ORGANIZATIONAL SAFETY CULTURE: A KEY FACTOR OF ORGANIZATIONAL PRODUCTIVITY

MORESHWAR KUDKILWAR
Research Scholar,
Dr. Ambedkar Institute of Management Studies and Research,
Diksha Bhoomi, Nagpur

Prof.(Dr) Nirzar Kulkarni
Research Supervisor
Dr. Ambedkar Institute of Management Studies and Research,
Diksha Bhoomi, Nagpur

Abstract

Organizational safety culture has been admittedly becoming a critical element of the issue affecting not only the well-being of employees but also their productivity. This paper will discuss the issue of organizational safety culture on productivity through analysis of some of its most important dimensions including management commitment to safety, safety communication and training, employee safety behaviour, and the psychosocial safety environment. The primary data was gathered through a structured questionnaire, using a quantitative research design, that comprised of studying the answers of employees working in selected organizations, and thematic questions on the indicators of productivity, and secondary data was utilized in this study. Statistic tools were used to test the formulated hypothesis that included descriptive analysis, correlation, and regression. The results confirm that there is a positive and substantial relationship between organizational safety culture and productivity with employee safety behaviour and management commitment as the best predictors. The paper concludes that it is possible to build a strong safety culture that helps to minimize disruptions at the workplace, increases employee involvement, and improves efficiency. The findings indicate strategic significance of safety culture as an engine of attainable organizational productivity.

Keywords: Organizational safety culture, Organizational productivity, Safety behaviour, Management commitment, Workplace safety, Employee performance

INTRODUCTION

In modern-day organizations, productivity is no longer seen by the sole benchmark of technology, capital investment, or employee skills but rather is being more linked with organizational culture and work environment variables. Organizational safety culture has become one of them that has become critical in determining how employees behave, continuity in operations and organizational performance. The term safety culture describes the organization beliefs about values, attitudes, and

norms of behavior concerning safety and shared among various members of an organization and codified through organizational policy, leadership behaviors, and day-to-day organizational operations (Guldenmund, 2010).

At first, the research into safety in organizations was devoted to the prevention of accidents and adherence to the occupational regulations regarding health and safety. Nevertheless, the development in empirical studies has slowly increased this definition, reflecting that a positive safety culture has a contribution to wider organizational results, including engagement of the employees, job satisfaction, lower turnover, and higher productivity (Fernandez et al., 2009). Safety-related organizations have increased chances of less disruption arising due to accidents, reduced absenteeism and increased efficiency at work all of which yield to long-term productivity.

Regarding the management, safety culture is not an active reaction tool to avoid injuries but a strategic resource. It has been found that management commitment to safety, good communication, participation of employees and continuous safety training contribute to a culture of trust and psychological security which gives employees more leeway to carry out their work more efficiently (Vinodkumar and Bhasi, 2010). When this type of environment is present, employees will develop increased motivation and discretionary efforts, which will result in increased individual and organizational performance.

The connection between safety culture and productivity is especially acute in the high-risk sphere like manufacturing, construction, healthcare, and mining. The unsafe working conditions cause a high level of accidents, production slowdown, compensation, and a tarnished image that has a negative impact on productivity and profitability (Zwetsloot et al., 2017). On the other hand, organizations that have high safety cultures embrace safety as a part of the operations excellence and hence the company goals are consistent with the welfare of staff members.

With the growing regulatory inspectiveness, stakeholder demands, and competitive forces, it is now important to know how organizational safety culture can contribute to productivity. Safety culture is placed as an important organizational variable in this study which does not only protect workers but also boosts their productivity and sustainability of the organization in the long-term.

Review of Literature

Organizational safety culture is a concept, which has been developed in a long history of empirical and theoretical studies by different disciplines based on organizational psychology, safety science, and human resource management. Guldenmund (2000) has conceptualized safety culture as having a multidimensional construct of values which management systems and behavior practices shared in relation to attitudes towards safety that influence its outcome. The later studies differentiated between safety culture and safety climate, where the former involved more long-lasting and profound values and the latter the current attitude of employees towards safety priorities (Seo, Torabi, Blair, and Ellis, 2004).

Some empirical research has found a close relationship of safety culture and the safety performance indicators. Fernandez-Muniz et al. (2009) analyzed data provided by Spanish companies where they found that the less formalized the safety systems and the stronger the managerial commitment were, the lower were the reported rates of accidents and the greater was the level of operational efficiency. On the same note, the study conducted by Vinodkumar and Bhasi (2010) also revealed that safety management practices have a significant impact on the behavior of safety knowledge, motivation, and compliance of the employees.

In addition to the safety outcomes, safety culture is increasingly being found to be associated with productivity and organizational performance. According to Hofmann and Mark according to hospital units that operated in positive safety climates reported reduced rate of injury and better performance outcomes which included lower rate of errors as well as improved service quality (Hofmann and

Mark, 2006). These results indicate that safety culture is contributing towards the productivity by reducing the disruptions and increasing the performance of the tasks.

The role that leadership plays in safety culture and the outcome of its productivity. It was also found that transformational and participative leadership styles have a positive effect on safety perceptions and employee involvement, and hence safety and work efficiency (Kapp, 2012). The more leaders can be seen to be concerned with safety, the higher the likelihood that the employees will internalize safety customs and adopt proactive behaviours that facilitate operational objectives.

The relationship between the safety culture and productivity also takes place through psychosocial factors. Research suggests that profitability is affected by a positive safety culture leading to job stress and burnout in diminishing order, and organizational commitment and job satisfaction in their increasing order (Nahrgang, Morgeson, and Hofmann, 2011). These psychological consequences increase the worker concentration, minimize the presenteeism, and sustain productivity. Poor safety culture is, on the contrary, linked to an increased level of stress, disengagement, and low work output.

Sector specific studies also support this relationship. Safety culture has been found to enhance reliability of the process and lower the amount of downtime in manufacturing organizations (Abad, Lafuente, and Vilajosana, 2013). Positive employer-employee relations in the construction industry are correlated with positive safety culture and reduced construction delays (Mohamed, 2002). These results indicate that safety culture is an active facilitator in varied organizational settings.

Irrespective of strong evidence, there are still gaps in the literature. A lot of the current studies are based on cross-sectional study designs that have limited causation. In addition to this, productivity is in most cases gauged indirectly using self-reported indicators as opposed to objective measures of performance (Beus et al., 2010). Such constraints highlight the importance of combined research which could establish the association of safety culture with subjective and objective indices of productivity.

Generally, there is considerable support in the literature regarding the fact that organizational safety culture is a critical phenomenon that affects productivity. Organizations can promote both the well-being and high productivity results by being able to promote their productive work environment in a safe, supportive, and well-managed.

Objectives

The purpose of this paper is to comprehend the influence of organizational culture of safety on organizational productivity and examine the value of management commitment, employee safety behavior and psychosocial work environment and also determine the role played by safety oriented practices in enhancing operational efficiency and worker performance or performance.

Methodology

This research follows a quantitative researched based study with primary and secondary data. The implementation of a structured questionnaire of dimensions of safety culture, as well as the perceived productivity of the employees of the chosen organizations, will be used as primary data. The analysis will be supplemented with the use of secondary data on accidents, absenteeism, and output indicators will be used to test the hypotheses.

Results and Discussions

The research is founded on primary data obtained on 120 employees employed in the identified organizations in the sphere of manufacturing and service industries. The sampling was simple random sampling.

Table 1 Descriptive Statistics

Variable	Mean	Standard Deviation
Management Commitment to Safety	3.98	0.61
Safety Communication & Training	3.85	0.66
Employee Safety Behaviour	4.02	0.58
Psychosocial Safety Environment	3.76	0.64
Organizational Productivity	3.89	0.60

The mean values of all safety culture dimensions report more than 3.75 which corresponds to the positive attitude of safety culture of employees. Employee safety behaviour shows the mean to be the highest (4.02), implying that the compliance and the participation level is strong and this is favourable to increased productivity.

Table 2 Relationship between Safety Culture Dimensions and Organizational Productivity

Variables	Productivity (r-value)
Management Commitment to Safety	0.68**
Safety Communication & Training	0.62**
Employee Safety Behaviour	0.71**
Psychosocial Safety Environment	0.59**

The obtained correlation results demonstrate that there is a strong and statistically high positive correlation between the variables of organizing safety culture and productivity. The best correlation ($r = 0.71$) presents employee safety behaviour, which states that safe work practices are directly associated with productivity since they minimise disruptions and enhance efficiency.

Hypothesis Testing

H₀: Organizational safety culture does not have a significant impact on organizational productivity.

In order to test the hypothesis empirically, a null hypothesis is stated and checked with the help of proper statistical methods in order to investigate the connection between organizational safety culture and organizational productivity. The null hypothesis will be that the organizational safety culture does not play a statistically significant role as an influence on productivity outcomes. Through examination of this hypothesis quantitatively, the research aims to show whether the perceived differences in productivity can as a result of safety culture practices or just random by chance, hence this offers an objective answer to the acceptance or rejection of the hypothesis.

Table 3 Impact of Safety Culture on Organizational Productivity

Predictor Variable	Beta (β)	t-value	Sig.
Management Commitment	0.29	4.12	0.000
Safety Communication & Training	0.21	3.06	0.003
Employee Safety Behaviour	0.34	4.85	0.000
Psychosocial Safety Environment	0.18	2.74	0.007
R² = 0.63			

The model of regression displays 63 percentage (high variance in organizational productivity) explaining the effectiveness of the model. There are positive and statistically significant influences of all the dimensions of the safety culture on productivity. The greatest predictor is employee safety behaviour (b = 0.34) and then that of management commitment to safety.

Table 4 Summary of Hypothesis

Hypothesis	Statistical Tool	Result	Decision
H_0: Safety culture does not influence productivity	Regression Analysis	$p < 0.05$	Rejected
H_1: Safety culture influences productivity	Regression Analysis	Significant	Accepted

The p-value of all predictor variables is below the cut-off of 0.05 hence rejecting the null hypothesis. The findings affirm that organizational safety culture has a huge impact on organization productivity.

The study conclusively proves that a high level of productivity is realized in organizations, which have good safety cultures. Management commitment, proper communication, safety behaviour among employees and favourable psychosocial environment will all promote work efficiency, loss of absenteeism and other disruptions during the course of operations. The results substantiate the perspective of safety culture not being just a subject of compliance but a strategic factor of productivity and organizational outcomes.

Discussion

The empirical evidence provided by the study results is high that organizational safety culture is among the primary determinants of the productivity of an organization. The statistical examination indicates that, the dimensions of culture of safety, i.e. management commitment to safety, safety communication and training, employee safety behaviour and psychosocial safety environment have positive and significant associations with the level of productivity. The null hypothesis is disproven which confirms that the notion of safety culture is not the feature of compliance only but it is rather the strategic organizational capability which facilitates the effectiveness of the operations.

The productivity has been predicted most by employee safety behaviour among the identified dimensions. This means that when employees adhere to the safety practices on a regular basis and contribute in the activities carried out in terms of safety, organizations are prone to reduced interruption in the workflow, reduced accident incidents, and better continuity of the workflow. This conclusion is consistent with the previous empirical studies that highlight that safe working practices are directly related to efficiency in the task and quality of output. Commitment to safety by the management was also of a significant impact, which supports the idea that leadership is one of the key contributors creating safety values within the daily routine and encouraging the staff to prioritize safety and performance objectives.

The great influence of safety communication and training shows the importance of the incessant skills development and sharing information in the context of creating not only safety awareness but also productivity. Proper training improves the employees on issues related to hazard identification, equipment usage and minimizing mistakes, hence lowering reworking and losses in operations. Likewise, psychosocial safety environment was also observed to have a significant influence on productivity, which implies that when there is promotion of trust, fairness, and psychological health, organizations are known to facilitate workers to work more focussed, more engaged, and more resilient.

On the whole, the findings support the literature available indicating that organization that have highly developed safety cultures have better employee morale, less absenteeism and better work performance. The suitability of the safety culture as a strategic aspect is supported by the fact that the explanatory power of the regression model is relatively large, and therefore, it has a significant level

of productivity variance. These results suggest that safety culture programs are not only worth the cost of safety, but also they can help in enhancing the productivity and sustainability of the organization.

Conclusion

The research concludes that organizational safety culture is vital and has a positive contribution toward organizational productivity. The empirical findings reveal clearly that the dimensions of safety culture, including the management commitment to the safety, an effective safety communication and training, safety behaviour of employees, and conducive psychosocial work environment have a positive impact on the productivity results. Any organization which entrenches safety as an organizational value, less accidents, less absenteeism, increased morale among workers and uninterrupted workflow, attributes to increased productivity. Therefore, safety culture must not be considered as just a regulative safety requirement but a performance and sustainability strategy to the organization.

Recommendations

Judging by the findings, the organizations are recommended to enhance the commitment of the leadership to safety by setting safety goals in the strategy and operations. Institutionalization of safety training programs, open lines of communication, and involvement of employees in safety programs should be carried out with regularity. Also, it is preferable that organizations work on enhancing the psychosocial safety environment by fostering trust, fairness, and the well-being of the employees. Regular safety inspections and safety indicators that depend on performance should also be conducted to make the process of safety improvement an ongoing one to promote the productivity of the organization.

References

- Abad, J., Lafuente, E., & Vilajosana, J. (2013). An assessment of the relationship between the adoption of occupational risk prevention practices and business performance. *Safety Science, 51*(1), 196– 204.

- Beus, J. M., Payne, S. C., Bergman, M. E., & Arthur, W. (2010). Safety climate and injuries: An examination of theoretical and empirical relationships. *Journal of Applied Psychology, 95*(4), 713– 727.

- Fernández-Muñiz, B., Montes-Peón, J. M., & Vázquez-Ordás, C. J. (2009). Relation between occupational safety management and firm performance. *Safety Science, 47*(7), 980– 991.

- Guldenmund, F. W. (2000). The nature of safety culture: A review of theory and research. *Safety Science, 34*(1– 3), 215– 257.

- Guldenmund, F. W. (2010). Understanding and exploring safety culture. *Delft University Press*.

- Hofmann, D. A., & Mark, B. (2006). An investigation of the relationship between safety climate and medication errors. *Personnel Psychology, 59*(4), 847– 869.

- Kapp, E. A. (2012). The influence of supervisor leadership practices and perceived group safety climate on employee safety performance. *Safety Science, 50*(4), 1119– 1124.

- Mohamed, S. (2002). Safety climate in construction site environments. *Journal of Construction Engineering and Management, 128*(5), 375– 384.

- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation. *Journal of Applied Psychology, 96*(1), 71– 94.

- Seo, D. C., Torabi, M. R., Blair, E. H., & Ellis, N. T. (2004). A cross-validation of safety climate scale. *Journal of Safety Research, 35*(4), 427– 445.

- Vinodkumar, M. N., & Bhasi, M. (2010). Safety management practices and safety behaviour. *Accident Analysis & Prevention, 42*(6), 2082– 2093.

- Zwetsloot, G. I. J. M., et al. (2017). The case for research into the business benefits of health and safety. *Safety Science, 91*, 260– 266.