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A Review on Occupational Health and Safety Management

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Abstract--- *In reviewing the latest research on "occupational health and safety" (OHS), this paper states that the increase in the number of OHS specialists has resulted in a focus on practice and policy away from more academic concerns earlier addressed by academics in sociology and psychology disciplines. There has been a hiatus, and this is demonstrated by the lack of management studies, although OHS is progressively used as a key business organizations administrative and tactical concern. This review assesses the contributions of sociology, psychology, management studies and industrial relations, and analyses five categories of specialist OHS literature, namely: systematic OHS management; prescriptive; success-based; disaster and error based; and climate, culture, and high-reliability research. The philosophical and methodological limitations of such a professional orientation are addressed, and future research prospects are outlined, for which the writers suggest that a variety of methodological approaches be adopted by management scholars.*

Keywords: *Health, Safety, OHS, Sociology, psychology, management, culture, climate, business, Industrial Relations.*

I. INTRODUCTION

Management of "Occupational Health and Safety" (OHS) have continued to overlap in certain regions across historical periods, concentrating on, for example, policy and practice, individual characteristics and social relations, activities and occurrences of injury and deaths, and administration and industrial relations. Previous research by sociologists and psychologists investigated human dispositions and social causes in establishing principles and analytical perspectives into OHS using methodological structures. Such conclusions were further reinforced by the outcomes of occupational studies carried out by experts in industrial relations, who drew attention to the value of regulation and ground-breaking non-regulatory and legislative approaches. OHS experience expanded, and a more realistic approach emanated from OHS students and professionals searching for practical solutions to real-life issues. Prescriptive research still dominates with an emphasis on methods, strategies and procedures rather than meanings or principles, or any formal interaction with rigorous empiric studies that guide scientific discourse [1].

The lack of OHS research in management findings–although understandable given the expert emphasis–highlights this gap in the study agenda which is worth considering further. Organizational scholars are well positioned to tackle this issue by using a more multidisciplinary approach and introducing a variety of analysis methodologies (mixed, qualitative and quantitative methodological approaches) to OHS management in organisations.

This may be most apparent in the Human Resource Management (HRM) sub-field where OHS is not only a key

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component of the HRM function but is progressively correlated with achieving competitive advantage and performance of the business. They suggest that management academics need to pay greater attention to the analysis of OHS, especially in areas not covered by the more expert and strategic issues currently serving the sector. They begin with a review of studies in sociology, work psychology and industrial relations in developing this argument.

This is accompanied by a debate in the management literature on the general absence of OHS administrators. Instead they turn our attention to the conventional literature evaluating workplace health and safety: prescriptive, systemic, success-based, disaster-based and culture-based research, environment, and high reliability. Amid these studies, they support the need for a more context-based story approach to promote the OHS management research agenda. They conclude by calling on academics within the management discipline to participate more deeply in the production of specialist knowledge and theoretical insights into this subject.

Corporate and industrial science, social psychology, industrial sociology and industrial relations, have added to our knowledge of organizational structure and activity and the causes of occupational disease and workplace injuries. A segment discusses some of the main developments and strategies in these fields proposed by researchers, and illustrates the lack of management science.

II. LITERATURE REVIEW

Work Psychology studies*:*

There has been a number of psychological studies following the early research that have recognized work as a leading cause of psychosocial illness. A causal relationship involving attitudes and behaviour was believed to occur through social psychological hypotheses. A dominant view up until the 1990s was that protection can be increased and OHS efficiency strengthened by changing attitudes; for example, studies note the significant correlation between safety attitudes and levels of injuries [2].

As researchers demonstrates, early psychological studies tended to focus on a small number of problem areas where the primary interest was in the person-in terms of cause and intervention-rather than in the social group or work environment In this formative study, it was not the structure that was considered to be at fault but the participant in failing to take responsibility for it. Therefore, as researchers say, approaches were targeted at personally supporting stress management guides to assist workers in handling their own circumstances: “traditionally the occupational physicians and occupational psychologists/personnel experts have based their expertise on the individual”.

The last twenty years also seen a distinct movement away from an interpersonal perspective to a fixation with the person and the working environment in which they find themselves, with an emphasis on cause and action. Of starters, scholars claim that these can be due to two factors in an analysis of workplace injuries; respectively, the characteristics of the work environment (job practices) and the characteristics of the patient. Initiatives designed to improve the safety of work environments have accomplished several success [3].

Although work on psychological and behavioural traits in the latter has provided mixed results in their attempts to identify factors predisposing a person to injury. When researching individual personality researchers found that while extraversion was a reliable indicator of traffic accidents, a clear correlation between personality dimensions and

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workplace accidents could not be detected, indicating the need for further studies on the connection between personality and safety environment. In reflecting on a shift in research focus, researchers note how the old belief that some people are more prone to accidents than others is being replaced by a new position that views human behaviour and unsafe behaviours as' symptoms and not direct causes.' Studies into the interaction between occupational safety and high-performance work processes further highlights the role of operational variables in ensuring the safety of employees [4].

They explain how this partnership is regulated by confidence in the management and perceived environment of health, and should no longer be considered "the prime prerogative of individual workers." Major disaster costs such as Piper Alpha emphasize the importance of safe management practices, working climate and behavioural responses. In discussing the psychological, situational, and organizational factors influencing compliant and non-compliant behaviour, Reason researchers highlight the limitations of the various procedures, rules, and regulations designed to limit individual behaviour.

Their research also brings out many of the difficult safety management issues when success is measured by the absence of damage, time-loss injuries or fatalities, and when accidents and near-misses are comparatively rare. They conclude that development of more social and self-controls needs to go beyond prescriptive procedures. The willingness of people to respond to security issues will vary over time, as shown by the researchers ' two longitudinal project completion studies. They noted that safety concerns were most apparent at the start and finish of projects and that there was a noticeable decline in security services [5].

During the middle stages, the emphasis is on completing the task and there is more risk-adverse conduct in proof as a project is nearing completion. Such findings demonstrate the ongoing differences between individual behaviour and the place and meaning under which decisions are made. A number of studies have shown, for example, how a poor climate of safety decreases compliance with safety procedures and consequently increases accident levels. In investigating these issues over a five-year period, researchers conclude that: "Organizations seeking to improve safety should focus on changing the working environment to motivate people to participate actively in safety activities, rather than simply punishing and blaming people who fail to comply with standard work procedures." Further job psychology studies turned their attention to broader issues in the workforce, such as the emergence of protection cultures or environments that facilitate healthy work and decrease the chances of accidents [6].

Industrial Sociology and Relations Studies:

The focus is not on the individual but in the way work is organized and controlled within industrial relations and the sociology of health and work. Recent research, moving away from the highly individualized conceptions of wellbeing, draw attention to the sense in which behaviour patterns arise and are maintained, and the significance of social relationships. The lack of prescriptive interventions–focused around the person–to cope adequately with issues of workplace disease and disability, and the propensity to see the blame as falling on the actions of the offender rather than on social factors, underlined the need for wider sociological research [3].

Such research concentrate on the social causes of ill-health and disability and, in particular, on job habits and methods of managing jobs. The harmful effects of non-standard work patterns (comprising extended hours and work in shifts) have all been well publicised and are now frequently taken up by groups representing employees, such as trade unions and other labour associations. Workplace vulnerability is an area of concern within the field of industrial relations which

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is often illustrated by statistical analysis of workplace surveys.

Researchers for example, used the 1990 Workplace Industrial Relations Survey (WIRS) to examine the scale of the work unit and injury rates in the UK manufacturing sector and concluded that workers of bigger workplaces are less likely to be injured. Another reason for this is that larger firms may have more resources to address these problems, and a stronger willingness to be mindful that health and safety officers are more willing to evaluate them [7].

Union diversity has also been equated with occupational risk levels, because individual employees are less able to negotiate on larger safety issues and show fewer permanence (in changing jobs and careers) than employers which are also better equipped to gather information and facilitate safety improvements. Scientists find facts in a re-analysis of WIRS data that supports the argument that trade union participation and workplace engagement enhance the quality of health and safety at work [8].

Subcontracting, especially in smaller site activities, is one field that has been vulnerable to poor representation and one in which there has also been a greater concern for hazards. Researchers found that lower OHS was related to the high level of subcontracting in this industry in a subcontracting analysis in the UK and Australian residential building market. In an analysis of subcontracting at U.S. petrochemical plants, researchers found that the apprehension of job loss by contract workers left them more vulnerable to risks (chemical reactions and explosions) than employees on direct hire. It may be surprising that the number of injuries reported in unionized workplaces is generally higher than non-unionized workplaces, although this is likely due to more comprehensive incident reporting systems in combination with higher union presence in high-risk sectors. Researchers in the US have discovered that unions are effective in promoting the establishment of health and safety committees, and they are showing how unions can use these committees as a vehicle to significantly improve workplace injury rates.

They conclude, however, that committees alone are not adequate to improve safety at work, but need employers ' participation and dedication (especially with regard to the availability of resources) and worker engagement. These findings are aligned with 70-year historical analysis of the effectiveness of employee participation in safety committees at an Australian Steelworks, where, despite significant limitations in effectiveness, significant reductions in time-lost injuries were achieved through a leadership-based' top-down' approach and involving the entire workforce in improving OHS.

Utilizing information from the 1998 Work place Employee Relations Survey (WERS), researchers found that unionized companies with defined health and safety committees have higher levels of occupational risk in terms of work-related injury reports recorded. They argue that this higher level of coverage is attributed to the unionization and successful functioning of health and safety committees with dual roles: first, as outlets for feedback and questions regarding risks and dangerous working practices, and second, as a means of securing insurance for injury or illness linked to work. Because such, full incident reporting shows good risk management practices rather than highly unionized firms with operational health and safety committees being higher-risk environments than their non-unionized counterparts, which may appear on first viewing. This in turn highlights the need for caution from a simple analysis of raw data on reported injuries and illnesses in extrapolating explanations and causality. Researchers examine the role that representative participation of workers can play in contributing to better health and safety in small businesses in

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Europe[9].

Good approaches of large organizations to counter OHS are not seen as transferable to the small business where the structure and nature of operation poses a whole set of different problems. To the researchers, it is not just a matter of poor management as other problems come into play, such as the social instability connected with the decline in organized labour, economic uncertainty and questions regarding job security, the lack of regulation and the amount of illegal work in this industry, the low levels of examination and compliance, and the excessive circumstance.

OHS Management Literature:

Researchers found many years ago that health and safety is a key area protected by HRM, it is shocking that it provides limited (or none at all) attention in main HRM texts and newspapers. OHS is typically treated as one of a number of HRM variables in studies primarily concerned with other phenomena in the HRM journals. For example, in their study of 38 US service firms (out of a total of 1,400 initially surveyed) to determine the efficacy of high-performance work processes, researchers found that enhanced workplace safety would lead to improved operations among a package of 10 popular organizational culture practices; The growing interest in the partnership between planning and human resource management, based on the assumption that human resources and their management contribute significantly to a sustainable competitive advantage for organisations, has been a major trend in HRM science. Without exception, OHS and OHS managers are exempt from the operationalization of this relationship in terms of legislation or action, except as an indication of productivity rather than quality, a collective performance measurement or an insight into the involvement of workers.

Much of the literature on handling OHS is prescriptive. It's largely populated by textbooks aimed at OHS practitioners and students. Consequently, they are not empirically based interpretations of what comprises OHS administration, nor are they conceptualizations that are checked or confirmed by rigorous field studies; instead, they are the efforts of their respective writers to organize principles, methods, strategies, innovations and observations [10].

III. CONCLUSION

Work on OHS management in organisations has continued to adopt either a more realistic expert path dealing with recommending approaches to do OHS and best management strategies, or a more analytical foundation in earlier research based largely on psychological or sociological sciences. Studies in the more traditional disciplines of social science have been concerned with the development of concepts that are theoretically robust, for example in psychology the focus has been on developing theories at the individual level, while sociological studies have placed greater emphasis on social relations and management control systems.

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Nevertheless, with the segmentation of specialty emphasis and the rise in more tactical professional concerns in the OHS area, this earlier attention lost momentum. Much of the more grounded industrial relations research, for example, draws on empirical data in assessing OHS in the workplace and the effectiveness of systems and management action or inaction in response to their legal obligations. Whereas within the expert OHS literature a strong proportion of research centred on the tools and techniques to solve problems and develop recommendations for best practice.

REFERENCES

[1] L. A. Colby and E. Corwin, "Occupational Health and Safety," in Patient Derived Tumor Xenograft Models: Promise, Potential and Practice, 2017.
[2] Occupational Safety and Health Administration, "Laboratory Safety Guidance," Occup. Saf. Heal. Adm., 2011.
[3] I. Mohammadfam, M. Kamalinia, M. Momeni, R. Golmohammadi, Y. Hamidi, and A. Soltanian, "Evaluation of the Quality of Occupational Health and Safety Management Systems Based on Key Performance Indicators in Certified Organizations," Saf. Health Work, 2017.
[4] Y. Kim, J. Park, and M. Park, "Creating a Culture of Prevention in Occupational Safety and Health Practice," Safety and Health at Work. 2016.
[5] Occupational Safety and Health Association, "Prevention of Musculoskeletal Injuries in Poultry Processing," U. S. Dep. Labor, 2013.
[6] Occupational Safety and Health Adminstration and U. S. D. of Labor, "Training Requirements in OSHA Standards and Training Guidelines," 2015.
[7] K. Jilcha and D. Kitaw, "Industrial occupational safety and health innovation for sustainable development," Eng. Sci. Technol. an Int. J., 2017.
[8] Y. Liu and D. B. Grusky, "The payoff to skill in the third industrial revolution," Am. J. Sociol., 2013.
[9] K. Lundgren, K. Kuklane, C. Gao, and I. Holmér, "Effects of heat stress on working populations when facing climate change," Industrial Health. 2013.
[10] M. Zanko and P. Dawson, "Occupational Health and Safety Management in Organizations: A Review," Int. J. Manag. Rev., 2012.

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