

RELATIONSHIP BETWEEN PERSONALITY TRAITS AND CAREER  
DECISION MAKING SELF-EFFICACY AMONG MALE AND  
FEMALE UNDERGRADUATES IN MALAYSIA

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## **DEDICATION**

This thesis is dedicated to the glory of God (the Author and Finisher of my faith)

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## ABSTRACT

The Malaysia Government projected to train 4,808,400 employees in engineering and other fields by the year 2020. However, the pre-plan has been truncated by gender career preference, imbalance and mismatch due to lack of a model for career counsellors to use as a guide for students in career choice making based on their personality traits and gender. This study determined the relationship that exists between personality traits and career decision making self-efficacy among male and female undergraduates in Malaysia. The quantitative research design of this study used TAJMA Personality Profile 2<sup>nd</sup> Edition (TPP2) and Career Decision Making Self-Efficacy Short Form (CDMSE-SF). 281 participants comprising 102 males and 73 females from Faculty of Electrical Engineering and 25 males and 81 females from Faculty of Management, Universiti Teknologi Malaysia, participated in the study. Seven research questions were raised and answered; while six hypotheses were also tested at 0.05 significant level. Data were analysed using Statistical Package for Social Science (IBM SPSS version 21.0) and Analysis of Moment Structures (AMOS version 22). The data were analysed descriptively with percentages, mean and standard deviation while the inferential statistics were analysed using t-test, correlation and Structural Equation Modelling (SEM). To identify the dominant personality traits and career decision making self-efficacy levels of the male and female students, the findings showed that the dominant traits include: extroversion, cross-cultural, achievement, integrity and patriotism with exception of the analytical trait which was high for electrical engineering students only, besides showing a significant difference between male and female students. In general, there was no significant difference in career decision making self-efficacy among male and female students except for electrical engineering students who had more confidence in self-appraisal, goal-selection and planning. Based on the findings, a Structural Equation Model that shows positive significant relationship between personality traits and career decision making self-efficacy was developed. The model also shows that positive relationship exist between gender and career decision making; while negative relationship exists between personality traits and gender. It is recommended that the model be used by career counsellors and University management in the selection of students' careers.

## ABSTRAK

Kerajaan Malaysia telah merancang untuk melatih seramai 4,808,400 pekerja dalam bidang kejuruteraan dan sebagainya menjelang tahun 2020. Namun, rancangan awal ini telah dikekang oleh pemilihan kerjaya berdasarkan jantina, ketidakseimbangan dan ketidaksepadanan kerana kurangnya model kaunselor kerjaya yang boleh digunakan oleh para pelajar dalam membuat pilihan kerjaya berdasarkan sifat keperibadian sahsiah diri dan jantina. Kajian ini menentukan hubungan antara sifat-sifat keperibadian sahsiah diri dan keberkesanan sendiri dalam memilih kerjaya dalam kalangan pelajar prasiswazah lelaki dan perempuan di Malaysia. Kajian yang berbentuk kuantitatif ini menggunakan *TAJMA Personality Profile 2<sup>nd</sup> Edition* (TPP2) dan *Career Decision Making Self-Efficacy Short Form* (CDMSE-SF). Seramai 281 peserta yang terdiri daripada 102 orang pelajar lelaki dan 73 orang pelajar perempuan telah diambil dari Fakulti Kejuruteraan Elektrik dan seramai 25 orang pelajar lelaki serta 81 orang pelajar perempuan telah diambil dari Fakulti Pengurusan, Universiti Teknologi Malaysia. Tujuh persoalan kajian telah diajukan dan dijawab; manakala enam hipotesis telah diuji pada tahap signifikan 0.05. Data yang dikumpul telah dianalisis menggunakan *Statistical Package for Social Science* (IBM SPSS versi 21.0) dan *Analysis of Moment Structures* (AMOS versi 22). Data tersebut juga dianalisis secara deskriptif dengan menggunakan peratusan, min dan sisihan piawai manakala statistik inferens telah dianalisis dengan menggunakan ujian-t, korelasi dan *Structural Equation Modelling* (SEM). Bagi mengenapasti sifat-sifat keperibadian sahsiah diri yang dominan dan tahap keberkesanan pemilihan kerjaya pelajar lelaki dan perempuan, hasil dapatan menunjukkan bahawa sifat-sifat dominan adalah extroversion, persimpangan budaya, pencapaian, integriti dan patriotism dengan pengecualian sifat analitik kerana sifat tersebut hanya tinggi bagi pelajar kejuruteraan sahaja, selain mempamerkan perbezaan signifikan antara pelajar lelaki dan perempuan. Secara umumnya, tidak terdapat perbezaan signifikan dalam keberkesanan sendiri pemilihan kerjaya dalam kalangan pelajar lelaki dan perempuan kecuali bagi pelajar kejuruteraan elektrik yang mempunyai keyakinan pada pujian sendiri, pemilihan matlamat dan perancangan. Berdasarkan hasil dapatan, satu *Structural Equation Model* yang menunjukkan hubungan signifikan positif antara sifat-sifat keperibadian sahsiah dan keberkesanan sendiri dalam memilih kerjaya telah tercipta. Model tersebut menunjukkan hubungan positif wujud di antara jantina dan pemilihan kerjaya; manakala hubungan negatif wujud antara sifat-sifat keperibadian sahsiah sendiri dan jantina. Oleh itu, model ini disyorkan agar diguna oleh kaunselor-kaunselor kerjaya dan pengurusan Universiti dalam pemilihan kerjaya pelajar pra-siswazah.

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**LIST OF ABBREVIATIONS**

BFI	-	Big Five Inventory
CFA	-	Confirmatory Factor Analysis
df	-	Degree of Freedom
CFI	-	Comparative Fit Indices
CR	-	Composite Reliability
FFM	-	Five-Factor Model
IFI	-	Incremental Fit Indices
NFI	-	Norm Fit Indices
RMSEA	-	Root Mean Square Error of Approximation
TPP2	-	TAJMA Personality Profile 2nd Edition
UKM	-	Universiti Kebangsaan Malaysia
UTM	-	Universiti Teknologi Malaysia

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Career development process spans throughout an individual's life span. The individual experiences several career decision making situations due to changing needs and environments (Ginzberg, 1972; Super, 1980). Students should be able to optimize satisfaction continuously between their changing needs and environmental changing constraints throughout their career life. This implies that career decision is an important development task especially in adolescence and early adulthood. The seemingly importance lies in the fact that individuals face career difficulty regarding career decision in this stage of life (Erickson, 1963; Super, 1980) that might affect their future career (Di Fabio et al.,2015; Erickson, 1989; McCormick et al., 2011).

Career is an expression of individuals' areas of interest in a certain profession and how they relate them to societal changes. Therefore, Popoola (2004), defined career as an occupation in which one is educated and trained over a particular time; which indicates the one they might like to pursue. Also career is a significant aspect of individuals' leading to development through life. In other words, it is traditionally viewed as a successive situation that brings about remuneration and sometimes leads to formal education. Furthermore, career preparation in the stage of adolescence is a vital consideration for a successful career growth and development throughout the life span. Hence, it has a close relationship with adjustment and well-being period in adolescence (Skorikov, 2007).

Decision making on a career is an important choice that students have to make to shape their future plans. It however, involves a life span process. Decision making is considered a significant turning point in students' lives and the period will have significant impacts on them throughout their lives. Hence, Gati and Asher (2001) opined that decision making about one's career is one of the most significant choice that students have to make. Therefore, student's personality will determine what they want to do with their life-long work. Students possess certain traits, which could help them determine how they view the world of work and decides on a career. Subsequently, the student's perception (personality and gender) also determines their career choices.

Personality is a distinctive and consistent pattern of characteristics that influence behaviour, emotions, and attitudes, and is expressed in many situations. Each individual possesses diverse characteristics which constituted into personality (Jung, 1934). According to Funder (2001), personality is considered as an individual's characteristic patterns of thought, emotion, and behaviour, together with the psychological mechanisms hidden within those patterns. Pervin (1990) defines personality as a psychological system of interrelated perceptions, feelings, thoughts, and behaviours which reflect individual differences. Traits determine a person's variances in the trend to develop a steady pattern of feelings, thoughts and actions (Myers, 1998). In other words, personality traits are predictable characteristics of individual behaviour which assist in explaining the differences of individual actions in similar situations (Llewellyn and Wilson, 2003).

Students regardless of their gender (male and female) have different personality traits which can best dictate the differences that can occur in their career decision making (Spence et al., 1975; Bem, 1974). The personality traits that have been identified by Mohd Tajudin Ninggal (2010, 2012) include the following: assertive, analytical, cross-cultural, self-confidence, achievement, caring, integrity, resilience, leadership, extroversion, patriotism and distortion. Whereas the career decision making self-efficacy identified by Betz et al., (1996) includes the following: self-appraisal, occupational information, goal selection, planning and problem-solving. However, gender stereotypes are still commonly shared together with cultural beliefs and personal attributes on gender basis (Deaux and Kite, 1993).

Gender however, is the grouping of humans either as males or females based on their biological, psychological, cultural and social, features (Riger, 2000). Hence, raises the need to consider the personality traits of Malaysian male and female students in relation to their career decision-making.

## **1.2 Background of the Study**

Decision making in a choice of career can help an individual meet up with his or her needs, interests and values. It will also influence the quality of life. John Holland (1966, 1973, 1985, and 1997) argued that career choice depends on personality traits. This argument has earlier been presented by career theorists that one's personality and career choice are closely linked together (Holland, 1985; Super, 1969). Likewise, Lubinski (2004) argued that student do not select educational and occupational paths randomly, but base their decision decisively on stable features of their personality.

Personality traits have been found to influence student's career direction and preference (Chen and Liew, 2015; Jaffer, Ismail and Zahid, 2013; Borgen, 2009; Furnham, 2002; Mount et al., 1994; Schneider and Hough, 1995). In other words, individuals' personality traits would influence their career decisions or their course of action (Salomone, 1982). Moreover, career itself requires certain traits that could encourage successful performance when deciding on a career (Gottfredson et al., 1975).

In trying to understand individual personality, different psychologists emerge with a simplified descriptive way based on specific theories and approaches. Norman (1963) found five dimensions of personality traits of higher-order from the natural-language of personality description that has generally been guided by the lexical approach (John et al., 1988; Saucier and Goldberg, 1996); which was a method of extracting higher-order personality traits dimension from the natural language of personality description. McCrae and Costa (1985, 1988) furthered Norman's (1963)

model that is known as the five dimensions called neuroticism; extraversion, agreeableness, openness to experience and conscientiousness respectively.

With the emerging support of the Five-Factor Model, a consensus was reached among the trait theorists regarding how the five-factor model of personality should be classified (Costa and McCrae, 1992; McCrae and Costa, 2003). The theorists therefore provided a structure of personality as a hierarchical model, where the specific personalities are grouped under their trait dimension. The Five-Factor Model states that the common variance among the variables of most personality trait is usually summarized under the factors including conscientiousness extraversion, neuroticism agreeableness and openness to experience. These factors therefore have been typically recovered from personality inventories, and it accounts for the shared variance of trait represented with different adjectives (Digman and Shmelyov, 1996). This personality traits dimensions, however has been criticized because some of the five dimensions reflect aspect of intelligent which is inappropriate to describe personality traits (Eysenck, 1990).

Hence, Mohd Tajudin Ninggal (2010, 2012) developed a personality traits profile named TAJMA Personality Profile Second Edition (TPP2). The instrument was unique because it was designed to measure traits of students based on Islamic and western culture unlike other personality inventory that is embed only on western values. Unlike the big five factors, the TAJMA Personality Profile was aimed at measuring twelve traits which include assertive, analytical, extrovert, self-confidence, leadership, resilience, caring, cross-cultural, achievement, integrity, patriotism and distortion. The profile however was used by Mohd Tajudin Ninggal and Adibah Latif (2014) and Alahdad et al., (2013).

Personality traits have also been found to have relationship with career decision making self-efficacy. Therefore, several researchers who explored the relationship of various personality traits with career decision (Keller and Brown, 2014; Bethencourt et al., 2011; Jin et al., 2009; Larson and Major, 1998; Leong and Chervinko, 1996; Sweeney and Schill, 1998: Taylor and Betz, 1993; Taylor and Popma, 1990) found that personality traits, like self-efficacy, locus of control and anxiety have been identified to be associated to career decision making. Similarly,

several studies have linked personality traits with gender (Kwon and Song, 2011; Mustafa et al., 2012; Spence and Hall, 1996; Bem, 1974). It was found in some studies that the relationship existing between some personality traits and career decision could be affected by gender (Korpershoek, Kuper and Werf, 2012; Mustaffa et al., 2012; Swanson et al., 1996).

Similarly, Holland (1987) a career theorist argued that students' personality traits affect their choice of career. In that case, certain careers demand matching personality qualities to desired field of study. For example, people who study business oriented courses or management are said to be more likely extroverted personality traits (social, talkative, and high amount of emotional expressiveness) (Borchert, 2002; Kwon and Song, 2011; Mustaffa et al., 2012).

In addition, literature has found that certain personality traits are needed to be possessed by individual in certain career; while most authors pinpointed on Engineering or science related courses as well as humanities or Business related courses. According to scholars such as Movein (2014), Davam (2014) and Hall et al., (2015) before the student in engineering field can be successful they have to possess certain traits such as analytical, agreeableness, extroversion, and conscientiousness. Similarly, Lounsbury et al., (2009) and Ku and Shan (2009) also attributed certain traits to be possessed by students in Management or Business field such as assertive, extroversion and conscientiousness.

Personality traits have been found to determine individual choice of career. On this note, Harris (1994) concluded that male and female in universities have different key personality traits which may make them prefer to pursue different types of careers. Bradley (2000) opined that when comparing different higher education majors across countries, female are still majoring in traditionally fields more than the male. Furthermore, some scholars such as Misran et al., (2012) suggested the need to develop a model for guiding engineering students by career counsellors; while Larson et al., (2010) also suggested for engineering and accounting students and Lo, 2007; Jaffer, Ismail and Zahid (2013) suggested model for accounting students.

Past studies however, have shown that personality trait can be influenced by students' self-efficacy. For example, Wang et al., (2006) in a study based on personality traits and career decision making found that self-efficacy was mediating between neuroticism and extroversion of career choice commitment among group of students thus, the path model developed by the authors showed that career decision making self-efficacy serve as mediator between the relationship of personality and career choice commitment. Similarly, Komarrju, Swanson and Nadler (2014) using regression analysis found that career information and self-efficacy have relation with career decision making self-efficacy and satisfaction. Their study indicated that having confidence in obtaining career-relevant information and solving relevant career related problem were associated with career decision making self-efficacy. Thus, high career decision making self-efficacy increases confidence level in a choice of career and in turn, lead to course or major satisfaction.

In the study carried out by Bo Young Choi et al., (2014), the authors found that relationship existed between career decision making self-efficacy and its relevant variables such as gender, vocational identity and career indecision. The result of the study showed that gender in particular showed negative significant effect on career decision making self-efficacy. The study demonstrated that career decision making self-efficacy is an outcome of desirable achievement in career decision making. However, Brown and Cinnamon (2015) noted that the important link between self-efficacy in a choice of career and its expectation outcome is as a result of individual's unique personality trait. The authors concluded that personality traits contributed to the beliefs regarding the ability to succeed in achieving desired outcomes in career decision making self-efficacy. Hence, lack of relationship between personality and career decision making self-efficacy can result in mismatch.

Mismatch arising from personality traits therefore, will not only affect the career decision making self-efficacy of the students, they also contribute to other problems (increased job dissatisfaction, work stress, organizational commitment reduction and economic growth decline) (Talib and Tan, 2009; Lim, 2013). This implies that irrespective of the personality traits possessed by some students, it is important to match students' personality traits to suitable career. In other words, suitability and consistency in a career are essential in management (accounting),



engineering and science related courses (Mastor et al., 2007; Misrian et al., 2012; Mustaffa et al., 2012). Therefore, for a successful and committed career, students need to identify and understand themselves with the career choice of their personalities (Mustapha and Long, 2010; Mastor et al., 2007).

In a study conducted by Mastor (2006), which thought was based on the big five factor which downplay the Malay culture as one of the Asian countries found that most Malay students are introverts, hence, the personality traits often affect them whenever they are deciding on their choice of career. Mastor (2006) further discovered that Malay female students were more introvert than male students and as such they had more difficulties in career decision making process (e.g., dissatisfaction in their career decisions). The students also face difficulties in decision making because of lack of encouragement and inadequate support from teachers, friends, family and the environment (Mustapha and Long, 2009). Consequently, it is important for students to choose the right careers that suit with their personalities because the chosen careers are closely correlated to their career paths. In line with this, Mustapha and Long (2009) suggested for a guideline that could be used to increase career awareness and deliver comprehensive information to the Malaysian community in relation to career decision making on gender basis. Hence, the students can be best assisted if their personality traits are determined based on the instrument that is culturally oriented which deploy their gender.

The term 'gender' is regarded as a means to differentiate between behavioural patterns in male and female. Psychologists utilise this differential patterns in projecting and explaining the occurrence of difference in personality, behaviour, ability and performance (Block, 1984; Buss, 1995; Eagly, 1994; Levy and Heller, 1992; Maccoby and Jacklin, 1974; Maccoby, 1998). Similarly, several kinds of hypotheses have been postulated to account for these differences in gender; such as biological differences and differential social roles. This explanation is aimed at accounting for overall differences between groups of men and women (Maccoby, 1998).

On which relationship occurred between gender and personality traits, previous studies have highlighted that an individual's gender and personality traits have relationship with career decision outcomes (Gottfredson, 1981; Jin et al., 2009; Kwon and Song, 2011; Salomone, 1982). Hence, Salomone, (1982) concluded that certain personality traits would prevent individuals from making career decisions and taking an action regarding the decisions. Gottfredson (1981) argued that gender influences one's own occupational goal, self-concept and personality traits which were associated with career decision making process.

Gender imbalance and differences are the most challenging issues associated with the enrollment of male and female students within Malaysia's public educational system. The gender imbalance presents a socio-political and economic implication within the educational system (Mohd and Dahan, 2010). There are fewer male students in Malaysian universities, compared to the population of female students; and also the level of participation of female in the technical and vocational or engineering related courses is very low. These have resulted in an imbalance in the skilled labour, in terms of the courses taken by male compared to female students (Mustapha et al., 2010).

Though, the authors failed to show whether the low enrollment was as a result of the different traits of the male and female students in career decision making. In order to strike a balance in the enrolment of male and female students, the Malaysian Government in the Third Outline Perspective Plan (OPP3), estimated that about 137,200 engineers together with 331,700 assistant engineers needed to be produced in the year 2010 and these engineers will be employed in the fields of chemical, mechanical, civil, electrical and electronics (EPU, 2001). It was therefore, speculated that the nation would need 4,808,400 educated employees in these fields by the year 2020 to enhance Vision 2020 as suggested by the fourth Malaysian Prime Minister, Tun Dr. Mahathir Mohamad (MOHE, 2007). Consequently, the Ministry of Higher Education (MOHE) was assigned the task of realising the vision. However, despite the effort been made concerning striking a balance between male and female students enrollment, Mustapha, Long and Fouziah (2010) found that generally, the number of female students who were enrolled in the public universities surpassed the

number of male students, there are gradual reduction in the number of enrollment of female students in technical related programme.

Deciding on which career to be pursuit by a student is a vital issue that involves a life span process. According to Gati and Asher (2001), decisions made about one's career form one of the most significant choices the student needs to make. Hence, students' personality traits will determine what to do in the world of work. However, there has been a mismatch between personality traits and choice of career among gender (West and Rushton, 1989, 2011; Mastor, 2006; Mastor et al., 2007; Misrian et al., 2012; Lim, 2013; Ryan, 2014). In another dimension, Conklin et al., (2013) expressed that mismatch in a career can occur when students found themselves in the field in which they lack necessary abilities. Hence, the authors suggested the need for career decision making self-efficacy guidance by career counsellors. In addition, the authors noted that students are faced with dissatisfaction in their choice of career during their transition period. This mismatch could however be avoided if a model which could be used in determining the students' personality traits and guiding them towards career decision making could be developed as recommended by some scholars such as Page et al., ( 2009); Fan et al., (2011) and Misrian et al., (2012).

In addition, some authors who stressed the need for the model emphasised the aspects that are urgently needed. For example, Korpershoek, Kuyper and Werf (2012) who carried out a research on relationship that existed between personality traits and gender based on the school subject choices in pre-university education recommended that future studies which will show relationship among personality traits, gender difference and choice of career should be carried out. Also, Rogers and Creed (2011) in a study recommended the need for career counsellors to design an intervention which could be used to implement career decision making confidence among students in order to get motivated in making the right career choice which could be aided by the counsellors, parent and teachers. Similarly, Conklin et al., (2013) in a study recommended to career counsellors and vocational psychologist to help students to identify their areas of study and their abilities.

Furthermore, Larson et al., (2010) in a study stressed that counsellors will always gain valuable information regarding the vocation of students especially in engineering, social science and accounting majors if they study their personality traits before assisting them chose their vocation appropriately. The authors further recommended the need to assess their self-efficacy also in order to help them chose the appropriate vocations. Lo (2007); Jaffer, Ismail and Zahid (2013) in their studies, established that students in various countries including Malaysia often change career multiple times or fail to work in the career they studied in their university time due to wrong choice of career. The authors who identified this problem among accounting students however, stressed that personality of the students often influence their career preference hence, the authors pointed out that a few studies have however examined the relationship between personality traits of accounting undergraduates (Who are part of management students) and their career decision making self-efficacy.

The study carried out by Misran et al., (2012) was based on factors that influence the selection of university matriculation student in Malaysia. The study which made used of students selected from Negeri Sembilan Matriculation College (NSMC) and Malacca Matriculation College (MMC) found that, career choice of the students have relationship with their personality traits on gender basis. The authors therefore recommended the need to develop a framework or model that will serve as a guideline to increase awareness on career related to engineering courses.

Although, most scholars who carried out research on career decision making have either develop a model or framework of career decision making or personality traits among students. For example, Mastor and Tan (2009) developed a conceptual framework that could influence career readiness among Malaysia undergraduates. The proposed conceptual framework was developed to help student get relevant information about themselves and their interest that could benefit them to make career decision. In addition, Ramlee and Long (2010) developed a conceptual framework on gender imbalance in technical and vocational field. The conceptual framework was recommended to be used by guidance and counselling unit, technical education department, schools, parents and teacher to reduce gender imbalance in the technical fields.

On model development, most researchers did not develop their model using Confirmatory Factor Analysis or Structural Equation models to analyse their data. For example, Gushue et al., (2006) who used a multivariate regression found that high level of relationship existed between career decision making self-efficacy, vocational self-concept and career exploration. Similarly, Logue et al., (2007) who made use of a stepwise multiple regression analysis to determine the relationship that occurred between their major and personality traits (based on big five) found that 49% of the students who have interest in the vocation possess the necessary personality traits.

In addition, Germeijs et al., (2012) using MANOVA developed a model that identifies relevant career decision making domain and describing the ways that the students' make their decisions. The model was used in assisting students in career selection. Furthermore, Oztemel (2014) used multiple regression analysis to find out that exploratory indecisiveness serve as the most significant factor that contributed to career indecisiveness among male and female students. Thus, the model was able to identify the difficulties that students experience in career decision making process.

Some researchers made used of Structural equation model in their studies, but the models left some gaps unfilled. For example, Dy (2008) develops a model for effective career decision among Filipino students. The model was recommended to be used in counselling students to select their career and to make adjustment based on their personality development. However, the model failed to consider decision making self-efficacy on gender basis. Mohammed Yusuf (2011) develop a structural equation model (SEM) based on students' self-efficacy, motivation and learning strategies. The model showed that there was significant relationship among the construct but no consideration for personality traits and gender difference.

Also, Fan et al., (2011) developed a structural equation model (SEM), showing the relationship among vocational interest, personality and career exploration. The model was based on the responses of university students in America and Hong Kong. The author recommended that the model could be used in assisting counsellor on relevant information that borders with culture, career interest and personality dimension of students in guidance and counselling process. However, the

model failed to consider differences of traits and career decision making self-efficacy on gender basis.

Finally, Ginevra et al., (2012) developed a confirmatory factor analysis model on career decision making profile and gender difference among adolescent boys and girls. The finding of the study was to facilitate students' choice of school and career. The model was developed to enhance career decision making among students. However, the model did not consider the personality traits of the students.

A careful reviewed of literature of past empirical study on career decision making and personality traits showed that some of the studies concluded in developing a framework ( Mastor and Tan, 2009; Ramlee and Long, 2010) or a model using multivariate analysis (Gushue et al., 2006; Logue et al., 2007; Germeijs et al., 2012; Oztemel, 2014) or a structural equation model which did not fully consider the relationship between personality traits and career decision making self-efficacy on gender basis as suggested by ( Korpershoek, Kuyper and Werf, 2012 ). Moreover, most models developed on personality traits or career decision making in Malaysia (Mohammed Yusuf, 2011) did not made use of TAJMA Personality Profile which took Malaysia culture into consideration and specifically for Engineering and Management students, hence, the need for this study.

### **1.3 Statement of the Problem**

There was speculation that the Malaysian Government will need 4,808,400 educated employees by the year 2020 to realize Vision 2020 inspired by the fourth Malaysia Prime Minister, Tun Dr. Mahathir Mohamad, (MOHE, 2007). With regards to this vision, the Ministry of Education (MOE) was charged with a huge responsibility to achieve this project. This vision was aimed to actualize the Third Outline Perspective Plan (OPP3) by the Malaysian Government. In view of this, the Malaysian Government projected to train about 137,200 engineers together with 331,700 assistant engineers to be produced in the year 2020.

These engineers are to be employed in various fields such as chemical, mechanical, civil, electrical and electronics as so on (EPU, 2001). Hence, it was observed that to an extent that the pre-planned was truncated by gender career preference (e.g., reduction in technical-oriented course programs) between male and female even with those on non-traditional career. The gender career preferences have resulted in an imbalance in the skilled labour in terms of the courses taken by male compared to female students (Mustapha et al., 2010). In view of this issue, Mustapha et al., (2010) suggested that schools career counselling unit should create effective activities such as visiting while learning, seminars, exhibitions and so on that could increase students' knowledge and awareness towards their truncated career.

Furthermore, Larson et al., (2010) in a study stressed that counsellors will always gain valuable information regarding the vocation of students especially in engineering, social science and accounting majors if they study their personality traits. The authors further recommended the need to assess the self-efficacy of students in a choice of career in order to help them chose the appropriate vocations. Lo (2007); Jaffer, Ismail and Zahid (2013) in theirs studies, established that students in various countries including Malaysia often change career multiple times or fail to work in the career they studied in their university time. The authors who identified this problem among accounting students however, stressed that personality of the students often influence their career preference but pointed out that very few study have been carried out in literature to examine the personality traits of accounting (Which is part of management students) undergraduates and their current career preference.

Mastor (2006) found that personality traits affect career decision making among Malaysian University matriculation students whereas Mustapha (2009) found that gender influences career decision making among matriculation university students. Both Mastor (2006) and Mustapha (2009) discovered that most students were under-represented in the technical field (including engineering) and the management field leading to mismatch in the chosen career and their personality traits.

Furthermore, Mastor (2006) found that introvert trait as commonly found in Malay students affects their career decisions. The author further discovered that Malay female students were more introverted than Malay male students. In addition, the female students reported experiencing dissatisfaction in their career decisions. These students attributed such difficulties in decision making to lack of encouragement and inadequate support from friends, teachers, family and the environment as noted by Mustapha and Long (2009). Consequently, they result into emotional confusion and depression in comparison with their male counterparts. Therefore, it is important that students are assisted to choose the appropriate course of study that suits their personalities because the programs chosen will directly influence their career paths in the nearest future (Norbahiah, 2010 and Misran et al., 2012).

At this juncture, it is worth mentioning that a few studies focused on the relationship of personality traits and career decision making did not base on Malaysia context (Bethencourt et al., 2011; Jin et al., 2009). Studies conducted by Mastor (2006) and Mustapha (2009) respectively, showed that one focused only on the relationship between personality traits and career decision making; while the other focused on the relationship between gender and career decision making. However, O'Hare and Beutell (1987); Leong and Chervinko (1996) and Salomone (1982) had earlier suggested that career decision making process can be influenced by both personality traits and gender. In addition, a few studies that considered the students career decision making self-efficacy on gender basis only considered the influence of parents on career decision making (Melati Sumari, 2006; Fouziah Mohd et al., 2010); job search of final year students only on engineering students (Noridah and Mohd Tajudin Ninggal, 2010) without considering their traits and to compare with other specialization which this study also aimed to considered.

In addition, the past studies that focused on personality traits in Malaysia did not make use of TAJMA Personality traits instrument which took the Malaysian culture into consideration-such studies include Chen and Liew (2015); Jaffar, Ismail and Zahid (2013); Mustaffa et al., (2012); Al-kaibani et al., (2011); Mastor et al., (2010) and Mastor (2006). The few studies such as this TAJMA Personality Profile (Mohd Tajudin Ninggal & Adibah Abdul Latif, 2014) that utilized the TAJMA



Personality Profile 2<sup>nd</sup> Edition, did not considered all the twelve dimensions contained in the instrument which this studies aim at considering.

Deciding on a career is vital to a student as it involves a life span process. Gati and Asher (2001) opined that decisions made on one's career significant to the progress of the students in future. Therefore, student's personality will determine how he or she can perform in life-long work. Consequently there seems to be frequent mismatch between personality traits and choice of career among gender (Mastor, 2006; Talib and Tan, 2009; Misrian et al., 2012; Lim, 2013; West and Rushton, 1998; 2011; Ryan, 2014). Therefore, the authors have suggested a careful examination of this for suitability of student personality and choice of career for career satisfaction. It is therefore imperative to study whether the same situation is the prevalent case among the undergraduate students of Malaysia in Malaysian context.

Also, previous studies on career decisions have highlighted that gender and personality traits have relationship with career decisions (Jin et al., 2009; Al-Kabani et al., 2011; Salomone, 1982). Hence, Salomone (1982) concluded that certain personality traits would influence individuals from making career decisions and taking an action regarding the decisions.

A careful reviewed literature of past empirical study on career decision making and personality traits showed that some of the studies concluded in developing a framework (Mastor and Tan, 2009; Ramlee and Long, 2010) or a model using multivariate analysis (Gushue et al., 2006; Logue et al., 2007; Germeijs et al., 2012; Oztemel, 2014) or a structural equation model which did not fully consider the relationship between personality traits and career decision making self-efficacy on gender basis as suggested by (Korpershoek, Kuyper and Werf, 2012 ). Moreover, most models developed on personality traits or career decision making in Malaysia (Mohammed Yusuf, 2011) did not made use of TAJMA Personality Profile 2<sup>nd</sup> Edition which took Malaysia culture into consideration and specifically for Engineering and Management students.

This study therefore was out to consider the relationship that exists between personality traits and career decision making self-efficacy among gender in the Faculty of Engineering and Management undergraduate students in Universiti Teknologi Malaysia. Apart from the fact that this study will bridge the gap that exists in literature so far by making use of TAJMA Personality Profile 2<sup>nd</sup> Edition which is developed to suit the Malaysia culture, it will also help in using structural equation modelling and confirmatory factor analysis to analyse the data which will be collected. In addition, it will help in producing a model which can be utilized by counsellors to guide Malaysian students in career decision making process. Otherwise, mismatch between personality traits and choice of career on gender basis will continue to exist.

#### **1.4 Aim and Objectives of the Study**

The main purpose of this study is to investigate the relationship between personality traits and career decisions making self-efficacy among male and female undergraduate students at a public university in Malaysia. In addition, it is proposed in this study to develop a Model which could be employed as a guide to career counsellors and administrators in planning programmes that will help student chose their career based on their gender and personality traits.

Specifically, there are seven objectives of the study as follows:

1. To identify the dominant personality trait among male and female undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.
2. To determine the career decision making self-efficacy of male and female undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.
3. To identify the relationship between personality trait and gender in career decision making self-efficacy among undergraduate students from the

Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

4. To identify the relationship between personality traits and career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.
5. To identify the relationship between gender and career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.
6. To identify the influence of gender and personality traits on career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.
7. To propose a model on the relationship between personality traits, career decision making self-efficacy and gender among undergraduate students at Universiti Teknologi Malaysia.

## **1.5 Research Questions**

In general, the researcher is interested to found out the relationship between personality traits and career decision making self-efficacy among male and female undergraduate students at Universiti Teknologi Malaysia and to propose a model of relationship between personality traits and career decision making self-efficacy of male and female undergraduate students in Malaysia. In this study, seven research questions have been formulated as follows:

1. What are the dominant personality traits among male and female undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia?

2. What are the career decision making self-efficacy among male and female undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia?
3. Does relationship exist between personality traits and gender in career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia?
4. Does relationship exist between personality traits and career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia?
5. Does relationship exist between gender and career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia?
6. Does a gender and personality trait influence career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia?
7. Is there any relationship that exists in the proposed model among personality traits, career decision making self-efficacy and gender among undergraduate students at Universiti Teknologi Malaysia?

## 1.6 Research Hypotheses

The following null hypotheses were formulated from the research questions to guide the study.

**H<sub>01</sub>**: There is no significant difference in the dominant personality traits among male and female undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

**H<sub>02</sub>:** There is no significant difference in the career decision making self-efficacy among male and female undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

**H<sub>03</sub>:** There is no significant relationship between personality traits and gender in career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

**H<sub>04</sub>:** There is no significant relationship between personality traits and career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

**H<sub>05</sub>:** There is no significant relationship between gender and career decision making self-efficacy among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

**H<sub>06</sub>:** There is no significant relationship among personality traits, career decision making self-efficacy and gender among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia.

## **1.7 Significance of the Study**

It has been found that individuals' personality traits have significant relationship with their choices of career. The result from this study could be used as a source of vocational behavioural provision of information for practicing counsellors either in educational or organizational sectors. Hence, the career counsellors who are involved to enhance students' career development and planning processes must be aware that the process of career decision making is often influence by their personality traits, and hence, a model could be employed as a guide to the career counsellors. The outcome of this study could help the administrators to determine

their personality measure prior to career guidance counselling. It could also help them to create a program or services for students' career development.

The outcome of the study could help assist students to be well informed about the effect of personality traits on career decision making prior to career planning and choice process. The counsellor also needs to understand and be able to identify the factors that influence students in making career decision; and how best to help them to identify those dominant traits that match their choice of career.

The model developed in this study could be adopted in counselling students. The model will greatly help the counsellors to reduce any problems that can lead to career failure. Furthermore, the study could assist the career counsellors to determine the relevant traits for predicting and assessing career decision making process among the university students. Again the outcome of this study could help career counsellors understand the influence of gender on career decision in relation to their personality traits rather than on general situation personality traits. This would help career counsellors understand better which aspect of gender is influence by specific dimension of personality traits. Career counsellors, consequently, could be guided by which dimension of personality traits should be attended to for the students (male and female) who has problems regarding specific personality traits in career decision making process.

In addition, the proposed developed model could also be of benefit to school management unit by providing additional measure which could be used to admit students into the faculty of Management and Electrical Engineering. The conventional criteria used for admission are based on students' academic qualification and students' career choice without any based relation for students' personality traits and gender. The criteria however, have not been able to get rid of problem of career mismatch and less self-confidence which have been noted by (Mastor 2006; Talib and Tan, 2009; Lim, 2013; West and Rushton, 1989, 2011; Conklin et al., 2013; Ryan, 2014). The model provided in this study can therefore be utilized by the management of UTM to admit students into the faculties. The study has emphasis the personality traits required in the fields of study on gender basis. It is therefore hoped that the proposed model will serve as additional guide in selecting

the matriculation students into the career they best fit into and as well aid in promoting self-confidence and reduce the problems of career mismatch.

## **1.8 Theoretical Framework**

In this study, three theories were used, namely, personality traits theory, career development theory and social role theory as theories that supported the study. The three theories identified were therefore merged to form as both the theoretical and conceptual framework. The examination of individual differences using trait-based theory has value in both explaining and predicting behaviour related to career decision making process. This is because personality traits are thought to be relatively stable across the lifespan (McCrae et.al., 2000), consistent and predictable patterns of behaviour that can be found by the time an individual reaches adulthood again providing researchers a framework within which to compare and evaluate different research results. Further as an asset of broad dimensions that characterizes individual and their different personality trait (McCrae and Costa 1987; Iwasa et al., 2008; Kumar and Bakhshi, 2010).

The Traits Theory is one of the theories under the Personality theory. The personality theories include Psychoanalysis theory, Behavioural theory, Humanistic theory, Biological/ Evolution theory and Traits theory. The Traits theory was propounded by Allport in 1936. The theory was grounded in the definition of the comprehensive description of characteristic patterns of thinking, feeling and behaving, which together form a personality that is distinctive to each individual. The Traits approach, sometimes referred to as dispositional approach, focus on empirical rather than clinical observations and describes traits as concretes aspects of personality in descriptive terms (impulsive and assertive).

Indeed, the choice of personality traits as a framework for studies involving college students has been advocated by some of the most well-known researchers in the vocational decision literature (e.g., Chartrand et al., 1993). Researchers have

studied these dimensions for decades. However, there has been different point of views on the dimensions and definitions of the personality traits (Goldberg, 1993).

A well-accepted personality dimensions includes Emotional Stability, Extraversion, Conscientiousness, Agreeableness and Openness to Experience (Goldberg, 1993; Saucier, 1994; Costa and McCrae, 1995; Judge et al., 2002). These dimensions are empirically validated as taxonomic structured model of personality traits. They also provide a dispositional approach to the application of personality constructs that focuses on the relevance of basic personality traits in fostering certain career related behaviours. Therefore, applying the personality trait as a framework in this study would allow better understanding for studying the human personality construct (Gold, 1993, Parks and Guay, 2009) on the differences in students' personality traits among Faculties.

The Traits Theory in the present study will help to identify personality traits dimension of the students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia. In addition, it will help determine which of the personality traits are dominant among the students. More so, to identify which prominent traits would better predict career decision-making in different academic areas and disciplines. This association however, would provide the career counsellors successful knowledge to realize differences of students' learning and performances in achieving their career goal. Moreover, having an insight into students' behaviours would help students on their educational achievement. Based on this, it is assumed that personality traits theory are important concepts in predicting career decision making, equally they played an important role in one's career.

### **1.8.1 The Framework Derived from the Theories**

This study was guided by three theories. These theories are i) Traits Theory, ii) Social role theory, and iii) Career Development Theory.



The Traits Theory is one of the theories under the Personality theory. The personality theories include Psychoanalysis theory, Behavioural theory, Humanistic theory, Biological/ Evolution theory and Traits theory. The Traits theory was propounded by Allport in 1936. The theory was grounded in the definition of the comprehensive description of characteristic patterns of thinking, feeling and behaving, which together form a personality that is distinctive to each individual. The Traits approach, sometimes referred to as dispositional approach, focus on empirical rather than clinical observations and describes traits as concrete aspects of personality in descriptive terms (impulsive and assertive). Traits theorists tend to avoid using abstract and unconscious explanation of human behaviour, unlike psychoanalyst who looks to dreams and parapraxis (sleep of tongue) as evidence for unconscious urges (Carducci, 2009).

The traits theory identifies five personality traits to included Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. Each of the personality traits can be discussed as follows:

Extraversion refers to a person inclination to be sociable, active, experience positive emotions (Iwasa et al., 2008). Extrovert characterizes people who are outgoing, talkative, sociable and assertive (Digma, 1990). Extrovert individual always has the tendency of being communicative, energetic, spontaneous, positive, and enthusiastic (Goldberg, 1990; Watson and Clark, 1997). Hence, they always long for admiration, control, social acknowledgement, and command (Costa and McCrae, 1992). If compared with other five traits, extraverts are completely associated with emotional commitment (Zickar et al., 2006). Extraversion refers to high activity, assertiveness, and a tendency towards social behaviour (Furnham et al., 2007). Individuals high in extraversion enjoy human interactions and take pleasure in activities that involve large social gatherings.

An introvert is an individual who is very reserved, less social and tends to find it uncomfortable to interact with strangers. The trait which is termed as introversion therefore is seen as an opposite to the extraversion (Goldberg, 1992). Individuals who are introvert are reserved, less social and tends to find it unease to interact with strangers. They would prefer to be self-centred and alone. Research

suggests that this personality dimension have quite healthy role in predicting the success in a career (Judge et al., 1999).

Agreeableness consists of traits such as politeness, flexibility, naive, helpfulness, supportive, merciful, kindness, and open-mindedness (Barrick and Mount, 1991). They also tend to be generous, calm, trusting, truthful, and sincere (Judge and Bono, 2000). It is an interpersonal dimension which has the tendency of measuring a person's selfless attitudes towards others; generous and tough minded. A person who scores high on this trait is always sympathetic, warm, considerate, compassionate, and behaves in a giving way. While those that score low on Agreeableness are tend to be sceptical, critical, shows condescending behaviour can directly express hostility (McCrae and Costa, 2003; McCrae et al., 1986).

Conscientiousness is an individual's tendency to be hardworking, striving for achievement, ambition, organized and duty-mindedness. This type of traits consists of individual that is diligent, attentive, vigilant, comprehensive, systematized, determined and responsible (Barrick and Mount, 1991).

Neuroticism trait portrays a tendency to negative effect including guilt sadness, fear, anger, embarrassment, and disgust. A person that score high on this trait is usually describes as having irrational ideas, struggle with controlling impulses, and to cope more poorly than others with stress. While those that score low are even-tempered, calm and not easily upset when been stressful (Costa and McCrae, 1992).

Openness can be seen as a personality dimension that is characterized by preference for variety, imagination, curiosity, intellectual sensitivity, independence of judgment, attendance to inner feelings, and aesthetic. An individual with a high score on Openness is willing to entertain novel ideas, curious about the inner and outer world, and unconventional values. Those on this trait can also experiences emotions more keenly, and are unconventional, willing to question authority. While those who scores low on Openness are usually conservative, prefer the familiar, conventional in behaviour, and have low emotional behaviours (Costa and McCrae, 1992).

The application of Traits Theory in this present study was to help identify personality traits dimension of the students from the Faculty of Electrical Engineering and Faculty of Management at Universiti Teknologi Malaysia. In addition, determine which of the personality traits are dominant among the students and the relationship of these traits to career decision making self-efficacy among male and female undergraduate students. However, the theory stress that individual's personality are differentiated by their traits through their way of thinking, feeling and behaviour which makes it relevant to be used in determining student's career decision making process.

The social role theory considers gender difference and shares social expectations of how males and females should think feel and behave. Gender roles are internalized very early in life through socialization processes, and they both shape personality traits and trait-relevant behaviour. This theory according to Eagly (1987), suggested communal expectation of female behaviour (i.e., gentle helpful, and nurturing) while agentic behaviours (ability to control, be assertive and confidence) are expected of the males. Thus, when an individual behaves inconsistently his or her expected sex behaviour, the person can be judged negatively (Rosenkrantz et al., 1972; Eagly, 1987; Diekman, et al., 2000; Heilman, 2001).

The theory is meant to determine whether gender actually influences the students' choice of career. That is it helps to look at individual difference based on their societal expectation on how male and female should behave, think and feel as regard to their career preference base on gender.

There are many theorists that are focused on career development, including: Super Donald (1951), Holland (1984), Ginzberge (1951), Gottfredson (1981) and Bandura (1987). Each of the theorist focuses on different aspects of career development and on human development across life span.

First, Ginzberg, Axelrad, and Herma (1951) proposed that career development as a developmental course of action and an occupational choice for an individual takes place over a number of years. This theoretical perspective also supposes that while individuals may assume this process is complete in early

adulthood, choosing an occupation is a lifelong process (Mau, 2007). The cumulative effect of the process is the transition process in which the adolescent begins the career choice process, recognizes the consequences and responsibility of that choice.

Second, Super Donald (1951) stressed that people choose careers that allow them to express their self-concepts and engage in satisfying work (Zunker, 2002). Super developed a theory of five stages to describe career development across a life span. According to Super, career development is based on these five stages: Growth, Exploration, Establishment, Maintenance, and Disengagement (Super et al., 1957). However, one of the greatest contributions of Super to career development was the emphasis laid on self-concept development, the process of changes and overall development throughout individuals' lives due to experience. Donald Super's career model is based on the belief that self-concept changes over time and develops as a result of experience.

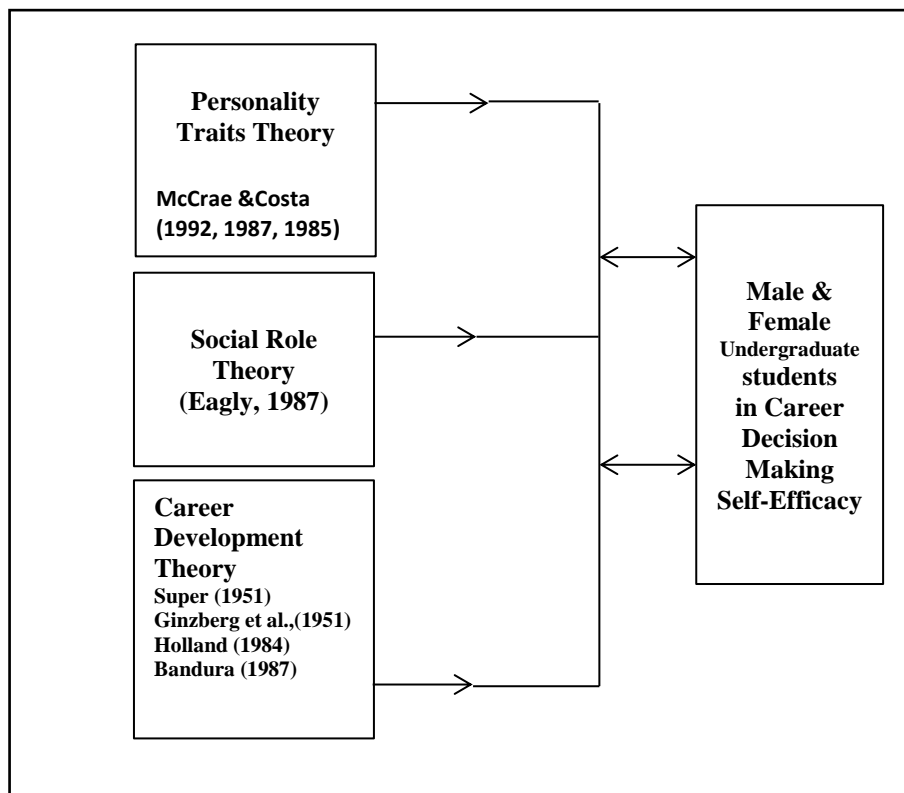
Third, John Holland (1959) developed his typology theory of vocational personalities and environments. He reported in his theory that mostly people choose a particular career related to their personalities and background rather than their environment (Zunker, 2002). If the personality fits with the work environment, the individual will most likely get satisfaction and success (Abernathy, 2003). Holland identified and described six personality and work environment types model that influence in career choice development. These are labelled Realistic, Investigative, Artistic, Social, Enterprising, and Conventional.

Fourth, emerges social cognitive theory propounded by Albert Bandura. The theory centres on interaction among gender, genetic endowment, culture, social context and unexpected life events that may also have relationship with career-related choices. The SCCT focused on the connection of outcome expectations, personal goals and self-efficacy which influence an individual's career choice. SCCT proposes that career choice is influenced by the beliefs an individual develops and refines through four main sources: vicarious learning, social persuasion, personal performance accomplishments, physiological states and reactions. These aspects work together in the career development process through a process whereby individuals develop abilities for a particular endeavour and meet with success.

Through an evolutionary process beginning in early childhood and continuing throughout adulthood, one narrows the scope to successful endeavours to focus on and form a career goal/choice.

Career Development Theory is applied in this study to determine the career decision making process among undergraduate students from the Faculty of Electrical Engineering and Faculty of Management based on their choice of career. For this reason, it seeks to address if the students are certain about their choice of career. And if they had prior information such as knowledge, prospect and placement regarding their choice of career. In addition, the theory is out to find out whether the students are ready to continue their career or make adjustment after graduation.

Figure 1.1 below represents the framework derived from three major theories to be applied in this study. As discussed above, the three major theories identified are as follows: i) Personality Traits Theory, ii) Social role, and iii) Career Development Theory. The Personality Theory applied in the framework could help to identify the relationship between personality traits dimension and career decision making process among the undergraduate students. The Social Role Theory is to identify the relationship between career choices and students' gender. In addition, the Career Development Theory contributes to the understanding of the students' development in career decision making process. The combination of these three major theories could provide comprehensive understanding about students' world of work, one's personality traits as it relates to their career choices, self-concept and activity of career related tasks that is link to their behaviour in career decision making.



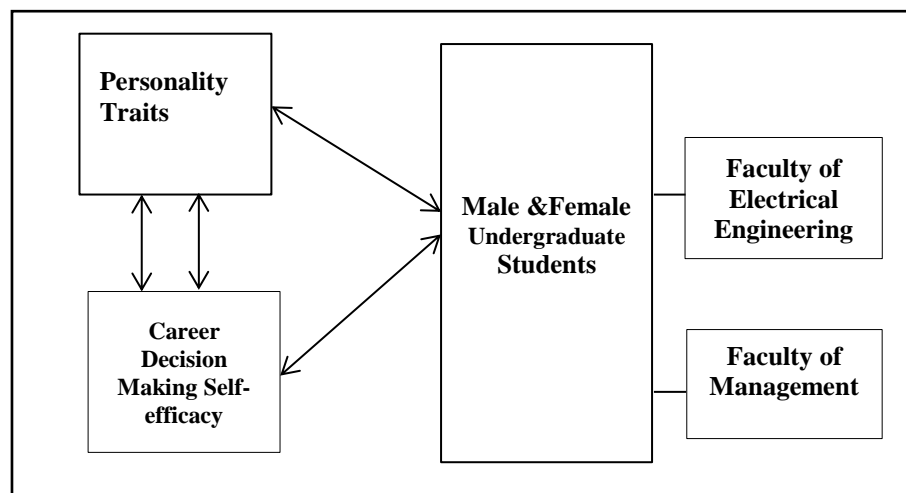
**Figure 1.1 :** Theoretical Framework Based from the Three Theories

### 1.8.2 Conceptual Framework

The conceptual framework illustrated in Figure 1.2 below explains the relationship between personality traits and career decision making among male and female undergraduate students of Universiti Teknologi Malaysia. The framework is based on the theories identified from the theories which are Trait theory and career development theories. The conceptual framework is also based on the statement of problem and the purposed of this study. The statement of the problem arises from the fact that all the scholars that researched on personality traits and career decision making only few have concentrated in developing a model in Malaysia context. Therefore, the statement of the problem is simply stated to mean that there will be need to identify certain variable which form the basis for this study.

The personality dimensions of personality traits form the unique individual trait (Neuroticism, Extraversion, Agreeableness, Conscientiousness, and Openness traits) and career decision making independent variable while gender is the dependent variables. The intervening variable is the Faculty which is Electrical Engineering and Management at UTM.

In this figure, the aim is to explain the relationship between personality trait and career making among male and female undergraduate students currently pursuing their studies at the Faculty of Electrical Engineering and Faculty of Management, Universiti Teknologi Malaysia. Also, conceptual framework shows a triadic relationship among personality traits, career decision making and gender. The conceptual framework is shown in figure 1.2



**Figure 1.2 :** Conceptual Framework of the Study

## 1.9 Scope of the Study

The study focuses on personality traits and gender difference in relation to career decision making process among undergraduate students at Universiti Teknologi Malaysia. The study made used of only undergraduate year two students from the Faculty of Electrical Engineering and Faculty of Management. It did not cover other Faculties in the university. Data were collected using two set of

instruments and analysis of the research were done based on the data collected from the undergraduate students that have been mentioned. In addition, the study sought to develop a model that can be used in guiding male and female undergraduate students of the Universiti Teknologi Malaysia (UTM) based on their personality traits.

### 1.10 Operational Definitions

- i. **Career Decision** is a process of choosing one's major and occupation by seeking agreement between self-concept and vocational role concept. As used in this study career decision involves the major courses the students at Universiti Teknologi Malaysia have decided to study.
- ii. **Career decision-making self-efficacy** is defined as having confidence in oneself to make decisions about a career on the basis of information gathered about the self, goals, and career options. Career decision making self-efficacy involves the concept such as information gathered on oneself, goals and career options.
- iii. **Gender** is usually considered as a psychological and cultural term, and related to the evaluation of behaviours as masculine or feminine in a specific society. Gender in this study refers to as the male and female undergraduate students in both Faculty of Electrical engineering and Management at Universiti Teknologi Malaysia.
- iv. **Personality** is a psychological system of interest perceptions, feelings, thoughts, and behaviours which forms an individual's integrated and unique patterns of characteristics and inclinations influencing every response of an individual to his or her environment Personality in this study refers to the behaviour and characteristics of the undergraduate students of University Teknologi Malaysia based on their personality traits dimensions.
- v. **Personality Traits** are element of personality, as enduring psychological dispositions which lead an individual's behaviour equivalently within various and changing environments. Personality traits in this study refer to the dimensions that are identified in the TAJMA Personality Profile 2<sup>nd</sup> Edition that includes assertive, analytical, extroversion, self-confidence, leadership,



caring, cross-cultural, resilience, achievement, integrity, patriotism and distortion.

- vi. **Personality Dimension** is a taxonomic structure that can represent in common framework the various and various diverse system of personality descriptions currently in use. Personality traits in this study refers to the personality traits dimensions, which includes neuroticism, extraversion, agreeableness, conscientiousness and openness to new experience.

### 1.11 Summary

The concluded chapter concentrates on the background of the study, purpose of the study, research questions and hypotheses. It explains the need of student personality trait in career decision making and influence of it on career development process. The chapter reveals seven research objectives, seven research questions and tested six hypotheses that guided the study. The aim of the study and research questions sought to determine student's personality traits and the relationship between career decision making among male and female undergraduates.

Three theories; which are Traits theory, Social cognitive theory and career development are identified as theories that backed up the study. The three theories are combined to produce both the theoretical and conceptual framework of the study. The thesis was organized into five chapters. There are inter-relationships between different chapters and sections of the thesis. Chapter 1 introduces the research area and its environment. This chapter proceeds with the problem statement, research objectives and questions. Chapter 2 discusses the related literature. Chapter 3 describes the methodology used in the research. Chapter 4 discuss the findings, while Chapter 5 was based on the discussion of the findings, contributions, and recommendations.

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