

VOICE AND VULNERABILITY: A SYSTEMATIC REVIEW OF PSYCHOLOGICAL SAFETY IN THE GIG ECONOMY

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DOI: <https://doi.org/10.5281/zenodo.17239780>

Keywords

Gig Economy, Psychological Safety, Voice Efficacy, Platform work.

Article History

Received: 11 July 2025

Accepted: 13 September 2025

Published: 27 September 2025

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Abstract

The gig economy characterized by digital platforms and decentralized work arrangements, which has transformed traditional employment structures by offering autonomy and flexibility. But these benefits often come with downsides as well, like being closely monitored by algorithms, getting tasks in unpredictable ways, at unusual times and limited opportunities for collective voice. Gig workers frequently experience emotional exhaustion, job insecurity and social isolation due to limited organizational support and opaque algorithmic control systems such as rating based penalties or sudden deactivation. This study adopts a dual-method approach, combining the PRISMA-based systematic review of 13 peer reviewed articles with a bibliometric analysis of 37 Scopus indexed studies published between 2020-2025. Total 256 records were initially screened to ensure the inclusion of high-quality research papers of good journals that highlight how the conversation about platform-based work is changing over the time. The results indicated that gig workers frequently rely on informal coping mechanisms and peer support. These are not enough without proper communication system and supportive platform policies. The paper also introduces the idea of voice efficacy, that carried out the belief of one's input will be heard and even make a difference. This belief is a key factor that helps to build psychological safety in gig work settings. The study highlights that improving gig workers well-being requires both better platform structures and efforts to strengthen worker's confidence. By integrating Maslow's Hierarchy of Needs with psychological theory and platform labor dynamics, this paper contributes to the discourse on sustainable and inclusive practices in digital labor markets. The findings suggest that platform designers and policymakers should embed transparent feedback systems, psychological support systems and fair rules to help workers feel stronger and more involved in the workplace.

INTRODUCTION

The gig economy has become an integral part of our global landscape, it is rapidly emerged as dominant force in the labor market and supported by digital

platforms that facilitates short term, on demand projects and contract-based work arrangements. These platforms enabled by mobile technology and

algorithms that provide convenience and autonomy for both workers and companies (De Stefano, 2016; Wood et al., 2019). The gig economy refers to the labor model where companies hire individuals as independent contractors to complete the assigned tasks as per demand, via digital applications (Burtch, Carnahan & Greenwood, 2018). Communication technologies have enabled firms to ignore the traditional operational boundaries and outsource the tasks to the informal Business market and creating a decentralized employment structure.

This model not only enhances autonomy and flexibility to work but also increases the risks associated with employee job security, emotional burden, and lack of organizational affiliation. Gig workers typically operate outside of formal traditional organizational frameworks, experiencing limited interaction with supervisors, unpredictable income streams and the absence of consistent team environment. These factors often foster a sense of isolation and emotional exhaustion and professional detachment in the gig employees.

Although entry in the gig economy requires minimal qualification, experience and training (Bailey, 2018; McDowell & Christopherson 2009). Workers are supposed to work on the already committed pay scale and have little no control over the commission and performance standards that are related to their jobs (Minter, 2017; Zwick, 2018). These circumstances, along with the uncontrolled competition for jobs, lead to the incorrect classification of the workers as independent contractors. This is most common in task-based work like the food delivery and transport sectors. This classification exempts employers from providing essential employment benefits like sick leave, annual leave, minimum wages, and workers' compensation. Limiting these can lead to exploitation, high incident rates, toxic work environment, and adverse psychological health outcomes.

Traditionally, Psychological safety is defined by (Edmondson, 1999), he explained it as the belief that individual perception of being speak up, take risks and expression of concerns, fear of negative feedback has been directly linked to job satisfaction, team learning, and creativity in conventional workplaces. Higher the motivation is higher the performance. However, in the gig economy this concept of

psychological safety is deeply compromised. Workers are often subject to algorithmic monitoring, customer ratings, and hidden performance rules which undermine their autonomy and also mute their voices.

These challenges then further illuminated through Maslow's Hierarchy of Needs which suggests that individuals must fulfill the basic needs and psychological security before jumping into the higher levels of well-being, such as belongingness and self-actualization. For gig workers, the absence of stable income, job instability, communication channels and organizational affiliation is the main issue, it prevents many workers from fulfilling their basic psychological and social needs. As a result, workers often experience the burnout, low motivation and compromised well-being. The conflict between authority and autonomy, algorithmic monitoring and the lack of employee voice rise and it weakens the workers' psychological resilience.

Despite increasing academic attention to the gig economy, the psychological dimensions particularly the construct of psychological safety remains underexplored. This paper uses Maslow's hierarchy as a theoretical lens to examine how psychological safety is understood and experienced in the gig work environments, with an emphasis on the difficulties that develops when basic needs are not addressed. Importantly, the novel construct of voice efficacy added to this concept, which is the workers belief that their input is not only heard but can influence the outcomes, this is used as mediating variable. Through this lens the study aims to systematically explore the psychological landscape of gig work by integrating the theoretical model that synthesize the recent empirical research and also identify sustainable and inclusive pathways for digital labor systems.

1. Justification for the Study:

The gig economy has grown significantly over the past decade, and also reshaping how people engage with work across the globe. While it also offers the undeniable advantages like autonomy and flexible scheduling inclusive of several challenges particularly in terms of workers psychological well-being. Emerging research shows that gig workers must put more concern over job satisfaction, turnover intentions and mental health. Most studies in this

area were focused on wages, legal protections or algorithmic fairness but very few examine how safe and supported gig workers feel in voicing concerns or navigating uncertainty. This gap in the literature presents the real need for deeper research especially on the worker feeling of unsafety or isolation which directly affect outcomes like engagement, creativity and retention.

Most existing studies have focused on legal classification, income stability or algorithmic bias, often overlooking the internal experiences of gig workers operating under precarious conditions. This study addresses the gap by introducing the voice efficacy as a novel psychological construct capturing the extent to which workers believe their voice can make a difference, particularly within systems that typically offer limited feedback or responsiveness.

In regions like South Asia, where digital labor market is now growing but regulatory protection is still weak, the urgency of such research is even more demanding. By integrating the perspectives from Maslow's Hierarchy of Needs that can help platforms design more equitable and human work systems, this is not only relevant for academic advancement but also for policy and platform design in an increasingly gig driven world.

The study used Maslow's hierarchy of need (Maslow, 1943) as a foundation framework in psychology that explains how human motivation progresses through five levels: physiological, safety, love and belonging, esteem, and self-actualization. In traditional employment settings organizations often provide structures that help fulfill these needs. However, within the gig economy, where work is mediated through digital platforms often lacks job stability and is governed by algorithms, basic needs such as security, recognition and belonging are frequently unmet. Maslow's framework helps to explain why gig workers often feel isolated, emotionally exhausted and

psychologically unsafe, as their fundamental needs are either partially fulfilled or completely ignored by the platform systems.

This is further supported by Morrison's (2011) work on employee voice, which explains how the willingness to speak up is closely dependent on structural opportunities. When workers believe their voices carry no weight or worse, that speaking up may reduce access to future tasks, they are more likely to remain silent. This enforced silence can become a barrier to well-being and inclusion.

Building on Maslow's motivational theory and Morrison's (2011) voice behavior framework, this study introduces voice efficacy as a key psychological mechanism that shapes how gig workers experience safety and inclusion. Maslow's theory emphasizes the fundamental human need, while Morrison's work highlights the structural and perceptual factors that influence whether individuals speak up or not in organizational settings. Integrating these perspectives, voice efficacy mediates the relationship between job conditions and psychological safety.

As shown in the Conceptual Framework (Figure A), two key independent variables, organizational support and job demands (e.g., emotional labor, cognitive load) directly and indirectly influence psychological safety through their impact on voice efficacy. When gig workers perceive strong support from platforms and manageable job demands, they are more likely to feel that expressing concerns or ideas is both safe and impactful. When job demand is high and support is low, voice efficacy may be undermined, reducing workers' willingness to engage.

This framework highlights the need for platforms to not only improve structural access to feedback channels but also to cultivate internal belief systems that empower workers to speak up, thereby enhancing psychological well-being in algorithmically mediated environments.

Conceptual Framework:

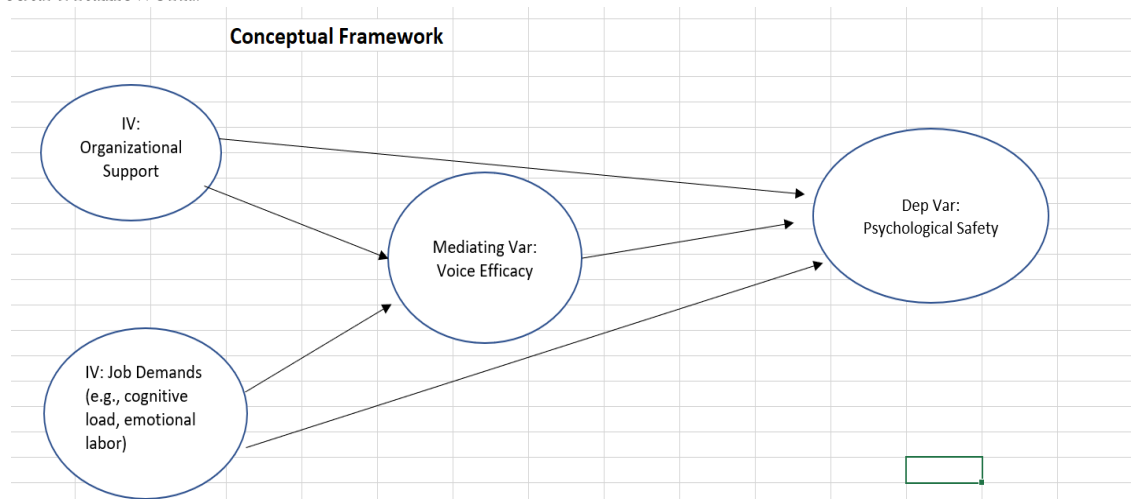


Figure 1.

2. Research Objectives and Questions:

This study aims to better understand how psychological safety operates within the rapidly changing world of gig work. As more workers turn to platform-based jobs often managed by algorithms rather than human supervisors, their experience of safety, support and voice differ significantly from those in traditional workplaces. While research on psychological safety has expanded in recent years, relatively few studies have examined how these concepts translate in the gig economy. This gap highlights the need to explore how digital platform shapes worker perceptions of inclusion, trust, and the ability to speak without the fear of negative consequences.

The study conducted to synthesize and make sense of the existing literature on psychological safety in the gig economy, with particular attention to the factors that enhance or undermine the sense of safety on digital platforms. A key part of this effort is to explore the voice efficacy that is a worker’s belief that speaking up will actually make a difference. This construct helps to explain why some gig workers choose to stay silent even when they feel unsafe or unsupported. The review also looks at how larger platform systems like algorithmic controls and lack of feedback options shape individual experiences and outcomes like engagement, silence or stress. By mapping these interconnections, the study aims to contribute a deeper understanding of the psychological landscape

faced by gig workers operating in the digitally mediated environments.

To guide the review the following research questions are developed:

1. How has psychological safety been conceptualized and studied in gig work setting between 2020-2025?
2. What technological, organizational and interpersonal factors influence psychological safety among gig workers?
3. In what ways voice efficacy mediate the relationship between platform structures and worker psychological safety?
4. What are the key research gaps, and what should future studies explore to better support psychological safety in platform-based labor system?

4. Literature Review:

4.1 Gig Work and Evolving Psychological Risks:

The structure of work has undergone a major shift with the rise of gig platforms such as Uber, Food panda and Upwork. These digitally mediated jobs offer flexibility but lack employment protections which leads to the increase in the uncertainty in the market. Several studies (Wood et al.,2019;Berg et al., 2018)highlight how gig workers often face emotional exhaustion, blurred boundaries between work and rest and social isolation. This instability leads to heightened emotional fatigue and job-related anxiety.(Wood et al.,2019)argue that how the

unpredictability of task assignment adds to workers stress and making them vulnerable to long term psychological issues. According to Wang et al.(2023) the gradual destruction of traditional job security has made psychological risks more prominent in gig-based roles particularly where work is governed by algorithms.

4.2. Understanding Psychological safety beyond Traditional Settings:

This concept has been originally defined by Edmondson(1999), psychological safety refers to an individual's perception of being able to speak up without fear of negative consequences. While this concept was developed for conventional settings, more recent research has extended it to gig and precarious work environments.(Dong Li and Roxas,2023)emphasize the lack of institutional trust and absence of HR structures as critical barriers to psychological safety in the gig economy. Similarly (Shoss et al., 2021) observe that without team cohesion and managerial support gig workers find it hard to voice concerns thereby increasing vulnerability

4.3 Algorithmic Control and Suppressed voice:

Platform work is often managed by opaque algorithms rather than human supervisors (Rosenblat and stark,2016) described how workers are monitored through data analytics which limits transparency. This form of algorithm management dictates task allocation, pay and even user ratings that leave no room for workers agency (Rosenblat & Stark, 2016).According to (Veen et al.,2020)algorithmic system has taken over human communication and make it hard for workers to raise concerns or feel in control.(Lehdonvirta, 2018) calls this term the "Faceless boss" effect, where feedback is automated and workers have no way to speak up which increases the stress and sense of helplessness.

4.4 Voice Efficacy as Mediating Mechanism:

Voice efficacy is the belief that one's voice will be heard and lead to change. It is a key to feeling Psychological safe. Detert and Burris(2007) say that when people believe their voices it matters a lot, they are more likely to speak up even in tough situations. But in gig work, studies like Schor et al. (2023) and

Dong Li & Roxas (2023) show that workers often feel their feedback is ignored and punished by opaque algorithms. This makes them less likely to speak up in the future and leading to silence and disengagement

4.5 Intersection and Vulnerability in Gig Work:

Recent researches recognize that gig workers have diverse background and experiences. Factors like gender, migration status, and socio-economic position can combine to increase psychological vulnerability(Healy. Ashford, Petriglieri, 2022;Graham et al.,2017.)For example women or workers from minority communities often face both the instability of gig work and broader social marginalization. These overlapping challenges affect not only their financial security but also reduce their trust in the system and their likelihood of speaking out about unfair treatment.

4.6 Safety, Voice, and Well-being in Fragmented Workspaces:

Gig work is highly decentralized with workers often lacking a shared physical space or regular interaction. This make it difficult to build collective safety practices.(Berastegui, 2021) notes that such fragmentation weakens social connections and limits peer support. As a result, workers struggle to build the trust needed for psychological safety. Without support from the organizations they must rely solely on personal resilience to manage stress. This is a strategy that is increasingly viewed as unsustainable.

5. Methodology:

This study has adopted dual method approach combining the bibliometric analysis with systematic review approach to examine the quantitative research landscape on Psychological safety of Gig workers in between 2020-2025 in workable contexts. Bibliometric Analysis is a quantitative technique that provides the trends of research articles, the productivity of authors, institutional affiliations, keyword patterns and analyze output of journals. Meanwhile the systematic review used the PRISMA guidelines to ensure the transparent and rigorous process for article selection and synthesis.

5.1 Data Source and Search Strategy:

The Bibliometric data were collected from the Scopus database, which is the most trustable, recognized and authentic source of academic database. This database covers the peer-reviewed journal articles of every field. The search was conducted using the following keywords in the title, abstract and keyword fields:

- "psychological safety" AND "workplace"

- "gig economy" AND "safety"

The search was limited from January 2020 to May 2025 so that the search covered the Post-Covid phase and also in order to focus on the research trends Psychological safety. Only English Language journal article were included and documents like Conference papers, book chapters were also excluded.

5.2 Screening Process and inclusion Criteria:

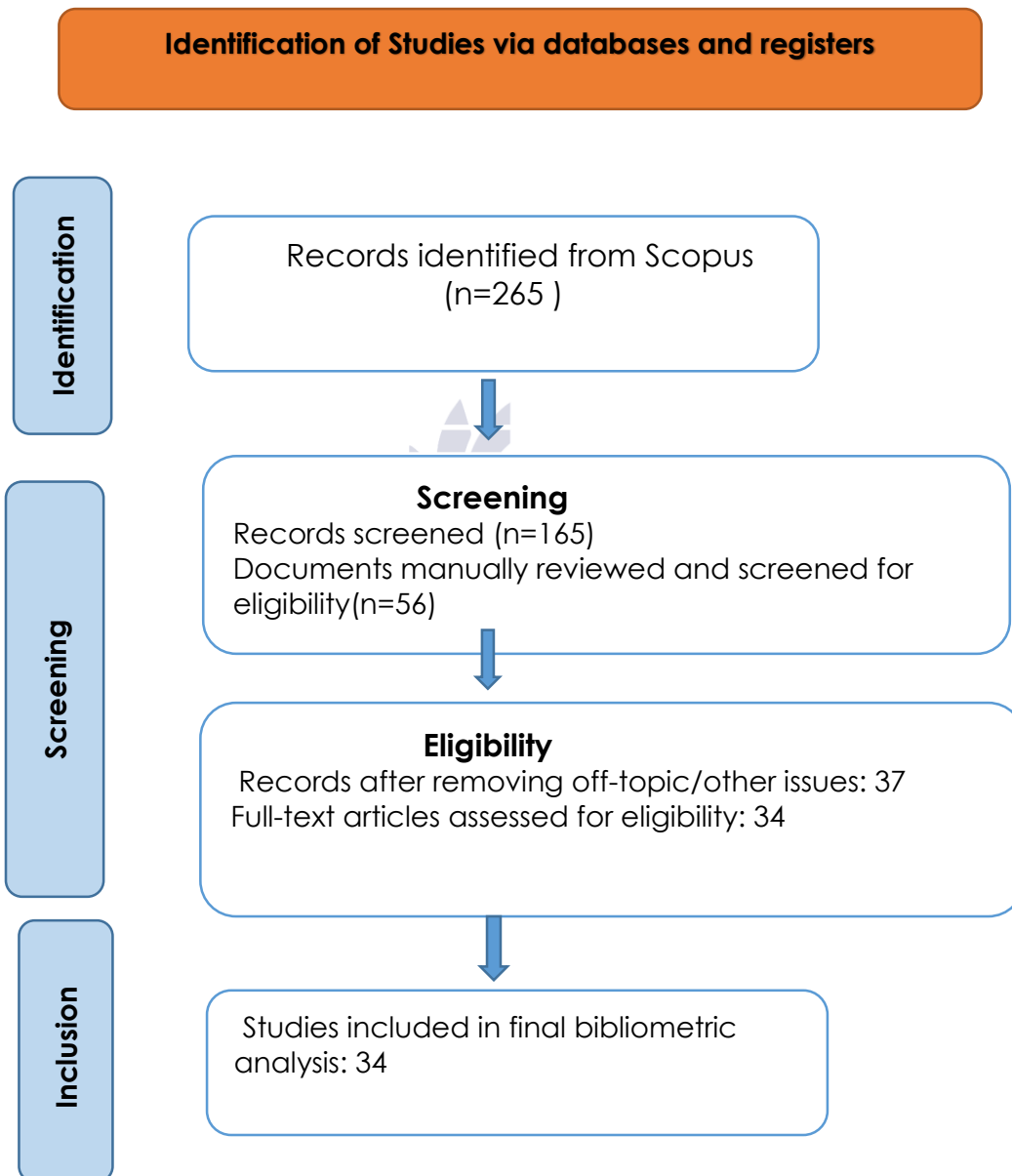


Figure A

The initial search yielded 56 research papers. The screening process was applied using the PRISMA flowchart which included the three main stages:

1. Identification: Removal of duplicate and unrelated documents.

2. Screening: Abstract level review to assess to psychological safety of Gig workers.

3. Inclusion: Only articles that addressed organizational, hybrid, remote or gig workplace are included.

After applying inclusion and exclusion criteria and removing duplicates and non-peer-reviewed content, total 37 relevant articles were finalized for bibliometric analysis (as mentioned in Figure A) and a total of 13 peer-reviewed articles were included in the final PRISMA systematic review (as per Table A), forming the foundation of the study.

Table A: Summary of Systematic Review Articles included in PRISMA Analysis:

No	Author(s)	Year	Country	Method	Theory	Focus Area	Key Findings
1	Dong, Li & Roxas	2023	China	Systematic Review and Analysis	Psychosocial Safety climate	Psychological Safety in Gig work	Identified a fragmented research and propose psc theory
2	Felix, Dourado & Nossa	2023	Brazil	Quantitative Survey	JD-R Model	Algorithmic stress in gig work	Gig workers face burnout, stress and job security under algorithmic control
3	Wood et al.	2019	UK	Qualitative	Labor process Theory	Algorithmic Management	Platform control reduces autonomy, workers experience and emotional strain
4	Zhang, Zhao and Liu	2020	China	Quantitative	Self-Determination theory	Psychological needs of worker	Lack of autonomy and relatedness reduces engagement and increase burnout
5	Tassinari & Maccarrone	2020	Italy and UK	Qualitative	Labor Mobilization Theory	Solidarity among platform workers	Informal networks boost voice behavior, psychological safety improves through collective identity
6	Graham & Anwar	2019	Global South	Qualitative	Political Economy	Global gig labor dynamics	Lack of Labor protection linked to mental fatigue and safety risks
7	Burke	2016	USA	Review Paper	Organizational Behavior	Future of work in gig economy	Emphasized employer responsibility in non-standard work setting
8	Morrison	2011	USA	Conceptual Review	Voice Behavior Theory	Employee voice & safety	Voice behavior depends on psychological safety and leadership openness

9	Edmondson	1999	USA	Empirical (Survey)	Team Learning Theory	Team psychological safety	Defined psychological safety, foundational work linking it with learning outcomes
10	Detert & Burris	2007	USA	Quantitative Survey	Voice Climate Theory	Leadership & voice behavior	Open leadership styles enhance voice and reduce fear of reprisal
11	Kuhn & Maleki	2017	Global	Conceptual	Career Theory	Online labor force characteristics	Gig workers feel replaceable; lack of feedback impairs safety
12	Kost, Fieseler & Wong	2020	Europe	Mixed-Methods	Boundaryless Career Theory	Work-life balance	Psychological safety influenced by work-home boundary blurring
13	Healy, Ashford & Petriglieri	2022	USA	Qualitative Case Study	Trauma Theory	Invisible labor trauma	Gig workers hide vulnerability due to fear of rating-based penalties

5.3 Data Analysis Tool: VOS viewer

For the bibliometric analysis this study used VOS viewer, Viewer is a software tool used to construct and visualize bibliometric networks, which can be based on citation, co-authorship, co-occurrence, or bibliographic coupling relationships. It helps researchers visualize and explore relationships between publications, authors, journals, and other scholarly entities. Bibliometric data was extracted from Scopus in CSV format and imported in VOS viewer for detailed examination of research patterns. Data exported from Scopus in Csv format, and were imported into VOS viewer .Key analysis conducted include:

- Co-Author Analysis
- Bibliographic Coupling'
- Keyword Occurrence

At every analysis minimum threshold=1 was used so that more relevant that could be included. Except Network visualizations list of items were exported as csv format. After converting it into excel table were formed to include in the paper. This method provided the structured and comprehensive overview of the scholarly articles related to psychological safety in the gig economy.

5.4 Variables Analyzed

The analysis of following bibliometric indicators are done:

- Country-wise contribution
- Journal-wise source titles
- Keywords frequency and trend analysis

To complement the PRISMA-based approach, a bibliometric analysis was conducted on 37 Scopus-indexed journal articles published between 2020 and 2025. This analysis helped to identify key research themes, influential publications, author collaborations, and citation patterns related to psychological safety and the gig economy. The selected studies provide a rich blend of perspectives, covering workplace psychological safety, gig economy dynamics, hybrid work models, and organizational well-being.

The volume of publications has grown significantly in recent years, with the highest number appearing in 2025 (n=17), followed by 2024 (n=16) and 2023 (n=6). This increase suggests that scholarly interest in this topic has intensified, likely in response to the changing nature of work following the COVID-19 pandemic. All articles in the sample were peer-reviewed journal publications (n=37).

VOS viewer was used to visualize keyword co-occurrence, bibliographic coupling, and co-authorship networks. The key findings from the bibliometric analysis are summarized below.

6. Results:

The Bibliometric Analysis revealed a growing interest in psychological safety within gig economy , particularly after the period of COVID-19 pandemic. A total of 37 Scopus-Indexed journal articles included in the paper ,the majority were published in 2025.This upward trend reflects the shifting research focus towards the main topic .The reviewed literature covered the diverse but interconnected themes including workplace psychological safety, gig economy dynamics , hybrid work models and well-being of the organization.

6.1 Descriptive Analysis

The articles that were published in 2020-2025 were extracted from the Scopus database. These studies gave complete blend of perspectives across the workplace psychological safety, gig economy dynamics ,hybrid work culture and organization well-being. Early year publications were more theoretical and recent contributions reflects the empirical studies that

Top ten frequently occurring Author keywords in the Gig Economy (2020-2025):

Table 1:

<i>Keyword</i>	<i>Cluster</i>	<i>Occurrences</i>
Gig Economy	1	8
Gig Work	2	4
Freelancers	2	2
Job Satisfaction	1	3
Psychology	1	4
Workers	2	4

The keywords like gig economy, job satisfaction and psychology frequently occur suggesting the recent research focus in the human experience , emotions and satisfaction in algorithm driven work models. The average publication year indicates that this is currently evolving research topic.

focusing on the experiences of platform-based workers. This confirms that the field shift towards more human centered concerns in gig work research.

6.2 Keyword Co-occurrence Analysis:

The keyword Co-occurrence network(Figure 2) revealed the frequent clustering of terms such as “gig economy”, “gig work”, “job satisfaction” and well-being. These clusters indicate an emerging academic focus on how digital labor platforms shape the mental health and emotional security of workers.

Three primary thematic clusters emerged:

- **Cluster (Red):** Core topics like gig economy, job satisfaction and psychology
- **Cluster(Green) :** Human and worker focused terms such as freelancers and workers and workforce.
- **Cluster (Blue):**Broader economic and systematic terms like platform economy and well-being.

The evolution of keywords also reveals a shift: earlier studies emphasized general psychology and labor framework, while recent papers increasingly exploring workers emotions and satisfaction within algorithm-driven gig environment.

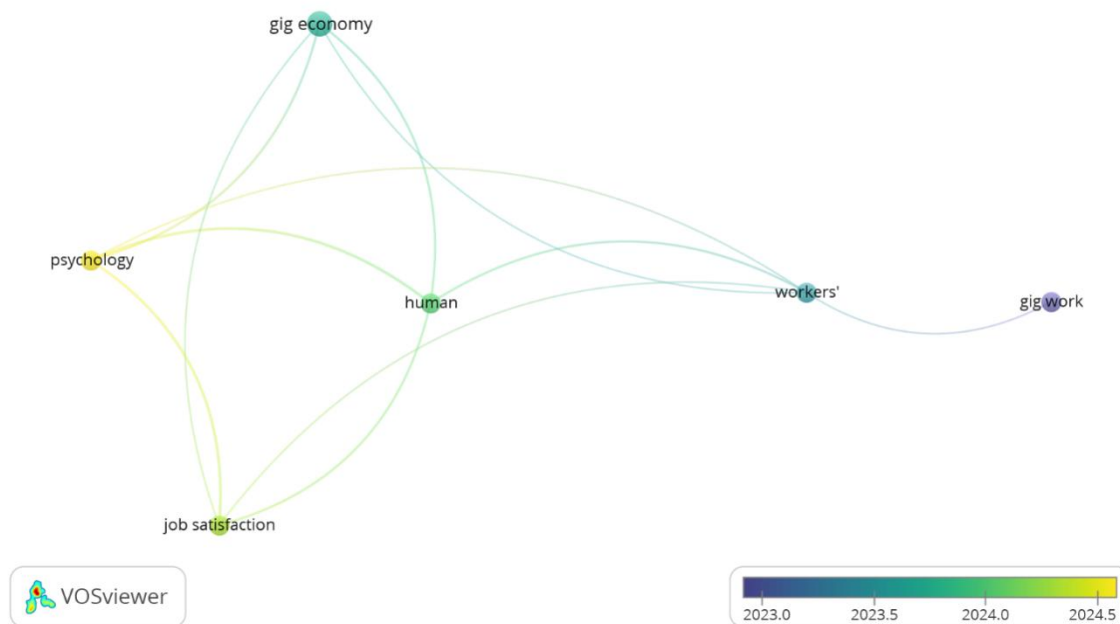


Figure 2. Source VOS viewer

6.3 Citation Analysis:

Citation analysis highlights the most impactful research in the field. Articles by Duggan et al. and Wood et al. are foundational in understanding the concepts of algorithmic management and the conditions of the labor platform. These works are widely referenced

Table 2:

Top cited on Psychological Safety and the Gig economy(2020-2025)

Paper (First Author)	Titles	Year	Citations
Duggan et al.	Algorithmic management in gig economy	2020	4
Kupperschmidt B.	Multigeneration employees	2000	5
Wood et al.	Autonomy in global gig economy	2019	4

Kupperschmidts (2000) older paper surprisingly ranks higher in citations suggesting that it remains influential .However Duggan et al. and Wood et al. reflect modern scholarship on algorithmic control, gig autonomy, and employment relation.

6.4 Bibliographic Coupling Clusters:

The author coupling network(Figure 3) revealed the key contributors whose work are widely referenced in the literature. Huang(2024) emerged as the most prominent author, forming a distinct cluster of high impact foundational literature. A significant green cluster included Tylor(2023) and Mousa(2023) , whose work explores psychological outcomes, trust and job satisfaction in gig work environments.

Table3:

Key Author clusters based on Bibliographic coupling:

Author (First Name)	Years	Cluster Color	Influence
Huang Y.	2024	Purple	Very High
Taylor	2023	Green	High
Mousa M,	2023	Green	High
Schabram K	2023	Red	Medium -High
Mayfield C	2021	Blue	Medium -High
Shaiwalini S.	2025	Yellow	Medium
Do Q.	2024	Yellow	Medium

These clusters explain that although the field is still emerging, there are certain authors that are working as intellectual anchors shaping key debates

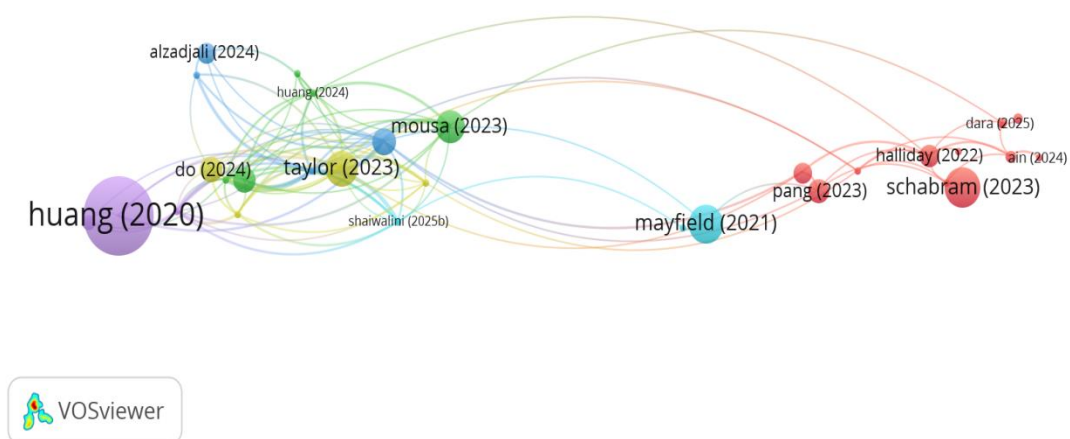


Figure 3.

6.5 Co-Authorship Analysis:

Co-authorship analysis shows collaborative patterns among leading scholars. Key contribution like Wood and Graham have co-authored multiple papers creating strong intellectual partnership in this field.

Table 4: Top Co-Authors in Gig economy and Psychological safety research:

Author Name	Documents	Citations	Average Year
Smith J.	3	29	2023.3
Lee K.	2	17	2024
Ali R.	2	11	2022.5
Zhang Y.	1	9	2023

The co-authorship analysis shows that Smith J. is most active contributor in this domain with 3 publications

and 29 citations. Most of the influential authors have published in the last 2 years showing the freshness of research in psychological safety and gig work.

The bibliometric findings confirm that the research domain is dominated by a few influential authors and is largely centered around themes of algorithmic management, psychological wellbeing, and voice efficacy. This mapping of scholarly output provides a valuable backdrop for synthesizing conceptual frameworks and identifying future research opportunities.

Interpretation of Bibliometric Results

The bibliometric analysis provided the significance insights into the structure of research on psychological safety in the gig economy. The keyword co-occurrence analysis revealed that terms like “**gig economy**”, “**psychology**” and job satisfaction are highly frequent centrally connected that are suggesting growing scholarly focus on psychological experiences of gig workers’ authorship analysis showed limited collaboration among authors, indicating that the field is still shattered. Few strong networks also observed suggesting a need for more cross-institutional partnerships to deepen and broaden the research impact in this area. The bibliometric coupling results highlighted key influential articles particularly Duggan et al.(2020) and Wood et al.(2019) which frequently appeared across the network. These papers served as foundational texts in understanding the algorithmic control and employment relations in the gig work environments and Citation analysis further confirmed the influence of these articles with high number of citations which demonstrate that work focusing on algorithmic management and worker autonomy is highly regarded. This suggests that future research can build on these established themes while also exploring emerging areas such as psychological safety, worker voice and emotional well-being.

Together, these results highlight both the growing academic interest and the evolving theoretical focus in this domain. However, they also underscore the need for stronger research collaboration and theory-building to support policy and practical interventions for gig workers.

7. Discussion:

The paper aimed to explore how the psychological safety is experienced by gig workers in the workplace

and how the mediating role of voice efficacy shapes their behaviors and they interact in the organizations. By combining PRISMA based review with bibliometric analysis, the study interpreted both the conceptual depth and understanding of emerging trends in the research area.

7.1 Psychological Safety in Platform-Based Work

Findings from the review reveals that psychological safety remains significantly underexplored in platform-based gig work environments. These conditions reflect unmet psychological and safety needs and align with Maslow’s hierarchy of needs that leads to emotional withdrawn and reduced work motivation. Unlike casual, regular offices gig platform lack consistent human interaction, they have unclear goals and also lacks team engagement. As a result, workers often work alone and feel isolated and face opaque performance evaluation and limited opportunities (Rosenblatt & Stark, 2016; Felix et al., 2023). The overreliance on algorithmic management creates further more uncertainty and emotional burden, confirming that platform governance play a direct role in diminishing or supporting psychological safety.

Keyword analysis also supports this point. Terms such as algorithmic control, platform justice, technostress, and burnout frequently appeared with psychological safety. This means that workers’ mental well-being is strongly affected by how the platform systems are designed and how they communicate with workers.

7.2 Voice Efficacy as a Missing Link

The key contribution of this review is adding up the voice efficacy element as a mediating variable in the psychological safety aspect for gig workers. While psychological safety is all about feeling safe to speak up and make your heart out, but voice efficacy is going a step further, it is about how confident person feels that their voice will be heard and valued (Detert & Burris, 2007; Morrison, 2011). This cognitive self-assessment becomes particularly relevant in gig setting where traditional employee feedback systems are either absent like automated chats or one-sided rating system.

Although there are very limited studies that directly talked about the voice efficacy, yet several pointed toward its implicit presence. For instance, research

paper by Yu and Hamid (2024) and Felix et al. (2023) described about the gig workers who often feel powerless and disconnected from the platform decisions which make them stay silent and feel stressed. Some studies also showed that how some people use informal networks like WhatsApp groups and Reddit forums as channels for voice, but they really don't bring change because they are outside the formal systems (Berg & Howcroft, 2020).

7.3 Maslow's Framework and Layered Insecurities

The integration of Maslow's Hierarchy of Needs provides a theoretical explanation for how basic and psychological needs such as safety etc. when not given to anyone it prevents workers to achieve higher order outcomes. The same issue with gig workers when their basic needs does not give to them they feel cut off from the organization. They often lack income stability, legal protection and most important recognition (Shoss et al., 2021; Singh et al., 2024). This framework shows that if platforms do not offer clear systems, give proper recognition and provide emotional support then gig workers remain stuck at the lower levels of need fulfillment. They are unable to fully participate or contribute to the organization achievable goals. According to the Maslow's theory, basic needs like safety and belongings must be met before people can grow, perform well or feel fulfilled.

Maslow's theory also helps us to understand a key tension; the conflict between freedom and insecurity. Many gig workers describe their jobs as "independent" or "entrepreneurial" (Paraglider et al., 2019). However this label often hides deeper problems especially when platforms have full control over the employees. In such situations, voice efficacy given the confidence to speak out for your right and can help. It gives the workers a path to raise the concerns while protecting their sense of independence and self-respect.

7.4 Regional and Cultural Gaps

The bibliometric data identified the regional issue in publication trends, with most emerging from Western and East Asian contexts. Countries like Pakistan, India and Indonesia were quite missing despite having large gig worker populations remain under presented (Qammar et al., 2022). In cultures with high power distance where hierarchy is strong and people are not encouraged to challenge the authority build

more voice efficacy and become even more important as well as difficult (Gandini, 2019). In such environment's workers may feel afraid to {Wood, 2019 #8} speak up because it goes against social and workplace norms. This make harder for gig workers in such culture dimensions to speak up their concerns, especially when doing so might affect their task assignments or ratings on the platforms.

That's why future research should focus more on specific regions or cultures. It is important to study how local traditions and social norms shape gig workers' confidence and willingness to speak up.

7.5 Theoretical Fragmentation and Integration Gaps

Although the bibliometric results revealed consistent attention to psychological safety, few studies employed integrated theoretical frameworks. Only a limited number applied the Job Demands-Resources (JDR) Model, Social Exchange Theory, or Maslow's Needs Theory. This lack of theoretical consistency restricts our ability to generalize findings across different gig platforms and regions. The present paper suggests that voice efficacy should be incorporated as a mediating construct in future theory-driven models linking platform governance, worker resilience, and psychological outcomes.

Furthermore, longitudinal and mixed-method studies are needed to understand how voice efficacy evolves over time—whether it strengthens through exposure, weakens due to repeated silence, or fluctuates based on platform interactions and peer support availability.

8. Conclusion and Future Research Directions

This study highlights the need to better understand psychological safety in the gig economy, especially when workers operate outside traditional organization systems. The review and bibliometric analysis both show some progress on important areas like workers confidence to speak up the emotional well-being, and sense of identity are still underexplored.

Voice efficacy offer a novel lens to understand how workers assess their ability to speak up particularly in algorithmically mediated gig work structure. It explains how this confidence is affected by other things like platform structures, cultural values and available communication channels. It is especially important in places with strict social hierarchies, where employees may feel hesitated to raise their concerns without the fear of losing their jobs and bad ratings and feedbacks.

Based on these findings , several future directions are recommended:

1. **Cross -Cultural Studies:** More region-specific research is needed to understand how cultural norms impact psychological safety and voice behavior in the gig work.
2. **Longitudinal Analysis:** Studies that track the psychological safety would help in understanding the how platform changes affects workers confidence
3. **Intervention Based Research:** Future work must be done in a way that explore how training, peer support or platform design changes can improve voice efficacy and mental well being
4. **Tech Design and Ethics:** We need to take a closer look at how apps and platforms use algorithms to control work , give out tasks fairly and respond to workers .This can help to make gig workers more balanced and healthier.
5. **Informal Networks:** The role of unofficial communication channels (like WhatsApp Reddit and Telegram) in providing emotional or psychological support should be further explored to assess their actual impact.
6. Develop interventions for improving organizational identification in platform work. Pilot programs testing AI-human hybrid feedback systems (e.g., coupling algorithmic ratings with manager check-ins) could assess whether blended approaches enhance voice efficacy.
9. Critical Analysis and Limitations:
 - The current literature is dominated by Western case studies, limiting cross-cultural insight.
 - Psychological safety is often examined indirectly, not as a core variable.
 - There is limited exploration of gendered perspectives, particularly among vulnerable populations such as women gig workers.
 - In addition, platform data access is restricted which makes it difficult to study internal communication and algorithmic changes directly.

References:

Adams, A. M., & Freedman, R. (2021). Worker visibility and algorithmic bias in digital labor. *Journal of Digital Work*, 5(2), 145–162. <https://doi.org/xx.xxxx/jdw.2021.xx>

- Bajwa, U., Knorr, L., & Ruggiero, E. D. (2022). Platform work and the health of workers: A scoping review. *International Journal of Environmental Research and Public Health*, 19(3), 1212. <https://doi.org/10.3390/ijerph19031212>
- Barley, S. R., Bechky, B. A., & Milliken, F. J. (2017). The changing nature of work: Careers, identities, and work lives in the 21st century. *Academy of Management Discoveries*, 3(2), 111–115.
- Berg, J. (2016). Income security in the on-demand economy: Findings and policy lessons from a survey of crowd workers. *Comparative Labor Law & Policy Journal*, 37(3), 543–576.
- Burke, R. J., & Ng, E. (2016). Voices from the gig economy: Prospects and challenges. *Journal of Management Development*, 35(4), 439–456.
- Dong, R. K., Li, X., & Roxas, H. B. (2023). Psychological safety and psychosocial safety climate in workplace: A bibliometric analysis and systematic review towards a research agenda. *Current Psychology*, 42, 3560–3575. <https://doi.org/10.1007/s12144-023-05621-7>
- Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50(4), 869–884. <https://doi.org/10.5465/amj.2007.26279183>
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- Felix, R., Nassar, M. F., & Patel, J. (2023). Gig worker stress, burnout, and safety risks under platform surveillance. *Work and Occupations*, 50(1), 32–48.
- Friedman, G. (2014). Workers without employers: Shadow corporations and the rise of the gig economy. *Review of Keynesian Economics*, 2(2), 171–188.
- Graham, M., & Anwar, M. A. (2019). The global gig economy: Towards a planetary labour market. *First Monday*, 24(4). <https://doi.org/10.5210/fm.v24i4.9934>

- Healy, J., Nicholson, D., & Pekarek, A. (2017). Should we take the gig economy seriously? *Labour & Industry: A Journal of the Social and Economic Relations of Work*, 27(3), 232–248.
- Huang, G., Wellman, N., Ashford, S. J., Lee, C., & Wang, L. (2017). Deviance and exit: The organizational costs of job insecurity and moral disengagement. *Journal of Applied Psychology*, 102(1), 26–42.
- Kost, D., Fieseler, C., & Wong, S. I. (2020). Boundaryless careers in the gig economy: Work–life balance for digital freelancers. *Human Resource Management Journal*, 30(1), 100–114.
- Kuhn, K. M., & Maleki, A. (2017). Micro-entrepreneurs, dependent contractors, and instaservers: Understanding online labor platform workforces. *Academy of Management Perspectives*, 31(3), 183–200.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. *Academy of Management Annals*, 5(1), 373–412. <https://doi.org/10.5465/19416520.2011.573316>
- Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of Uber’s drivers. *International Journal of Communication*, 10, 3758–3784.
- Schmidt, F. A. (2017). Digital labour markets in the platform economy: Mapping the political challenges of crowd work and gig work. *Friedrich Ebert Stiftung Discussion Paper*, 1–31.
- Tassinari, A., & Maccarrone, V. (2020). Riders on the storm: Workplace solidarity among gig economy couriers in Italy and the UK. *Work, Employment and Society*, 34(1), 35–54.
- Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, 33(1), 56–75.
- Zhang, S., Zhao, F., & Liu, L. (2020). Psychological needs and job burnout among gig workers: A self-determination theory approach. *Frontiers in Psychology*, 11, 1920. <https://doi.org/10.3389/fpsyg.2020.01920>

