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ENVIRONMENT**

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usbet.fspuperak@gmail.com

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SAFETY MANAGEMENT PRACTICES IN BUILDING FACTORY AT JITRA, KEDAH DARULAMAN

Muhammad Iqmal Muhammad¹, Mohd Khazli Aswad Khalid^{1*}

¹Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA, Perak Branch, 32610, Seri Iskandar, Perak, Malaysia

iqmalfazil@gmail.com, *khazliaswad@uitm.edu.my

ABSTRACT

This study examined the importance of risk and safety as well as the requirement for correct operating procedures in determining the relationship between the various types and categories of event-related risks from the perspective of event planners and venue managers. Malaysian management industry A systematic approach is needed in the developing field of event management to assure the success and security of all participants. A thorough literature review has revealed the paucity of research in general threat and safety aspects and, more specifically, the lack of research relating to event risk management and safety, despite the abundance of literature verifying that risk and safety is foundational in event planning and management. This study use method of quantitative that is by distribute questionnaire to the staff and workers in Scenic Drive Sdn. Bhd. building factory at Jitra, Kedah. This action has been conducted in an effort to better understand how Malaysian event and venue managers see hazards and safety concerns when organising and overseeing event.

Keywords: *safety management, factory, practices*

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INTRODUCTION

A safety management practices is either a management system that is primarily focused on safety or a system that is used to manage and control safety. An SMS is the junction of three views, namely safety, management, and system. The development of each of these three factors alone will influence how an SMS changes over time to some extent. The main focus of safety is on its opposite, namely, accidents, losses, or injuries, which are frequently depicted using models and metaphors (Bottani,2009).

However, there is no such thing as an absolutely safe scenario with zero danger. Even if some businesses these days manage to go years without an accident or injury, that does not mean they are risk-free. As a result of the fact that "risk is a measure of the probability and consequence of uncertain future events; it is the chance of an undesired outcome.

LITERATURE REVIEW

Definition of Safety

Who by legal protections must be considered the founder of industrial safety, was careful to point out that a distinction should be made between accidents and injuries, where the former denoted the cause and the second the effect. The occurrence, potential or actual, of some kind of unfavourable outcome, whether it has been classified as a risk, hazard, a similar incident, a series of events, or a dangerous occurrence. Of course, there are major and minor injuries, and it is possible to say that a serious accident is one that results in a serious injury. Safety is frequently, in fact almost always, described as a situation in which nothing goes wrong (i.e., there are no injuries, accidents, incidents, or near misses), or, more cautiously, as one in which there are only a minimal number of problems. Safety, for example, is described by the International Civil Aviation Organization as "the state in which harm to persons or of property damage is reduced to, and kept at or below, an acceptable level through a constant process of hazard assessment and risk management." The history of safety comprises a number of these shifts that took place when the safety community was confronted with accidents that the pre-existing conceptual framework was unable to satisfactorily or simply explain. In each instance, new categories of causes (such as metal fatigue, "human mistake," infractions, organisational failure, and safety culture) have been added to the already-existing list to account for new sorts of accidents.

Finding a reason, or a combination of causes, to explain what occurred and to suggest corrective measures has long been a common issue for safety management. (Hollnagel.E,2014) The goal of safety barriers, or what the safety barriers must accomplish to prevent, regulate, or minimise unwanted events or accidents, is described by their barrier functions.

Definition of Factory Building

Manufacturing has a significant impact on a nation's growth, prosperity, and competitiveness. Craft production, mass production, lean production, mass customisation, and customised production are some of the paradigms that have emerged as a result of the changing demands of society, markets, and technology capabilities. This classification is dependent on the product variety and the volume of production per variant. The new production system, which profited by utilising cutting-edge technologies at the moment the concept was adopted, has overcome challenges related to the new paradigm. (Sajadieh,2022) Although the institutional manufacturing strategy literature advises factories to concentrate on one or two performance dimensions by catering to a specific market niche or by producing a limited range of products, the actual fact in operations sometimes seems quite different: deciding to focus or not may depend on the opportunities or constraints presented by the operating environment. (Ketokivi, M., 2006) Industrialized Building System (IBS) is a construction method that makes use of prefabricated, standardised building components that are mass-produced in a factory or on-site, transported, and then put together to form a structure using the proper tools and machinery with the help of careful planning and integration.

Risk, Assessment And Management

Eisenhauer (2005) claims that "risk" has many diverse definitions and is defined by subjectivity, multidimensionality, and variability, which makes it challenging to operationalize, particularly across many fields and, of course, dimensions. It is crucial to consider a number of additional risk definitions as a result. Risk is defined as "uncertainty about and severity of the repercussions (or outcomes) of an activity with respect to something that humans value," according to Aven and Renn (2009). The customer behavior literature defines risk as "an individual's perception towards uncertainty and an exposure to the chance of loss or injury" in paragraph 33. (Richter, 2003) A fundamental proposition regarding risks is outlined below:

$$\text{Risk} = \text{Hazard} + \text{Exposure}$$

Thus, hazard is defined as "a potentially damaging physical event, phenomenon and/or human activity, which may cause loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can be single, sequential or combined in their origin and effects", (European Community,2004) while exposure is described as those entities that are exposed and susceptible to being impacted by a natural hazard occurrence, such as people, resources, infrastructures, goods, services, or ecosystems (Birkmann et al., 2011).

Table 1: Definition of Hazard Characteristics

Hazard Characteristic	Definition
Magnitude	Only those occurrences that exceed some common level of magnitude are extreme.
Frequency	How often an event of a given magnitude may be expected to occur in the long-run average.
Duration	The length of time over which a hazardous event persists, the onset to peak period.
Areal Extent	The space covered by the hazardous event.
Speed of Onset	The length of time between the first appearance of an event and its peak.
Spatial Dispersion	The pattern of distribution over the space in which its impacts can occur.
Temporal Spacing	The sequencing of events, ranging along a continuum from random to periodic.

There is additional literature that defines the fundamental concepts of risk and risk management. An integrated risk management generally entails controlling a variety of risks, including volumetric risks, price risks, physical supply/delivery risk, operational risks, financial risks, etc., according to Chen (2006), who provided a more thorough definition. According to Funk (2012), risk is defined as a combination of severity and chance. Rose (2006) highlighted, however, that the risk measure that depends on reported incidents and accidents is insufficient, particularly when gauging operational safety, underscoring the need to establish a measure of safety that does not depend on events.

Event Risk And Safety

Every day, many kinds of events are produced, and they all, in general, contain dangers. While some events create relatively slight waves, others cause far greater ones. Even while producing an event entails liabilities since it involves speculative risk, it may nonetheless have positive economic and/or societal effects (Silvers, 2008). Event organisers and venue managers are responsible for ensuring a safe environment, which is defined by Goldblatt (2002) as one that is safeguarded from harm and has all potential dangers removed. Most event management training and educational programmes consider risk management for the events sector to be a key competency, yet there is a dearth of literature and resources for this particular area of interest (Silver, 2008) As a result, event planners still lack the tools necessary to control the risks related to the stakeholders' safety.

The event industry has made risk management, risk assessment, and risk communication top priorities, and event professionals now have to play the crucial function of a risk manager (Robson, 2009). The results, however, showed that Malaysian event professionals still largely lack knowledge of (international) rules for risk management in events and festivals, legal difficulties, and safety standards.


Insights Into Risk Perception

The public's perception of the risks associated with various environmental health and safety (EHS) hazards is one example of the risk perceptions that social sciences scholars have investigated over the past 50 years. (Cummings et al., 2013) Renn (2004) claims that individual typically construct their own world and evaluate risk based on their personal perception. Risk "heuristic" (such as the memorability, representativeness, and affective qualities of risk events) and qualitative elements of risk have been specifically studied in relation to how judgements about perceived risks and their acceptability originate (Pidgeon, Kasperson and Stovic, 2003). Numerous perception theories and models that society uses to perceive and evaluate risk have been identified by research on risk perception (Renn, 2004).

METHODOLOGY

This study used a quantitative method to study and identify the safety management practices in building factory at Jitra, Kedah. Thus, the researches choose one of factory building as the case study:

Table 2: Case Study

Case Study

<p>Figure 1.0: Scenic Drive Sdn. Bhd.</p> <p>Company Name: Scenic Drive Sdn. Bhd. Company Registration No.: 0975674D Nature of Business: Manufacturing and Sub-Assembles of Semi-Conductor Components Date of Registration: 18/01/2021</p>

A problem statement and research objectives will also be included in this study. Other components include a literature review, data collecting, analysis, and discussion, as well as a summary conclusion and presentation. The most crucial components of this study's research concerns were first identified during the research process.

Data Collection

Through an online survey, the researcher can provide the survey questionnaire at any time, or the respondents can complete the survey whenever they have access to the internet. Only if the respondents resided in the study's study region, which is Scenic Drive Sdn. Bhd., was the data considered valid.

Primary Data

The production team, the engineer, the supervisor, and other relevant individuals will be surveyed in order to gather the primary data for this study based on its specific objectives. Primary data is the most significant sort of data in research because it is received directly from the source of the data. To make sure the data aligns with the goals of the study, the primary data's source must be thoroughly analysed. Examples of techniques used to collect primary data include semi-structured interviews, surveys, site observations, questionnaires, experiments, and other approaches.

Secondary Data

The secondary data is gathered by consulting any journals from online pages, books, or previous similar articles. Typically, secondary data is compiled by another author with a specific objective in mind. Although this method is less precise, it must be used because various viewpoints on the same subject were picked.

DISCUSSION

The responses provided by the respondents may be displayed in a clearer format, the questionnaire form is using Google Form. The last results of this research are focusing only on questionnaire to be answered by the related parties in the building factory of Scenic Drive Sdn. Bhd. which are Engineer, Human Resources Officer, Supervisor and Operator staff of the factory. The questionnaire consists of 15 questions has been distributed to 45 respondents through Email and WhatsApp's application platform to the respondents. The questionnaire is divided into three (3) section which is Section A, B and C. The division of each part is as follows:

- i. Section A: Demographic information of the respondents that include:
 - Age
 - Gender
 - Marital Status
 - Level of Education
 - Role of job in the building factory

- ii. Section B: The frequently accident occurs, the level of effectiveness in handling accident situation and challenges faced by the accident management team when responding to accidents.
- iii. Section C: The level of satisfied on security measures in the factory building.

Section A: Demographic Survey

Count of Gender/Jantina

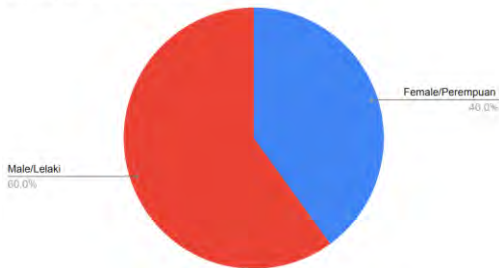


Figure 1: Chart of Gender

Count of Age/Umur

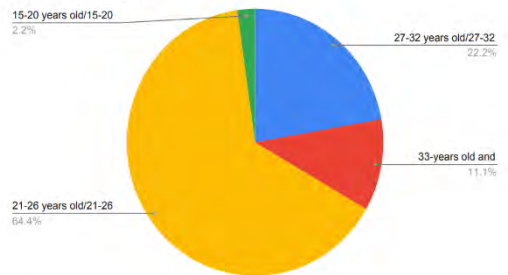


Figure 2: Chart of Age

The largest frequency of respondents—27 people—are men, with a percentage of 60%, while the lowest—18 respondents—are women, with a percentage of roughly 40%. Almost all of the 45 respondents to the survey, or 29, are between the ages of 21 and 26. This represents 64.4% of the total respondents.

Section B: The frequently accident occurs, the level of effectiveness in handling accident situation and challenges faced by the accident management team when responding to accidents

Table 3: Frequently Do Accidents Occur In The Factory Building

Answer	Number of Respondents	Percentage
Once in a week	1	2%
Once in a month	17	39%
Once in a year	14	31%
None	8	17%
Others	5	11%

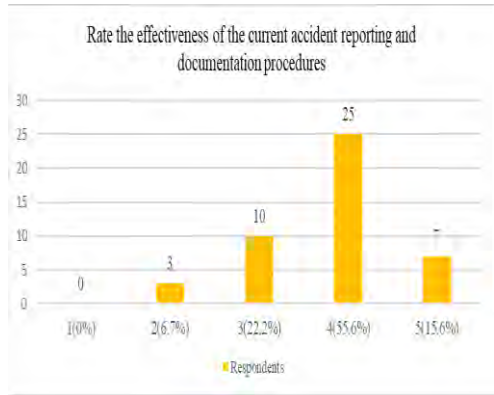


Figure 3: Answer by the respondents for each different question

Based on the chart above, the highest percentage is once a month for frequent do accidents occurring in the building factory with a percentage of 38% with 17 respondents. the highest rate of scale for the rate of current effectiveness of the accident management team is 4 which is 59.1% which equals to 27 respondents exceeding half of the 45 total number of respondents. The highest rate of scale for the rate the effectiveness of the current accident reporting and documentation procedures is 4 is 55.6%.

Section C: The level of satisfaction with security measures in the factory building.

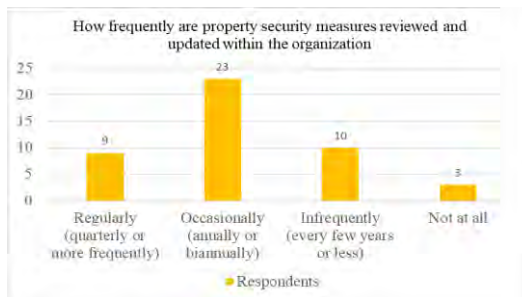
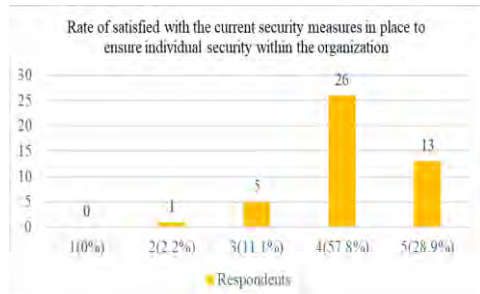
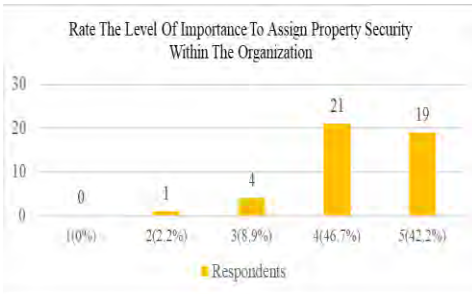


Figure 4: Answer by the respondents for each different question

The highest rate of scale for the level of satisfied on security measures in the factory building is 4 that is 46.7%. The highest rate of scale for the rate the effectiveness of the current security measures in place to ensure individual security within the organization is 4 that is 57.8%. The highest answer for how frequently are property security measures reviewed and updated within the organization is occasionally (annually or biannually) that is 51.1% that equal to 23 respondents The organisation in the building factory seeks to provide a secure and safe working environment for employees and stakeholders by placing a high amount of attention on property security.

CONCLUSION

Assessing the Effectiveness of Safety Training Programmes at Scenic Drive Sdn. Bhd. Jitra, Kedah, appears to have been successful in achieving the goals and objectives of this research, according to the findings of this study. Other than that, researcher advice examining the impact of safety practices on organizational performance. Further research can investigate the relationship between safety management practices organizational performance metrics in Scenic Drive Sdn. Bhd. building factory. This can involve assessing indicators such as accident rates, employee absenteeism, productivity, and overall business sustainability. Understanding the impact of safety practices on these factors can provide evidence of the business case for investing in safety and inform decision-making at both organizational and industry levels.

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Saya yang menjalankan amanah,

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Timbalan Ketua Pustakawan

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Setuju.

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