowledging mistakes, and seeking support without fear of retribution or negative performance appraisal. A significant theoretical observation is the varied use of constructs: five studies used Dollard and Bakker (2010) psychosocial safety climate framework.

Limitations

A primary methodological limitation identified across the included literature is the consistent lack of identification and management of confounding factors. Many cross-sectional studies failed to explicitly control for external variables, such as individual personality traits or prior mental health history, which may influence the relationship between psychological safety and mental health outcomes.

Implications for Behavioral Science

The results offer significant contributions to organizational behavior and occupational psychology. Theoretically, there is a clear need for future research to distinguish between interpersonal-level psychological safety and macro-level psychosocial safety climate in order to determine which construct has the more significant impact on mental health. Methodologically, future studies should employ longitudinal or experimental designs to better establish causality and control for confounding variables. Additionally, meta-analyses are recommended to determine definitive effect sizes and assess potential bias. Geographically, research should expand into developing nations such as Indonesia to validate whether these theories hold across different collectivist cultures and regulatory systems. Practically, organizations must develop a strong psychological safety climate by prioritizing mental health alongside productivity. Leaders should adopt humble leadership styles to foster a sense of security through transparent communication, while employees are

encouraged to maintain social interactions to prevent isolation (Kumagaya et al., 2025).

Conclusion

In conclusion, this systematic literature review identified 18 influencing factors (antecedents) comprising 15 protective factors and 3 risk factors, and 21 specific mental health and behavioral outcomes associated with psychological safety in the workplace. The evidence underscores that psychological safety is a critical determinant of well-being, with 13 primary impacts directly affecting mental health status across various industries. Establishing a supportive psychosocial climate is essential for mitigating risks such as burnout and depression while promoting engagement and resilience in the modern workforce.

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Generative AI. During the preparation of this work, the authors used Rayyan AI (Rayyan.ai) as a systematic review tool to facilitate the deduplication process and the screening of titles and abstracts during the literature selection phase. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Author contributions. Conceptualization, P.A.R.A. and Z.; methodology, P.A.R.A.; software, P.A.R.A.; validation, Z. and R.F.; formal analysis, P.A.R.A.; investigation, P.A.R.A.; writing—original draft preparation, P.A.R.A.; writing—review and editing, P.A.R.A., Z., and R.F.; visualization, P.A.R.A.; supervision, Z. and R.F. All authors have read and agreed to the published version of the manuscript.

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APPENDIX

Figure 2
Synthesized Framework of Factors, Mediators, Moderators, and Mental Health Impacts of Psychological Safety

