

**THE RELATIONSHIP BETWEEN PERSONALITY TRAITS, SOCIAL  
SUPPORT AND TRAINING TRANSFER: A STUDY IN MANUFACTURING  
COMPANY**

A thesis submitted to the College of Business, Universiti Utara Malaysia in  
fulfillment of the requirements for the degree of Master of Human Resource  
Management

**By**

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## ABSTRACT

Training is the vital contributors to organizational success and will continue to sustain the business. Every year, billions of dollars were invested in the training process, but the return of investment is not as expected. The main objective of this study is to identify the relationship between personality traits, social support and training transfer. The big five dimensions of personality traits are extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience, while social support dimensions supervisor support and peer support.

To attain the objective, the quantitative method was used and data were collected through questionnaire among operators in a private MNC in Penang. A total of 191 questionnaires were distributed and only 87 questionnaires returned which constituted 39.5% response rate. Out of the 87 questionnaires, 11 were incomplete. Thus, only 76 questionnaires (34.5%) were coded for analysis. The study utilized reliability analysis, descriptive statistics, factor analysis, pearson correlation, and regression analysis to examine the relationship between variables. The results reveal that personality traits dimension of openness to experience have relationship with training transfer. Meanwhile, social support influence training transfer. Further, social support indicated being a more significant factor than personality traits that influence training transfer. Thus, social support has high weightage in influencing employees' transfer of knowledge, skills, and ability to the job compared to personality traits. However, greater emphasis should to be taken by the organization to carry out personality check before the recruitment process and in the staffing and training needs of the employees. The training program should be given greater emphasis to social support and personality traits to enhance employees' abilities and competencies.

*Keywords: training transfer, personality traits, social support, manufacturing industry*

## ABSTRAK

Latihan adalah penyumbang kejayaan terpenting kepada organisasi dan akan mengekalkan perniagaan. Setiap tahun, berjuta ringgit di laburkan kepada proses latihan, tetapi hasil pelaburan tidak seperti yang dijangkakan. Objektif utama kajian ini adalah untuk melihat hubungan di antara personaliti, sokongan sosial, dan pemindahan latihan. Dimensi personaliti Big Five iaitu *extraversion*, bersetuju, sifat berhati, kestabilan emosi, dan keterbukaan kepada pengalaman; manakala sokongan sosial adalah sokongan penyelia dan sokongan rakan sejawat. Bagi mencapai objektif kajian, kaedah kuantitatif digunakan dan data di kutip melalui pengedaran soal selidik di kalangan operator di MNC swasta di Pulau Pinang. Sebanyak 191 soalan kaji selidik telah di edar dan pulangan hanya 87, iaitu mewakili 39.5% kadar maklumbalas. Dari 87 soalan kaji selidik, 11 tidak lengkap. Dengan itu, hanya 76 soalan kaji selidik (34.5%) digunakan untuk kajian selanjutnya. Kajian ini menggunakan analisa reliabiliti, statistik deskripsi, analisa faktor, hubungan korelasi pearson, dan analisis regresi untuk hubungan di antara pembolehubah. Keputusan dimensi personaliti iaitu keterbukaan kepada pengalaman mempunyai hubungan dengan pemindahan latihan. Manakala sokongan sosial mempengaruhi pemindahan latihan. Sebagai tambahan, sokongan sosial menjadi faktor yang lebih penting daripada personaliti yang mempengaruhi pemindahan latihan. Dengan itu, sokongan sosial mempunyai wajaran tinggi dalam mempengaruhi ilmu, kemahiran, dan kemampuan pekerja kepada pekerjaan di bandingkan dengan personaliti. Walaubagaimana pun, penekanan yang lebih banyak harus di ambil oleh organisasi untuk menjalankan ujian personaliti sebelum proses pengambilan dan keperluan kakitangan dan latihan. Program latihan seharusnya memberi penekanan kepada sokongan sosial dan personaliti untuk meningkatkan kebolehan dan kecekapan kakitangan.

*Kata kunci: pemindahan latihan, personaliti, sokongan sosial, industri perkilangan*

## **ACKNOWLEDGEMENT**

This project paper would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this research. It is a pleasure to convey my gratitude to them all in my humble acknowledgment.

First and foremost, I am heartily to my supervisor, Professor Dr. Khulida Kirana Yahya for the endless support, encouragement, guidance, thoughtful comments and invaluable insight throughout my entire master journey. It was a great pleasure to work under her supervision because her professional expertise and constructive comments had contributed enormously in my academic writing.

Special thanks are extended to my research method lecturer, Assoc. Prof Dr. Norazuwa Mat for her guidance to do the research and all lectures in the Human Resources Management Department, College of Business, Universiti Utara Malaysia for their encouragement and kind assistance rendered throughout my studies.

It is also a pleasure to offer my appreciation to my parents for their endless support and made this project paper possible. My father who has influenced my personal life to achieve my ambitions. I would like to give my special thanks to my lovely mother for having so much faith in me and for her love and support. I also would like to extend my appreciation to my siblings, cousins and all family members for their continuous encouragement.

I would like to thank to my friends Annuar Aswan, Aed Obeidat, Nurul Ain, Hanisah, and Yuzairi for their kindness and moral support that made my master journey interesting. I also would like to offer my regards and blessings to all of those who supported me in any respect during the completion of the research. Last but not least, the one above all of us, the omnipresent Allah S.W.T for answering my prayers and giving me the strength to continue the journey despite my intention wanting to give up, thank you so much Allah.

## TABLE OF CONTENTS

PERMISSION TO USE .....	III
DISCLAIMER .....	IV
ABSTRACT .....	V
ABSTRAK .....	VI
ACKNOWLEDGEMENT .....	VII
LIST OF TABLES .....	XII
LIST OF FIGURE.....	XIII
CHAPTER 1 .....	1
1.1    Background of Study.....	1
1.2    Problem Statement .....	4
1.3    Research Questions .....	6
1.4    Research Objectives .....	6
1.5    Significant of study .....	7
1.6    Definition of Key Term.....	8
1.7    Organizations of Remaining Chapter .....	9
CHAPTER 2 .....	10
2.1    Introduction .....	10
2.2    Concepts of Training Transfer .....	10
2.2.2    Concepts of Personality Traits .....	14

2.2.3	Concepts of Social Support.....	16
2.3	The Relationship between Variables.....	17
2.3.1	Relationship between Personality and Training Transfer.....	17
2.3.2	Relationship between Social Support and Training Transfer.....	21
2.4	The Underlying Theory.....	23
2.4.1	Social Cognitive Theory (SCT).....	24
2.5	Research Framework.....	26
2.6	Conclusion.....	27
CHAPTER 3.....		28
3.1	Introduction.....	28
3.2	Research Design.....	28
3.2.1	Source of Data.....	29
3.2.2	Population and Sample.....	29
3.4	Questionnaire Design.....	30
3.5	Data Collection Procedures.....	31
3.6	Measurement/Instrumentation.....	31
3.6.1	Individual Personality Traits.....	32
3.6.2	Social Support.....	34
3.6.3	Training Transfer.....	35
3.7	Pilot Test.....	37
3.8	Data Analysis Techniques.....	38
3.9	Conclusion.....	39



CHAPTER 4 .....	40
4.1 Introduction .....	40
4.2. Response rate.....	41
4.3 Respondents' Demographic Characteristics.....	41
4.4 Factor Analysis.....	43
4.4.1 Factor Analysis on Personality Traits .....	43
4.4.2 Factor Analysis on Social Support.....	46
4.4.3 Factor Analysis on Training Transfers.....	46
4.5 Reliability Analysis .....	47
4.6 Descriptive Analysis.....	49
4.7 Correlation analysis .....	50
4.8 Regression Analysis between Personality Traits, Social Support and Training Transfer.....	51
4.9 Summary of Hypotheses Testing .....	53
4.10 Conclusions .....	53
CHAPTER 5 .....	54
5.1 Introduction .....	54
5.2 Discussion .....	54
5.2.1 Objective 1: To examine the relationship between personality traits dimensions on transfer of training. ....	55
5.2.2 Objective 2: To examine the influence of social support and transfer of training. ....	58

5.2.3	Objective 3: To examine if personality traits and social support influence the transfer of training the most.....	61
5.3	Implication.....	62
5.4	Limitation of the study .....	62
5.5	Conclusions .....	63
	REFERENCES: .....	65
	APPENDIX A – Survey Questionnaire .....	71
	APPENDIX B – SPSS Outputs.....	78

## LIST OF TABLES

<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 2.1	Personality Traits Characteristic	15
Table 3.1	Questionnaire Design	31
Table 3.2	Operational Definitions and Items for Personality Traits Dimensions	32
Table 3.3	Operational Definitions and Items for Social Support	35
Table 3.4	Operational Definitions and Items for Training Transfer	36
Table 3.5	Reliability of Each Variables and Its Dimensions	38
Table 4.1	Profile of Respondents	41
Table 4.2	Factor Analysis for Personality Traits	42
Table 4.3	Factor Analysis for Social Support	45
Table 4.4	Factor Analysis for Training Transfer	46
Table 4.5	Summary for Reliability Analysis	47
Table 4.6	Descriptive Statistics of the Dependent and Independent Variables	48
Table 4.7	Correlation Results between Training Transfer, Personality Traits and Social Support	51
Table 4.8	Regression Results of Personality Traits, Social Support on Training Transfer	52
Table 4.9	Summary of Hypothesis Testing	53

## LIST OF FIGURE

<b>Figure</b>	<b>Title</b>	<b>Page</b>
Figure 2.1	Integrated model of Social Cognitive Theory	25
Figure 2.2	Research Framework of Personality Traits, Social Support and Training Transfer	26

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background of Study**

As organizations struggle to match in the worldwide economy, divergence of knowledge, skills, and ability of their workforce are important components to organizational success. Training is an initiative effort taken by employers to enhance the knowledge, skills, and ability of their employees. The target principal of training is to provide, obtain and enhance the necessary skills in order to help organizations achieve their goals and create competitive advantages by adding values to their key resources (Nikandrou, et al., 2009). Therefore, it is a basic requirement to get the job done.

Training focuses on getting the knowledge in short and/or long term periods. In terms of success training, it significantly depends on whether employees effectively and sustainably learn and transfer new information in the form of effective work performance and profit for their companies (Schneider et al., 2014).

Training is a planned effort by organizations to facilitate learning of job-related competencies, knowledge, skills, and behaviours of their employees (Noe, 2013). Thus, training can be defined as a process to move individuals' knowledge, skills, and attitude in order to improve individual, team and organization effectiveness (Aguinis & Kraiger, 2009). The aim of training is to ensure that employees gain knowledge regarding their day-to-day activities in the workplace, besides enhanceing their skills with an updated product or technology (Saks & Haccoun, 2010).

Investments in training will benefit in many ways. It can help organizations obtain and sustain competitive advantages. It can simplify organizational strategies, increase effectiveness, and improve employees' recruitment and retention (Saks & Haccoun, 2010). The main goal of any organization is to survive and make profit. Therefore, training can help organizations to achieve their goals. The successful organization can carry out training employees so they have knowledge, skills, and the necessary ability to help organizations achieve their goals and objectives. By linking training and organization strategy, training can become a strategic activity that operates in the concepts of programs and activities to reach an organization's strategic business objective (Saks & Haccoun, 2010). Through appropriate training, it could help organizations to achieve their goals and also can increase their profit. Meanwhile, training also can help organization to develop their employees as they are the valuable asset in any organization.

In terms of effectiveness, trained employees can do better work, make fewer errors, require less supervision, and develop more positive attitudes. Also trained employees usually produce high quality product and services (Saks & Haccoun, 2010), so the benefits have positive effect on an organization competitiveness and effectiveness.

To retain and attract the top talent, training is an effective tool, especially for those under age 30 who are still considering their career growth. Thus, training can be used by an organization to increase their attractiveness to prospective employees and to retain their current employees. If an organization fails to provide training opportunities to its employees, it will be disadvantaged in attracting employees and retaining current ones (Saks & Haccoun, 2010).

Training is important to employees and can benefit them and it can be divided into two categories: intrinsic and extrinsic. In terms of intrinsic, gaining the new knowledge and skills will enable them to perform jobs better. Meanwhile, extrinsic include things such as getting higher earnings as a result of increased knowledge and skill, improved marketability, greater security of employment, and enhanced opportunities for advancement and promotion (Saks & Haccoun, 2010). When talk about training, it is related to training transfer. Training transfer refers to the degree to which trainees regularly apply the knowledge, skills, behaviors, and attitudes learned through/in/from training to their jobs (Raquel and Antonio, 2007). Training transfer involves the generalization and the maintenance of, trained skills, and behaviours from the training environment to the work environment (Alan and Monica, 2006; Baldwin and Ford 1988); or the length of time that trained material is used on the job following a training program. Training transfer is the emphasis of the researchers and practitioner because it is estimated that only a small percentage of the training actually results in transfer to the job (Baldwin and Ford, 1988).

The success of training is also based on the individual characteristics. Human's personality has a significant stimulus on how learners may or may not want to become involved in their learning process, self-determining of their personal interests or stage of cognitive development (Bayne, 2004). Therefore, the personality type might reveal the learners' preferences in processing information and making decisions through their learning process (Bayne, 2004). Hence, it is important to relate employee's personality with the training transfer.

## 1.2 Problem Statement

Strategic human resources practice included training that can benefit individuals, teams, organizations, and society (Aguinis & Kraiger, 2009). The benefits to the organization outcomes can be in terms of human resource management such as positive job attitudes as well as organizational outcome, such as firm performance (Tharenou et al., 2007). Usually, the organization will invest in training, and the trainee must apply what they learn in training program into the job is known as the transfer of training (Saks & Burke, 2012). The basic purpose of training is to help employee to develop skills when applied to work, enhance job and organizational performance (Leimbach, M. 2010).

Every year organizations spend billions of money on formal training and development programs (Doleza-lek, 2005; Dirani, 2011; Azmawani et al., 2013), extremely waste of time, money and energy (estimated cost ranges from \$50 billion to \$200 billion annually) (Laker & Powell, 2011). The purpose of budget allocation for the training and development is to lead improvement in organizational performance or results criteria (Salas & Cannon-Bower, 2001). Results criterias are the primary goals of training. The main goal of training is to provide, obtain and improve the necessary skills in order to help organizations achieve their goals and create a competitive advantage by adding value to their key resources (Nikandrou, et al., 2009).

At the same times, training is the continuing concern by organizations all around the world (Machin, 2002). The aim of training is to help employees to gain skills and knowledge but there is no guarantee that training results improved performance (Azmawani et al., 2013). Reports indicate that only 10 per cent (Fitzpatrick, 2001) what learned in training is applied on the job. In addition findings by Burke and Baldwin (1999) reveal 40 per cent of that what learned in training is applied on the job. The



money that invested in training by the organizations and the failure to reap the full potential from the trained employees is still being reported by the researchers (Abdul Rahman and Bennett, 2009; Lager and Frishammer, 2010). It is a serious problem for organizations because training influences the organizational outcomes and results (Kozlowski et al., 2000). Hence, organizations should incorporate into their training program strategies to improve transfer of training (Saks & Belcourt, 2006).

Because of the importance of training, a large amount of money was invested into the training programs, but the results were not as expected from the organization. The individual differences may influence the success of training transfer (Rowold, 2007). It is because the individual characteristics that influence and determine the individual ability to acquire the provided knowledge during training courses. Different personality traits will influence different types of motivation, instructional methods and learning strategies (Moldasheva & Mahmood, 2013). The basic line of this study is to examine personality traits that can lead to the preferred learning and thinking style among the employees according to the nature of their personality type. It is important to assess the effectiveness of training strategies with different personality traits (Moldasheva & Mahmood, 2013). Because the different personality traits, will influence the ability of the employees to acquire the knowledge and skills during training, and transfer it to the workplace.

The success of training transfer is related to the support from supervisor and peer. These two groups play an important role to give the support in terms of before, within, and after training. Researchers emphasize the importance of supporting employees in the training process (Lim and Novell, 2014; Awais, 2013).

### **1.3 Research Questions**

This study is to determine the relationship of independent variable, personality traits and dependent variable, training transfer. The research questions will cover the following:

- Is there relationship between personality traits and training transfer?
- Is there relationship between social support and training transfer?

### **1.4 Research Objectives**

This study examines the training transfer dependence on personality traits and social support.

- To examine the relationship of personality trait dimensions on training transfer.
- To determine if social support influence training transfer.
- To examine whether personality traits or social support influence the training transfer the most.

## **1.5 Significant of study**

It is hoped that this study would provide significant contributions in terms of practical aspects on training transfer. From the theoretical insight, this study aims to provide some insights on the personality traits and social support towards the effectiveness of training transfer, which consists of big five model of personality and social support which consists of supervisor and peer supports. By incorporating both the independent variables, findings in the study could enrich the existing knowledge in the area of training transfer.

From the practical insight, findings from this study would be useful and valuable for the organization and scholar. In terms of organization, the finding will help employers to better understanding their employees better with regarding personality traits linked to the training transfer. Hence, the employer will identify the weakness and the strength of their employees to be sent for the training courses. Personality traits may have impact the effectiveness of training transfer. In terms of scholar, this study will help academicians to more understanding the link between personality traits, social support and training transfer. The results will help academicians to get updated findings regarding the manufacturing industry. This study intends to develop interests in and provide avenues for future scholars to conduct research regarding training transfer or the related field that is linked to the effectiveness of training transfer.

## 1.6 Definition of Key Term

Based on the purposes of this study, the following definition of the concept will be used along the process of research. The definitions of each of the variables (personality traits, social support and training transfer) are stated as follows:

**Training transfer:** Defined as maintenance of new knowledge and skills in time and generalization of new knowledge and skills (Baldwin & Ford, 1988)

**Personality Traits:** Defined as enduring characteristics that describe an individual's behaviour (Robbins, 2001)

- **Conscientiousness:** Individual are described as efficient, organized, dutiful, though, self-disciplines, and deliberated (Costa & McCrea, 1992).
- **Extraversion:** Tendency to be sociable, assertive, active, and to experience positive emotions such as energy and zeal (Costa & McCrea, 1992).
- **Openness to experience:** Tendency to be imaginative, nonconforming, unconventional, autonomous, inventive, curious, and innovative (Costa & McCrae, 1992).
- **Agreeableness:** Tendency to be highly agreeable people are cooperative, affectionate, and believing (Costa & McCrae, 1992).
- **Neuroticism:** tendency to be ability stand's with stress, calm, self-confident, and secure (Costa & McCrae, 1992)

**Social Support:** Defined as verbal and nonverbal communication between recipients and providers that reduced uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one's life experience (Albercht & Adelman, 1987).

## **1.7 Organizations of Remaining Chapter**

This study seeks to gather a better understanding of the perceptual antecedents, i.e. personality traits, social support and training transfer. Therefore, this study is organized in five chapters. Chapter 2 presents the literature review on personality traits, social support and training transfer. The methodology of the study is highlighted in Chapter 3. Data analyses and finding of the study are explained in Chapter 4. Lastly, Chapter 5 covers the discussions, limitations, and the conclusions of the study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of literature that is relevant to the research topic. Based on the literature, hypotheses and research framework are developed; and independent variable and dependent variable will also be present. This chapter is divided into three sub topics, namely literature review, which provides information relative to training transfer, personality traits and social support. The second sub topic presents the framework that explains the relationship between variables and finally the conclusions of the chapter will be presented.

#### **2.2 Concepts of Training Transfer**

Training transfer involves the induction of learning, trained skills and conducts from the training environment to the work environment, as well as the sustainment of trained skills and conducts or the length of time that trained substantial is used on the job pursue a training program (Baldwin & Ford, 1988). Training transfer is one of the important elements in the training effectiveness criteria to improve organization performance (Awais et al., 2013). Training transfer refers to the consistent application of knowledge, skills and attitudes that have been gained during training in the workplace (Blume et al., 2010; Awais et al., 2013).

In addition, Holton et al., (1997) defined transfer of training as “the degree to which trainees apply their job knowledge, skills, behaviours and attitudes they gained in training”. In this study, the definition by Blume et al., (2010) and Awais et al., (2013) will be used. Training transfer generally refers to the use of the knowledge and skills back into the job. An adequate understanding will help the organization to enrich the application of new learned knowledge, skills and attitude in the plant (Yamkovenko et al., 2007). If employees gain the new knowledge, skills, behaviour, they can give the best impact to apply those training outcomes in their work context. It’s been supported by the previous research studies conducted in various organizations such an electronics industry (Xiao, 1996), bank sectors (Liebermann & Hoffmann, 2008; Awais et al., 2013), academicians (Bossche, 2010), local governments (Hua et al., 2011), training and development association (Saks & Burke, 2012), insurance company (Lee et al., 2014). It shows that training transfer occurs in all sectors as long as the people gain new knowledge, skill and ability.

Training transfer is vital to human development. About 40% of the trainees failed to transfer directly after training, 70% falter in transfer one year subsequently the training program, and 50% of training investment result in organizational or individual improvement (Saks, 2002). It’s maybe the ability of the trainee to acquire the knowledge during the training programs and also the content of the training program itself. After the training course, it is important to apply the training immediately to ensure that the knowledge transfer is still fresh into the real job. Application of the knowledge immediately will help the employees to perform better and reduce the false task. It’s because, when the employees immediately apply the knowledge, skills, and ability to the real job, they will enhance their quality and effectiveness to produce that

thing. The management can play important roles to ensure that the employees can apply their knowledge after attended the training course.

There are two reasons why training of transfer has a positive impact on human resource development. Firstly, training transfer can enhance the employee's ability to use various cognitive and behavioural tactics or strategies to apply their training outcomes to their job with adequate supportive work atmosphere (Roberson et al., 2009). Second, training transfer can increase their responsiveness to practice what they get in terms of skills and knowledge during training transfer (Liebermann and Hoffmann, 2008).

A study conducted by Warr et al. (1999) find that correlation between learning and transfer of training was small. The same finding by Alliger et al. (1997). Shown that some barrier to apply the knowledge after training transfer process in terms of individual factors and environment. Various analysts have called for research that inspects potential mediators of the relationship between learning and transfer of training (Aguinis & Kraiger, 2009). The trainees characteristics, including their behaviour toward job are the factors that can affect the success of transfer of training in the plant (Baldwin & Ford, 1988).

The study conducted by Rahim (2013) at the National Institute of Public Administration (INTAN) is consistent with previous research that indicate employees are able to transfer the skills, knowledge and their behaviour of the plant (e.g. Liebermann and Hoffmann, 2008). But it depends on the percentage they transfer the knowledge that they gain from the training transfer process in the job. The transfer of knowledge into the plant takes a time. It's because, the individual factors will determine the ability his/her to adapt and acquire the new knowledge during training courses. The percentage of knowledge they get will influence their ability to transfer in nature of job.



However, evidences from previous research showed that such transfers have not taken place. Many factors influence to transfer problem. A well-known framework for training transfer problem by Baldwin and Ford (1988) reveal that the three main factors are trainee characteristic (or individual factors), work environment (or environmental factors) and training design factors (or situational factors). Trainee characteristics include motivation, skills and personality factors. Work environment included factors of climate such as peer support or supervisor as well as constraints and opportunities to perform a learned behaviour on the task. Training design factors included principles of learning, training content and sequencing, and also learning retention.

However, the individual characteristics, individual attitude and attributes also affect the transfer of learning-training (Huczynski & Lewis, 1980; Noe, 1986). A study by Kirwan and Birchall (2006) found that learner readiness affects transfer motivation directly and transfer motivation affect the learner personal capacity for transfer. Different factors that directly or indirectly affect the transfer of learning-training were identified by researchers (Awais, 2013). These factors are categorized as situational, individual, environmental or contextual and training design factors. This study will focus on individual and environmental factors. It's because, the main factor of successful of training transfer comes from the trainee him/herself. His/her commitment, ability, adaptability will determine individual capability to transfer the knowledge into the organization. Also, environmental factor plays important roles to ensure that knowledge transfer is totally supported.

### **2.2.2 Concepts of Personality Traits**

According to Allport (1937), personality is “the dynamic organization within somebody of those psychophysical systems that shape his unique adaptation to his surroundings”. Robbins (1996), described personality as the aggregate total of ways in which an individual reacts to and interacts with others. Meanwhile traits are enduring features that distinguish an individual’s behaviour (Buss, 1989). It's also seen as stable characteristics or nature that exhibit particular patterns of attitudes, cognitions, and emotions (Just, 2011; Allik, 2012; Vesealka et al., 2012).

In the twentieth century, the five personality factors (Big Five) proposed by Costa and Mc Crae have played a major theatrical role in psychology studies (Zhang, 2003). Many researchers in personality have proven and reached that Big Five Model is more sufficient to follow the basic dimensions of individual personality traits (Guthrie et al., 1998, Chiaburu et al., 2010). The Big Five Model consists of five dimensions, namely neuroticism, extraversion, openness to experience, conscientiousness, and agreeableness. The characteristics of each of the Big Five Model’s dimensions are outlined as follows:

Table 2.1  
 Personality traits characteristics

Dimensions	Characteristics
<b>Extraversion</b>	The extraversion dimension captures our comfort level with relationship. Extraversion tends to be gregarious, assertive, and sociable.
<b>Agreeableness</b>	The agreeableness dimension refers to an individual's propensity to submit to others. Highly agreeable people are cooperative, affectionate, and believing.
<b>Conscientiousness</b>	The conscientiousness dimension is a measure of reliability. A high conscientiousness person is responsible, organized, dependable, and persistent.
<b>Emotional stability</b>	The emotional stability dimension often labeled by its converse, neuroticism – taps a person's ability to withstand stress. People with positive emotional stability tend to be calm, self-confident, and secure.
<b>Openness to experience</b>	The openness to experience dimensions addresses range of interests and fascination with novelty. Extremely open people are creative, curious, and artistically sensitive.

Source: International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measured of Personality Traits and Other Individual Differences (<http://ipip.ori.org/>).Internet web site.

This model is considered universal because it had been translated into 25 languages in the world including Bahasa Melayu (Goldberg et al., 2006).

### **2.2.3 Concepts of Social Support**

Social support is the perception and actually that one is cared for, has assistance available from other masses, and that one is part of a supportive social network (Wikipedia, 2014). Albercht and Adelman (1987) defined social support as verbal and nonverbal communication between recipients and providers that reduced uncertainty about the situation, the self, the other, or the relationship, and the functions to enhance a perception of personal control in one's life experience. Schumaker and Brownell (2010) defined social support as "an interchange of resources between two individuals perceived by the supplier or the recipient to be designated to enhance the welfare of the recipient. The definition from Wikipedia (2014) state that the social support is tendency to care about and assist or to guide. Whereas Albercht and Adelman (1987), state that social support can be divided into the key features which is communication, uncertainty reduction, and enhanced control. In terms of communication, it's helped individuals more certain about the situation, and therefore, feel as if they have control over the situation. The information communicated will help to reduce uncertainty and consequently will enhanced control. A similar definite from Schumaker and Brownell (2010), indicates that the interchange of the resource between two parties to enhance the understanding of the recipient. The definitions above have the same goals to help the individual or parties who have a good and clear understanding.

These support can be emotional (e.g., nurturance), tangible (e.g., financial assistance), information (e.g., advice), or companionship (e.g., sense of belonging) and intangible (e.g. personal advice). Social support can be assessed as the perception that one has available assistance, the actual received assistance, or the degree to which a person is incorporated into a societal network. Support can come from many origins,

such as folk, friends, pets, neighbours, co-workers, organizations. Social support studies across a wide range of disciplines including psychology (Zhang, 2003), medicine, sociology, nursing, public health, and social work (Wikipedia, 2014).

## **2.3 The Relationship between Variables**

This sub-section will discuss the relationship between dependent variable which is training transfer and the independent variables which are the dimensions of personality traits and the dimensions of social support.

### **2.3.1 Relationship between Personality and Training Transfer**

Personality traits consist of five dimensions which are neuroticism, extraversion, conscientiousness, openness to experience and agreeableness.

First, neuroticism defined as the negative aspects of instability and concern about the uncertainty environment. Hence, neuroticism is the inability of an individual to manage his/her psychological or emotional stability. Neuroticism encloses characteristics that are included anxiety, depression, low confidence, and tendencies to experience negative emotions. Because their tendency to emotion under negative manner, an individual who scores high on neuroticism should be less likely to have positive attitudes towards their training transfer. It will likely be negatively related to training transfer. This is because characteristics such as emotional stability and anxiety are likely to reduce the performance of training transfer. This is because individuals who score high on neuroticism are more likely to experience a variety of problems such

as incomplete tasks, low performance and unhappiness relationship between classmates. All of these problems will hinder an individual's motivation and mobility to acquire knowledge, skills, and ability during training.

Second, extraversion is defined as feeling high-spirit, energetic, love to hang out and to socialize. They are able to function efficiently and competently, and to expand their networks to obtain job information, which may be important to achieve the aim of training. Extraversion people are outgoing, energetic, joyful, ambitious and assertive; represent preferences for interacting with others, sociable, active, energetic, bold, dominant, and status seeking (Mount et al., 2005). Extravert people tend to be socially oriented, whereby they like to socialize and make friends. Thus, extroverts are more likely to have a greater number of close friends compared to neurotic people. Their tendency in the training may excel is the active stance they take towards learning (Cullen et al., 2013). Take an active stance to learning may improve learning and transfer by increasing the ability to planning, monitoring, and evaluating which will return related into training (Bell & Kozlowski, 2008).

Third, conscientiousness individual is organized, able to complete assignments on time and very concerned about the completeness of a task carried out correctly. There are three main characteristics of conscientiousness, which are achievement orientation (hard working and persistent), dependability (responsible and careful), and orderliness (organized). Thus, conscientiousness could be related to an individual's degree of self-control, as well as the need for achievement, order, and persistence. According the study conducted by Taher et al., (2011), conscientiousness has a significant interaction between learning approach. It is because, conscientiousness are more responsible for what they see and well organize the knowledge that they learned. Meanwhile, finding by Salgado (1997) indicate that conscientiousness is more related to

training outcomes. Individuals who have high conscientiousness are likely to pay attention to the training material, training content, and will use the meta-cognitive strategies of planning, observation, and evaluation to enrich their learning process (Cullen et al., 2013). It also affects learning by affecting motivation to learn (Colquitt et al., 2000).

Fourth, openness to experience is how people are willing to make adjustments in notions and activities in accordance with new ideas or situations are more thoughtful, tend to fit the opinions of others with more tolerance, agree to and accept. Openness to experience is characterized by intellections and unconventionality. Hence, It generally refers to openness people that are sensitive, flexible, creative and curious. Thus, openness to experience traits represented the desire for personal growth (Mount et al., 2005). Meta-analysis findings show that openness to experience is positively related to learning (Barrick & Mount, 1991; Salgado, 1997).

Fifth, agreeableness personality contains features good-hearted, well-mannered, friendly, sympathetic, collaborative and fun approachable. In terms of training transfer, the agreeableness individual will easily adapt the training environment. It is because the individual's friendliness, collaborativeness and approachability that will help his/her behavior. However, not many literatures discuss about agreeableness and training transfer.

Based on the above literature, it is postulated that:

**H1: There is a relationship between personality traits and training transfer.**

*H1a: There is a negative relationship between neuroticism and training transfer.*

*H1b: There is a positive relationship between extraversion and training transfer.*

*H1c: There is a positive relationship between conscientiousness and training transfer.*

*H1d: There is a positive relationship between openness to experience and training transfer.*

*H1e: There is a positive relationship between agreeableness and training transfer.*



### **2.3.2 Relationship between Social Support and Training Transfer**

Many researchers have recognized the importance of supportive elements in training transfer and consequently link the supervisor's (Lim and Nowell, 2014; Nijman et al., 2006; Xiao, 1996) and peer's support to successful transfer (Lim and Nowell, 2014; Awais et al., 2013; Nijman et al., 2006; Xiao, 1996). According to Motesino (2001) and Smith-Jentsch et al., (2002), social support positively influenced the transfer of training.

In the supervisor's support context, supervisor's support has issues regarding the time and the type of support required. It supervisor's support has the critical task of providing reinforcement for learning on the job (Bates et al., 1996; Bossche et al., 2010). The definition above is used widely in the study. supervisor's support requires much more active participation, such as modelling trainee behaviour, discussing the training capacity and offering opportunities to use (Nijman et al., 2010). The support from supervisor such as encouragement to attend training, supervision on how to apply training, and adequate opportunities and time to apply training was able to motivate employees to apply what they learnt through training into the job (Hua et al., 2011).

The study by Haslinda and Mahyuddin (2009), Festner and Gruber (2008), Lim and Morris (2006), advocates that supervisor's support has a significant improvement on the training transfer. They found that when employees got support from supervisors they had more chances, clear direction and sufficient time to learn how to make use of the training in the plant (Hua et al., 2011). It is shown that the supervisor played important roles to ensure that the employees apply their knowledge, skills, and ability in the job.

The study carries out by Chiaburu and Marinove (2005), found that the supervisor support is not linked with transfer of training. Their study measured the

supervisor support from the perspective of “employee development”, “practice new skills”, and “constant reminder to apply skills”. Similar finding by Hua (2012), indicates that supervisor support is not significant to training transfer. While Facticeau et al., (1995) measured the supervisor support in term of “supervisor to learn to change” and the study found that supervisor’s support is positively related to pre-training motivation. In other terms, “discussion with supervisor to use the new thing”, “supervisor’s involvement of familiarization with the training”, and “receiving positive feedback from supervisor” were measured by Lim and Johnson (2002) is seen as being more related with transfer of training.

Meanwhile the study focusing on supervisor support shows mixed results. Review by Chang and Hampson (2008) show that the relationship with supervisor’s support, has non-significant relationship between a supportive environment and training transfer outcome have also been found.

In the peer support context, it is more to which focuses predominantly on supporting the application of learning on the job (Holton et al., 1997; Bossche et al., 2010). Peer support has a significant influence on the training transfer (Hatala & Fleming, 2007) and peer’s support factors affected training transfer includes setting learning goals, giving assistance or offering positive feedback (Bossche et al., 2010). The study was conducted by Holton et al. (2007) and Hua (2012) found that among social support factors, peer’s support has a greater impact on past training behaviour and motivation to transfer. Meanwhile, the study conducted by Bossche et al., (2010) discovered that peer support, in the form of feedback was very important in determining employees' ability to apply what they earned on the job.

The comprehensive reviewed of 170 studies by Burke and Hutchins (2007) concluded that peer support had a more consistent relationship with training transfer.

The study conducted by Chaiburu and Marinova (2005) found that peer support is significantly related to pre-training motivation and skills transfer. While the study done by Hawley and Barnard (2005) and Martin (2010) reveal that peer support influence positive transfer.

In addition, the study by Facticeau et al. (1995) found that there is no significant relationship between peer support and motivation to training transfer. This is because of the lack of consistent result; more research is needed to understand the significant effects of these variables in training transfer. Based on the literature, the following hypothesis is proposed:

**H2: There is a relationship between social support and training transfer.**

## **2.4 The Underlying Theory**

Many researchers have concluded that factors such as personality traits (Cullen et al., 2013; Taher et al., 2011; Bell & Kozlowski, 2008; Mount et al., 2005; Colquitt et al., 2000) and social support (Lim & Nowell, 2014; Awais et al., 2013; Hua et al., 2011; Bossche et al., 2010; Haslinda & Mahyuddin, 2009; Nijman et al., 2006; Xiao, 1996) are the major indicator of success of training transfer. This inference aligns with the theory of Social Cognitive Theory (SCT).

### **2.4.1 Social Cognitive Theory (SCT)**

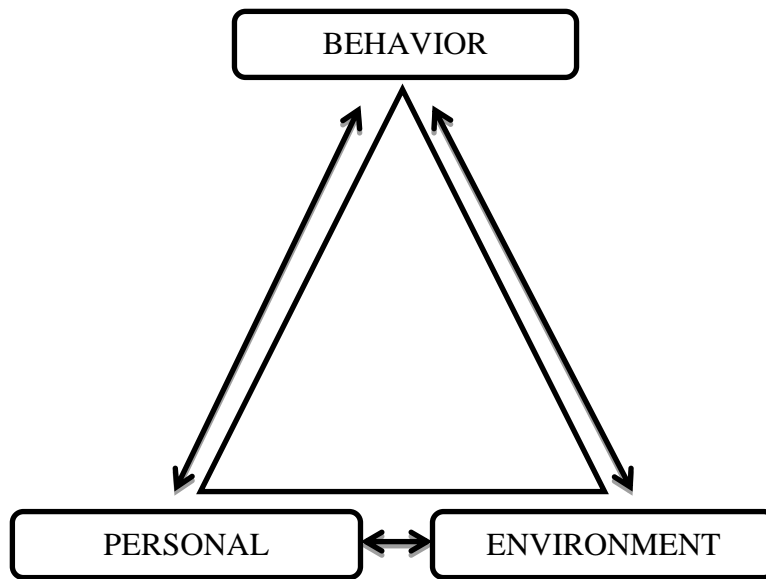
In 1941 Miller and Dollard proposed the theory of social cognitive theory. In 1963 Bandura and Walters broadened the social cognitive theory with the principles of observational learning and vicarious reinforcement. Bandura provided his concept of self-efficacy in 1977, while he refuted the traditional learning theory for understanding learning ([www.utwente.nl](http://www.utwente.nl)).

Social Cognitive Theory (SCT) is a learning theory based on the ideas that people learn by watching what others do, and that human thought processes are central for understanding the personality. This theory provides a framework for understanding, predicting and changing humans' behaviours.

The main tenets of Bandura's theory are:

- People learn by observing others
- The same set of stimuli may provoke different responses from different people, or from the same people at different times
- The world and a person's behaviour are interlinked
- Personality is an interaction between three factors: the environment, behaviour, and a person's psychological processes.

SCT revolves around the notion that learning correlates to the observation of role models.



*Figure 2.1*  
*Integrated model of Social Cognitive Theory (SCT)*

The concepts of the SCT have three main elements which are behaviour, personal and environment. In the behaviour element, they are related to the capability of the behaviour which are knowledge and skills to perform a given behaviour, and promote mastery learning through skills learning. In the personal element, it is related to cognitive, affective, and biological events. It is more to personal regulation of goal-directed behaviour or performance, provide opportunities for self-monitoring, goal setting, problem solving, and self-reward. Meanwhile, in the environment element, they are factors physically external to person, provides opportunities and social support.

In this research context, the personal element can describe the personality traits. The individual ability is based on the cognitive, affective, and biological events (www.utwente.nl). These will affect the ability of the individual to acquire the knowledge and skills during training and transfer them into the workplace. Meanwhile, the environment factor that is external, will affect the individual, such social support. In

this study, social support can be supervisor and peer. The environment factor (social support) will influence the individual to enhance their knowledge and skills into the workplace. This is because, social support have their roles to help the employees to transfer the knowledge and skills to the workplace. Furthermore, the behaviour is the expected form. The goal of the training is to transfer the knowledge, skills, and ability to the workplace. The process is to ensure that knowledge, skills, and ability are fully utilised.

## 2.5 Research Framework

Based on the literature, the research framework was proposed as the following figure:

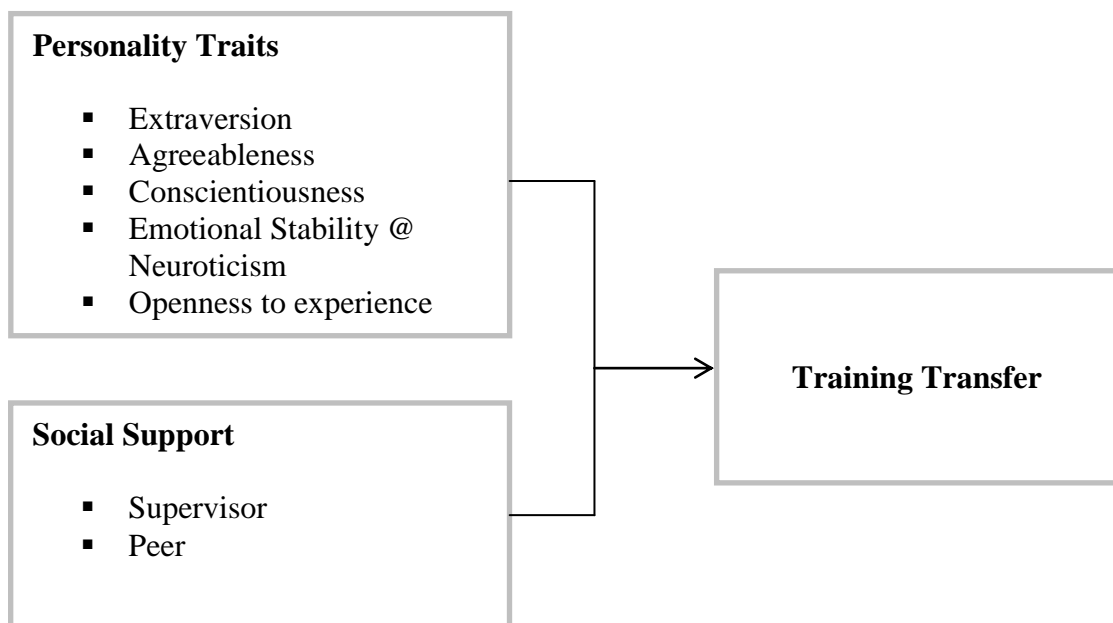


Figure 2.2

*Research framework of personality traits, social support and training transfer.*

As shown in the framework, there are two groups of variables, that are the dependent and independent variables. The dependent variable of this study is training transfer. The

independent variables are personality traits and social support. Personality traits consist of five dimensions derived from the Big Five Model. The five dimensions are neuroticism, extraversion, conscientiousness, openness to experience, and agreeableness. The Big Five Model is chosen because it represents taxonomy to comprehensively describe human personality. Furthermore, its validity is strongly supported by empirical evidences. The two social support dimensions are supervisor support and peer support. These two dimensions are used as they are linked to the success of the training transfer based on the previous empirical studies.

## **2.6 Conclusion**

This chapter presents the reviews of literature that focuses on the relationship between personality traits, social support and training transfer. Based on the literature review, the research framework is proposed. The following chapter describes in detail the procedures and the methodology for data collection and analysis of this study.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design and the used method in this study. It consists of research design, population and sample, data collection procedures, measurement/instrumentation, and data analysis techniques.

The study aims to determine the relationship between personality traits, social support, and transfer of training. Therefore, personality traits and social support have been chosen as two independent variables. The dimensions for the personality traits consist namely of neuroticism, extraversion, conscientiousness, openness to experience and agreeableness. In addition, the dimensions of social support consist of supervisor support and peer support.

#### **3.2 Research Design**

There are two types of research namely qualitative and quantitative research. In this study, a quantitative type of the research is used. The purpose is to examine the relationship between personality traits, social support and transfer of training. Correlation studies are used as a formulated method to measure the items. According to Cavana et. al., (2001), correlational study is a study that specially used to identify the relationship between important factors (independent variable) and the problem (dependent variable). Furthermore, this study is a cross-sectional research, in which data is collected, analysed, and summarized statistically while the conclusion is drawn



at a single-point in time. Because of the resource limitations in most cases, a cross-sectional research is chosen over a longitudinal-research approach by researchers (Sekaran, 2010). Hence, this study adopts a cross-sectional (a one-shot) method in the data collection process.

### **3.2.1 Source of Data**

The primary data pertaining to the relationship between personality traits, social support and training transfer, is collected through a self-administrated questionnaire.

### **3.2.2 Population and Sample**

An individually Unit of analysis employed in the data collection from the targeted population who are operators in manufacturing industry at the Malaysia Smelting Corporation Berhad, in the Penang Free Trade Zone.

This study is conducted at Malaysia Smelting Corporation Berhad (MSCB) in Penang. The population is limited to only MSCB operators due to the time constraint.

Based on the sampling frame, there is a total of 380 employed operators in the respective manufacturing organization. Based on generalized scientific guidelines for sample size decisions table provided by Krejcie and Morgan (1970) as cited in Piaw (2012), the appropriate sample size for a population of 380 is 191 (n). If the appropriate sampling design is not used, a large sample size will not allow the findings to be generalized to the population (Sekaran & Bougie, 2010). The purpose of sampling is to use a relatively small number of cases to know about their larger number (Piaw, 2012). Thus, these 191 (n) sample sizes draw a conclusion about the entire population on the manufacturing industry in the northern region. In order to identify the subject of this

research, convenience sampling is used because it has the least bias and offers the most generalizability (Sekaran, 2010); at randomization, the process by which individual are drawn (i.e., everybody has a known and equal chance of being drawn) (Sekaran & Bougie, 2010); so the data collection is more accurate without any prejudice.

### **3.4 Questionnaire Design**

The questionnaire design as in Table 3.1. Part A contains questions for personality traits which cover five dimensions namely extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Part B consists of questions for social support to know the type of support in the organization which influences the training transfer. Part C seeks answers for training transfer which can help the employees to enhance their knowledge, skills, and ability. Part D contains information regarding the respondents demographic profile which includes gender, age, race, length of service, salary, the number of times they attended the training per year and who support the training course. The questionnaire starts and ends with courteous note thanking them for their participation. In this study, questionnaires are distributed to respondents in the Bahasa Melayu version. (See Appendix 1).

Table 3.1  
*Questionnaire Design*

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<b>Part</b>	<b>Content</b>
Part A	Personality traits
Part B	Social Support
Part C	Training transfer
Part D	Demographic profile

---

### **3.5 Data Collection Procedures**

This is a cross-sectional study, which utilizes questionnaires to collect the primary data. The data is gathered once a period of two weeks to answer the research questions (Sekaran & Bougie, 2010). In order to distribute the questionnaire, self-administrated technique is used by the researcher. This technique is chosen because data could be collected from the respondents within a short period that is between five hours after the questionnaires' distribution.

### **3.6 Measurement/Instrumentation**

The personality traits is assessed with five dimensions and the social support is assessed with two dimensions, and training transfer as uni dimension. There are 50 items for personality traits, eight items for social support and six items for training transfer. All items are evaluated based on a seven-point Likert Scale.

### 3.6.1 Individual Personality Traits

In order to get a valuable data regarding personality traits, this study uses the International Personality Item Pool (IPIP). The main reasons for choosing this instrument because of its high-reliability value of Coefficient Alpha between .79 to .89 (www.ipip.ori.org). Furthermore, items from IPIP have been translated from English into more than 25 other languages, including Bahasa Melayu (Goldberg et al., 2006). Currently, the IPIP scales are widely used by over 80 publications (Goldberg. et al., 2005).

In this study, 50-items of IPIP were selected to measure the five dimensions of personality traits: neuroticism, extraversion, conscientiousness, openness to experience, and agreeableness. The items and the operational definitions of the dimensions are listed in Table 3.2.

Table 3.2

*Operational Definitions and Items for Personality Traits Dimensions*

<b>Dimensions</b>	<b>Operational definition</b>	<b>Items</b>
<b>Extraversion</b>	Someone who is sociable and like to make friends.	<ol style="list-style-type: none"> <li>1. I like to life of the party.</li> <li>2. I don't talk a lot.®</li> <li>3. I feel comfortable around people.</li> <li>4. I keep in background.®</li> <li>5. I start conversation.</li> <li>6. I have little to say.®</li> <li>7. I talk a lot different people at parties.</li> <li>8. I don't like to draw attention to myself.®</li> <li>9. I don't mind being center of attention.</li> <li>10. I am quiet around strangers.®</li> </ol>
<b>Agreeableness</b>	Someone who is cooperative, altruism and sensitivity to other's need.	<ol style="list-style-type: none"> <li>1. I feel little concern for others.®</li> <li>2. I am interested in people.</li> <li>3. I insult people.®</li> <li>4. I sympathize with other's feeling.</li> <li>5. I am not interested in others people problem.®</li> </ol>

		6. I have a soft heart.
		7. I am not really interested in others.®
		8. I take time out for others.
		9. I feel others' emotions.
		10. I make people feel at ease.
<b>Conscientiousness</b>	Someone who is hardworking, dependable and orderliness.	1. I am always prepared.
		2. I leave my belongings around.®
		3. I pay attention to details.
		4. I always make mess of things.®
		5. I get chores done right way.
		6. I often forget to put things back in their proper place.®
		7. I like order.
		8. I shirk my duties.®
		9. I follow as schedule.
		10. I am exacting in my work.
<b>Neuroticism @ Emotional Stability</b>	Someone who is lack of emotional stability	1. I get stresses out easily. ®
		2. I am relaxed most of the time.®
		3. I always worry about things.
		4. I seldom feel sad.®
		5. I am easily disturbed.
		6. I get upset easily.
		7. I change mood a lot.
		8. I have frequent mood swings.
		9. I get irritated easily.
		10. I often feel sad.
<b>Openness to experience @ Intellect</b>	Someone who is intellectualism and unconventionality.	1. I have a rich vocabulary.
		2. I have difficulty understanding abstract idea.®
		3. I have vivid imagination.
		4. I am not interested in abstract idea.®
		5. I have excellent idea.
		6. I do have a good imagination.®
		7. I am quick to understanding things.
		8. I use difficult words.
		9. I spend time reflecting on things.
		10. I am full of ideas.

® = Negatively worded items

Source: International Personality Item Pool (IPIP) (2001)

In this instrument, the respondents have been asked to indicate the degree to which they agree about their personality traits. They rate their level of agreement with specific item on a seven-point Likert Scale (1 = strongly disagree to 7 = strongly agree).

The seven-point Likert Scale is used in this research because it prevents people from being neutral in their response.

### **3.6.2 Social Support**

The items' series of statement are employed to assess the organizational factors (supervisor and peer relationship). The items were originally derived from Xiao (1996). The Cronbach Alpha for this instrument is between .75 and .76 for supervisor support, and between .74 and .75 for peer support. The respondent rate their level of agreement with specific item on a seven-point Likert Scale (1= strongly disagree to 7 = strongly agree). The operational definitions and items are shown in the Table 3.3 below:

Table 3.3

*Operational definitions and items for Social Support*

<b>Dimensions</b>	<b>Operational definition</b>	<b>Items</b>
Supervision	The supervisor behaves in ways congruent with the training objectives to ensure that employees apply the knowledge into their job/task.	<ol style="list-style-type: none"> <li>1. My supervisor helps me set goals for applying new knowledge, skills, and ability to my job.</li> <li>2. My supervisor sets criteria for applying new knowledge, skills, and ability to my job.</li> <li>3. My supervisor provides assistance when I have a problem trying out knowledge, skills, and ability.</li> <li>4. My supervisor discuss how to apply knowledge, skills, and ability to job situations.</li> <li>5. My supervisor informs me how well I accomplish tasks by using knowledge, skills, and ability.</li> <li>6. My supervisor informs me of our group performance in accomplishing tasks.</li> </ol>
Peer relationship	The interdepent relationship of group members affects the effectiveness of the group as well as the individuals.	<ol style="list-style-type: none"> <li>1. My peers help me with information in applying new knowledge, skills, and ability.</li> <li>2. My peers care about my applying new knowledge, skills, and ability on the job.</li> </ol>

Source: Xiao (1996)

### 3.6.3 Training Transfer

6 items of statments have been employed to assess transfer of training. The items were originally derived from Xiao (1996). Multiple researchers (Burke & Saks, 2009; Jiadev & Chirayath, 2012) had used this instrument. The Cronbach Alpha for this instrument is

.83 which makes this instrument valid and reliable. The respondents rate their level of agreement with specific item on a seven-point Likert Scale (1= strongly disagree to 7 = strongly agree). The operational definition and its represented items are shown in Table 3.4.

Table 3.4

*Operational Definition and Items for Training Transfer*

<b>Variable</b>	<b>Operational Definition</b>	<b>Items</b>
Training transfer	The application of knowledge, skills, and attitudes (KSA) gained through training on the job as well as their maintenance over a period of time.	<ol style="list-style-type: none"> <li>1. Using the new knowledge, skills, and ability has helped me improve my work.</li> <li>2. I can accomplish my job tasks faster than before training.</li> <li>3. I have accomplished my job tasks faster than before training.</li> <li>4. I can accomplish job tasks better by using new knowledge, skills, and ability.</li> <li>5. The quality of my work has improved after using new knowledge, skills, and ability.</li> <li>6. I make fewer mistakes in production when using new knowledge, skills, and ability.</li> </ol>

Source: Xiao (1996)

In this instrument, the respondents were asked to indicate the degree to which they agree about transfer of training in their workplace. The respondents rate their level of agreement with specific item on seven-point Likert Scale (1 = strongly disagree to 7 = strongly agree).



### **3.7 Pilot Test**

A pilot test was conducted in October 2014 to pre-test the items and to examine the reliability value of each dimension in the instrument. The process of the pilot test is to see if the items are reliable, that is, if they have internal consistency (Piaw, 2012).

Even though all the items were adapted from a well-established instrument, a pilot test was still required to test the nature of the respondent. The different groups of individuals from different cultural and demographic backgrounds will respond differently to the items. All the items (personality traits, social support, and training transfer) were translated (and back-translated) from English to Malay Language by the researcher and counter checked by the supervisor.

Moreover, the pilot test will also help the researcher to evaluate the suitability of the research questions and to make improvement on the actual research. Based on the response and feedback from the pilot test, several improvements had been made on the items. Table 3.5 illustrates the reliability of each variable and its dimensions.

Table 3.5

*Reliability results of the variables and its dimensions*

<b>Constructs</b>	<b>Number of items</b>	<b>Cronbach's Alpha</b>
<b>Personality Traits</b>	50	0.812
Extraversion	10	0.690
Agreeableness	10	0.651
Conscientiousness	10	0.701
Emotional stability @		
Neuroticism	10	0.495
Openness to experience	10	0.787
<b>Social Support</b>	8	0.889
Supervisor support	6	0.889
Peers support	2	0.896
<b>Training transfer</b>	6	0.779

### 3.8 Data Analysis Techniques

Data coding involves assigning a number to the participants' responses so they can be entered into a database (Sekaran & Bougie, 2010). In this study, the compile data analysis using "Statistical Package for Social Sciences" (SPSS) version 20.0. The results will be summarized using descriptive statistics (frequency, percentage, and mean), and inferential statistics (Factor analysis, Pearson correlation and Regression).

A reliability test using Cronbach's Alpha was used since this is a widely accepted reliability test tool (Cavana et. Al, 2001). For this study, Pearson correlation analysis will be used to assess whether the personality traits and social support have significant relationship with transfer of training. The scale suggested by Hair et al.,

(2003) is used to describe the intensity of the relationship between the dependent and the independent variable of the study. The analysis is used to test the relationship between personality traits, social support and transfer of training. Then, regression was used to assess the hypothesized relationships between the independent and dependent variables.

### **3.9 Conclusion**

This chapter discussed the methodology of this research, which includes research design, population and sampling design, data collection procedures, measurement and data analysis technique. The next chapter will discuss the findings of the study.

## **CHAPTER 4**

### **DATA ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

This chapter covers the results of data analysis. The research focuses on the relationships between independent variables of personality traits (extraversion, agreeableness, conscientiousness, neuroticism, openness to experience), and social support (supervisor support and peer support) on the dependent variable which is training transfer.

This chapter consists of three main sections. In the first section, the respondents' profiles are presented based on their demographic characteristics of gender, age, marital status, race, length of service, monthly salary, frequency attend the training, and who support the cost of training. In the second section, the instrument is tested its validity and reliability using factor analysis (FA), correlation, and reliability analysis. In the third section, Regression is used to analyse the relationship between independent variables (personality traits and social support) and dependent variable (training transfer).

## **4.2. Response rate**

Questionnaires was distributed to 191 operators attached to the Malaysia Smelting Corporation Berhad (MSCB) located in Penang. Overall returned survey was 87, which constituted 39.5% response rate. Out of these 87 questionnaires, 11 were incomplete. Thus, only 76 questionnaires (34.5%) were coded and used for further analyses. The response rate was low, but an acceptable level of quantitative study. The response rate of 34.5 per cent was higher than the standard 20 per cent acceptable response rates (Samat et al., 2006) for quantitative studies.

## **4.3 Respondents' Demographic Characteristics**

The respondents' demographic characteristics are shown in Table 4.1. The frequency analysis revealed that 71 (93.4%) respondents were male, and 5 were female. The majority of the respondents were between the age of 16 and the 40 years old (69.7%), and 44 of them were married (42. %). Most of the respondents were Malay (57.9%).

In terms of the length of service, 40 respondents (52.6%) had more than 4 years' work experience. Most of the respondents received salary of between RM901 to RM 1200 (34.2%), and 18 respondents (23.7%) received less than RM 900. Most of the respondents' participated in the training program between 1 to 3 times (44.7%) this year; while most of the training programs attended by respondents were paid or sponsored by the employer (72.4%).

Table 4.1

*Profile of Respondents*

<b>Demographic</b>	<b>Characteristic</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Gender	Male	71	93.4
	Female	5	6.6
Age	16 – 26	31	40.8
	27 – 40	22	28.9
	41 – 50	13	17.1
	51 – 60	10	13.2
Marital status	Single	32	42.1
	Married	44	57.9
Race	Malay	70	92.1
	Chinese	1	1.3
	Indian	2	2.6
	Other	3	3.9
Length of service	< 1 year	13	17.1
	1 year – 2 years	10	13.2
	2 years- 4 years	13	17.1
	4 years >	40	52.6
Salary	< RM900	18	23.7
	RM 901- RM 1200	26	34.2
	RM 1201 – RM 1500	15	19.7
	RM1501 – RM 1800	8	10.5
	RM 1801 – RM 2100	5	6.6
	> RM 2100	4	5.3
Times attended (this year) training	None	31	40.8
	1 – 3 times	34	44.7
	4 – 6 times	9	11.8
	7 – 10 times	2	2.6
Training sponsor	Self	4	5.3
	HRDF	10	13.2
	Employer	55	72.4
	None	7	9.2

## **4.4 Factor Analysis**

The exploratory factor analysis is used to measure the content validity, that is to what extent can the measurement represent the content aspect measured (Piaw, 2012), and will confirm whether or not the theorized dimensions emerge (Sekaran, 2010). If a measurement accurately reflects the true value of the variable, the value of correlation will be high and the research will have high validity (Piaw, 2012).

### **4.4.1 Factor Analysis on Personality Traits**

They were 50 items for the personality traits which consist of 10 items for each dimension. The results with varimax rotation shown that 18 items had low factor loading i.e. cross-loading. Therefore, these items were excluded from further analysis due to the low factor loading or high cross loading as recommended by Tabachnick and Fidell (2007). Table 4.2 present the results of the factor analysis on personality traits.

As shown in Table 4.2, Six (6) factor 1 were used to measured conscientiousness personality. Factors loading for this item range from 0.40 to 0.63. Out of ten (10), these 6 items represent respondent who is hardworking, responsible and organized to become achievement oriented individual was accepted and four items from stress, socialize, and work schedule were eliminated from the subsequent analysis because of the cross loading. The second factor represented by 10 items and was labelled as openness to experience because all these 10 items were related to the intellectuality of the respondent. The total variance and factor loading of items ranged from 0.42 to 0.69.

Table 4.2 also exhibit that Factor 3 is represented by 6 items. Factor loading of the items ranged from 0.45 to 0.71. Further, this factor tapped respondent who were

able to withstand stress, calm, self-confident and secure. Out of ten items, four items (emotional, socialize) were eliminated from the subsequent analysis because of cross loading. Thus, Neuroticism was named for factor 3. On the other hand, Factor 4 comprised of 4 items which represent respondent with characteristics of agreeable, cooperative, warm and sociable. Out of ten, 6 items were eliminated, which items related to knowledge and vocabulary because of the low loading. Therefore, this factor was named as agreeableness. The last factor, Factor 5 consisted of 6 items with the factor loadings for items ranged 0.41 to 0.58. The 6 items indicated the characteristics of respondent who were tending to be gregarious, assertive, and sociable. Out of ten, 4 items were eliminated, which items emotion (sadness), imagination, and socialize because of the cross loading. Thus, Factor 5 was named as Extraversion.



Table 4.2

*Factor Analysis for Personality Traits*

<b>Items</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>
Conscientiousness 1	0.631				
Conscientiousness 2	0.630				
Conscientiousness 3	0.621				
Conscientiousness 4	0.593				
Conscientiousness 5	0.570				
Conscientiousness 6	0.402				
Openness 1		0.692			
Openness 2		0.626			
Openness 3		0.559			
Openness 4		0.557			
Openness 5		0.556			
Openness 6		0.545			
Openness 7		0.489			
Openness 8		0.484			
Openness 9		0.432			
Openness 10		0.425			
Neuroticism 1			0.716		
Neuroticism 2			0.625		
Neuroticism 3			0.617		
Neuroticism 4			0.569		
Neuroticism 5			0.487		
Neuroticism 6			0.452		
Agreeableness 1				0.592	
Agreeableness 2				0.532	
Agreeableness 3				0.531	
Agreeableness 4				0.531	
Extroversion 1					0.580
Extroversion 2					0.516
Extroversion 3					0.463
Extroversion 4					0.450
Extroversion 5					0.432
Extroversion 6					0.419

#### 4.4.2 Factor Analysis on Social Support

There are 8 items for social support (6 items for supervisor support and 2 items for peer support). The data was run for factor analysis, but the result showed that all items fall into one factor (uni dimensional) as in Table 4.3. All the items were named as social support. Based on the result the hypotheses on the social support is re-hypotheses as there is a relationship between social support and training transfer.

Table 4.3

*Factor Analysis for Social Support*

<b>Items</b>	<b>Factor 1</b>
SocialSupport1	0.872
SocialSupport2	0.819
SocialSupport3	0.810
SocialSupport4	0.796
SocialSupport5	0.759
SocialSupport6	0.759
SocialSupport7	0.634
SocialSupport8	0.617

#### 4.4.3 Factor Analysis on Training Transfers

To examine the validity of the training transfer, the principal component analysis with varimax rotation was carried out. There were 6 items for training transfer. The results of factor analysis revealed that one items of training transfer had cross factor loading and thus were eliminated from further analysis. The remaining 5 items represent two factors were further analysed. The factor loading for Factor 1 was named as training transfer

1,2,3 ranged from 0.76 to 0.84. Meanwhile, factor loading for Factor 2 were named as training transfer 4,5 ranged from 0.66 to 0.70.

Table 4.4

*Factor Analysis for Training Transfer*

<b>Items</b>	<b>Factor 1</b>	<b>Factor 2</b>
TrainingTransfer1	0.848	
TrainingTransfer2	0.845	
TrainingTransfer3	0.760	
TrainingTransfer4		0.709
TrainingTransfer5		0.666

#### **4.5 Reliability Analysis**

The reliability result were being established by testing both consistency and stability. Cronbach's alpha is a reliability coefficient that indicate how well the items in a set are positively correlated each other's (Sakaran ,2010). It is meant to determine the internal consistency of the instruments being used in the study. The closer the Cronbach's alpha is to 1, the higher the internal consistency reliability. Table 4.4 show the Cronbach's alpha values for the variables. Coefficient alpha of less than .60 is considered weak, range of .70 considered moderate and more than .80 is considered good (Cavana et al., 2001). In summary, the finding show that instruments used to measure each variable fall into the three categories. Each of the variable carried Cronbach alphas of more than .55. Supervisor support has the highest Cronbach's alpha of .895. indicating the instrument to be most reliable amongst all the variables.

Table 4.5

*Summary of Reliability Analysis*

<b>Variables and Dimension</b>	<b>No. of items</b>	<b>Cronbach's Alpha</b>
<b>INDEPENDENT VARIABLES</b>		
<b>Personality</b>	32	0.683
Conscientiousness	6	0.747
Openness to experience	10	0.767
Neuroticism	6	0.674
Agreeableness	4	0.600
Extraversion	6	0.632
<b>Social Support</b>	8	0.895
<b>DEPENDENT VARIABLE</b>		
<b>Training transfer</b>	5	0.635
Training transfer (1-3)	3	0.800
Training transfer (4-5)	2	0.629

## 4.6 Descriptive Analysis

Descriptive analysis, which include the mean and standard deviation for the dependent and independent variables attained are presented in Table 4.6.

Table 4.6

*Descriptive Statistics of the Dependent and Independent Variables*

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Training Transfer</b>	5.27	0.88
<b>Personality Traits</b>	4.14	0.54
Conscientiousness	3.54	0.65
Openness to experience	5.05	0.87
Neuroticism	4.12	1.16
Agreeableness	4.00	0.93
Extraversion	4.25	1.00
<b>Social Support</b>	5.13	1.14

All the variables are evaluated based on a 7-point scale. The result showed the mean on training transfer (5.27), personality traits (4.14), and social support (5.13).

The standard deviation, which is a measure of dispersion for interval and ratio scale data, offers an index of the spread of a distribution or the variability in the data. All the data spread to the right. The Table 4.7 above show the standard deviation for training transfer (0.88), personality traits (0.54), and social support (1.14).

## 4.7 Correlation analysis

Pearson Correlation was carried out to examine the relationship between two variables in a linear fashion (Coakes, 2013).

In general, for social science, correlation coefficients of 0.10, 0.30, and 0.50 regardless of sign, are indicator as low, medium, and large coefficient respectively (Green et al., 1997).

Table 4.7 exhibits that two dimensions of personality trait have significant correlation with training transfer which are openness to experience and extraversion. Openness to experience indicated coefficient of 0.524, meanwhile extraversion indicated of coefficient is 0.273.

The correlation result also suggested that conscientiousness, agreeableness and neuroticism does not indicate relationship with training transfer. Refer to Table 4.7 for the correlation result.

Meanwhile, the correlation results of social support with training transfer showed a moderate correlation of 0.639. These explain that social support plays vital role to ensure that knowledge was transfer into the organization among support employees.

Table 4.7

*Correlation results between Training transfer, Personality Traits and Social Support*

	1	2	3	4	5	6	7
1. Training Transfer	1						
2. Conscientiousness	-.061	1					
3. Openness to experience	.524**	.009	1				
4. Neuroticism	.122	.363**	.031	1			
5. Agreeableness	-.102	.140	-.029	.128	1		
6. Extraversion	.273**	.134	.346**	-.099	.021	1	
7. Social Support	.639**	.032	.285**	.071	-.012	.327**	1

Note: n=76; \*\*p &lt; 0.01 level (1-tailed)

#### **4.8 Regression Analysis between Personality Traits, Social Support and Training Transfer**

The regression analysis revealed that 56.2% of the variances in the dependent variable of training transfer have been explained by the dimension of personality traits and social support. This was shown by the R square value of 0.562 (refer to Table 4.8). The openness to experience dimension ( $\beta = 0.367$ ,  $p < 0.05$ ) have significant relationship to training transfer. The other dimensions does not reveal being significant to training transfer. Meanwhile, the regression result for social support ( $\beta = 0.527$ ,  $p < 0.05$ ) have a significant relationship to training transfer.

Table 4.8

*Regression results of Personality Traits, Social Support on Training Transfer*

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.738	.660		2.631	.010
Conscientiousness	-.156	.118	-.115	-1.316	.193
Openness	.372	.088	.367	4.226	.000
Neuroticism	.096	.067	.126	1.437	.155
Agreeableness	-.081	.077	-.085	-1.048	.298
Extraversion	.002	.080	.003	.030	.976
SocialSupport	.412	.068	.527	6.094	.000

Dependent Variable: Training Transfer

R Square = 0.562

F = 14.72

\*p &lt; 0.05

Based on the result above, the hypotheses H1 (there is relationship between personality traits and training transfer), H1a (there is negative relationship between neuroticism and training transfer), H1d (there is a positive relationship between openness to experience and training transfer), and H2 (there is a relationship between social support and training transfer) was accepted. While hypotheses H1b (there is a positive relationship between extraversion and training transfer), H1c (there is a positive relationship between conscientiousness and training transfer), and H1e (there is a positive relationship between agreeableness and training transfer) was rejected.



## 4.9 Summary of Hypotheses Testing

The following Table 4.9 shows the summary of the findings of hypothesis testing:

Table 4.9

*Summary of hypothesis testing*

<b>Hypotheses</b>		<b>Results</b>
<b>H1:</b>	<b>There is a relationship between personality traits and training transfer.</b>	<b>Supported</b>
H1a:	There is a negative relationship between neuroticism and training transfer.	Supported
H1b:	There is a positive relationship between extraversion and training transfer.	Not supported
H1c:	There is a positive relationship between conscientiousness and training transfer.	Not supported
H1d:	There is a positive relationship between openness to experience and training transfer.	Supported
H1e:	There is a positive relationship between agreeableness and training transfer.	Not Supported
<b>H2:</b>	<b>There is a relationship between social support and training transfer.</b>	<b>Supported</b>

## 4.10 Conclusions

From the above findings, the correlation analysis results exhibited that personality traits and social support have significant correlation with training transfer. The dimension of personality traits, namely openness to experience and social support have a significant relationship to training transfer. While conscientiousness, neuroticism, extraversion, and agreeableness does not indicate any relationship with training transfer. The next chapter will discuss the findings and conclusion of the study.

## **CHAPTER 5**

### **DISCUSSION, AND CONCLUSION**

#### **5.1 Introduction**

In this chapter the findings from the analysis were presented and discussed. Implications, suggestion, limitation of the study are included in this chapter. The chapter ends with conclusions.

#### **5.2 Discussion**

This study aimed at examining the relationship between two independent variables of personality traits, namely extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience of operators in Malaysia Smelting Corporation Berhad (MSCB) participants. It also examines the relationship between social support with training transfer. Additionally, the study included a determination of which, amongst the personality traits and social support drive their intention and capability to training transfer. The results of the study are important for organizations to determine the appropriate preparations before and after their employees' attended the training course. The research objectives of the study were:

- To examine the relationship of personality trait dimensions on training transfer.
- To examine social support influence on training transfer.
- To examine whether personality traits and social support influence training transfer the most.

Next, the following discussion would provide the results' review of the objectives and a comparison with previous researches.

### **5.2.1 Objective 1: To examine the relationship between personality traits dimensions on transfer of training.**

The primary objective of this study is to examine the relationship between personality traits dimensions (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) and training transfer. Based on the finding shown in Table 4.8, the dimension of personality traits (openness to experience) have a positive and a significant relationship with training transfer.

The relationship between personality and training transfer in this study was reflected by the respondents demographic. In this study, most of the respondents are male (93.4%) and they could easily adapt with the new environment. The ability to adapt to the new environment such as training course will enable them to explore more. They are willing to explore further compared to female employees. It is because of the nature of eastern women are politely and shy.

The observation in this study is consistent with the finding by Petrides et al., (2005), Stumm & Furnham (2012) that personality traits in several ways have been reported contributing to learning process (transfer of knowledge). They indicated that

personality traits influence the individual ability to acquire the process of transferring knowledge based on the individual differences of attitude and action. The previous study suggested that there is link between training transfer and personality traits (Moldasheva & Mahmood, 2014).

Personality traits could determine the behaviour or nature of the employees adaptability to the environment during training lessons. Personality traits will enhance the ability of the person to communicate during training as this will help them to understand the knowledge more comparing to those who are passive or introvert. In training transfer process, the ability to adapt the training environment will influence one's ability to acquire the knowledge during training. A passive person who does not like to socialize will acquire the knowledge that comes to him or her. If that person missed the knowledge, he/she just leaves it because he/she is shy or not confident to ask the trainer. Thus, they are not able to utilize the knowledge again because they are shy or have low confidence if it is not existed.

Thus, personality traits have strong linkage with the learning process or training transfer. This is because the difference in personality traits will influence nature. Thus, it would be demonstrated by his/her action, attitude, either that person like to be alone or in public. That differentiation will affect his/her attitude, action during the pre and post training.

The personality traits also will determine his/her effort and ability in the training transfer process. Either his/her effort to take-in the process of training transfer being important or not. If they are committed to the training transfer process, it would transfer what they gained during training in the post training to the workplace. Consequencely, the training transfer becomes successful in terms of transfer of knowledge in the organization. Otherwise, if the person has the personality traits that allow him/her to see

new things such as knowledge, idea as something that is bored and they are not interested in the training process, they would just ignore the knowledge during the training program and the chances for them to transfer the knowledge into the workplace becomes less due to the low concentration and acquiring the new knowledge during the training process.

Personality traits have been linked to determine the success of the training transfer. This is because the individual differences of personality traits will make the training transfer smooth or not in terms of the individual ability and the capacity to acquire the new things. The personality will influence the way they learn and get the new knowledge.

As a dimension of personality traits, openness to experience have a significant relationship to training transfer. The correlation revealed that the only dimension of personality traits that have significant correlation with training transfer is openness to experience (correlation result of 0.524,  $p < 0.01$  and regression results of  $\beta = 0.367$ ,  $p < 0.05$ ).

Openness to experience also have a positive relationship to learning in each phase of training transfer according to Barrick & Mount (1991) as cited by Herold et al., (2002). Openness to experience is related to the level of intellect, curiosity about the environment, and willing to explore the unfamiliar things (Herold et al., 2002). Because training is a process of putting an individual into the new situation, the personality traits associated with it should assist the person in the training program as they are compulsory to accept and manage the new information explore and adopt the new behaviour patterns. On other hand, openness to experience are also related to the adaptability when changing the tasks contexts the contexts of tasks as indicated by LePine et.al., (2000). They explained adaptability as “learning or performance in a task

that is complex, novel or just ill-defined". The Complexity of stage by stage training programs represents such changing task contexts (Herold et al., 2002). In the beginning, training task may be viewed as new and often multifaceted, and as one enters each new stage of training, the change in task context introduces a new and different undertaking environment to which the trainee necessarily adapt.

People, who are open to experience, are more likely to engage in new things and settings with some level and willingness to assess what they need to do to adapt (Herold et al., 2002). Creating a positive view of training and learning will serve trainees well in all multistage of training, as well as influencing the motivation to uphold direction and level of effort which called for new training tasks. This is because they have more adaptability to the changing conditions. Furthermore, they are intellectually curious about new circumstances.

### **5.2.2 Objective 2: To examine the influence of social support and transfer of training.**

The second objective of this study is to examine the influence between social support and training transfer. Based on the results in Table 4.7 and Table 4.8, social support has a positive and significant relationship with training transfer.

The result further indicated that social support had high correlation to training transfer with (0.639,  $p < 0.01$ ) and regression result ( $\beta = 0.527$ ,  $p < 0.05$ ).

The profile of the respondents may influenced the results. It has a strong correlation to affect the big impact on training transfer. The respondents demographic profile i.e. marital status, race, length of service, and times attended the training had influenced the results. As 57.9% are married, 92.1% are Malay, 52.6% had work more

than 4 years, 56.5% attended the training course between one to six times, it can be concluded that they are socialized and able to communicate effectively with their supervisors and peers. These elements will influence the social support because they are always together with their colleagues and hang out with co-workers.

The result of this study is consistent with the findings by Lim and Nowell (2014), Awais (2013), Nijman et al., (2013), Haslinda and Mahyuddin (2009), Festner and Gruber (2008), Hatala and Fleming (2007), Lim and Morris (2006). They indicated that social support will increase the level of commitment and transfer of skills and knowledge into the organization. In terms of work environment, social support consists of supervisor support and peer support. The role played by the supervisor and peer is important to ensure that the knowledge gained during training is properly applicable to the real job supported by both groups.

The role played by the supervisor is related to the time and encouragement for the subordinates. Supervisor's support has a critical task of providing reinforcement for learning through the job (Bossche et al., 2010); and promoting training transfer to the subordinates (Nikandrou & Bereri, 2009). Supervisor's support is a critical task in terms of controlling behavior, attitudes, and actions. The supervisor should play more active participation because he/she has the ability to encourage employees to attend the training and also apply the acquired knowledge, skill, and ability when they come back from training. The encouragement from supervisors is the key to motivate employees to attend training. Sometimes, employees who are passive will not join the training if not encouraged by supervisors.

Besides that, the role played by the supervisor as a consultant to discuss problems is related to apply new skills in the organization. As a "consultant", the supervisor will deal with problems faced by the employees to solve or to apply new

knowledge and skills. Also, the supervisor will offer opportunities to the employees to use their new knowledge and skills in the real work. Furthermore, when the employees got the support of the supervisor, they will have more chances, clear direction and sufficient time to learn how to make use of the training in the organization (Hua et al., 2011). This means that the employees are well guided to do the job through using the new knowledge and skills. It also helps them to apply the new knowledge and skills with a high level of confidentiality. Hence, the role played by the supervisor will increase the significance of the training transfer (Haslinda & Mahyuddin, 2009).

Under the social support, the peer support is also included. Peer support is generally understood as the co-worker encouragement to use new knowledge, skill, and ability in the workplace (Bossche et al., 2010). Peer support is more focused on supporting the use of learning on the job (Bossche et al., 2010). The study done by Chiaburu (2010) showed that support from peer was more vital than coming from supervisor and organization. The role played by the peer is setting learning goals with their friends. The peer will clear the goals of their friends with good explanation regarding learning goals. Moreover, peer also act as assistance to their friends. It means that, peer will give their help in terms of view, comments, and positive feedback to their friends. In the form of feedback, peer support is very important in determining employees' ability to apply what they had earned on the job (Bossche et al., 2010). This is in line with the study done by Hua (2012) who found that peer support has a greater impact on past training behaviour and motivation to transfer.

Peer support also is significantly related to pre-training (Chaiburu and Marinova, 2005), during training, and post-training. It has influenced the positive transfer among the employees (Martin, 2010). Co-worker who was thought to be more proximal than



supervisory support and always in contact with other employees of the same status in the organization (Chaiburu, 2010).

### **5.2.3 Objective 3: To examine if personality traits and social support influence the transfer of training the most.**

The third objective is to examine if personality traits or social support influence the transfer of training the most. Based on findings shown in Table 4.8, social support had the greater impact on the training transfer.

The results further indicated that social supports have a strong relationship based on regression results' ( $\beta = 0.527$ ,  $p < 0.05$ ). It showed that social support played an important role to training transfer. Social support in the context of manufacturing industry consists of two groups namely supervisor and peer support. They have their own roles to enhance the application of knowledge, skills, and ability among co-workers after they attended the training courses.

The observation in this study is consistent with the findings of Lim and Nowell (2014), Awais (2013), and Nijman et al., (2013). They indicated that social support will increase the level of commitment, and also the transfer of skills and knowledge into the organization. The role played by those groups is important to ensure that the knowledge gained during training is properly transferable to the real job/task supported by both groups.

### **5.3 Implication**

The results of this study have provided several implications to some practical implications to the organization and employees.

The implication for employees is when the employer carry out the training needs analysis (TNA), they will determine the types of training needed by employee's base on their personality traits. The employee who has the suitable personality traits that able to apply knowledge, skill, and ability will be chosen. Based on the findings, those who had characteristics of openness to experience would likely be able to absorb the knowledge and apply into the real job after the training courses.

The implication for the organization is when the company recruit the new staff especially for operator position; they should be tested the personality test. Personality test will determine their characteristic of traits. From the test, the company can choose employees who have personality of openness to experience and extraversion traits then the company can provide the suitable training based on their personality that will enhance their knowledge, skills, and ability.

### **5.4 Limitation of the study**

This research had some limitations. Which are stated as follows:

First, the population in this study encompassed operator in MSCB, Penang. The limited population restrict generalizability of the research results. Hence, generalizability of the research should be addressed with caution.

Second, this is a cross-sectional study. This type of research is bound to several drawbacks. Most outstandingly, cross-sectional data limits this ability to create causal

relationship of all the variables in the study. A longitudinal study would be of superior value to infer causal associations of all variables of interest in this study.

Third, the limitation of study relates to the sample of 191 employees manufacturing industry in Penang. Thus, the findings obtained may not be generalized to other sample across different industrial zone in Malaysia. It would be better if the study can be conducted in all industrial zone in Malaysia.

Fourth, the findings were based on the data gathered using quantitative (questionnaire) which may be affected by response bias.

## **5.5 Conclusions**

The purposes of this study were to investigate the relationship between personality traits (extraversion, agreeableness, conscientiousness, emotional stability, openness to experience) social support and training transfer.

The study had met all the four research objectives as outlined in Chapter 1. The two research objectives were to examine the relationship between personality traits and training transfer and the one of the objective is to determine the relationship between social support and training transfer. Lastly, to examine which variables (personality traits, social support) influences the training transfer the most. The results of this study (Table 4.5 till table 4.9) had either fully support and not support the tested hypotheses as outlined.

Based on the findings, personality traits have significant relationship between training transfer namely openness to experience. Although not all the dimensions indicated positive result, but it show that personality has an impact on the training transfer.

The results also discover that social support plays an important role in the training transfer (pre and post training) process. The role played by the supervisor and peers are crucial to determine the application of knowledge, skills, and ability to the plant.

Results from the study have some implications to employees, and also employer. It does affect the training need analysis, recruiting process, and also selection for training courses. The personality traits being the main factor to determine the capability of individual to acquire the knowledge and training provided by the employer.

This study was conducted in a manufacturing sector among the operator, and further work need to be done to establish data from the middle and upper level management to gain various data related to personality traits, social support and training transfer.

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