

**PSYCHOLOGICAL SAFETY AS A DRIVER OF EMPLOYEE WELL-BEING IN THE AUTOMOTIVE INDUSTRY****Akshitha R, Narkees Beevi S, Yasmine I, Jayashree R**

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**ABSTRACT**

Working conditions of employees is a critical organisational concern in the automobile and manufacturing sector whereby employees are exposed to performance based, high pressure and safety sensitive work environment. The rapid pace of technological transformation, strict production deadline, and physically demanding working conditions placed a significant psychological stress on the employees, and consequently, the human resource strategies should be aimed at making sure that efficiency is attained with respect to operations and sustainable work force. To this end, this paper shall touch on the concept of psychological safety as a major element of Sustainable Human Resource Management (HRM) and how it can be applied to enhance the well being of employees and their engagement in the car industry. Psychological safety implies that employees have the common feeling that they do not fear to communicate ideas, make reports regarding mistakes and raise concerns without fear of being accused or subject to negative effects. Sustainable HRM is targeted toward the development of ethical, robust, people-based practices that are proactive in regard to the workforce and organisational viability in the long-term. Adding these perspectives to each other, the paper mentions that psychological safety is particularly vital in the automobile workplace environment where free communication and trust are essential to the well-being of the employees, as well as to prevent errors and guarantee constant improvement. The quantitative research design was assumed through structured questionnaire that was to be administered on employees working in automobile and other associated manufacturing organisations. The instrument measured the key aspects of psychological safety that included trust, support leadership, openness, and interpersonal respect and examined their implications on the measure of employee well-being and engagement, including job satisfaction, emotional stability, reduced stress, sense of belonging, and work-related optimism. To check the relationship and variation among the respondents, descriptive statistics, regression analysis, and t-tests were used to analyse the data. The findings indicate that higher levels of psychological safety are influential factors in the general well-being of the employees, their interest and commitment to the organisation of the automobile industry. The paper identifies the fact that sustainable HRM is not limited to safety measures and manufacturing mechanisms, but requires organisational cultures founded on empathetic, free-communication and psychological support. As a strategic HR capability, the concept of psychological safety can be included in the research, which can provide evidence-based data on how to build a healthy, engaged, and the future of the workforce in the context of the automobile industry.

**Keywords:** Psychological Safety, Employee Well-Being, Automobile Industry, Manufacturing Work Environment, Sustainable HRM, Industrial workforce sustainability.

**Introduction**

The welfare of the employees has emerged as a scalding organisational concern in the automobile and manufacturing business whereby the working conditions are extremely work conditions, safety issues, production issues, and production systems that are driven by technologies. Automobile is physically stressful, production timetables are strict and demands of quality are constant and this may have significant psychological and emotional influences on the employees (Leka and Houdmont, 2010). As the manufacturing organisations undergo the trends of automation and lean production, the need of considering not just the technical efficiency but also the human and psychological side of working grows. The psychological safety has now been identified as a significant variable of concern as far as the health and participation of employees in the industrial environment is concerned. The attitude that individuals have formed and employees can share ideas, raise concern, speak about the erroneous acts, and receive help without being afraid of any adverse effects may be defined as psychological safety (Edmondson, 1999; Edmondson, 2018). Psychologically unsafe environments may result in the decline of communication, increased stress, and a decline in employee welfare and performance, as observed in the automobile manufacturing environments, where mistake reporting, safety adherence and onward improvement are obligatory.

The welfare of the employees does not only mean the absence of physical injuries but it also involves emotional stability, job satisfaction, belonging and mental strength. It has been put forward that psychological experiences of people in the work place, perceived support, leadership trust and fairness play an important role in the determination of well-being and engagement (Kahn, 1990; Schaufeli et al., 2002). Employee voice at the factory is possibly limited by hierarchical hierarchies and task-oriented work processes, which consider psychological safety to be of outstanding importance in maintaining the well being of employees.

These concerns are in accordance to Sustainable Human Resource Management (HRM) tenets as a Human Resource Management issue. Sustainable HRM emphasises the need to have healthy workforces in the long-term, ethical human resource management, and supporting organisational cultures founded on the productivity/employee welfare equilibrium (Ehnert, 2009; Kramar, 2014). As opposed to enhancing the brevity yield, sustainable HRM is concerned with sustaining the human capital by developing trust-based and psychologically secure workplaces. The psychological safety as the basis of sustainable workforce management is explored in the automobile industry in which human reliability has a direct impact on the quality and safety outcomes. Although the psychological safety has gotten increased scholarly attention, majority of literature on the subject is focused on associated to its relations with performance, learning and innovation outcomes. The empirical research addressing the concept of psychological safety in an employee well-being and sustainability perspective of the cars and manufacturing sector is scarce. Such a gap reveals the need of the research which will investigate the role of the psychological safety in the welfare of the staff and their involvement in the industrial workplaces. According to it, the ongoing study will address the psychological safety as the driver of enhancing the welfare of employees and their engagement rates in the automobile industry and present it as one of the fundamental factors of Sustainable Human Resource Management. The empirical research on the employee perceptions will offer insights into the research that are theoretically valid and practically helpful in promoting the interest of organisations to develop safe, healthy and sustainable working environment in their manufacturing factories.

**Research Objectives**

The current paper discusses how the psychological safety can be beneficial to the welfare of the automobile industry employees. As the automobile organisations are increasingly operating under an intricate manufacturing environment that is defined by great production targets, safety sensitive processes, and increased degree of hierarchy in the work structure, the perceptions of interpersonal safety, support and openness among the employees emerge central in the creation of sustainable and people-focused human resource practices. Another relevant aspect of the environment of such industries is psychological safety, which helps to ensure the wellness of employees, their interest, and workforce sustainability.

The research questions will be:

- To assess the degree of psychological safety of the employees working at the automobile industry.

- To confirm the existence of correlation between psychological safety and employee well-being in motor vehicle-making organisations.
- To investigate the significance of psychological safety in worker engagement, emotional and job satisfaction at car workplaces.
- To identify what dimensions of psychological safety are the most significant like trust, openness, supportive leadership and interpersonal respect, which produce employee well-being in the automobile industry.
- To appreciate the presence of psychological safety in the realization of sustainable and human-centered human resource management practices in the industrial and manufacturing based environment.

The research proposal will assist HR practitioners and organisational managers within the automobile industry to make feasible recommendations that promote worker well-being and engagement through psychologically safe work practices.

#### Literature Review

The concept of psychological safety has gained relevance in the organizational behaviour literature particularly work environment that is highly interdependent in tasks, high performance pressure and operational risk. Edmondson (1999) introduced the psychological safety as a popular illusion among the team members that workspace is where one can afford to take risks, which are interpersonal and a member of a group can speak up, share ideas, report errors, and seek help safely without the threat of being corrected. Subsequently, other research has confirmed psychological safety as a significant predictor of employee learning, engagement and well-being within other organisational environments (Edmondson and Lei, 2014).

Psychological safety assumes even greater primary importance in the industrial and manufacturing setting such as in the automobile business since the work is critically about safety, quality is strongly sought after and there is hierarchical structure of organisation. The conditions in the automobile production are linked to assembly lines, machines at work, rigid production schedule, and processes based on adherence. It has been found that, when the employees in these environments develop the sense of psychological insecurity, they are likely to hide information and avoid the reporting of any errors and create a level of stress that can damage not only the working environments of the employees, but also the safety performance of organisations (Tucker and Edmondson, 2003).

Employee welfare in the automobile industry has been viewed by the concept still in the context of physical safety and ergonomics. However, current research indicates that well being does not only focus on the physical well being of a person but emotional stability, job satisfaction, perceived organisational support and psychological resilience (Danna and Griffin, 1999). Monotony, manufacturing pressure, working shifts and limited degree of autonomy is among the factors of manufacturing employees that may cause emotional fatigue and lack of engagement unless tackled. The significance of psychological safety in minimizing these challenges is that they develop help relations, trust in leadership, and free dialogue in the shop floor.

The leadership behaviour has always been mentioned as a significant antecedent of psychological safety in manufacturing. Positive and involving leadership aids the employees in raising issues about quality, safety, and workload without fearing being blamed and punished (Detert and Burris, 2007). The transparency and impartiality of leadership in the automobile industry where the supervisors and line managers influence the working environments directly in the daily work environment has a role to play in designing psychologically safe working environments. The researchers have indicated that when the leaders involve the staff and respond positively to the mistakes, they enhance the psychological safety and the morality of employees (Nembhard and Edmondson, 2006).

Trust and interpersonal respect are the other important components of psychological safety within the industrial organisations. Research studies have shown that employees who feel that they are treated fairly and are respected with an open channel of communication have higher chances of being emotionally secure and interested in their work (Kahn, 1990). The automobile manufacturing factories need to have teamwork and coordination effective in the operations and psychological safety would assist in the cooperation by ensuring it is less likely to keep silent through fear and defence behaviour. The respected workers will be more willing to work, support their fellow workers in addition to remaining hooked to organisational goals.

The concept of Sustainable HRM may also be considered to be the possible outlook on the lateral outcomes of psychological safety and considered through the prism of Human Resource Management. Sustainable HRM is concerned with a balancing of performance and personal well-being of the organisation, ethical HRM and long-term sustainability in the workforce (Ehnert, 2009). One of the areas where sustainable HRM practices aim to promote health, motivation and employability of employees in the long run are the automobile industry in terms of their productivity needs and workforce burnout problems.

These principles are aligned with psychological safety as it provides human-centred working environments that contribute to well-being and performance. Although the phenomenon of psychological safety has already been examined in detail in the knowledge-based and service-based fields, empirical research is relatively scarce in the manufacturing and automobile context. The existing literature tends to be more biased to emphasize on the operational safety, quality management and productivity measure without much consideration of the psychological experiences of the individuals that work in the shop floor. Such a gap also demonstrates the need of a study that will examine the contribution of psychological safety to employee welfare and engagement in the automobile industry, particularly in terms of Sustainable HRM.

In summary, the literature review has shown that psychological safety is a dire yet poorly studied antecedent of employee welfare, engagement, and sustainability in the automobile manufacturing contexts. The current study will contribute to the academic literature and practice in the field of HR in the automobile industry by proposing the notion of psychological safety along with Sustainable HRM.

#### 4. Hypotheses of the study

This is because the results of the literature review and the study objectives created the following hypotheses that are to be empirically tested to investigate the relationship between psychological safety and employee well-being in digital workplace settings:

H 1: There are no significant links between psychological safety and employee well-being and the employees of the automobile industry.

H 2: There is a high degree of relationship between psychological safety and employee well-being among the automobile industry employees.

H3: The level of employee engagement and job satisfaction among the employees in the automobile industry is highly contingent on such a construct as the psychological safety.

#### 5. Research Methodology

The research design applied to the current study is a quantitative research design that will be conducted to determine the association between psychological safety and employee well-being in online labor market environments. The reason why a quantitative approach is considered appropriate is that it is possible to measure the perceptions of the employees quantitatively and conduct statistical tests revealing the correlations between variables. The study is both informative and critical in that it attempts to provide evidence on the role of psychological safety on the welfare and involvement of the employees in the work environments mediated by technology.

**Research Design**

The research will be cross-section survey; the survey shall be conducted on the respondents at a given time. The selected design suits to understand the existing perceptions of the psychological safety and well-being of the employees in the automobile industry and gather the information in an effective manner and with the constrained time.

**Source of Data**

It is a primary data research, and that was conducted in the form of a structured questionnaire. The questionnaire was also designed to establish a conception of how the employees are psychologically safe and well at work in the automobile sector. Secondary data included in the form of academic journals, books and research articles were also used to offer theoretical grounds in addition to literature review.

**Population and Sample**

The desired target population in the present study will be the employees within the automobile industry, manufacturing, production, maintenance, quality control, and other administration industries. The car industry is a highly complex, pressurized, and safety conscious workplace in which coordination, communication and human well being are of very critical importance. In this way, the employees of this sector can serve as a legitimate background to the research of psychological safety and its influence on the happiness of employees.

Convenience sampling strategy was selected due to the access and time limitation. The sample will consist of the employees with varying work experience, age category, and work arrangements and to ensure that there is diversity in the response, the sample will be varied.

**Research Instrument**

Data were collected in terms of close-ended statements the answers to which could be rated on a five-point Likert scale, i.e., Strongly Agree to Strongly Disagree, through the structured questionnaire the variables of which were determined beforehand. The questionnaire has been divided into two big sections. The former section elicits demographic data of the respondents such as age, working experience and arrangement of work with regard to work. The second section is devoted to measurement of the main constructs of the study including the psychological safety dimensions, including the dimensions of trust, openness, supportive leadership, and interpersonal respect and employee welfare including emotional stability, job satisfaction, stress levels, sense of belonging, and work-related optimism.

**Variables of the Study**

Psychological Safety: Independent Variable.

Dependent Variable: Employee Well- being

Employee engagement is assumed to be one of the related outcomes variables in the automobile industry setting in terms of psychological safety and well-being.

**Data Collection Procedure**

The questionnaire was sent to the respondents through online means to make it readily available to the respondents. The researchers disclosed the scholarly character of the research to the participants and obtained their consent prior to the research process. The answers were anonymous as well to ensure honesty and non-bias participation.

**Methods and Techniques of Analysis.**

The obtained data were analysed by the statistical tools and techniques. Generalisation of demographic data and response pattern was done using the descriptive statistics. Reliability analysis was performed in order to guarantee internal consistency measurement scales. The inferential statistical methods were used to analyze the relationship between the psychological safety and the employee well-being; it entailed correlation and regression analysis. Where necessary, T-tests were conducted to establish the differences between demographic variables.

**Ethical Considerations**

The research adhered to the ethical requirements. The answer was voluntary with anonymity and confidentiality given to the respondents. No personal or identifying data and information were collected and the data were used in reference to academic and research use.

**6. Data Analysis and Results**

The obtained data was analysed to explore the relationship between online working conditions and psychological safety on employee welfare. The descriptive and inferential statistical techniques provided the valuable conclusions, which were appropriate to the objectives and the study hypotheses.

**Descriptive Analysis**

Descriptive statistics were used to summarise the demographic profile and the response pattern of the participants. In the respondents, both of the genders, age groups, level of work experience, and digitally enabled work arrangement were combined in a mixture. Such diversity provided a timely context to inquire about the psychological safety and wellbeing within the automobile industry workplaces. Psychological safety item assessment has revealed that the majority of respondents agreed with the sentences about the easiness of sharing ideas, the lack of fear of asking a question, and the feeling of respect in the relationships with the other partner. However, the proportion of the neutral answers is rather minor, which demonstrates that the degree of the psychological safety is average and may not be similar in the organisational contexts. Similarly, the well-being indicators such as general work satisfaction, emotional stability, and perception of a healthy working environment of the employees were largely positive. Most of the workers claimed that they are content with their welfare at the work place, implying that there are desirable organisational settings in digital and technology enabled work places.

**Table 1: Descriptive Statistics of Psychological Safety Items**

Psychological Safety Items	Mean	Std. deviation
Freedom to express ideas	3.92	0.64
Asking questions without fear	3.85	0.69
Respectful treatment at work	4.08	0.58
Openness of communication	3.77	0.72
Support from supervisors	3.69	0.75

**Table 2: Descriptive Statistics of Employee Well-Being Items**

Employee Well-Being Items	Mean	Std. deviation
Emotional well-being	3.88	0.66
Job satisfaction	4.00	0.61
Stress management	3.73	0.71
Sense of belonging	3.92	0.63
Overall work satisfaction	4.08	0.59

### Reliability Analysis

The questionnaire questions that were utilized to measure the psychological safety and staff welfare were assessed to determine internal consistency rendering them dependable. The answers indicated the sufficient correspondence of items that implies that the measurement scales were good and could be employed in the subsequent analysis. This is an indication that the questionnaire was useful in measuring the target constructs.

### Psychological Safety and Employee Well-Being Relationship.

Psychological safety and well-being of the employees were tested to determine their relationship with the correlation analysis. The results indicate that there is a positive correlation between the two constructs. The other employees who reported having experienced more psychological safety also indicated more emotional well being, more job satisfaction and more organisational support. The regression analysis also demonstrated that the psychological safety is a significant aspect that can result in the welfare of the employees. These dimensions as the openness of the communication, supportive leadership, and respect within the interpersonal sphere were found to positively influence the level of well-being that the employees felt about the digital workplace.

**Table 3: Correlation Between Psychological Safety and Employee Well-Being**

Variables	Psychological safety	Employee Well Being
Psychological safety	1.00	0.68
Employee Well Being	0.68	1.00

Table 3 shows that there is a positive correlation between psychological safety and employee well-being, which implies that the better the psychological safety is the higher the well-being outcomes.

### Hypothesis Testing Results

As the analysis shows, hypotheses of the study were compared. The results of the research support the assumption that employee well-being is closely connected with psychological safety in a positive manner. Psychological safety was also established to be reducing the perceived stress, enhancing job satisfaction, as well as, enhancing emotional stability and belonging of the employees. Though it was demonstrated that the application of the supportive leadership and the open communication had a positive impact on the psychological safety, the minor variability in the outcomes of the responses indicates that it may have disparate effects on the organisational context. The evidence generally provides a good empirical data on majority of the hypotheses that were put forward in the study.

### Discussion of Findings

The findings of the study show the importance of psychological safety as a means of improving the well-being and participation of employees in the automobile sector. Given that the automobile organisations are high-pressure, safety-critical, and processes-driven organisations, psychological safety plays a crucial role in deciding the working experience of the employees.

The results show that most of the employees possess moderate to high amounts of psychological safety that implies that there was an open and respectful interaction with supervisors and supportive supervisory behaviors. However, as neutral responses reveal, not all teams have an experience of psychological safety, and the difference can be observed in the leadership behaviour, communication and organisational culture in automobile working places.

The relationship between psychological safety and the well-being of the employees was determined to be high-positive. The employees who felt safe to express their concerns mentioned increased emotional stability, job satisfaction, and organisational support. This is particularly essential in the automobile industry whose feeling of blame adds to the stress and unhealthy living of employees besides safety of operations. Also, in the study, psychological safety is also associated with preventing the occurrence of work stress since it facilitates open communication and the help-seeking behaviour. In addition, the psychological safety was found to enhance the degree of employee engagement that translated to an improvement in their motivation, commitment and engagement in the work activity. On the sustainability of HRM the findings indicate that psychological safety is associated with sustainable workforce in the long term in terms of burnout mitigation, well-being improvements, and strengthening organisational commitment.

Overall, it is a study that claims that technological systems drive productivity within the automobile sector, yet, psychological safety plays a major role within the overall well-being of workers, their engagement in the organisation and the overall long-term organisational performance.

### Implications of the Study

This research results have great impacts to organisations within the automobile sector, particularly to the human resource managers, supervisors and the top management within the production intensive and the safety critical environment.

Psychological safety has to be a strategic focus and not a soft organisational notion as perceived by the HR. The HR practice in motor vehicle organisations must strongly promote open communication, employee voice and non-punitive reporting of errors, especially at the shop floors and the teams within the technical team where the fear of being blamed bodes down safety reporting and innovations.

The results also indicate that the employee welfare initiatives in the automobile industry cannot operate independently. One of the pillars that determine the perception of authenticity and effectiveness of stress management programs, safety training and engagement activities is the psychological safety. The combination of the notion of psychological safety into the leaders training framework, the performance appraisal framework and the relationships between the supervisors and the workers can be a valuable aspect of ensuring the staff members become more trustful and engaged.

Within the framework of Sustainable HRM, the paper reveals that a need to pay greater attention to the long-term sustainability of the workforce instead of a short-term rise in the productivity is present. It has been documented that psychological safety reduces work related stress, job satisfaction and organisational commitment which are significant in reducing burnout, absenteeism and turnover in physically and mentally demanding automobile workplaces.

Finally, when it comes to automobile organisations that are in the process of technological innovation and automation, the study suggests that technical improvement also needs to be complemented by human-centred practices. Despite the improved efficiency, which is reached with the assistance of new machinery and process optimisation, psychologically safe working conditions ensure that the employees are retained, opposing and motivated, therefore, facilitating the organisational performance in the long run, as well as organising the operating excellence.

### 9. Future Research Limitations and Scope.

The limitations applied to the current study are not insignificant and have something to add to it. To begin with, the sample size of the study is limited to a sample of a few automobile organisations and this may hamper the generalisability of the findings in the entire automobile

industry. The perception of the psychological safety and well being of the employees can be influenced by the differences in the size of the organisations, production systems as well as safety culture.

Second, the research is premised on the self-reported questionnaire information which is likely to be subject to the effect of response bias such as the social desirability and personal perception bias. The employees who work in automobile environment that is hierarchical and safety sensitive could be reluctant to divulge out their perceptions even with the assurance that their activities will not be transmitted.

Third, the study design is the cross-sectional study which captures the perception of employees at a single time, and cannot be employed to stud the causal relationship between the psychological safety and the well-being of workers. Perception techniques can evolve with time depending on the variation of the production pressure, practices of the leadership, or a safety accident.

The above limitations can be avoided in the future by using a larger and wider sample of the segments in the automobile industry like manufacturing departments, maintenance, quality control and R and D departments. Longitudinal study would provide a greater amount of information about how psychological safety changes with time and how it eventually impacts the health and overall involvement of employees.

In addition to this, in future it may be explored whether this moderating or mediating variables such as leadership style, safety climate, union presence, level of automation, or work arrangement (shop floor work as opposed to office work) can be explored. The derived information of the functioning of automobile organisations, including the context-related experience of employees, can be enhanced through using additional qualitative methods (interviews or focus groups). 10.

### **Conclusion**

The paper is devoted to the importance of a psychological safety as the tool of enhancing employee health and engagement in the auto industry. As this industry is physically labor-intensive, high standards of production, marked by the hierarchical systems, the workers can express themselves and share ideas freely without any fear and it is one of the most important aspects of their working experience.

The findings suggest that the higher levels of the psychological safety are the higher the levels of job satisfaction, emotional stability, and organisational commitment. The study also confirms that psychological safety is helpful in reducing work-related stress, as well as, enhances employee engagement with others via set up of trust, open communication and facilitation of leadership. All these factors are particularly significant in automobile organisations, in which the collaboration and adherence to safety standards play a critical role in ensuring the efficiency of the operations.

Speaking of the Sustainable HRM approach to the problem, the results show that, to tackle the problem, the automobile organisations must take the introduction of psychological safety to the HR policies, HR leadership practice, and safety systems in the workplace. By ensuring a psychologically safe working environment and minimising burnout, a healthy working environment can be created, which helps organisations retain their staff and developed a highly motivated workforce via the well-being of the employees. In most cases, the study identifies psychological safety, which is an HR strategic capacity to sustainability and performance over the long-term in the automobile industry.

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