FACTORS INFLUENCING SAFETY TRAINING PARTICIPATION IN A MANUFACTURING COMPANY

By

YUWARANI A/P PERIASAMY

Thesis submitted to the

School of Business Management, Universiti Utara Malaysia

in Fulfillment of the Requirement for the Degree of

Master of Human Resource Management

Pusat Pengajian Pengurusan Perniagaan
SCHOOL OF BUSINESS MANAGEMENT
Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)
YUWARANI A/P PERIASAMY (828154)

Calon untuk Ijazah Sarjana
(Candidate for the degree of)
MASTER OF HUMAN RESOURCE MANAGEMENT

telah mengemukakan kertas penyelidikan yang bertajuk
(has presented his/her research paper of the following title)

FACTORS INFLUENCING SAFETY TRAINING PARTICIPATION IN A MANUFACTURING COMPANY

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(as it appears on the title page and front cover of the research paper)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper).

Nama Penyelia : **ASSOC. PROF. DR. HADZIROH IBRAHIM**
(Name of Supervisor)

Tandatangan :
(Signature)

Tarikh : **7 AUGUST 2025**
(Date)

PERMISSION TO USE

In presenting this study in partial fulfilment of the requirement for postgraduate degree from University Utara Malaysia, I agree that University's Library may take this project freely for any purpose. I further agree that the permission for copying of this study in manner, in part or whole, for scholarly purpose may be granted by my supervisor or their absence, the Dean of School of Business Management must be referred. It is also understood that any copying publication or the use of this study or part there of financial benefits are not allowed without my written permission. It is also understood that due recognition shall be given to me and to university Utara Malaysia for any scholar use which may be made of any material from my thesis.

Request for permission to copy or use regarding on this material in this study should be addressed to:

Dean of School of Business Management

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRACT

In manufacturing industry, safety training participation is playing important role to avoid the accidents at workplace. The objective of this study was to examine the relationship between training motivation, management training policies and organizational learning climate, management commitment and safety training participation among employees in manufacturing industry. Social Exchange Theory (SET) and Self Determination Theory (SDT) was utilized in explaining the relationship between the research variables in the research framework. The quantitative research method has been used through a questionnaire. A total of 214 employees from YX Company representing a response rate of 87.3% participated in this study. Four hypotheses were tested using SPSS 27. The result of this research exposes that training motivation, management training policies and organizational learning climate, management commitment significantly contributes to higher levels of participation in safety training. Future research could explore these potential factors such as job satisfaction, peer influence, and organization support to provide a more holistic understanding of safety training participation.

Key words: Training Motivation, Management Training Policies and Organizational Learning Climate, Management Commitment and Safety Training Participation.

ABSTRAK

Dalam industri pembuatan, penyertaan latihan keselamatan memainkan peranan penting untuk mengelakkan kemalangan di tempat kerja. Objektif kajian ini adalah untuk mengkaji hubungan antara motivasi latihan, dasar latihan pengurusan dan iklim pembelajaran organisasi, komitmen pengurusan dan penyertaan latihan keselamatan dalam kalangan pekerja industri pembuatan. Teori Pertukaran Sosial (*SET*) dan Teori Penentuan Kendiri (*SDT*) digunakan dalam menjelaskan hubungan antara pembolehubah kajian dalam rangka kerja penyelidikan. Kaedah kajian kuantitatif telah digunakan melalui soal selidik. Seramai 214 pekerja dari YX Company yang mewakili kadar tindak balas sebanyak 87.3% telah mengambil bahagian dalam kajian ini. Empat hipotesis telah diuji menggunakan SPSS 27. Hasil penyelidikan ini mendedahkan bahawa motivasi latihan, dasar latihan pengurusan dan iklim pembelajaran organisasi, komitmen pengurusan menyumbang secara signifikan kepada tahap penyertaan yang lebih tinggi dalam latihan keselamatan. Penyelidikan masa depan boleh meneroka faktor-faktor yang berpotensi seperti kepuasan kerja, pengaruh rakan sebaya, dan sokongan organisasi untuk memberikan pemahaman yang lebih holistik tentang penyertaan latihan keselamatan.

Kata kunci: Motivasi Latihan, Dasar Latihan Pengurusan dan Iklim Pembelajaran Organisasi, Komitmen Pengurusan dan Penyertaan Latihan Keselamatan

ACKNOWLEDGEMENT

First of all, I would like to appreciate to University Utara Malaysia (UUM) for giving me the opportunity to pursue my studies to Master and to conduct y research paper in partial fulfilment of the requirements for a postgraduate degree.

In addition, I would like to express thanks to my respectful research supervisor Assoc. Prof. Dr. Hadziroh Ibrahim for the valuable guidance and support from the beginning of my research paper towards the end. Prof inspired me greatly to work in this research paper.

Moreover, I would like to thank to my valuable respondent who involved to do complete survey for this research paper. Really appreciated for their time, cooperation, and contributions in this research paper. Not forgotten special appreciations to my beloved husband Mr. Punithan for his continues support morally and financially provide me to complete my studies. Also, thanks to my dearest daughter P. Dhiyanika Sri, my parents, friends, and family members who always support me.

Last but not least, I take this opportunity to thank each everyone who support, guide and assists me directly and indirectly to complete my research paper.

TABLE OF CONTENT

PERMISSION TO USE ii
ABSTRACT iii
ABSTRAK iv
ACKNOWLEDGEMENT v
TABLE OF CONTENTS vi
LIST OF TABLES ix
LIST OF FIGURES ix
LIST OF ABBREVATION x

CHAPTER 1: INTRODUCTION

1.1 Introduction 1
1.2 Background of the Study 1
1.3 Problem Statement 3
1.4 Research Objectives 8
1.5 Research Questions 8
1.6 Significance of the Study 8
1.7 Definition of Key Terms 9
1.7.1Training Motivation 9
1.7.2 Management Training Policies & Organization Learning Climate 10
1.7.3 Management Commitment 10
1.7.4 Safety Training Participation 10
1.8 Scope of Study 11
1.9 Organization of the thesis 11

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction 13
2.2. Variables of the Studies 13
2.2.1 Training Participation 13
2.2.2 Training Motivation 15
2.2.3 Management Training Policies & Organization Learning Climate 19
2.2.4 Management Commitment 21
2.3. Underpinning Theory 24
2.3.1 Social Exchange Theory (SET) 24
2.3.2 Self-Determination Theory (SDT) 26

2.4 Hypotheses Development 27
2.4.1 Training Motivation and Safety Training Participation 27
2.4.2 Management Training Policies & Organization Learning Climate and Safety Training Participation 28
2.4.3 Management Commitment and Safety Training Participation 29
2.5 Research Framework 30
2.6 Summary 31
CHAPTER 3: METHODOLOGY
3.1 Introduction 32
3.2 Research Design 33
3.3 Sampling Design 33
3 3.1 Population 33
3.3.2 Sample 34
3.3.3 Sampling Techniques 34
3.4 Measurement of Study 35
3.4.1 Training Motivation 35
3.4.2 Management Training Policies & Organization Learning Climate 36
3.4.3 Management Commitment 38
3.4.4 Safety Training Participation 39
3.5 Questionnaire Design 40
3.6 Pilot Test 41
3.7 Data Collection Procedure 43
3.8 Data Analysis Techniques 43
3.9 Summary 44
CHAPTER 4: FINDINGS
4.1 Introduction 45
4.2 Response Rate 45
4.3 Profile of Respondent 46
4.4 Descriptive Analysis 48
4.5 Person Correlation Analysis 50
4.6 Multiple Regression Analysis 51
4.7 Summary 53

CHAPTER 5: DISCUSSIONS AND CONCLUSIONS

5.1 Introduction 55
5.2 Discussion of Findings 55
5.2.1 Relationship between Training Motivation & Safety Training Participation 56
5.2.2 Relationship between Management Training Policies & Organization Learning Climate & Safety Training Participation 56
5.2.3 Relationship between Management Commitment & Safety Training Participation 57
5.3. Implication of the Study 58
5.4. Limitation of the Study 60
5.5. Suggestion for Future Research 62
5.6. Conclusion 64
REFERENCES 65
APPENDIX A: QUESTIONAIRE 73
APPENDIX B: SPSS OUTPUT 78

LIST OF TABLES

Table 3.2 : Questionnaire Design Sources of Variable Instruments 41
Table 3.5 : Pilot Test 42
Table 4.1 : Response Rate 46
Table 4.2 : Respondent's Demographics Profile 46
Table 4.3 : Descriptive Analysis 49
Table 4.4 : Pearson's Correlation Analysis 50
Table 4.5 : Model Summary 51
Table 4.6 : Multiple Regression Analysis 52
Table 4.7: Summary of Hypothesis Results 53

LIST OF FIGURES

Figure 2.1: Research Framework 30

LIST OF ABBREVATION

List of Abbreviations	Description of Abbreviations
NTI	National Training Index
DOSM	Department of Statistics Malaysia
HRD	Human Resource Development
OSHA	Occupational Safety & Health Management
SET	Social Exchange Theory
SDT	Self-Determination Theory
HRM	Human Resource Management
SPSS	Statistical Package for the Social Science

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter explains the problem statement, a series of research questions, all of the objectives of the study, significance that are relevant in this study, scope of study, definition of key terms and organization in this thesis.

1.2 BACKGROUND OF THE STUDY

In this modernized era, still human assets are the most important part of the resources required by every organization. Therefore, every organization give priority on the training for the employees replenish their skill and knowledge. Through training, which is a form of investment skill, corporations wish to achieve their goals and furnish their working skill time to time. However, employees are not very convinced on the training participation, either because such effectiveness is not easily measured or because training is not incorporated into the workplace (Pineda & Andres, 2007). To sustain modest advantage, organizations are forced to train and develop employees and managers (Noe & Tews, 2012; Reio, 2020).

Usually, the list of compulsory trainings is habitually fulfilled by providing corporate training programs. Regardless of the skills they aim to develop, organizations must make sure that the substantial resources committed to workforce training yield a return on investment (i.e., rewards to both parties' employees and employers) respect to their different organizations' success (Abugre & Adebola, 2015; Armstrong, 2009). Among the list of trainings listed in the yearly training calendar, safety training is most important

training that should every employee need to give priority for safety training participation. In manufacturing industry, active safety training participation are playing important role to reduce or avoid the workplace accidents. As many people are aware, workers in global manufacturing are constantly working in dangerous conditions due to their exposure to heat, lasers, chemicals, metals, machinery, and other materials.

Furthermore, employers in Malaysia have a high capacity for performance in terms of training preparedness, skills of training providers, and other areas, according to the National Training Index (NTI) Report 2022, which evaluated 81,706 corporate organizations with over 4.3 million employees from five economic sectors and 238 subsectors. The manufacturing industry continues to have serious concerns about workplace accidents, diseases, and injuries. Malaysia's manufacturing industry is thought to be among the worst for worker safety. Manufacturing industry has advanced significantly, yet it will still lag behind other industries in terms of safety. The manufacturing industry has a significantly higher risk of occupational accidents than other sectors, according to the Department of Statistics Malaysia's (DOSM). According to the Human Resource Development (HRD) industry training participation report 2022 stated that, in 2020 and 2021, the Manufacturing industry remain a consistent ratio of training opportunities, with 1.6 training spots. The average number of training places per employee trained in the services industry increased slightly from 1.4 in 2020 to 1.5 in 2021.

1.3 PROBLEM STATEMENT

Over the past 30 years, occupational safety and health management (OSHA) has gained importance worldwide, prompting industries across sectors to provide safety training for their employees, including those in soft skill roles. However, despite efforts to implement safety training, workplace accidents continue to occur, with a rising global trend in accident rates indicating that existing training approaches may not be fully effective in reducing these incidents. In Malaysia, numerous cases report that some workers lack the necessary skills to manage the complexities of large-scale projects, primarily due to insufficient training and specialization in their work (Marhani et al., 2012). According to Workplace Safety and Health Report 2022 National Statistics there are around 46 workers who suffered fatal injuries, or 1.3 fatalities for every 100,000 workers. 614 employees suffered major injuries during work, or 17.3 injuries per 100,000 employees. 21,106 workers, or 596 injuries per 100,000 workers, had minor workplace injuries that required at least one day of medical absence or light duty. 11,915 workers, or 336 injuries per 100,000 workers, had minor occupational injuries that required at least four days of medical absence or a 24-hour hospital stay.

Therefore, the training participation is very important for the employees. It will help employees to increase their knowledge, skills, efficiency and job outcomes. Furthermore, it's also helps employees to growth in their career and to take new job responsibilities. Beside this, training participation boosts the employees to be more confidence, and reduce the number of accidents at workplace. Furthermore, training participation will also increase the knowledge of safety and create awareness of important of safety at workplace, especially for manufacturing side.

Salleh et al. (2012a) observed that early safety measures in Malaysia were implemented in response to the Occupational Safety and Health Act 1994 (OSHA 1994), which established requirements for employers to provide essential safety training for their workforce. These initiatives required employers to adhere to the rules established either for providing or sending workers to training to obtain information of safety prior to work on manufacturing sites. Workers must have attended safety and health induction/ introduction training is an important basic course, before they enter the manufacturing side.

Nevertheless, challenges remain in achieving consistent participation in safety training among employees. Many employees do not actively engage in training programs, possibly due to lack of awareness of the program's relevance or limited support from management. This lack of engagement and participation could contribute to the ongoing occurrence of workplace accidents, as employees without proper training are more likely to make mistakes or overlook safety procedures. Therefore, understanding the factors influencing safety training participation such as training motivation, management training policies and organizational learning climate, and management commitment are essential for developing targeted strategies to improve both participation rates and workplace safety outcomes.

Despite the critical role of safety training in preventing workplace accidents and ensuring compliance with occupational health and safety standards, many organizations continue to face low participation rates among employees. In industries such as manufacturing where the risk of accidents is inherently high this lack of engagement in safety training

can have serious consequences, including increased incident rates, reduced productivity, and higher operational costs.

Several factors may contribute to low participation, such as inadequate training motivation, weak management commitment, insufficient organizational learning climate, and ineffective training policies. Employees may perceive safety training as irrelevant, repetitive, or disruptive to their work schedules, while management may fail to allocate adequate resources or actively promote participation. This gap between the availability of safety training programs and actual employee engagement underscores a pressing need to identify and address the underlying causes of low participation, in order to foster a safer, more compliant, and more productive workplace.

In Malaysia's manufacturing sector, safety training is essential to minimizing workplace accidents and promoting compliance with occupational health and safety standards. Despite the availability of safety training programs, active participation remains inconsistent, largely due to challenges associated with employee motivation, management training policies and the organizational learning climate, and management commitment. One of the critical issues affecting safety training participation is the level of training motivation among employees. Motivation is an internal driver that influences the willingness of employees to engage meaningfully in training sessions. In the context of safety training, research shows that employees often view training as a compulsory task rather than an opportunity for skill enhancement or personal growth (Gagné et al., 2019). This perception stems from a lack of clear connection between safety training and tangible rewards or recognition, which may lead to disengagement and a lack of motivation to actively participate (Deci & Ryan, 2020). Intrinsic motivation, such as

personal interest in safety knowledge, and extrinsic motivation, such as career benefits or managerial recognition, are both crucial for encouraging employees to engage in training (Noe et al., 2021). In the absence of adequate motivation, employees may attend safety training without fully engaging, resulting in limited retention of knowledge and skills necessary for safe workplace practices. As a result, low motivation levels can undermine the effectiveness of safety training, contributing to ongoing workplace accidents and safety compliance issues.

Next, management training policies and the organizational learning climate significantly impact safety training participation. A well-defined training policy provides employees with clear guidelines and expectations around training requirements, while a supportive organizational learning climate fosters an environment that values continuous improvement and skill development. However, in many Malaysian manufacturing firms, safety training is often delivered through passive methods—lectures, notes, and presentations—that lack interactive or hands-on components, which are critical for effective knowledge transfer (Tezel et al., 2021). Studies suggest that active training methods, such as simulations, role-playing, or virtual reality, are more engaging and lead to better safety outcomes, as they allow employees to apply safety protocols in real or simulated scenarios (Makransky et al., 2019). Without policies encouraging such interactive formats, employees may perceive training as irrelevant or impractical, reducing their willingness to participate actively. An organizational learning climate that does not prioritize or value safety training can discourage employees from fully committing to training sessions, viewing them instead as formalities rather than valuable opportunities for growth (Kraiger & Ford, 2021).

Furthermore, the commitment level of management plays a crucial role in reinforcing the importance of safety training participation. When employees observe management's genuine dedication to safety—through policies, resources, and visible support—they are more likely to recognize the importance of training and engage in safety practices (Vinodkumar & Bhasi, 2010). Conversely, when management does not actively participate in or endorse safety programs, employees may feel that safety training is not a priority, leading to low engagement and compliance. Management commitment can include actions such as regular safety meetings, on-site audits, consistent communication about safety policies, and rewards or incentives for employees who demonstrate commitment to safety protocols. This visible support helps cultivate a safety-centric culture, which research shows is essential for reducing accidents and fostering an environment where employees feel valued and responsible for maintaining safety standards (Ford & Tetrick, 2008). Thus, without strong management commitment, safety training participation remains low, and the likelihood of workplace accidents increases, underscoring the need for further examination of this factor.

A lot of research has shown that attitudes toward safety behaviour and personality are related. However, not much research has been done to look at how training motivation, management commitment, organizational learning climate, and training policies affect training participation. Based on the above issues, the purpose of this study is to investigate the impact of training motivation, management training policies and organizational learning climate, and management commitment on safety training participation among employees at YX Company. The findings can also provide different approaches to problems arising from the influence of safety training participation.

1.4 RESEARCH OBJECTIVES

The main objective of the study is to investigate the relationship between training motivation, management training policies and organizational learning climate, management commitment and safety training participation. Therefore, the specific objectives of this study are as follow:

i. To examine the relationship between training motivation and safety training participation.
ii. To investigate the relationship between management training policies and organizational learning climate and safety training participation.
iii. To assess the relationship between management commitment and safety training participation.

1.5 RESEARCH QUESTIONS

The research questions are as follows:

i. Does training motivation influence safety training participation?
ii. Do management training policies and organizational learning climate affect safety training participation?
iii. Does management commitment influence safety training participation?

1.6 SIGNIFICANCE OF STUDY

The importance of conducting this study is to understand how safety training participation among YX Company workers can contribute to the design of targeted safety training programs. This in turn can enhance the skills and knowledge of employees, leading to improved job performance, efficiency and overall productivity within the company.

Safety training programs that vibrate with the motivations of YX Company workers are likely to result in higher level of job satisfaction. Satisfied employees are more likely to stay with the company, contributing to reduced turnover rates and the retention of valuable talent.

By identifying the impact of management training policies and organizational learning climate on safety training participation, the study can inform YX Company about the effectiveness of existing strategies. This knowledge can aid in optimizing resource allocation, ensuring that training initiatives align with employee needs and organizational goal.

Management commitment is a critical aspect that can significantly influence the success of safety training programs. Insights to the impact of management commitment can guide YX Company's leadership in making strategic decision related to training investment, policy adjustment, and communication strategies. Last but not least, this study also will help YX Company's management to identify the actual or specific need and motivations of employees. From this YX Company can improve in continuous learning & improve work performance.

1.7 DEFINITION OF KEY TERMS

1.7.1 Training Motivation

According to Tharenou (2001), training motivation refers to an individual's intention, effort, and persistence towards participating in and learning from training programs. This concept encompasses both intrinsic and extrinsic motivations, where employees engage in training either for personal growth or external rewards, influencing their overall engagement and success in training sessions.

1.7.2 Management Training Policies & Organization Learning Climate

Management training policies and organizational learning climate refer to the structures, policies, and cultural environment within an organization that supports employee learning and skill development (Tharenou, 2001). Tharenou describes organizational climate as employees' perception of their work environment, encompassing dimensions such as management support, resource availability, and opportunities for continuous improvement, which together foster engagement and skill application in the workplace.

1.7.3 Management Commitment

Vinodkumar and Bhasi (2010) define management commitment as the active involvement and prioritization of safety, quality, and employee well-being by an organization's leadership. This includes setting and reinforcing safety policies, allocating resources, and engaging in practices that demonstrate a commitment to organizational safety and compliance.

1.7.4 Safety Training Participation

Safety training participation is defined by Vinodkumar and Bhasi (2010) as the active involvement of employees in safety training programs designed to reduce workplace accidents and enhance health and safety outcomes. Participation levels often reflect both the organizational emphasis on safety and the effectiveness of training delivery methods in engaging employees.

1.8 SCOPE OF STUDY

This study focuses on examining the relationship between training motivation, management training policies, organizational learning climate and management

commitment on safety training participation among employees at manufacturing company in Klang Malaysia. Approximately 481 workers, primarily in lower management roles, were selected as respondents for the survey. This factory setting offers insight into how these factors influence safety training participation within the manufacturing sector. A quantitative approach is used, with questionnaires serving as the primary data collection tool to assess the study variables effectively.

1.9 ORGANIZATION OF THE THESIS

Chapter one covers the introduction of safety training and effectiveness at workplace and the background of study. Also, include the problem statement of research, research objectives, research question, scope of study, significance of the study and definition of key term.

Chapter two reflected on literature review on safety training and effectiveness at workplace and identifying the variable of this study. Beside this, in chapter include the theory, framework and hypothesis development.

Chapter three discussed on the research design and sampling design. The sampling design divided into three part which are population, sample size and sampling techniques. Measurement for each variable and questionnaire design, data collection procedures and data analysis techniques also presented in this chapter.

Chapter four will evaluate the findings and results of the data analysis. It also demonstrates the thrust of the research hypothesis and discusses the research findings in order to interpret and analyse the data acquired for this study.

Chapter five includes a summary of the study's key findings, discussion, conclusions, limitations, and suggestions for how the study should be applied in future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter begins with a review of related literature for this study. Firstly, the chapter explored in detail the variable of studies involved which are training motivation, management training policies and organizational learning, management commitment, as well as safety training participation. Next, the researcher explained through the underlying theory that was used in this study. Besides, hypotheses developments are illustrated and shown between the intended dependent variable (safety training participation) and independent variables clarified (training motivation, management training policies and organizational learning as well as management commitment). Lastly, the research framework is presented accordingly.

2.2. VARIABLES OF STUDY

2.2.1 Training Participation

Participation in employee training refers to employees' engagement in various structured programs, which would allow them to effectively carry out their current duties (Evans and Davis, 2005). It also includes organized and systematic training and development efforts to encourage staff members to learn (Armstrong, 2009).

According to Vinodkumar & Bhasi, “participation of employees is a behavior-based strategy that includes people or groups in the organization's upward communication and decision-making procedures.” They emphasize the depth of participation, stating that it

can range from no participation, where supervisors solely make decisions, to full participation, where all individuals impacted by a decision are actively involved.

When training gives workers a wide range of information for the general labour market, it is referred to as general participation. Conversely, when employees receive firm-specific training to enhance their understanding of particular skills and talents related to a particular industry, training participation is characterized as specialized (Benson, 2006). Therefore, imparting new knowledge, skills, abilities, behaviours, or attitudes to employees is the main objective of any training program (Dessler, 2006; DeNisi and Griffin, 2005). Accordingly, every company's ability to develop creative and innovative human resources—who will inevitably improve performance and boost the company's competitive advantage—is essential to its survival in this cutthroat environment (Chukwu, 2016; Dermol and Čater, 2013).

Participation in safety training plays a vital role in occupational health and safety efforts, especially within high-risk industries such as manufacturing. It involves more than just attending training sessions—it encompasses employee involvement, understanding, and practical application of safety knowledge in their daily tasks (Ahmad et al., 2023). This form of participation represents a critical behavioural outcome that connects the delivery of safety training to tangible improvements in workplace safety.

The success of safety training programs is largely dependent on how actively employees engage with them. When participation is lacking, the transfer of essential safety skills and knowledge becomes ineffective, which can negatively impact the organization's overall safety standards (Lee et al., 2024). In manufacturing settings,

where workers often face exposure to dangerous machinery, materials, and procedures, active and committed participation in safety training is crucial to minimizing accidents and occupational hazards (Tan & Rahman, 2023).

Safety training participation goes beyond meeting regulatory requirements—it is a critical strategy in high-risk industries such as manufacturing. It indicates how dedicated and engaged employees are in understanding and applying safety procedures in their everyday tasks. Effective training plays a vital role in making workers aware of potential hazards, teaching them how to manage risks, and preparing them to respond appropriately during emergencies.

Participation, however, involves more than just being physically present in training sessions. It also encompasses mental focus, emotional commitment, and the practical use of the knowledge gained, all of which are essential for converting training into actual safe practices in the workplace (Chen et al., 2023).

Engaged participation involves interactive behaviors such as asking questions, participating in hands-on activities, and relating training to real work situations. In contrast, passive involvement—such as attending sessions without engagement—rarely leads to meaningful behavioural change (Lim et al., 2023).

2.2.2 Training Motivation

In research by Tharenou conceptualizes training motivation as comprising two key components, Motivation to learn the intrinsic drive or genuine interest an individual has in acquiring knowledge or skills. Motivation through expectation the extent to which individuals expect that training will lead to valued outcomes (e.g., career advancement,

pay increase, recognition). This aligns with the concept of instrumentality—believing that training will yield tangible rewards.

Training motivation refers to the internal and external forces that drive an individual's willingness to participate in safety training programs (Yasen, 2020). Several scholars have defined this construct, emphasizing different aspects of motivation related to learning contexts. Colquitt, LePine, and Noe (2000) describe training motivation as "the direction, intensity, and persistence of learning-directed behaviour in training contexts," indicating that motivation in training is influenced by personal goals and the perceived relevance of the learning material. This definition forms the foundation for much of the current understanding of motivation in training environments. Mathieu, Tannenbaum, and Salas (1992) define training motivation as the degree to which employees focus on the intended learning outcomes of a training program. This aligns closely with Tannenbaum and Yukl's (1992) perspective, which views training motivation as the extent of a trainee's effort toward learning and applying skills gained during training. Both definitions highlight the link between motivation and training effectiveness, as motivated employees are more likely to achieve meaningful outcomes from their training experiences.

From a psychological perspective, Noe and Wilk (1993) define training motivation as a function of both intrinsic and extrinsic motivation, where intrinsic motivation reflects an individual's genuine interest in personal development, and extrinsic motivation involves external rewards like job security and career progression. Colquitt et al. (2000) explain that training motivation influences employee engagement and satisfaction, describing it as an individual's psychological readiness to absorb knowledge and apply

it in work contexts. Meanwhile, Ehrhart et al. (2019) propose that training motivation encompasses the cognitive and emotional drive behind training engagement, affecting the depth of learning and retention. Sitzmann and Weinhardt (2018) further emphasize training motivation's role in behavioral outcomes, suggesting that a motivated learner not only acquires skills but is also more likely to transfer them effectively to the job setting. Research suggests that employees with higher motivation are more likely to attend and actively engage in training sessions (Chiaburu & Tekleab, 2020).

According to Self -Determination theory, (SDT) intrinsically motivated employees, who find personal value and satisfaction in learning, are more likely to participate in safety training (Ryan & Deci, 2020). Moreover, extrinsically motivated employees, who perceive rewards such as career advancement or job security through participation in safety training, will also show higher involvement (Ehrhart et al., 2019). Motivation plays a crucial role in employee performance and satisfaction within organizations (Manzoor, 2012). Numerous studies have examined the factors that contribute to employee motivation and its impact on organizational effectiveness (Van den Broeck et al., 2021). These studies have found that factors such as empowerment and recognition have a positive effect on employee motivation, which in turn can lead to improved job performance and productivity (Joshi, 2021).

Furthermore, research has shown that when employees are motivated and rewarded, it leads to increased effectiveness and productivity within the organization (Manzoor, 2012). Several sources emphasize the importance of employee motivation in the workplace. They suggest that managers should focus on understanding their employees and utilizing various strategies to motivate them based on their individual needs.

Additionally, involving employees in decision-making processes and giving them a sense of ownership in the organization's policies, objectives, and strategies can further enhance motivation and organizational performance. In conclusion, the literature review suggests that employee motivation is a critical factor in improving job satisfaction, organizational performance, and productivity (MuseAliGeelmaale &, 2019).

Motivation plays a crucial role in the training process, as it determines the level of engagement, persistence, effort, and achievement exhibited by learners (Murphy & Alexander, 2000). Motivation is the desire or drive that an individual to get the work done (Sejdija, 2016). This desire can be influenced by various factors, such as intrinsic motivation (personal interest and satisfaction) and extrinsic motivation (external rewards or consequences). In the context of education, motivation is a multifaceted concept that encompasses an individual's beliefs about their abilities, intentions, and emotional responses related to learning.

Motivation is seen as a process rather than an end result, and it can be inferred from actions and self-reported thoughts and feelings (Ryan et al., 2021). Companies invest a significant number of resources in training sessions and recreational events to motivate employees because motivation is the internal state that activates, guides, and sustains behaviour towards work-related activities. Motivation is a fundamental aspect of training that drives individuals to actively engage in learning and development activities. In conclusion, training motivation is the internal drive and desire that individuals have to actively participate in work-related activities, engage in learning and development, and achieve success in their tasks and responsibilities. Motivation in

training refers to the internal drive and desire that individuals have to actively engage in work-related activities, participate in learning and development, and achieve personal growth and organizational goals, thereby contributing to a culture of safety and continuous improvement within the workplace.

2.2.3 Management Training Policies and Organizational Learning Climate

Management training policies are widely recognized as formalized sets of guidelines and procedures that govern how an organization develops its employees' competencies and skills to meet strategic goals. Several scholars have defined management training policies, emphasizing their role in organizational growth and employee development. Noe and Wilk (1993) describe management training policies as structured programs designed to ensure employees are equipped with essential technical and behavioral skills necessary for organizational success. According to Aguinis and Kraiger (2009), effective management training policies align employee capabilities with organizational demands, fostering a productive workforce capable of addressing challenges. Kirkpatrick and Kirkpatrick (2006) add that well-implemented training policies help bridge skill gaps, promote continuous improvement, and ultimately enhance employee performance. Appal et al. (2022) extend this by noting that strategic training policies encourage adaptability and resilience within the workforce, preparing employees for both current and future leadership roles. Chuang et al. (2021) emphasize that training policies that support transformational leadership cultivate an empowered workforce, which not only aligns with organizational objectives but also contributes to a collaborative, innovative work environment.

Management Training Policies (informed by Tharenou, 2001) Organizational rules, structures, or practices—including supervisory behaviours that actively support and encourage employee participation in development opportunities. Organizational Learning Climate (in relation to Tharenou's study). The overall workplace environment characterized by supportive management, enabling job conditions, and an emphasis on learning factors that facilitate employees' engagement in training and development. Management training policies are critical for the strategic alignment of employee skills with organizational objectives, providing employees with not just technical skills but also fostering broader behavioural competencies (Xhemajli et al., 2022). These policies often focus on leadership development, change management, and continuous professional development, which are essential in a fast-evolving business environment. Effective training policies also mitigate skill gaps and prepare employees for future leadership roles (Noe et al., 2020).

An organization's learning climate is defined as the collective atmosphere that facilitates or constrains learning, knowledge sharing, and development opportunities (Kraiger & Ford, 2021). A positive learning climate encourages employees to take risks, innovate, and engage in problem-solving without fear of failure. It also contributes to building a resilient workforce, one that can adapt to changes and overcome challenges through continuous learning (Zhu & Feng, 2022).

Several studies suggest that organizations with strong, well-communicated management training policies often see enhanced levels of employee performance and satisfaction (Van Waeyenberg et al., 2020). When management consistently emphasizes learning as a core value, it creates an environment where employees feel

supported in their professional growth (Noe et al., 2014). Furthermore, these training programs serve as a form of reciprocity, where employees feel a sense of obligation to reciprocate the organization's investment in them through higher engagement and commitment (Albrecht et al., 2021).

To maximize effectiveness, management training policies should be tailored to align with the organization's overall goals, including a focus on fostering employee engagement (Nauman et al., 2020). For example, training that enhances transformational leadership skills not only equips managers with tools to inspire their teams but also increases the engagement of employees by promoting a collaborative, supportive work environment (Lai et al., 2020). Additionally, creating a culture of learning requires not just top-down policies but also active participation from employees at all levels, making learning a dynamic and integral aspect of organizational life (Peler et al., 1989).

2.2.4 Management Commitment

Management commitment is broadly defined as the extent of dedication, engagement, and involvement demonstrated by an organization’s leadership, which plays a pivotal role in fostering employee commitment and enhancing organizational effectiveness. Vinodkumar and Bhasi (2010) characterize management commitment as the organizational leaders' investment in resources, policies, and practices to reinforce a culture of safety and compliance among employees. A strong commitment from management is considered a fundamental component of an effective safety management system, as it directly influences workplace safety behaviours and organizational safety performance (Cheyne et al., 1998, Wiegmann et al., 2002; Zohar, 1980).

Studies have consistently shown that management commitment to safety significantly influences employees' perceptions of workplace safety. Employees are more likely to adhere to safety protocols when they observe that their leaders prioritize and enforce safety policies (Fernandez-Muniz et al., 2007; Hofmann et al., 1995). Griffin and Neal (2000) further emphasize that positive perceptions of management commitment create a strong safety culture, where employees feel encouraged to actively participate in safety-related initiatives. To establish this culture, Neal and Griffin (2002) highlight the importance of managers visibly demonstrating their commitment to safety by their behavior and practices, integrating safety-related policies, regular training programs, and continuous monitoring of workplace hazards.

In high-risk industries, such as manufacturing, management commitment has been repeatedly identified as a key determinant of workplace safety (Cox & Cheyne, 2000; Cox & Flin, 1998; Vinodkumar & Bhasi, 2010). Leaders in such industries must ensure that safety is treated as a core organizational value or guiding principles rather than a compliance requirement (Eiff, 1999). When safety becomes an integral part of an organization's mission and operational strategy, employees are more likely to engage in safety training and adopt safe work practices (Cheyne et al., 1998; Wiegmann et al., 2002).

Moreover, research has shown that high levels of management commitment to safety can enhance employees' safety behaviour and communication (Barling & Zacharatos, 1999; Hofmann & Morgeson, 1999). Leaders who consistently enforce safety policies, provide sufficient resources, and actively engage in safety initiatives contribute to improved safety performance and reduced workplace accidents. Employees perceive

strong leadership commitment as an indication that their well-being is valued, leading to higher compliance with safety measures and greater participation in safety programs (Zohar, 1980; Tsao, Hsieh, & Chen, 2017).

Moreover, Guest (2016) suggests that a commitment-based human resource management (HRM) approach, where managers take active roles in employee well-being and professional growth, enhances a sense of responsibility and reciprocal loyalty among employees. Together, these definitions emphasize that management commitment is integral to promoting both organizational loyalty and a high-performance work culture, with tangible outcomes in safety, productivity, and long-term engagement.

Several sources were used to examine the multiple faces of commitment and the links established between various forms of commitment and organizational behaviour (Asif & Rathore, 2021). The first source emphasizes the role of leadership capacity and management behaviour in fostering employee commitment, which ultimately improves the performance of public-sector organizations. The second source highlights the integration of commitment-based human resource management practices as a means to build long-term commitment among employees. This leads to a sense of obligation towards the organization, contributing to increased performance. The third source delves into the significance of behavioral aspects in public sector employees and how they impact organizational performance. Specifically, it emphasizes that measuring commitment is not enough and that management behaviour towards employees plays a crucial role in improving organizational performance.

In conclusion, management commitment is a crucial element in promoting workplace safety, enhancing employee safety participation, and reducing workplace hazards. Organizations with high levels of safety commitment from leadership often experience greater employee engagement in safety training and compliance with workplace safety protocols (Vinodkumar & Bhasi, 2010; Neal & Griffin, 2002; Hofmann & Morgeson, 1999). Thus, fostering visible, actionable, and sustained management commitment is essential in ensuring a safe and productive work environment.

2.3 UNDERPINNING THEORY

Social Exchange Theory (SET) and Self-Determination Theory (SDT), each providing a unique lens through which the relationship between training motivation, management training policies and organizational learning climate, management commitment can be explained.

2.3.1 Social Exchange Theory (SET)

Social Exchange Theory (SET) posits that social relationships, whether personal or organizational, are based on the principle of reciprocity, where actions that benefit one party are expected to be reciprocated by the other (Cropanzano et al., 2017). This theory is particularly relevant in understanding the relationship between employees and management within organizations. In the context of safety training, management's commitment to employees' safety and professional development creates a sense of obligation in employees to reciprocate by actively engaging in organizational initiatives like safety training (Blau, 1964).

From an organizational perspective, when management invests in initiatives such as leadership development programs, comprehensive safety training, and open channels

for employee feedback, it signals to employees that their well-being is a priority (Frazier et al., 2017). This, in turn, fosters a sense of loyalty and commitment, which motivates employees to participate in safety-related activities more proactively (Frazier et al., 2017). For example, when employees observe strong management commitment to safety through clear safety policies, training opportunities, and resources, they perceive that the organization values their health and safety, which makes them more inclined to reciprocate by actively engaging in safety training and following safety protocols (Ford & Tetrick, 2008).

Furthermore, SET provides a framework to understand how a climate of trust and mutual benefit can increase employee participation in training programs. Employees who feel that their organization is investing in their growth and well-being are more likely to invest effort into their work and participate in safety training, viewing it as a reciprocal exchange (Chiaburu & Tekleab, 2020). The reciprocal nature of SET is especially useful in safety-critical industries like manufacturing, where employee participation in safety training directly impacts not only personal well-being but also organizational performance (Reader et al., 2017).

The application of SET in safety training participation highlights the importance of creating a supportive organizational learning climate. Such a climate promotes autonomy by allowing employees to see the value of training for their own professional growth rather than as a mandatory task (Gagné et al., 2019). It also nurtures competence by aligning the training content with employees' skill development needs, making it relevant and impactful for their daily roles. Relatedness is enhanced when employees

feel a sense of connection with others during training, fostering collaboration and shared responsibility for safety outcomes (Noe & Kodwani, 2020).

Additionally, the role of management commitment plays a key part in reinforcing these psychological needs. When management is actively involved in promoting a culture of continuous learning, employees are more likely to feel competent and valued, which encourages them to participate in training programs, particularly those focused on safety (Noe et al., 2014). In conclusion, SET not only provides insights into the factors driving participation in safety training but also underscores the broader importance of addressing intrinsic motivational factors to foster a culture of safety within organizations

2.3.2 Self-Determination Theory (SDT)

Self-Determination Theory (SDT), developed by Deci and Ryan (2008), emphasizes the role of intrinsic motivation in driving human behaviour. According to SDT, individuals are more likely to engage in activities that satisfy their core psychological needs: autonomy, competence, and relatedness. This theory is particularly relevant in understanding how training motivation can influence employees' participation in safety training programs (Deci & Ryan, 2008). In the organizational context, SDT suggests that employees are more motivated to engage in safety training if they perceive that the training allows them to enhance their skills (competence), provides them with the autonomy to make meaningful decisions, and fosters a sense of connection with colleagues and the organization (Ryan & Deci, 2020). When these basic psychological needs are satisfied, employees experience intrinsic motivation, which not only encourages their participation in safety training but also increases their overall engagement in the workplace (Rigby et al., 2018).

2.4 HYPOTHESIS DEVELOPMENT

Based on the literature review and theoretical foundations, the following hypotheses are proposed to examine the relationships between training motivation, management training policies and organizational learning climate, management commitment, and safety training participation.

2.4.1 Training Motivation and Safety Training Participation

Training motivation affects people's willingness and effort to participate in training events, whether it is extrinsic (such as work competence or prizes) or intrinsic (such as personal growth). The self-determination theory (Ryan & Deci, 2000) is still a key concept in describing how relatedness, competence, and autonomy support learners' long-term motivation.

Recent study confirms training motivation's mediating role in translating organizational conditions into training results. For example, Hoque and Ahmed (2024) show that a supportive organizational training environment increases motivation, which drives training effectiveness, including participation and knowledge transfer.

As suggested by the Self-Determination Theory and other related studies, training motivation is expected to have a positive relationship with safety training participation. Employees who are motivated to engage in safety training perceive it as a valuable component of their professional development and personal safety (Chiaburu & Tekleab, 2020). Training motivation also influences attitudes toward learning and the perceived benefits of safety practices (Ryan & Deci, 2020).

Research on safety training, meanwhile, is focusing more and more on how interesting delivery strategies, such gamification, simulations, hands-on activities, or flipped-learning approaches, can increase motivation and engagement. In construction contexts, flipped-learning approaches improved safety learning outcomes by about 13% over traditional methods. Furthermore, studies indicate that gamified, dynamic, multisensory, and virtual-reality methods are preferable than lecture-only approaches for increasing engagement and retention.

This hypothesis predicts that employees who are more motivated to undertake training will be more likely to actively participate in safety training programs. The rationale is that motivated employees regard safety training as good for their own well-being and job performance. Employees who are more eager to learn will be more motivated to engage fully in safety training initiatives. The reasoning behind this is that motivated workers believe safety training improves both their effectiveness on the job and their personal well-being.

H1: Training motivation is positively related with safety training participation.

2.4.2 Management Training Policies and Organizational Learning Climate and Safety Training Participation

Management training plans involve formal techniques for educating managerial workers with safety leadership skills, coaching strategies, and supervising abilities. Recent study suggests that leadership training that includes safety coaching can significantly improve both the safety climate and workers' voluntary safety behaviors. For example, safety leadership training for manufacturing managers increased safety compliance by more than 15% while improving safety climate scores significantly.

The literature highlights the importance of structured management training policies and a supportive learning climate in fostering a culture of safety. Employees are more likely to participate in safety training programs when policies clearly mandate or encourage participation, and when they are embedded within a broader organizational culture that prioritizes safety (Ford & Tetrick, 2008). According to this theory, workers who are more eager to learn will be more inclined to engage fully in safety training initiatives. The reasoning behind this is that motivated workers believe safety training improves both their effectiveness on the job and their personal well-being.

H2: Management training policies and organizational learning climate are positively related with safety training participation.

2.4.3 Management Commitment and Safety Training Participation

Management commitment to safety refers to how much organizational leaders prioritize, promote, and allocate resources to provide a safe working environment. This dedication is frequently demonstrated by visible safety leadership, policy implementation, resource support, and proactive participation in safety procedures. Employee engagement in safety training indicates their willingness and actual involvement in safety-related learning activities, such as attending training programs, completing safety modules, or participating in exercises and simulations.

According to theoretical frameworks such as Safety Climate Theory (Zohar, 2000) and Social Exchange Theory, when employees perceive strong managerial support for safety, they are more likely to respond with positive safety behaviours, such as active involvement in safety training. Previous research confirms that management commitment to safety directly impacts employee engagement with safety training

programs (Vinodkumar & Bhasi, 2010). Employees who perceive management as dedicated to safety initiatives are more likely to actively participate in safety training, as they view it as a reflection of the organization's values and priorities.

H3: Management commitment is positively related with safety training participation.

2.5 RESEARCH FRAMEWORK

Figure 2.1 shows the research framework of this study which is designed to examine how the independent variables such as training motivation, management training policies and organizational learning climate, and management commitment affect safety training participation. Each independent variable is hypothesized to positively correlate with the dependent variable, safety training participation.

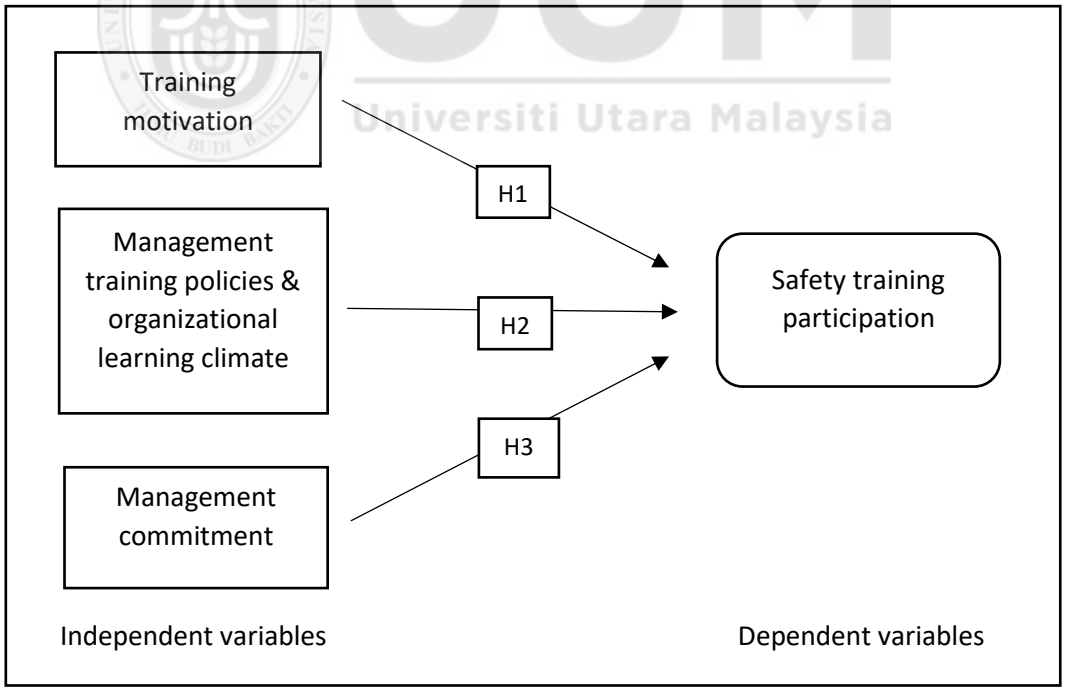

Figure 2.1: Research Framework

2.6 SUMMARY

In conclusion, the theoretical framework for this study integrates two primary theories: Social Exchange Theory and Self-Determination Theory. These theories provide a comprehensive understanding of how training motivation, management training policies and organizational learning climate, and management commitment influence safety training participation. The research framework was constructed based on these variables and suggests that each independent variable plays a significant role in predicting safety training participation. The hypotheses were developed to empirically test these relationships, based on recent literature and theoretical insights.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter describe the methodology uses in this study which is includes the research design, research methods, data collection techniques and sampling design. This chapter ended up with discuss on pilot test, data collection procedure and data analysis techniques.

3.2 RESEARCH DESIGN

Research design is important part of the any of study and efficiently providing a structure framework for collecting and analyse the data. Research design is the concept or plan for conducting research that combines particular techniques, philosophical ideas, and investigative techniques (Creswell, 2012). There are two types of research design methods: qualitative and quantitative research. Qualitative research is providing detailed interpretations of phenomena without relying on numerical measurements. In contrast, quantitative research addresses objectives through empirical assessments involving numerical measurement and analysis (Zikmund et al., 2000).

The nature of this research is quantitative design because this study uses numerical data to measure variables and simplify outcomes. According to Sekaran, Robert, and Brain (2001), quantitative methods are particularly suitable and commonly used in social sciences and business fields for providing empirical evidence. Quantitative research method typically highlights the quantification of data during collection and analysis (Bryman & Bell, 2011). Alongside, the quantitative research method is well-suited for

measuring and testing hypotheses using data collected through surveys involving a large population. According to Zikmund et al. (2013), the survey approach is defined as a method of collecting data by communicating with a representative sample of individuals. Additionally, the cross-sectional method was employed in the information-gathering process to prevent time delays. Also, cross-sectional study to acquire information and data because of less favouritisms and more accurateness of data (Sekaran and Bougie, 2016).

For this research, unit of analysis is the individual, meaning that data collected from each person will be considered separately, and each worker's response will be treated as an individual data source. These groups of workers are employed at YX Company. All returned questionnaires can serve as evidence for data and information in this study, surveys and questionnaires were chosen for actual implementation due to their effectiveness.

3.3 SAMPLING DESIGN

3 3.1 Population

The population refers to the entire group of people, events, or things that a researcher aims to explore or investigate (Sekaran & Bougie, 2016). The population for this study consists of the 481 lower management employees working at manufacturing companies in Klang, Selangor. This specific group was selected as they are directly involved in operational activities, making them relevant for understanding the impact of training motivation, management training policies and organizational learning climate, and management commitment on safety training participation. By focusing on these 481 employees, the study ensures a targeted approach that reflects the immediate context

and applicability of the findings to safety training practices within this particular factory environment.

3.3.2 Sample

A sample is defined as a subset of the population consisting of selected members from it (Sekaran & Bougie, 2016). According to Morgan (1970), who produced a table for sample size determination, it was concluded that for a population of 481, a minimum of 214 respondents is appropriate to ensure the sample size is sufficient for reliable research. This selection ensures that the study maintains reliability and validity.

3.3.3 Sampling Techniques

This study employs the convenience sampling technique, a non-probability sampling method that involves selecting participants who are most readily available and willing to respond. Convenience sampling is widely used in research due to its simplicity, cost-effectiveness, and efficiency in gathering data from large populations. In this study, the researcher distributed the questionnaire to employees of manufacturing companies in Klang, Selangor. Ensuring that responses were obtained quickly and conveniently. Convenience sampling was chosen because it allows for an accessible and practical approach to collecting data from a large workforce without the need for complex random selection procedures. Additionally, this method ensures a sufficient number of responses while maintaining the accuracy of data collection.

According to Sekaran and Bougie (2016), convenience sampling is one of the most commonly applied techniques in research as it provides an efficient way to obtain fundamental information without excessive time or resource constraints. Given the

scope and nature of this study, convenience sampling was deemed the most suitable method to gather insights from employees regarding training motivation, management training policies, organizational learning climate, management commitment, and safety training participation. During the data collection process, 214 questionnaires were returned by the respondents. Therefore, the raw data for analysis in this study consists of responses from 214 participants, meeting the minimum sample size recommended by Krejcie and Morgan (1970).

3.4 MEASUREMENTS

3.4.1 Training Motivation

Training motivation is defined as the drive or desire that influences an individual's decision to participate and engage in training activities. In this study, training motivation is measured using a seven-item scale adapted from Tharenou (2001). Example items include: "I am motivated to learn new things at work," and "Training programs provided by my organization are important to me." These items are rated on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), to capture respondents' motivation levels. The Cronbach's alpha reliability for this scale, according to Tharenou (2001), is 0.88, indicating high reliability.

Variable	Operational definition	Items	Cronbach's Alpha	Sources
Training Motivation	Internal and external factors that drive the willingness to engage in training programs	1. I try to learn as much as can from safety training 2. I believe tend to learn more from safety training than others 3. I am usually	0.88	Tharenou (2001)

	motivated to learn skills emphasized in safety training 4. I would like to improve my skills 5. I am willing to exert effort in safety training to improve skills 6. Taking safety training courses are high priority for me 7. I am willing to invest effort to improve skills & competencies	

3.4.2 Management Training Policies and Organizational Learning Climate

Management training policies refer to the frameworks that guide training practices within an organization, while organizational learning climate indicates the degree to which an environment promotes continuous learning (Rouiller & Goldstein, 1993). This study uses a six-item adapted from Tharenou (2001) to measure these factors. Sample items include: "My organization has clear training policies for employees," and "The work environment supports continuous learning and development." Items are rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Tharenou (2001) reported a Cronbach's alpha of 0.85 for this measurement.

Variable	Operational definition	Number of items	Cronbach's Alpha	Sources
Management Training Policies & Organizational Learning Climate	Policies and climate that promote structured learning and development within an organization	1. In my organization, policies & work rules make possible to participate in safety training 2. In my organization, it is easy to participate in safety training 3. In my organization, policies, regulations, and time constraints make difficult to participate in safety training 4. My organization values employee learning and development activities 5. My organization emphasizes employee learning to employees 6. My organization not have an employee learning orientation	0.85	Tharenou (2001)

3.4.3 Management Commitment

Management commitment in this study refers to the level of support, resources, and involvement that management provides toward training initiatives (Vinodkumar & Bhasi, 2010). The study uses a nine-item scale adapted from Vinodkumar & Bhasi (2010) to measure management commitment. Sample items include: "Management is committed to providing safety training to all employees," and "There is visible support from management for safety practices." Each item is rated on a 5-point Likert scale, with responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale demonstrated a Cronbach's alpha of 0.89 in previous studies, indicating strong internal consistency.

Variable	Operational definition	Number of items	Cronbach's Alpha	Sources
Management Commitment	Level of involvement and support provided by management for training and safety practices	1. Safety is given high priority by the management. 2. Safety rules and procedures are strictly followed by the management. 3. Corrective action is always taken when the management is told about unsafe practices. 4. In my workplace, managers/supervisors do not show interest in the safety of workers. 5. Management considers safety to be equally important as production. 6. Members of the management do not attend safety meetings.	0.89	Vinodkumar & Bhasi (2010)

		7. I feel that management is willing to compromise on safety for increasing production. 8. When near-miss accidents are reported, my management acts quickly to solve the problems. 9. My company provides sufficient personal protective equipment for the workers		

3.4.4 Safety Training Participation

Safety training participation is the extent to which employees engage in safety-related training provided by their organization. It is measured using a five-item scale adapted from Vinodkumar & Bhasi (2010), with items such as: "I regularly attend safety training sessions offered by my organization," and "I am fully attentive during safety training sessions." Respondents indicate their agreement with each statement on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale has a reported Cronbach's alpha of 0.87.

Variable	Operational definition	Number of items	Cronbach's Alpha	Sources
Safety Training Participation	The degree to which employees engage and participate in safety training sessions	1. I encourage my co-workers to participate in safety training when they are working under risky or hazardous conditions. 2. I always point out to the management if	0.87	Vinodkumar & Bhasi (2010)

	any safety training participation matters are noticed in my company. 3. I put extra effort to improve the safety training participation at the workplace. 4. I voluntarily carryout tasks or activities that help to improve workplace safety training participation. 5. I encourage my co-workers to participate in safety training

3.5 QUESTIONNAIRES DESIGN

The questionnaire for this study was distributed using two methods: direct personal distribution (face-to-face) by the researcher and an online medium such as Google Forms. The survey consists of approximately 34 questions, which include sections on demographics, the dependent variable, and independent variables. The questionnaires were prepared in English. They are structured into distinct sections, beginning with demographics, followed by motivation to learn, management training policies and organization learning climate, and management commitment as the independent variable, and concluding with safety training participation as the dependent variables.

Firstly, Section A of the questionnaire covers demographic information. This section of the questionnaire aims to gather information on the respondents' gender, education

level, age group, status of employment and length of service. In total, this section consists of five (5) items. Secondly, Section B and C consists of questions related to the independent variable, which is motivation to learn and management training policies & organizational learning climate. The questions were adopted from Tharenou (2001). The next independent variable questions are set in section D and E, which are management commitment and training participation. In these section questions are adopted from Vinodkumar & Bhasi (2010).

Table 3.2
Questionnaire Design

Category	Variables	Total Num. of Items
Section A	Demographics	7 items
Section B	Training Motivation	7 items
Section C	Management training policies and organization learning climate	6 items
Section D	Management Commitment towards Safety	9 items
Section E	Safety Training Participation	5 items

3.6 PILOT STUDY

A pilot study was conducted with a sample of 45 employees from manufacturing companies in Klang, Selangor to test the clarity, relevance, and reliability of the questionnaire. The aim was to identify any ambiguous questions or technical issues with the survey instrument before the main data collection. Feedback from the pilot study participants was analysed to make necessary adjustments to the questionnaire, ensuring that the final version was well-structured and comprehensible. This preliminary testing helped in refining the instrument and enhancing its effectiveness in capturing the intended data.

Table 3.5
Pilot Test

Variables	Number of items	Cronbach's Alpha
Training Motivation	7	0.977
Management Training Policies and Organization Learning Climate	6	0.794
Management commitment	9	0.767
Safety Training Participatiom	5	0.962

The reliability of the questionnaire was evaluated using Cronbach's Alpha, a statistical measure that determines the internal consistency of the items within each variable. A Cronbach's Alpha value above 0.7 is generally considered acceptable, indicating good reliability of the instrument. As shown in Table 3.5, the results of the pilot test demonstrated high reliability across all variables. The training motivation variable, consisting of seven items, recorded an exceptionally high Cronbach's Alpha of 0.977, indicating excellent internal consistency. The management training policies and organizational learning climate variable, which comprised six items, achieved a Cronbach's Alpha of 0.794, reflecting strong reliability. The management commitment variable, which included nine items, produced a Cronbach's Alpha of 0.767, signifying acceptable reliability. Lastly, the safety training participation variable, with five items, recorded a Cronbach's Alpha of 0.962, further confirming the consistency of the questionnaire items.

3.7 DATA COLLECTION PROCEDURES

The data collection process involved distributing the questionnaires both in-person and online. The in-person distribution was done directly at the manufacturing companies in Klang, Selangor to facilitate immediate response and clarification of any questions.

This method also allowed for a higher response rate, as employees were more likely to complete the questionnaire on-site where they felt comfortable. The online questionnaire was disseminated through Google Forms, enabling broader access for employees who preferred this method. Clear instructions were provided to all participants regarding the purpose of the study, confidentiality of responses, and how to complete the questionnaire. This dual approach aimed to maximize response rates and ensure diverse participation across different employee demographics.

3.8 DATA ANALYSIS TECHNIQUES

Data were analysed using the Statistical Package for the Social Sciences (SPSS), a robust software suite widely used for statistical analysis in social science research. The study will encompass descriptive analysis, Pearson correlation analysis, and multiple regression analysis, each serving a distinct purpose in interpreting the data. Descriptive analysis will provide an overview of the demographic characteristics of the participants and summarize the main findings from the questionnaires.

Following this, pearson correlation analysis will be used to determine the strength and direction of relationships between the independent variables (training motivation, management training policies, organizational learning climate, and management commitment) and the dependent variable (safety training participation). This statistical method allows to determine whether increases in one variable correspond with increases or decreases in another, thereby providing insights into the interdependencies among the variables (Field, 2018).

Lastly, multiple regression analysis technique will be employed to assess the predictive relationships between the independent variables and safety training participation, helping to understand how well the independent variables can explain variations in the dependent variable.

3.9 SUMMARY

This chapter outlined the research methodology employed in this study, detailing the research design, sampling techniques, and instruments used for data collection. The pilot study was conducted to ensure the clarity and reliability of the questionnaire, allowing for necessary adjustments prior to the main data collection phase. The procedures for distributing the survey through both in-person and online methods were also highlighted, aiming to maximize participation and ensure diverse representation of the target population. By establishing a solid methodological foundation, this study aims to effectively examine the relationships between training motivation, management training policies, organizational learning climate, management commitment, and safety training participation.

CHAPTER FOUR
FINDINGS

4.1 INTRODUCTION

This chapter presents the findings of the study based on the data collected from 214 respondents at manufacturing companies in Klang, Selangor. The data analysis was conducted using IBM SPSS Statistics 27 ensuring accurate and reliable results. The analysis begins with an overview of the response rate, followed by a demographic profile of respondents to provide insight into their characteristics. Next, descriptive analysis summarizes the mean and standard deviation for each study variable. To examine the relationships between the independent variables (training motivation, management training policies & organizational learning climate, and management commitment) and the dependent variable (safety training participation), Pearson correlation analysis was conducted. Additionally, multiple regression analysis was performed to determine the extent to which the independent variables influence safety training participation.

4.2 RESPONSE RATE

A total of 245 questionnaires were distributed to employees at manufacturing companies in Klang, Selangor out of which 214 completed responses were returned, yielding a response rate of 87.3%. This high response rate ensures the reliability and validity of the data for further statistical analysis. Table 4.1 presents the details of the response rate.

Table 4.1
Response Rate

Items	Result
Distributed Questionnaires	245
Returned Questionnaires	214
Response Rate	87.3%

4.3 PROFILE OF RESPONDENT

This section summarizes the demographic characteristics of the respondents including gender, age, education level, employment status, years of service, department, and safety training attendance.

Table 4.2
Respondents Demographic Profile

Demographic	Frequency	Percentage (%)
Gender		
Female	157	73.4
Male	57	26.6
Age		
19-29	133	62.1
30-39	74	34.6
40-49	7	3.3
50 and above	0	0
Highest education level		
SPM	17	7.9
Certificate	36	16.8
Diploma	10	4.7
Bachelor degree	5	2.3
Other	146	68.2
Status of employment		
Permanent	177	82.7
Contract	29	13.6
Other	8	3.7
Years of service		
Less than 1 year	10	4.7
1- 3 years	53	24.8
4-6 years	123	57.5
7-10 years	28	13.1

Departmental representation		
QA	14	6.5
R&D	5	2.3
IETS	2	0.9
Packing	87	40.7
Former	18	8.4
Production	51	23.8
M&E/Scada	9	4.2
Compounding	17	7.9
Chlorination	3	1.4
Other	8	3.7
Have you attended safety training before		
Yes	212	99.1
No	2	0.9
How often do you attend safety training in a year		
Once	15	7.0
3 months once	173	81.8
4 months once	22	10.3
6 months once	2	0.9

The gender distribution of respondents indicates that the majority were female (73.4%), while male respondents accounted for 26.6%. In terms of age, the largest group of respondents fell within the 19–29 age range (62.1%), followed by 30–39 years (34.6%). A small percentage of respondents were between 40–49 years old (3.3%), while no respondents were aged 50 and above.

Regarding educational qualifications, the majority of respondents (68.2%) fell under the "Other" category, which includes various informal or industry-specific qualifications. Meanwhile, 16.8% of respondents held certificates, followed by SPM graduates (7.9%), diploma holders (4.7%), and bachelor's degree holders (2.3%). This distribution highlights the diverse educational backgrounds of employees within the manufacturing industry.

For employment status, most respondents (82.7%) were permanent employees, while 13.6% were on contract, and 3.7% fell under the "Other" category, which could include part-time or temporary workers. In terms of years of service, a significant portion of respondents (57.5%) had worked for 4–6 years in the organization, followed by 1–3 years (24.8%), and 7–10 years (13.1%). A smaller group (4.7%) had been with the company for less than one year.

The respondents were distributed across different departments, with packing (40.7%) and production (23.8%) comprising the largest proportion of employees. Other notable departments included former (8.4%), compounding (7.9%), QA (6.5%), and M&E/Scada (4.2%). Meanwhile, smaller representations came from R&D (2.3%), IETS (0.9%), chlorination (1.4%), and other categories (3.7%).

A crucial aspect of this study was evaluating previous safety training participation. The vast majority of respondents (99.1%) had attended safety training before, whereas only 0.9% had not. Furthermore, 81.8% of respondents reported attending safety training once every three months, while 10.3% attended it every four months, and 7.0% attended it once a year. A smaller fraction (0.9%) attended safety training once every six months.

4.4 DESCRIPTIVE ANALYSIS

Descriptive analysis was conducted to summarize the central tendency and dispersion of responses for each key variable. Table 4.2 presents the mean and standard deviation for each variable.

Table 4.3

Descriptive Analysis

Variables	Mean	Standard Deviation
Training Motivation	4.0554	0.60378
Management Training Policies and Organizational Learning Climate	3.2749	0.60866
Management Commitment	3.6184	0.45352
Safety Training Participation	3.9841	0.70032

The results show that training motivation had the highest mean score (4.0554), suggesting that employees generally recognize the importance of safety training and are motivated to participate. This indicates that employees perceive safety training as beneficial to their skill development and workplace safety awareness, leading to higher engagement in training programs. However, management training policies and organizational learning climate had the lowest mean score (3.2749), indicating that there may be gaps in policies or organizational support for training participation. Employees may feel that the organization does not provide sufficient encouragement or structural support for continuous learning and skill enhancement in safety practices.

Meanwhile, management commitment recorded a mean score of 3.6184, suggesting a moderate level of commitment from management toward safety training initiatives. Lastly, safety training participation had a mean score of 3.9841, indicating that most employees actively engage in safety training programs.

4.5 PERSON CORRELATION ANALYSIS

Pearson correlation analysis was conducted to examine the relationships between training motivation, management training policies & organizational learning climate, management commitment and safety training participation. The results are shown in Table 4.4.

Table 4.4
Pearson's Correlation Analysis

Variable	TM	MTP/OLC	MC	STP
TM	1			
MTP/OLC	0.531**	1		
MC	0.485**	0.520**	1	
STP	0.580**	0.539**	0.476**	1

a. N=214
b. **Correlation is significant at the 0.05 level (2-tailed)
c. Independent Variables: Training motivation (TM), Management training policies and organizational learning climate (MTP/OLC) and management commitment (MC)
d. Dependent Variable: Safety training participation (STP)

The results indicate that training motivation has a moderate positive correlation with safety training participation ($r = 0.580$, $p < 0.05$). This suggests that employees who are more motivated to learn tend to actively participate in safety training programs. Similarly, management training policies and organizational learning climate also show a moderate positive correlation with safety training participation ($r = 0.539$, $p < 0.05$). This finding implies that well-structured training policies, supportive learning environments, and organizational emphasis on continuous development play a crucial role in encouraging employees to participate in safety training. Furthermore, management commitment demonstrates a moderate positive correlation with safety training participation ($r = 0.476$, $p < 0.05$). This indicates that managerial support,

enforcement of safety protocols, and commitment to employee safety contribute to greater training participation. According to the correlation coefficient interpretation by Davis (1971), the relationships between safety training participation and training motivation (r = 0.580) and management training policies and organizational learning climate (r = 0.539) fall within the range of moderate to strong correlation.

4.6 MULTIPLE REGRESSION ANALYSIS

A multiple regression analysis was conducted to examine the predictive power of the independent variables, training motivation, management training policies and organizational learning climate, and management commitment—on the dependent variable, safety training participation.

Table 4.5
Model Summary

R	R Square	Adjusted R square	Standard error of the estimate
0.655[a]	0.429	0.421	0.53283

The R Square (R^2) value obtained from the model summary is 0.429, indicating that 42.9% of the variance in safety training participation is explained by the independent variables included in this study. The remaining 57.1% of the variance is influenced by other factors not included in the model. This suggests that while training motivation, management training policies and organizational learning climate, and management commitment significantly contribute to safety training participation, additional factors may also play a role in shaping employee engagement in safety programs.

Table 4.6
Multiple Regression Analysis

Model	Unstandardized Coefficients B	Std. Error	Standardized coeficients Beta	t	Sig
(Constant)	0.379	0.317		1.195	0.233
Training motivation	0.419	0.075	0.362	5.626	<.001
Management training policies & organizational learning climate	0.301	0.076	0.262	3.982	<.001
Management commitment	0.254	0.098	0.164	2.576	.011

The findings indicate that training motivation is the strongest predictor of safety training participation ($\beta = 0.362$, $p < 0.001$), suggesting that employees who are more motivated to learn and engage in training are more likely to actively participate in safety training programs. Since the p-value is less than 0.05, hypothesis 1 (H1) is accepted.

Next, management training policies and organizational learning climate ($\beta = 0.262$, $p < 0.001$) also show a significant positive influence on safety training participation. Since the p-value is below 0.05, hypothesis 2 (H2) is accepted. This highlights the importance of clear training policies, supportive learning environments, and organizational encouragement in driving employee engagement in safety programs.

Finally, management commitment ($\beta = 0.164$, $p = 0.011$) also contributes significantly to safety training participation, although its impact is comparatively smaller than the other two variables. As the p-value is below 0.05, hypothesis 3 (H3) is accepted. This

suggests that employees who perceive stronger managerial support and enforcement of safety policies are more likely to engage in safety training initiatives. In conclusion, all three independent variables significantly influence safety training participation.

Table 4.7
Summary of Hypothesis Testing

Hypothesis	Description	Result
H1	Training motivation is positively related with safety training participation.	Accepted
H2	Management training policies and organizational learning climate are positively related with safety training participation.	Accepted
H3	Management commitment is positively related with safety training participation.	Accepted

4.7 SUMMARY

This chapter presents the results from the data analysis using IBM SPSS Statistics, including response rate, demographic analysis, descriptive statistics, correlation analysis, regression analysis, and hypothesis testing. The results indicate that training motivation, management training policies and organizational learning climate, and management commitment significantly influence safety training participation. Pearson correlation analysis showed positive relationships between all independent variables and the dependent variable, with training motivation having the highest correlation. Regression analysis confirmed that all three independent variables significantly contribute to explaining 42.9% of the variance in safety training participation. The

hypothesis testing results supported all three hypotheses, highlighting the importance of motivation, training policies, and management commitment in fostering employee participation in safety training programs.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 INTRODUCTION

This chapter presents a detailed discussion of the study's findings, focusing on the relationships between the independent variables, training motivation, management training policies and organizational learning climate, and management commitment and the dependent variable, safety training participation. The discussion is aligned with the research objectives and hypotheses formulated in earlier chapters. Additionally, this chapter highlights the implications of the study, its limitations, and suggestions for future research before concluding with a summary of key findings.

5.2 DISCUSSION OF FINDINGS

The primary objective of this study was to examine the factors influencing safety training participation among employees at manufacturing companies in Klang, Selangor. Specifically, this study investigated the effects of training motivation, management training policies and organizational learning climate, and management commitment on safety training participation. The findings revealed that all three independent variables had a positive and significant relationship with the dependent variable. This suggests that employees who are highly motivated to learn, operate within a supportive training policy framework and organizational learning climate, and perceive strong management commitment to safety are more likely to participate actively in safety training. The following sections discuss the relationships between each independent variable and safety training participation in detail.

5.2.1 Relationship between Training Motivation and Safety Training Participation

The first research objective sought to determine the relationship between training motivation and safety training participation. The results from Pearson correlation analysis and multiple regression analysis indicate a positive and significant relationship between these two variables ($r = 0.580$, $p < 0.05$; $\beta = 0.419$, $p < 0.001$). This suggests that employees who exhibit higher motivation to learn are more likely to engage in safety training. These findings align with previous research that highlights motivation as a key determinant of safety training participation and effectiveness (Bayram, 2020). Employees who perceive training as an opportunity for skill enhancement and career development tend to be more engaged and willing to participate actively in training program.

5.2.2 Relationship between Management Training Policies and Organizational Learning Climate And Safety Training Participation

The second research objective examined the relationship between management training policies and organizational learning climate and safety training participation. The results show a positive and significant relationship ($r = 0.539$, $p < 0.05$; $\beta = 0.301$, $p < 0.001$), indicating that employees are more likely to participate in safety training when there is strong policy support and a learning-oriented organizational climate. These findings are consistent with previous studies that suggest structured training policies and an organizational culture that values continuous learning contribute to higher safety training participation (Ford & Tetrick, 2008).

Organizations that integrate interactive training methods such as hands-on learning, simulations, and virtual reality tend to achieve better safety training outcomes

compared to those relying on passive safety training methods like lectures (Zhao & Lucas, 2014; Stefan et al., 2023). Furthermore, a supportive learning environment fosters employees' confidence and willingness to engage in safety training programs in this manufacturing company. Employers should ensure that training policies are well-communicated and accessible, while also fostering an organizational climate that encourages continuous learning. Possibly, providing resources, scheduling regular training sessions, and promoting a culture where employees value training as part of their professional growth can significantly enhance safety training participation.

5.2.3 Relationship Between Management Commitment And Safety Training Participation

The third research objective assessed the relationship between management commitment and safety training participation. The findings indicate a significant positive relationship ($r = 0.476$, $p < 0.05$; $\beta = 0.254$, $p = 0.011$), suggesting that employees are more likely to participate in safety training when they perceive strong management support for safety initiatives. This finding aligns with previous research that highlights management commitment as a key determinant of workplace safety culture and employee participation in safety training (Bayram, 2020). Possible reason for this is, when management actively supports safety initiatives by providing resources, enforcing policies, and leading by example, employees in this manufacturing company are more inclined to take safety training seriously.

Ford and Tetrick (2008) also emphasize that when employees perceive their supervisors as committed to safety, they develop a stronger sense of responsibility and participation in safety training programs. To enhance safety training participation, organizations

must demonstrate visible commitment by regularly conducting safety audits, holding safety meetings, and integrating safety objectives into overall business goals. Providing incentives, reinforcing training importance through leadership communication, and fostering a safety-conscious work environment can further strengthen employee participation in safety training.

5.3 IMPLICATIONS OF THE STUDY

This study provides significant theoretical, practical, and managerial implications regarding the factors influencing safety training participation among employees at manufacturing companies in Klang, Selangor. From a theoretical perspective, this study contributes to the existing body of knowledge by integrating the Social Exchange Theory (SET), and Self-Determination Theory (SDT) to explain how training motivation, management training policies and organizational learning climate, and management commitment impact employees' participation in safety training. By linking these theories, this research enhances the understanding of employees' attitudes, perceived behavioral control, and intrinsic or extrinsic motivation toward safety training, ultimately contributing to improved workplace safety outcomes. Furthermore, the findings support prior research that highlights the importance of both individual and organizational factors in determining training effectiveness.

Similarly, SET is substantiated in the study's findings, demonstrating that employees reciprocate positive managerial actions such as comprehensive training policies and a supportive learning climate by actively engaging in training. Moreover, SDT is particularly relevant, as motivation (both intrinsic and extrinsic) emerges as a crucial

factor affecting training participation, aligning with SDT's proposition that autonomy, competence, and relatedness drive individuals' engagement in workplace learning.

From a practical perspective, this study offers valuable insights for human resource professionals, safety officers, and top management in manufacturing sectors, particularly in organizations like YX Company, where workplace safety is a critical concern. Given that training motivation was found to have the highest mean score (4.0554) in this study, organizations should develop strategies that further enhance both intrinsic and extrinsic motivation among employees. This could include implementing reward-based training systems, recognition programs, and career progression incentives to encourage employees to prioritize safety training. Moreover, since management training policies and organizational learning climate scored the lowest mean (3.2749), indicating potential gaps in training accessibility or policy enforcement, companies should re-evaluate and restructure their training policies to be more inclusive, interactive, and engaging. This includes introducing more flexible training schedules, incorporating digital and virtual learning platforms, and ensuring adequate managerial support for training participation.

From a managerial perspective, this study emphasizes the pivotal role of management commitment in fostering a safety-oriented organizational culture. The significant positive correlation between management commitment and safety training participation ($r = 0.476$, $p < 0.05$) suggests that employees are more likely to participate in safety training when they perceive strong managerial support and investment in safety initiatives. Therefore, management should actively demonstrate commitment to safety through consistent communication, enforcement of safety policies, and providing

incentives for employees who excel in safety training programs. Additionally, managers should work towards enhancing the organizational learning climate by fostering an environment where employees feel encouraged to continuously improve their safety knowledge without fear of repercussions for mistakes. This could be achieved through mentorship programs, peer learning sessions, and hands-on safety drills that make training more engaging and practically relevant.

5.4 LIMITATION OF THE STUDY

Despite its significant contributions, this study is not without limitations, which should be acknowledged for a more comprehensive understanding of the findings. The first major limitation of this research was related to the data collection process, specifically the delayed response from employees. Although the study initially targeted a larger sample size, many employees took an extended period to respond to the questionnaire due to their workload and shift-based schedules in the manufacturing industry.

The second limitation pertains to the geographical and organizational scope of the study. The research focused solely on employees working at YX Company, meaning that the findings may not be entirely generalizable to other manufacturing plants or companies operating under different organizational cultures and training environments. Future research should expand the sample to include multiple factories within YX Company and other manufacturing firms to obtain a broader perspective on safety training participation trends.

A third limitation of this study lies in the self-reported nature of the questionnaire, which could lead to social desirability bias. Respondents may have overstated their

motivation or commitment to safety training due to perceived expectations from management. Although the study ensured anonymity and confidentiality, there is still a possibility that some employees provided responses they believed were more favourable rather than entirely accurate. Future studies could employ mixed-method approaches, in cooperating qualitative interviews or focus groups to gain deeper insights into employees' true attitudes and experiences regarding safety training participation.

Additionally, this study primarily relied on quantitative analysis using Pearson correlation and multiple regression techniques, which, while effective for identifying relationships between variables, does not capture the underlying reasons or personal experiences that drive employees' attitudes toward safety training participation. Future studies may benefit from a longitudinal research design, tracking employees' participation over time to determine whether changes in training policies, motivation strategies, or management commitment leads to sustained improvements in safety training participation.

Finally, while this study focused on three key factors affecting safety training participation, other potential factors such as job satisfaction, peer influence, and organizational support were not examined. Future research could explore these additional variables to provide a more holistic understanding of safety training participation.

5.5 SUGGESTIONS FOR FUTURE RESEARCH

Given the limitations discussed, several recommendations can be made for future research to further enhance understanding of safety training participation in manufacturing and other high-risk industries. First and foremost, future studies should aim to expand the sample size and diversity of respondents by including multiple organizations from different sectors such as construction, healthcare, and oil and gas industries, where safety training plays a crucial role in employee well-being and regulatory compliance. A comparative study between different industries could provide valuable insights into best practices for safety training programs and how various organizational factors influence training participation rates.

Second, future research should explore additional variables that may impact safety training participation, beyond the three independent variables studied here. For example, organizational safety culture, leadership styles, psychological empowerment, and employee personality traits could all play a significant role in determining employees' willingness to engage in safety training. Integrating these variables into a more comprehensive research framework could provide a more holistic understanding of the factors influencing safety training participation.

Third, future research should consider employing qualitative methods, such as interviews, case studies, and focus groups, to complement quantitative findings. While this study utilized structured survey data, a qualitative approach could help uncover employees' perceptions, fears, and motivational barriers related to safety training participation. Additionally, ethnographic studies or observational research within

manufacturing settings could provide real-time insights into employee behavior regarding safety training participation.

Fourth, a longitudinal study design should be considered to assess whether changes in training motivation, management training policies, and management commitment lead to sustained improvements in safety training engagement over time. A pre-and-post intervention study could also be useful, where organizations implement new training policies or incentives and researchers evaluate their impact on employee participation rates over a defined period.

Lastly, future research could examine the impact of technological advancements in training delivery methods. The rise of virtual reality (VR) simulations, e-learning platforms, and gamified training modules presents an opportunity to enhance safety training engagement. Investigating how digital training tools influence motivation and participation in safety training could provide valuable recommendations for organizations seeking to modernize their training approaches.

By incorporating these recommendations, future studies can build upon the findings of this research and contribute to a deeper and more actionable understanding of safety training participation in workplace settings.

5.6 CONCLUSION

This study aimed to examine the factors influencing safety training participation among employees at manufacturing companies in Klang, Selangor, focusing on training motivation, management training policies and organizational learning climate, and management commitment. The findings provided valuable insights into the relationships between these variables and their impact on employees' willingness to engage in safety training programs. Organizations must take proactive steps to enhance training motivation, implement supportive training policies, and demonstrate strong managerial commitment to ensure a safer and more engaged workforce. By addressing the factors identified in this study, organizations can significantly reduce workplace hazards and foster a safety-conscious work environment that benefits both employees and the organization as a whole. Future research should explore additional factors and expand the study to different industries for broader applicability.

REFERENCES

Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual review of psychology*, *60*(1), 451-474.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies, 2*(4), 314-324.

Appal, V. L., & Markom, M. N. B. (2022). The impact of training and development on the performance of academic staff in technical universities in Ghana (A Conceptual Paper). *International Journal of Academic Research in Business and Social Sciences, 12*(1), 1793-1806.

Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2021). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness: People and Performance, 8*(2), 143-165.

Asif, A., & Rathore, K. (2021). Behavioral drivers of performance in public-sector organizations: A literature review. *Sage Open*, *11*(1), 2158244021989283.

Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Developing and testing a model of safety specific transformational leadership and occupational safety. *Journal of Applied Psychology, 87*, 488-496.

Bayram, Metin (2020). Factors affecting employee safety productivity: an empirical study in an OHSAS 18001-certified organization. *International Journal of Occupational Safety and Ergonomics*, 28(1), 139-152. https://doi.org/10.1080/10803548.2020.1739892

Blau, P. M. (1964). Exchange and power in social life. John Wiley & Sons.

Bryman, A., and Bell, E. (2011). Business Research Methods. 3 rd Edition. Oxford: Oxford University Press.

Cheyne, A., Cox, S., Oliver, A., & Tomas, J. M. (1998). Modeling safety climate in the prediction of levels of safety activity. Work and Stress, 12(3), 255–271.

Chiaburu, D. S., & Tekleab, A. G. (2020). Individual and contextual influences on multiple dimensions of training effectiveness. *Journal of Occupational Health Psychology, 24*(3), 373-386.

Creswell, J. (2012). *Research design*.

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals, 11*(1), 479-516.

Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology, 85*(5), 678–707. https://doi.org/10.1037/0021-9010.85.5.678

Cox, S., Cheyne, A.J.T., 2000. Assessing safety culture in offshore environments. Saf. Sci. 34, 111–129.

Cox, S., Flin, R., 1998. Safety culture: philosopher's stone or man of straw? Work Stress 12 (3), 189–201.

Deci, E. L., & Ryan, R. M. (2019). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61*, 101860.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. Canadian Psychology / Psychologie canadienne, 49(3), 182–185. https://doi.org/10.1037/a0012801

Ehrhart, M. G., Schneider, B., & Macey, W. H. (2019). Organizational climate and culture: An introduction to theory, research, and practice. Routledge.

Eiff, G. (1999). Organizational safety culture. In proceedings of the 10th International Symposium on Aviation Psychology (pp. 1-14). Columbus, OH: Department of Aviation.

Fernández-muñiz, B., Montes-peón, J.M., Vázquez-ordás, C.J., 2012. Occupational risk management under the OHSAS 18001 standard: analysis of perceptions and attitudes of certified firms. J. Cleaner Prod. 24, 36–47. http://dx.doi.org/10.1016/j.jclepro. 2011.11.008.

Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics (5th ed.). SAGE Publications.

Ford, Michael T., and Tetrick, Lois E. (2008). Safety motivation and human resource management in North America. The International Journal of Human Resource Management, 19(8), 1472-1485. https://doi.org/10.1080/09585190802200231

Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). Psychological safety: A meta-analytic review and extension. Personnel Psychology, 70(1), 113-165. doi:http://dx.doi.org/10.1111/peps.12183

Gagné, M., Deci, E. L., & Ryan, R. M. (2019). Self-determination theory applied to work motivation and organizational behavior. Journal of Business and Psychology, 34(1), 15-28.

Guest, D. E. (2016). Human resource management and employee well-being: towards a new analytic framework. HUMAN RESOURCE MANAGEMENT JOURNAL, 27(1). DOI: 10.1111/1748-8583.12139

Griffin, M.A., Neal, A., 2000. Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge and motivation. J. Occup. Health Psychol. 5 (3), 347–358.

Hofmann, D.A., Jacobs, R., Landy, F., 1995. High reliability process industries: individual, micro, and macro organizational influences on safety performance. J. Saf. Res. 26, 131–149.

Hofmann, D.A., Morgeson, F., 1999. Safety-related behavior as a social exchange: the role of perceived organizational support and leader-member exchange. J. Appl. Psychol. 84 (2), 286–296.

Joshi, G. (2021). Rewards and their influence on employee motivation. International Journal for Research in Applied Science & Engineering Technology (IJRASET), 9(7), 94-99.

Kirkpatrick, D., & Kirkpatrick, J. (2006). *Evaluating training programs: The four levels*. Berrett-Koehler Publishers.

Kraiger, Kurt, & Ford, J. Kevin (2021). The Science of Workplace Instruction: Learning and Development Applied to Work. Annual Review of Organizational Psychology and Organizational Behavior, 8(1), 45-72. https://doi.org/10.1146/annurev-orgpsych-012420-060109

Lai, Fong-Yi et al. (2020). Transformational Leadership and Job Performance: The Mediating Role of Work Engagement. Sage Open, 10(1). https://doi.org/10.1177/2158244019899085

Makransky, Guido, Borre-Gude, Stefan, & Mayer, Richard E. (2019). Motivational and cognitive benefits of training in immersive virtual reality based on multiple assessments. Journal of Computer Assisted Learning, 35(6), 691-707. https://doi.org/10.1111/jcal.12375

Manzoor, Q. A. (2012). Impact of employees motivation on organizational effectiveness. *Business management and strategy*, *3*(1), 1-12.

Mathieu, J. E., Tannenbaum, S. I., & Salas, E. (1992). Influences of individual and situational characteristics on measures of training effectiveness. *Academy of management journal*, *35*(4), 828-847.

Murphy, P. K., & Alexander, P. A. (2000). A motivated exploration of motivation terminology. Contemporary Educational Psychology, 25(1), 3-53.

MuseAliGeelmaale, A. (2019). Impact of Employee Motivation on Organizational Performance. International Journal of Advanced Research, 7(10), 166–172. https://doi.org/10.21474/ijar01/9818

Morgan, K. (1970). Sample size determination using Krejcie and Morgan table. *Kenya Projects Organization (KENPRO)*, *38*, 607-610.

Nauman, Shazia et al. (2020). How training at work influences employees' job satisfaction: roles of affective commitment and job performance. International Journal of Training Research, 19(1), 61-76. https://doi.org/10.1080/14480220.2020.1864444

Noe, Raymond A., Clarke, Alena D.M., and Klein, Howard J. (2014). Learning in the Twenty-First-Century Workplace. Annual Review of Organizational Psychology and Organizational Behavior, 1(1), 245-275. https://doi.org/10.1146/annurev-orgpsych-031413-091321

Noe, R. A., & Kodwani, A. D. (2020). Employee training and development. McGraw-Hill Education.

Noe, R. A., & Wilk, S. L. (1993). Investigation of the factors that influence employees' participation in development activities. *Journal of applied psychology*, *78*(2), 291.

Peler, Mike, Boydell, Tom, and Burgoyne, John (1989). Towards the Learning Company. Management Education and Development, 20(1), 1-8. https://doi.org/10.1177/135050768902000101

Reader, T. W., Mearns, K., Lopes, C., & Kuha, J. (2017). Organizational support for the workforce and employee safety citizenship behaviors: A social exchange relationship. Human relations, 70(3), 362-385.

Rigby, C. Scott, and Ryan, Richard M. (2018). Self-Determination Theory in Human Resource Development: New Directions and Practical Considerations. Advances in Developing Human Resources, 20(2), 133-147. https://doi.org/10.1177/1523422318756954

Rouiller, J. Z., & Goldstein, I. L. (1993). The relationship between organizational transfer climate and positive transfer of training. Human resource development quarterly, 4(4), 377-390.

Rousseau, D. M., & McLean Parks, J. (2019). The contracts of individuals and organizations. Research in Organizational Behavior, 24, 1-43.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. Contemporary Educational Psychology, 61, 101860.

Ryan, Richard M., Donald, James N., and Bradshaw, Emma L. (2021). Mindfulness and Motivation: A Process View Using Self-Determination Theory. Current Directions in Psychological Science, 30(4), 300-306. https://doi.org/10.1177/09637214211009511

Sejdija, Q. (2016). Motivation an Important Part in Management. *Academic Journal of Interdisciplinary Studies*, *5*.

Sekaran, U., & Bougie, R. (2016). Research methods for business: a skill-building approach (7th ed.). Haddington: John Wiley & Sons.

Sekaran, U., Robert, Y.C. & Brian, L.D. 2001. Applied Business Research. Australia: John Wiley and Son Australian Ltd.

Sitzmann, T., & Weinhardt, J. M. (2018). Training engagement theory: A multilevel perspective on the effectiveness of work-related training. *Journal of Management*, *44*(2), 732-756.

Stefan, H., Mortimer, M. & Horan, B. Evaluating the effectiveness of virtual reality for safety-relevant training: a systematic review. *Virtual Reality* 27, 2839–2869 (2023). https://doi.org/10.1007/s10055-023-00843-7

Tannenbaum, S. I., & Yukl, G. (1992). Training and development in work organizations. *Annual review of psychology*.

Tezel, A., Dobrucali, E., Demirkesen, S., & Kiral, I. A. (2021). Critical success factors for safety training in the construction industry. Buildings, 11(4), 139.

Tharenou, P. (2001). The relationship of training motivation to participation in training and development. *Journal of Occupational and Organizational Psychology*, *74*(5), 599-621.

Tsao, M. L., Hsieh, C. J., & Chen, L. Y. (2017). THE ROLE OF MANAGEMENT COMMITMENT AND EMPLOYEE INVOLVEMENT IN SAFETY MANAGEMENT. International Journal of Organizational Innovation, 10(2).

Van den Broeck, A., Howard, J. L., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. Organizational Psychology Review. Advance online publication.

Van Waeyenberg, Thomas, Peccei, Riccardo, & Decramer, Adelien (2020). Performance management and teacher performance: the role of affective organizational commitment and exhaustion. The International Journal of Human Resource Management, 33(4), 623-646. https://doi.org/10.1080/09585192.2020.1754881

Vinodkumar, M. N., & Bhasi, M. (2010). Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation. Accident Analysis & Prevention, 42(6), 2082-2093.

Wiegmann, D. A., Zhang, H., von Thaden, T., Sharma, G., & Mitchell, A. (2002). A synthesis of safety culture and safety climate research (ARL0203/FAA-02- 2). Savoy, IL: University of Illinois.

Xhemajli, A., Vokshi, B., & Neziraj, E. (2022). THE LEADERSHIP OF HUMAN RESOURCE TRAINING AND THEIR IMPACT ON ORGANISATIONAL PERFORMANCE. Human Research in Rehabilitation, 12(2).

Yasen, M. K. (2020). Impact of Safety Training on Employees' Motivation in Diagnostic Laboratories-An Empirical Study of Public diagnostic Laboratories in Kurdistan Region. *Mosul Journal of Nursing*, *8*(2), 260-276.

Zhao, D., & Lucas, J. (2014). Virtual reality simulation for construction safety promotion. *International Journal of Injury Control and Safety Promotion*, *22*(1), 57–67. https://doi.org/10.1080/17457300.2013.861853

Zhu, J., Lv, H., & Feng, Y. (2022, March). The effect of psychological safety on innovation behavior: A meta-analysis. In 2022 7th International Conference on Financial Innovation and Economic Development (ICFIED 2022) (pp. 3082-3087). Atlantis Press.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2000). *Business research methods* (Vol. 6). Fort Worth, TX: Dryden Press.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business Research Methods, Ninth Edition International Edition South-Western Cengage Learning

Zohar, D. (1980). Safety climate in industrial organizations: theoretical and applied implications. Journal of Applied Psychology, 65, 96–102.

APPENDIX A : QUESTIONAIRE

Pusat Pengajian Pengurusan Perniagaan
SCHOOL OF BUSINESS MANAGEMENT
Universiti Utara Malaysia

Dear Respondent,

I am a Master candidate at Universiti Utara Malaysia, currently engaged in research on "The Impact of Motivation to Learn, Management Training Policies and Organizational Learning Climate, and Management Commitment on Safety Training Participation among Employees in Manufacturing Industry." Your participation in this study is crucial, and I kindly request you to complete the attached questionnaire, which should take approximately 10 minutes of your time.

Please be assured that the questionnaire is designed to be anonymous, and your responses will be utilized solely for academic research purposes. Should you have any inquiries or concerns regarding the questionnaire or your involvement in this study, feel free to reach out to me at punithanrany72@gmail.com . You may also use the same email address to request the research findings.

Thank you for your valuable contribution.

Sincerely,

PR. YuwaRani

Yuwarani Periasamy
Master Human Resource Management,
School of Business Management
Universiti Utara Malaysia,
Kuala Lumpur, Malaysia
punithanrany72@gmail.com

Assoc. Prof. Dr. Hadziroh Binti Ibrahim (Supervisor)
School of Business Management
Universiti Utara Malaysia,
06010 Sintok, Kedah, Malaysia
hadziroh@uum.edu.my

Section A: Demographic Information

The following information is strictly confidential and will only be used for research purpose. I will be grateful if you could kindly fill the required information. Please read the following statements and TICK (√) in the appropriate box.

1. Gender
☐ Male
☐ Female

2. Age
☐ 19 - 29
☐ 30 - 39
☐ 40 - 49
☐ 50 and above

3. Highest Education Level
☐ SPM
☐ Certificate
☐ Diploma
☐ Bachelor Degree
☐ Other (please specify) _____

4. Status of employment
☐ Permanent
☐ Contract
☐ Other (please specify) _____

5. Number of years working with the present organization: _____ years

6. Current department in this organization
☐ QA
☐ R&D
☐ IETS
☐ Packing
☐ Former
☐ Production
☐ M&E/Scada
☐ Compounding
☐ Chlorination
☐ Other (please specify) _____

7. Have you attended safety training before?
☐ Yes
☐ No

8. How often do you attend safety training in a year?
☐ Once
☐ 3 months once
☐ 4 months once
☐ 6 months once

Section B: Motivation to learn

Please read the following statements and Please (√) in the appropriate box to indicate your level of agreement for each statement below. The statements are anchored on the following 5-point Likert Scale:

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

To what extent do you agree with the following statement?

		1	2	3	4	5
Motivation to learn						
1	I try to learn as much as can from safety training					
2	I believe tend to learn more from safety training than others					
3	I am usually motivated to learn skills emphasized in safety training					
4	I would like to improve my skills					
5	I am willing to exert effort in safety training to improve skills					
6	Taking safety training courses are high priority for me					
7	I am willing to invest effort to improve skills & competencies					

Section C: Management training policies and organization learning climate

Please read the following statements and Please (√) in the appropriate box to indicate your level of agreement for each statement below. The statements are anchored on the following 5-point Likert Scale:

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

To what extent do you agree with the following statement?

		1	2	3	4	5
Management training policies and organization learning climate						
1	In my organization, policies & work rules make possible to participate in safety training					
2	In my organization, it is easy to participate in safety training					

3	In my organization, policies, regulations, and time constraints make difficult to participate in safety training					
4	My organization values employee learning and development activities					
5	My organization emphasizes employee learning to employees					
6	My organization not have an employee learning orientation					

Section D: Management commitment

Please read the following statements and Please (√) in the appropriate box to indicate your level of agreement for each statement below. The statements are anchored on the following 5-point Likert Scale:

1 Strongly Disagree	**2** Disagree	**3** Neutral	**4** Agree	**5** Strongly Agree

To what extent do you agree with the following statement?

		1	**2**	**3**	**4**	**5**
Management commitment						
1	Safety is given high priority by the management.					
2	Safety rules and procedures are strictly followed by the management.					
3	Corrective action is always taken when the management is told about unsafe practices.					
4	In my workplace, managers/supervisors do not show interest in the safety of workers.					
5	Management considers safety to be equally important as production.					
6	Members of the management do not attend safety meetings.					
7	I feel that management is willing to compromise on safety for increasing production.					
8	When near-miss accidents are reported, my management acts quickly to solve the problems.					
9	My company provides sufficient personal protective equipment for the workers					

Section E: Safety training participation

Please read the following statements and Please (√) in the appropriate box to indicate your level of agreement for each statement below. The statements are anchored on the following 5-point Likert Scale:

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

To what extent do you agree with the following statement?

		1	2	3	4	5
Safety training participation						
1	I encourage my co-workers to participate in safety training when they are working under risky or hazardous conditions.					
2	I always point out to the management if any safety training participation matters are noticed in my company.					
3	I put extra effort to improve the safety training participation at the workplace.					
4	I voluntarily carryout tasks or activities that help to improve workplace safety training participation.					
5	I encourage my co-workers to participate in safety training					

Section F: Safety self -efficacy

Please read the following statements and Please (√) in the appropriate box to indicate your level of agreement for each statement below. The statements are anchored on the following 5-point Likert Scale:

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

To what extent do you agree with the following statement?

		1	2	3	4	5
Safety self -efficacy						
1	I can identify job-related hazards					
2	I can recognize factors that affect the occurrence of accidents					
3	I can reduce the risk of accidents					
4	I can think about ways in which to improve safety at work					
5	I can acquire instructions or guidelines at work in order to work safely					
6	I can consider ways in which to improve working conditions in terms of occupational safety					

APPENDIX C: SPSS OUTPUT

DEMOGRAPHIC INFORMATION

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	157	73.4	73.4	73.4
	Female	57	26.6	26.6	100.0
	Total	214	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19 - 29	133	62.1	62.1	62.1
	30 - 39	74	34.6	34.6	96.7
	40 - 49	7	3.3	3.3	100.0
	Total	214	100.0	100.0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM	17	7.9	7.9	7.9
	Certificate	36	16.8	16.8	24.8
	Diploma	10	4.7	4.7	29.4
	Bachelor Degree	5	2.3	2.3	31.8
	Others	146	68.2	68.2	100.0
	Total	214	100.0	100.0	

Employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Permenant	177	82.7	82.7	82.7
	Contract	29	13.6	13.6	96.3
	Others	8	3.7	3.7	100.0
	Total	214	100.0	100.0	

Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	QA	14	6.5	6.6	6.6
	R&D	3	1.4	1.4	8.0
	IETS	2	0.9	0.9	9.0
	Packing	87	40.7	41.0	50.0
	Former	18	8.4	8.5	58.5
	Production	51	23.8	24.1	82.5
	M&E/Scada	9	4.2	4.2	86.8
	Compounding	17	7.9	8.0	94.8
	Chlorination	5	2.3	1.4	96.2
	Others	8	3.7	3.8	100.0
	Total	214	100.0	100.0	

Have you attended safety training before?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	212	99.1	99.1	99.1
	No	2	0.9	0.9	100.0
	Total	214	100.0	100.0	

How often attend safety training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once	15	7.0	7.0	7.0
	3 months once	175	81.8	81.8	88.8
	4 months once	22	10.3	10.3	99.1
	6 months once	2	0.9	0.9	100.0
	Total	214	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Motivation_mean	214	2.86	5.00	4.0554	0.60378
Trainingpolicies_mean	214	2.33	5.00	3.2749	0.60866
engangement_mean	214	2.56	5.00	3.6184	0.45352
safetytraining_mean	214	2.80	5.00	3.9841	0.70032
Valid N (listwise)	214				

Correlations

		Motivation_mean	Trainingpolicies_mean	engangement_mean	safetytraining_mean
Motivation_mean	Pearson Correlation	1	.531**	.485**	.580**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	214	214	214	214
Trainingpolicies_mean	Pearson Correlation	.531**	1	.520**	.539**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	214	214	214	214
engangement_mean	Pearson Correlation	.485**	.520**	1	.476**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	214	214	214	214
safetytraining_mean	Pearson Correlation	.580**	.539**	.476**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	214	214	214	214

**. Correlation is significant at the 0.01 level (2-tailed).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.655[a]	0.429	0.421	0.53283

Coefficients

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	0.379	0.317		1.195	0.233
	Motivation_mean	0.419	0.075	0.362	5.626	0.000
	Trainingpolicies_mean	0.301	0.076	0.262	3.982	0.000
	engangement_mean	0.254	0.098	0.164	2.576	0.011

a. Dependent Variable: Safety Training Participation