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FACTORS AFFECTING CAREER MATURITY AND CAREER DECISION MAKING SELF-EFFICACY OF BACHELOR OF ARTS STUDENTS

SONAM SUPASHNA CHAND
FACTORS AFFECTING CAREER MATURITY AND CAREER DECISION MAKING SELF-EFFICACY OF BACHELOR OF ARTS STUDENTS

by

Sonam Supashna Chand

A thesis submitted in the fulfillment of the requirements for the degree of Masters of Arts

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School of Social Science
Faculty of Arts and Law and Education
The University of the South Pacific

January, 2014
DECLARATION

I, Sonam Supashna Chand, declare that this thesis is my own work and that, to the best of my knowledge, it contains no material previously published, or substantially overlapping with material submitted for the award of any other degree at any institution, except where due acknowledgment is made in the text.

Signature .................................. Date..................................

Name .................................................................

Student ID No. .................................................

Statement by Supervisor

The research in this thesis was performed under my supervision and to my knowledge is the sole work of Mrs. Sonam Supashna Chand

Signature........................................ Date 14-01-15

Leif Andergren

Name.........................................................

Designation .................................................
Dedication

I would like to dedicate this Masters thesis to my parents.
Acknowledgements

My Masters thesis would not have been a success if it were not for the kind and generous support and guidance of many people. I wish to express my deepest appreciation to all those who helped me to reach my destination.

Firstly, I am heartily thankful to my supervisor, Mr. Leif Andergren, whose encouragement, guidance and support enabled me to develop an understanding of the subject and to complete my work within a short period of time.

I am indebted to the USP Research Office for funding my research and my education.

I owe my deepest gratitude to my husband, parents, grandparents and brother who have provided support in numerous ways and have been continuously encouraging me to complete my work.

I would also like to honor my colleagues and friends who have made available their support in a number of ways.
Abstract

Choosing an appropriate career is an important decision that one has to make. Career decision making is a very complex process. There are many factors that affect the choice of a career. Two of these factors are career maturity and career decision making self-efficacy. This study aimed to find the career maturity and career decision making self-efficacy of the students who were doing Bachelor of Arts. This study also aimed to find the relationships among career maturity, career decision-making self-efficacy, gender role ideology and locus of control and how these were affected by gender, culture and geographical locations. This study involved a quantitative approach and consisted of 8 research questions with 21 hypotheses. There were 212 participants who were students of the University of the South Pacific, enrolled in Bachelor of Arts programme. A survey was carried out using Career Maturity Inventory, Career Decision Making Self-efficacy Inventory, Attitude towards Women Scale, and Locus of Control Scale. The gender, ethnicity and geographical locations of the participants were also considered. Data were collected and entered in SPSS. The analysis tests which were used to find the predictors of career maturity were simple descriptive, Pearson’s correlation, independent t-test, one-way ANOVA and regression analysis. It was found that career maturity has a significant positive association with career decision making self-efficacy, gender role ideology, locus of control and participation in extracurricular and academic related activities. Significant positive correlations were also found for career decision making self-efficacy and gender role ideology, locus of control and participation in extracurricular and academic related activities. This study showed the influence of gender, ethnicity and geographical location in career maturity and career decision making self-efficacy of students. The limitations of this study were in terms of the inventories used and sample size. In spite of these, this study suggests that the factors affecting career decision making are embedded in cultural aspects of Fiji.
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1.0 Chapter 1 Introduction

This research is a study of career maturity and career decision making self-efficacy of students taking Bachelor of Arts at the University of the South Pacific. This research is relevant because it helps to understand how students can be well prepared for their career decisions. It is important to assist students in making appropriate career choices as this will help them to establish themselves in seeking a satisfactory career.

Career decision making is a complex process. Career maturity and career decision making self-efficacy are an integral part of the decision making process. Career maturity ensures that students are concerned about their career goals; they are curious and ready to consult others in getting information about the world of work. Career decision making self-efficacy helps to see students’ confidence in approach behaviors that allow them to explore the world of work and also increase their self-knowledge. If students possess a lower level of these two then there may be chances of career indecisiveness, unsatisfactory performance and dropouts and high unemployment rates.

If students are not well prepared, they become indecisive of their career goals. This leads to instability in performance and hinders the growth of an individual in the labour force. Fiji is constantly undergoing economic developments and challenges in terms of poverty and high rate of unemployment. For a country like Fiji, it is important to understand the cultural implications and the roles of culture that are hidden in the education system. Culture and traditions govern and shape the way children are brought up in schools and the way they are taught to make decisions. This has a lot of influence on the career decision making process of students. This research has looked at the career maturity and career decision making self-efficacy of students taking Bachelor of Arts at the University of the South Pacific. It has also looked at how certain factors such as gender role ideology, attitude towards women, participation in extracurricular activities and academic related activities, ethnicity, gender and geographical location influence career maturity and career decision making self-efficacy. This paper has five chapters. The first chapter looks at the introduction. In the second chapter, possible literatures have been reviewed from which research questions and hypotheses were developed. The third chapter looks at the methodology while the fourth chapter presents the results followed by discussion in the last chapter.
1.1 Background of the Study

The present study was based on several premises that led to the need to recognize the role played by career maturity and career decision making of adolescents. It was noted that career maturity and career decision making self-efficacy were affected by many factors. These factors are in terms of the culture of the ethnic groups, education system, unemployment rate, gender role ideology and the rate of female participation in labour force.

Firstly, cultural values and norms are deeply embedded in the upbringing of adolescents and also in the school and work place structures. The cultural values also dominate and predict gender roles. Secondly, there are ethnic differences in the way educational and vocational development is seen. The i-Taukei (indigenous Fijians) group encourages participation in communal activities which to some extend limits individualism. The Indo-Fijian society on the other hand, encourages individualism but it also has some limitation when it comes to females (Kishore, 1981). Thirdly, even though compulsory education has been enforced, there are still differences in the male and female enrollment in primary schools, high schools and also in universities. Due to culture, ethnicity, gender and even geographic location, students’ exploration of career field can be hindered.

Keeping these factors in mind, this study has explored how ethnicity, gender role ideology, and geographical location affect career maturity and career decision making of the students enrolled in Bachelor of Arts at the University of the South Pacific. Career decision making is an important aspect of career choice and career development. Career maturity and career decision making are an integral part of the decision making process. These two aspects can be influenced by many external factors such as ethnicity, gender and geographical location. If the hypothesized career maturity model is supported then this may help career counselors to recognize ways of increasing the career maturity and career decision making self-efficacy of students.

1.2 Fiji

The Republic of Fiji is located in the heart of the Pacific Ocean midway between the Equator and the South Pole and between longitudes 174° East and 178° West of Greenwich and latitudes 12° S and 22° South. Most of the country is made up of islands, out which the two largest islands are Viti Levu and Vanua Levu that cover more than 85 percent of the total area. Most of the islands
are volcanic in nature and the mountains like Mount Tomaniiivi on VitiLevu rises up to a maximum elevation of 1,324m. The smaller islands are coral formations and rise only a few feet above sea level. Fiji’s Exclusive Economic Zone contains approximately 330 islands of which about a third are inhabited. This covers about 1.3 million sq.km of the South Pacific Ocean (Cattermole, 2008).

Fiji's total land area is 18,333 sq.km. There are two major islands - VitiLevu which is 10,429 sq.km and Vanua Levu 5,556 sq.km. Other main islands are Taveuni 470 sq.km, Kadavu 411 sq.km, Gau 140 sq.km, Koro 140 sq.km. Indigenous iTaukeis own 87.9% of the land while 3.9% is State Land. Freehold land comprises of 7.9% and Rotuman land is 0.3%. The capital is Suva and it is one of the two cities in Fiji. The other is Lautoka City and both are located on the island of VitiLevu.

Generally, Fiji has a tropical climate without great extremes of heat or cold. The islands lie in area which is occasionally traversed by tropical cyclones, and mostly confined between the months of November to April every year. On the average some ten to twelve cyclones per decade affect some parts of Fiji, and two to three cyclones can be very severe.

1.2.1 Culture and Tradition

Fijian society is a mixture of culturally diversified people. The original homelands of the Pacific Island people were Melanesia and Southeast Asia. Fijians, the indigenous inhabitants of Fiji, are Melanesians who possess a mixture of Polynesian blood which is very apparent in the eastern islands (such as the Lau group), but less so in the west and interiors of the main islands (Willis, 1990). Many of the present chiefly families trace their descent, through 11 or more generations, from strangers who sailed or drifted to these shores from distant islands, and who settled singly or in small groups among the Melanesian people already occupying the land (Willis, 1990).

The people who were to populate Fiji had adopted sail and outrigger canoes, methods of cultivating root crops, and pig farming. Fijian society was dominated by a complicated class system. Chiefs often had tremendous personal power, which was expressed in demand for tribute from conquered tribes and in many bloody human sacrifices. Each “tribe” was broken into several clans, each with its own function in society (Willis, 1990).
Leadership in the tribal units was strictly hereditary and succession often a subject of debate. Rank was inherited through both parents, and in a polygamous society this could be very confusing. A chief might have five different sons from five different wives, each with a different political status. To complicate matters even more, rank could be inherited from one’s mother’s brothers before it passed on to sons. There might be a number of individuals qualified as chiefly candidates, but those who became chiefs had to stand out from the group. During the reign of Chief Cakobau, a central figure for nearly half of a century and the most influential chief in recorded Fijian history, much of Fiji became politically consolidated and was eventually ceded to Britain. On October 10th, 1874 Fiji became a crown colony (Willis, 1999).

During the colonial days, the British government brought labourers from India under the Indentured system. When the labourers’ contract expired, most of them chose to stay back and settle in Fiji, contributing to the second main ethnic group in Fiji. When the indentured labour system was abolished in 1920, over 60,000 labourers had been brought to Fiji, many of whom decided to settle (Lal, 1983). Because of natural increase and a small volume of further migration from India, Fiji rapidly became a multi-ethnic and multi-lingual nation (Mangubhai, 1995).

Table 1.1 shows the demography of the population.

<table>
<thead>
<tr>
<th>Population</th>
<th>Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>4,704</td>
</tr>
<tr>
<td>European</td>
<td>2,953</td>
</tr>
<tr>
<td>iTaukei</td>
<td>475,739</td>
</tr>
<tr>
<td>Indians</td>
<td>313,798</td>
</tr>
<tr>
<td>Part European</td>
<td>10,771</td>
</tr>
</tbody>
</table>
Table 1.1 represents the two main cultural groups which are iTaukei and Indo-Fijian. The iTaukei society tends to be culturally bonded to their norms and social obligations (Kishore, 1981). Gender roles are mostly determined by traditional values which emphasizes the authority of chiefs (usually the chiefs are males). Similarly, the Indo-Fijian society is also governed by traditional values and norms. Fiji, as a whole is a patriarchal society but this does not mean women’s mobility in economic development is discouraged (Republic of Fiji Islands, 2006). iTaukei culture emphasizes duty to the family, clan, and community over individual achievement and education. At times, this factor can make it difficult for an individual indigenous Fijian to accumulate wealth, since obligations to family tend to deplete savings that could be directed toward further investments (Woodrow, 2000). The Indo-Fijian community, on the other hand, encourages individual achievement. Families push children to excel in school and to go on to higher achievements.

### 1.2.2 Population of Fiji

iTaukei and Indo-Fijians mostly dominate Fiji. With respect to the report by Fiji Bureau of Statistic (2011) the male population was higher than the female. Table 1.2 shows the distribution of population by gender and age.

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>42,835</td>
<td>39,883</td>
<td>82,718</td>
</tr>
<tr>
<td>Age Group</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>5 - 9 years</td>
<td>40,441</td>
<td>37,578</td>
<td>78,019</td>
</tr>
<tr>
<td>10 - 14 years</td>
<td>42,369</td>
<td>40,015</td>
<td>82,384</td>
</tr>
<tr>
<td>15 - 19 years</td>
<td>40,818</td>
<td>38,700</td>
<td>79,518</td>
</tr>
<tr>
<td>20 - 24 years</td>
<td>41,325</td>
<td>39,027</td>
<td>80,352</td>
</tr>
<tr>
<td>25 - 29 years</td>
<td>37,390</td>
<td>36,097</td>
<td>73,487</td>
</tr>
<tr>
<td>30 - 34 years</td>
<td>32,825</td>
<td>30,710</td>
<td>63,535</td>
</tr>
<tr>
<td>35 - 39 years</td>
<td>28,778</td>
<td>27,774</td>
<td>56,552</td>
</tr>
<tr>
<td>40 - 44 years</td>
<td>28,598</td>
<td>27,676</td>
<td>56,274</td>
</tr>
<tr>
<td>45 - 49 years</td>
<td>25,835</td>
<td>24,487</td>
<td>50,322</td>
</tr>
<tr>
<td>50 - 54 years</td>
<td>20,215</td>
<td>19,794</td>
<td>40,009</td>
</tr>
<tr>
<td>55 - 59 years</td>
<td>15,735</td>
<td>15,426</td>
<td>31,161</td>
</tr>
<tr>
<td>60 - 64 years</td>
<td>11,956</td>
<td>12,164</td>
<td>24,120</td>
</tr>
<tr>
<td>65 - 69 years</td>
<td>8,098</td>
<td>8,710</td>
<td>16,808</td>
</tr>
<tr>
<td>70 - 74 years</td>
<td>4,716</td>
<td>5,394</td>
<td>10,110</td>
</tr>
<tr>
<td>75 years &amp; over</td>
<td>5,242</td>
<td>6,660</td>
<td>11,902</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>427,176</strong></td>
<td><strong>410,095</strong></td>
<td><strong>837,271</strong></td>
</tr>
</tbody>
</table>

Source: Fiji Bureau of Statistics (2011)

Table 1.2 shows the record of census in the year 2007. The teenage and the adolescent age record the highest population. The male group has generally outnumbered the female group.
The current study has also considered the geographical division and ethnicity. Table 1.3 shows the average household size by division and ethnicity.

Table 1.3 *Average Household Size By Division And Ethnicity*

<table>
<thead>
<tr>
<th>Geographical division</th>
<th>Total</th>
<th>iTaukei</th>
<th>Indo-Fijian</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>4.93</td>
<td>5.49</td>
<td>4.12</td>
<td>4.68</td>
</tr>
<tr>
<td>Urban</td>
<td>4.79</td>
<td>5.52</td>
<td>4.05</td>
<td>4.60</td>
</tr>
<tr>
<td>Rural</td>
<td>5.36</td>
<td>5.44</td>
<td>4.80</td>
<td>6.21</td>
</tr>
<tr>
<td>Eastern</td>
<td>4.73</td>
<td>4.74</td>
<td>3.69</td>
<td>4.86</td>
</tr>
<tr>
<td>Western</td>
<td>4.60</td>
<td>5.10</td>
<td>4.23</td>
<td>4.09</td>
</tr>
<tr>
<td>Urban</td>
<td>4.56</td>
<td>5.27</td>
<td>4.11</td>
<td>3.98</td>
</tr>
<tr>
<td>Rural</td>
<td>4.63</td>
<td>4.99</td>
<td>4.32</td>
<td>4.81</td>
</tr>
<tr>
<td>Northern</td>
<td>4.64</td>
<td>5.16</td>
<td>4.11</td>
<td>4.20</td>
</tr>
<tr>
<td>Urban</td>
<td>4.67</td>
<td>5.88</td>
<td>4.04</td>
<td>5.88</td>
</tr>
<tr>
<td>Rural</td>
<td>4.63</td>
<td>5.01</td>
<td>4.16</td>
<td>3.75</td>
</tr>
<tr>
<td>Total</td>
<td>4.75</td>
<td>5.25</td>
<td>4.17</td>
<td>4.49</td>
</tr>
</tbody>
</table>

Source: Fiji Bureau of Statistics (2011)
Fiji is a multiracial country which is mostly populated by iTaukei and the Indo-Fijians. With regards to data shown in the table, Central division consists of the highest average household with majority being iTaukei. English is the official language but with majority being iTaukei and the Indo-Fijian, Fijian and Hindi are also taught in schools as part of the school curriculum.

1.2.3 Education System in Fiji

Education is one of the means through which adolescents get to explore the world of work. Education should holistically develop and inculcate in every child the fundamental ethical, moral, social, spiritual and democratic values (World Data on Education, 2011). The school based education was structured in a way that would support the learning and development of positive attitudes in students and empower them with a foundation of knowledge that would help them encounter challenges in meeting their ends (Ministry of Education, 2007). The provision of education in Fiji is based upon a core of intrinsic and enduring values. These are: cultural understanding, empathy and tolerance, human rights, human dignity and responsibility, a sense of family and community and faith (Ministry of Education, 2009).

The Ministry of Education is responsible for the administration and management of education, policy and delivery of educational services. The Ministry of Education provides Curriculum Advisory Services (CAS) which facilitates supports and promotes quality in the curriculum. CAS has been divided into many units and these are Curriculum Development, Careers, the Education Resources Centre, Schools Broadcast Unit, Basic Education Management and Teacher Upgrading Project (World Data on Education, 2011). The school based education is organized in three stages; early childhood care, development and education, primary phase of education, secondary phase of education (Ministry of Education, 2008). After completing secondary education, students can choose to go for higher education. There are three universities in Fiji; the University of the South Pacific, Fiji National University, University of Fiji. The primary school enrollment rate is usually higher than the secondary school. Table 1.4 shows the enrollment rate of students into primary and secondary school for the year 2008 and 2009.
The education sector is facing many challenges. The rising unemployment rate compounds the problem creating a sense of hopelessness amongst students and posing the question of the relevance of schooling (Ministry of Education, 2009). The Bureau of Statistics (2011) showed the unemployment rate of 8.7% in 2009 and 8.8% in 2008.

1.2.4 University of the South Pacific

The University of the South Pacific (USP) is the premier provider of tertiary education in Fiji. It was established in 1968. It is jointly owned by the governments of 12 member countries: Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Samoa. The University has campuses in all member countries and the main Laucala Campus is located in Fiji. In Fiji the main areas where USP campuses are located are in Suva, Lautoka and Labasa. This university has 3 faculties; the Faculty of Arts, Law and Education, Faculty of Business and Economics and the Faculty of Science, Technology and Environment. Each Faculty provides a wide range of courses and programmes at both undergraduate and postgraduate levels. With respect to Bureau of Statistics (2011), most of the students are enrolled in the Faculty of Business and Economics.
Table 1.5 *University of the South Pacific: Enrollment by Each Faculty*

<table>
<thead>
<tr>
<th>Faculty</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Arts, Law and Education</td>
<td>2,626</td>
</tr>
<tr>
<td>Faculty of Business and Economics</td>
<td>3,177</td>
</tr>
<tr>
<td>Faculty of Science, Technology and Environment</td>
<td>2,519</td>
</tr>
</tbody>
</table>

Source: Fiji Bureau of Statistics

The University of the South Pacific is continuously improving the quality of education provided to its students through various forms and departments. Campus life, for instance, is responsible for the provision of services that foster a sense of community and promote physical, social, spiritual and intellectual growth and development among students in an atmosphere of understanding, responsibility, tolerance and sensitivity. The Campus Life Section seeks to provide these services in the most effective and efficient manner possible through teamwork from its staff that are committed, dedicated and responsive to all issues that fall within the scope of its responsibilities. Specifically, the services provided are in the areas of Student Accommodation, Food outlets, Sports and Recreation, Health, Counselling, (including Chaplaincy) and Security (Campus Life, 2012). One of the Missions of Campus Life is to contribute to student success primarily by providing a welcoming, safe, secure and supportive living and learning environment. This provides a holistic development in students. Some of the activities that campus life provides to its students are market day (this is open to the public as well, through involvement in this activity; students get to explore their skills in business and marketing.), blood drive, USP fun day, sports and other leisure activities (this ensures students involvement in extracurricular activities), USP student elections, counselling activities and workshops (Prasad, 2012).
All in all, USP is not only involved in providing academic teaching and learning but it also fosters development of practical skills and talents through the organisation of various campus life activities.

### 1.2.5 Unemployment in Fiji

Fiji is struggling to regain its economic status. Fiji has adapted the Millennium Development Goals to provide a better future for its citizens. It is trying to reduce the high unemployment rate. Providing free education and encouraging students to pursue in further education is one of the ways of improving the living status. Despite this, students still face difficulties in finding a satisfactory job. May (2007) argued that unemployment may be related to poor career planning. A certain level of career maturity and career decision making self-efficacy can prevent students from becoming a victim of unemployment. Table 1.5 shows the sector in which most of the labour force is engaged. Table 1.6 shows a comparison between male and female participation in each sector.

#### Table 1.6 Fiji Labour Force

<table>
<thead>
<tr>
<th>Labour Force</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>329,755</td>
<td>332,582</td>
</tr>
<tr>
<td>Employed</td>
<td>300,747</td>
<td>303,647</td>
</tr>
<tr>
<td>Money work</td>
<td>256,023</td>
<td>261,181</td>
</tr>
<tr>
<td>Formal</td>
<td>130,600</td>
<td>132,600</td>
</tr>
<tr>
<td>Informal (seasonal workers)</td>
<td>125,423</td>
<td>128,581</td>
</tr>
<tr>
<td>Subsistence</td>
<td>44,724</td>
<td>42,466</td>
</tr>
<tr>
<td>Unemployment</td>
<td>29,018</td>
<td>28,935</td>
</tr>
<tr>
<td>Unemployment rate %</td>
<td>8.9</td>
<td>8.7</td>
</tr>
<tr>
<td>Employment sector</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>1,375</td>
<td>229</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>2,046</td>
<td>108</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15,242</td>
<td>11,957</td>
</tr>
<tr>
<td>Electricity and Water</td>
<td>2,101</td>
<td>157</td>
</tr>
<tr>
<td>Construction</td>
<td>8,999</td>
<td>338</td>
</tr>
<tr>
<td>Wholesale and Retail Trades</td>
<td>18,719</td>
<td>11,507</td>
</tr>
<tr>
<td>Transport and Communications</td>
<td>8,315</td>
<td>2,513</td>
</tr>
<tr>
<td>Financial and Business Services</td>
<td>5,706</td>
<td>3,682</td>
</tr>
<tr>
<td>Community, Social and Personal Services</td>
<td>25,863</td>
<td>15,997</td>
</tr>
<tr>
<td>Total</td>
<td>88,366</td>
<td>46,488</td>
</tr>
</tbody>
</table>

Source: Fiji Bureau of Statistics (2011)
Overall, the female participation in the employment sector is much lower than the males particularly in the construction, electrical and water sector. One of the reasons for this may be because these jobs are usually perceived as masculine jobs. While the proportion of women in the economically active population has increased since 1988, employment opportunities for women are concentrated in a small part of the labor market, with one quarter of all paid jobs for women in clerical, teaching, nursing, factory, and sales work. Women predominate in all lower-paid occupations except manual labor. In the private formal sector, women’s employment is concentrated in manufacturing, particularly in the fish processing and garment industries, and in hotel and related hospitality services (Republic of the Fiji Islands 2006).

### 1.3 Significance of the Study

The current study is significant as it addresses some important career issues. Looking at the unemployment rate of Fiji, it is important that students make wise career decisions that would ensure the development and security of their future. The current study is significant because firstly, it will help understand career maturity and career decision making self-efficacy and how these are affected by the background variables. The background variables that this study looked at were gender role ideology, locus of control, participation in extracurricular activities and in career related activities, ethnicity, gender and geographical location. Secondly, if the hypothesized career maturity and career decision making self-efficacy model is found to be significant then this can help to understand the ways in which one’s career maturity can be increased which will assist students in realizing the areas in which they need to improve in order to make a better plan for their career. In particular, the model will enable career counselors to understand how gender roles and ethnicity shape one’s career decisions in a subtle way.

### 1.4 Career Maturity and Career Decision Making Self-Efficacy

Students usually start to think about their career from a very young age. This thinking becomes much of a concern when they have to decide on which subjects to choose in high school and later when they enter universities their concerns grow much higher. Students have to think with precautions on which courses to choose. During this age, career decision making process becomes crucial. Johnson (2000) stated that a person’s occupation has important consequences for the self and is the pivot on which his/her basic values and life goals rest. Super (1957) argued
that for an individual to make right career choice, it is important that he/she should display a certain level of career maturity.

There are many factors that affect career maturity and career decision making self-efficacy. This study only looked at certain factors namely, locus of control, gender role ideology, participation in extracurricular activities and in academic related activities, ethnicity, gender and geographical locations. Previous research has shown that an egalitarian gender role ideology, internal locus of control and participation in extracurricular and academic related activities foster career maturity and career decision making self-efficacy. This study explored how all these factors have been in fact shaped by cultural practices. By assessing career maturity and career decision making self-efficacy and how they are affected and associated with other external factors, one can increase their career self-awareness and make better career choice. Knowing one’s career confidence in making career decisions may allow for better academic performance and satisfactory job presentation.

Fiji is a multicultural and a developing country that is always hindered by political instability (Foreign and Commonwealth Office, 2012). The Fijian society is very passionate about their culture and traditions. Even during these modern times, culture and traditions still play huge role in the development of an individual. During primary school education students’ academic behaviour has been governed by culture and traditions. Therefore, when students start to think of their career, there are chances that they tend to consider only those that have been made visible to them by their culture (Pauma, 1999).
2.0 Chapter 2 Literature Review

This chapter presents prominent career development theories and literature reviews on them and on the variables that are present in the current research. The first part of the chapter discusses three theories: Social Cognitive Career Theory (SCCT), Super’s theory of Career Development and Careership theory. Some theorists have diversified their work across life-span career development whereas some have focused their attention on adolescence. The current study has looked at the adolescent age group because it is the appropriate time when one starts to commit him or herself to career development. It is the time when adolescents chose the ground on which they would land their feet. The second part looks at the variables (career maturity, career decision making self-efficacy, and gender role ideology, locus of control, participation in extra-curricular and academic related activities) and various studies that have been carried out.

2.1 Career development theories

Many factors determine the decisions that adolescents make while choosing their career. Some theorists may argue that the career planning theories and models may not be parallel to the actual way a career is chosen. While Baumgardner (1977) and Miller (1983) were content to suggest that some individuals make career decisions because of happenstance, which can be based on the job market, others have sought different ways and models to explain how people plan their future and career from an early stage. Some see career decision making as occurring at a particular point in life whereas others view it as something that is carried on across the life span. There are many theories that talk about career development but for the current study, Social Cognitive Career Theory, Super’s theory of Career Development and Careership theory were found to be most useful. Allison and Cossette (2007) suggested that Super’s theory of career development including life span and life-space theory and SCCT claim to integrate or synthesize a number of constructs and concepts. Careership theory tends to look at the sociological factors such as social class, culture, and history of a person and how it affects decision making. It is also competent with Gottfredson’s theory. Gottfredson’s (1981) throws light on how career exploration has been restricted by gender role stereotyping. It helps to understand why one compromises his or her desired choice with the one that they have opted. Taken together, a review of these three theories will provide a richer understanding of career-decision making processes.
2.1.1 Social Cognitive Career Theory

Many people consider the probable consequences of their decision about a career before taking any actions. SCCT provides a framework for understanding the process that people use when making choices about their career (Lent, Brown & Hackett, 1994). Also, SCCT looks at other personal cognitive variables such as self-efficacy, outcome expectations and goal selection, and at how these variables interrelate with other aspects of the person and his or her environment (e.g., gender, ethnicity, social supports; and barriers) to help shape the course of career development (Tang, Fouad, Smith, 1999). This theory involves the study of the interactions among the person’s environment, cognitive beliefs and their actual behaviour.

The SCCT model is extended to include academic interest, choice and performance with self-efficacy and outcome expectation (Sharf, 2010). Lent, Brown and Hackett (1994) also looked at other external factors such as gender and cultural issues and lack of support that limit career choices. However, the main emphasis of SCCT is that an individual’s belief and self-efficacy shape their career behaviours.

Source: Andersen and Vandehey, 2006, p. 94.

Figure 2.1 Social Cognitive Career Decision Making Model
Figure 2.1 shows how one’s personal input (learning experiences, background and interest) and other factors such as learning experiences and outcome expectations are interrelated with career decision-making. According to Lapan (2003, p. 7), social cognitive career theory has four key components: “the link between choice goals, actions, and interest; the influence of career-related efficacy on outcome expectations”. These also link to the person’s environment and learning situations, which together shape an individual’s future actions. Overall, social cognitive career theory helps to explain how one’s cognitive processes are related to his or her actions when it comes to making decisions regarding vocational choice.

Social Cognitive Career Theory initially evolved from Bandura’s concept of self-efficacy. According to Ahuja (2006, p. 4), self-efficacy has a major role to play in career development as presented by the SCCT model. “Self-efficacy relates to an individual’s perception of his or her own ability to organize and execute a plan of action”. An individual’s efficacy expectations directly affect his or her outcome expectations, goals, choice actions, and performance attainment, and all-important factors in career related behaviours (Lapan, 2003).

Social cognitive factors, such as self-efficacy and outcome expectations, play an important role in career interests and decision making. Quimby, Wolfson and Seyala (2007) carried out a study on the social cognitive factors of African American adolescents’ career interests. Their research involved 132 high school students who were enrolled in science subjects. Some of the variables that the researchers investigated were self-efficacy, outcome expectations, perceived barriers, support and environmental concerns. Regression analysis showed that these variables contributed significant variance to the prediction of interest in environmental science.

Gushue (2004) carried out a study to find out the relation of ethnic identity and self-efficacy and outcome expectations. Results for the sample of 128 Latino students selected for this research indicated that ethnic identity had a direct and positive relationship to career decision-making self-efficacy, while its association with career planning outcome expectations was mediated by self-efficacy (Gushue, 2004). Apart from this, Gushue, Scanlan, Pantzer and Clarke (2006) explored the relationship between the social cognitive construct of career decision-making self-efficacy and the outcome variables of vocational identity and career exploration behaviours in a
sample of 72 urban African American high school students. The results indicated that higher levels of career decision-making self-efficacy were related to greater engagement with career exploration activities (Gushue, et al, 2006). This demonstrates that other external factors affect career self-efficacy as exhibited by the SCCT model in figure 1.

Rogers, Creed and Glendon (2008) extended the SCCT model to determine the role of personality and social supports in terms of finding out information on career choices. The researchers surveyed 414 Australian high school students in Years 10, 11 and 12. Career exploration was associated with goals and social supports, whereas career planning was associated with self-efficacy, goals, personality and an interaction term for goals and social support that indicated that levels of planning were highest when social support for career goals was highest (Rogers, Creed & Glendon, 2008).

Overall, social cognitive career theory helps to explain how the cognitive processes function when a person is deciding on a career. Many cognitive variables influence an individual’s decision, including self-efficacy, interest, learning experiences and outcome expectations. The SCCT model helps to understand how cognitive variables assimilate with environment factors such as ethnicity, social support and gender to exert an influence in career decision making. The concept of the SCCT model is self-efficacy and how it molds career choices.

2.1.2 Super’s theory

People’s career decision may change with progression through life’s different developmental stages. In addition, as people start to explore life, they tend to diversify their interests. Similarly, career choices are not constant decisions; rather it keeps changing. Super (1990) proposed a life stage developmental framework. Life-span career theory helps to explain the growing and the changing ways that an individual has to deal with over his or her life span. As a person progresses, they encounter new experiences and these have an impact on the choices they make. Super, Thompson and Linderman (1988) found that people value different things at different points in their lives. Super’s model (1990) comprises five stages across the life span: growth, exploration, establishment, maintenance (or management) and disengagement. Each stage
explains how an individual achieves his or her vocational development in a given chronological stage (Leung, 2008).

The first stage, the growth stage, is basically the early development of childhood. During this stage, attitudes towards work are formed. According to Sharf (2010) the initiator of career development in children is curiosity. At childhood stage, children are very curious and eager to learn about their surround and the environment. Hence, they start to explore to get information that would satisfy their curiosity. While exploring their environment, children tend to develop interest in the activities that attract them. In the second stage, exploration, the individual becomes aware of career options and turns his or her career fantasies into role plays. Exploration stage drives the behaviour of the child. Career choices are made in this stage. With respect to Chak (2002) if the exploration stage is distorted (for example by parents), the child eventually starts to lose interest in studies and their imaginative work becomes weak. The child will withdraw him or herself form classroom activities and will not be fully able to grasp information about career related activities. This does not mean that the child will not explore the world of work; rather the child will choose to explore some activities and ignore others Chak (2002). In the establishment stage, as the name suggests, the person enters the world of work. The person experiences the work field and tries to match options with their interests and personalities. The person may try many other jobs to see which fits them best. The next stage is the maintenance stage where an individual adapts to the choice they made and further develops their interests and skills, which will eventually bring success and satisfaction. Lastly, the disengagement stage involves the individual retiring from their occupation after having achieved satisfactory performance (Anderson &Vandehey, 2006).

The second stage of Super’s (1990) model is crucial because it coincides with the stage of adolescence. In terms of career development, adolescence is a stage of educational commitment and an important step in selecting a career. Hence, this stage is the core of the present research. In other words, this stage is the consequence of successful resolution of the first stage. During the first stage, growth, a child begins to learn from his or her curiosity and fantasies. The child starts to explore and to adapt to the environment. If children have successfully developed their abstract thinking and a sense of their capacities, they will be able to transit to the second stage or
exploration stage. Piaget (1977) argues that adolescence is the stage in which one develops the ability to solve problems and the ability to plan goals. In Piaget’s theory of cognitive development, this would be the formal operational stage in which, the adolescent will be able to think abstractly and be in a position to make a well-planned decision (Claiborne and Drewery, 2010). In addition, at this stage, adolescents are better able to assess their own abilities. For instance, they have the potential to realize what activities they are good at and what activities capture their interests.

Super (1957) argued that the exploration stage ranges between 15 and 25 years of age. At this time, adolescents who are either in secondary or in tertiary colleges, have to decide the subjects or the majors that they are going to undertake. These choices in turn strongly influence their career. Super (1957) identified three sub-stages in the exploration stage, which he terms crystallizing, specifying and implementing.

Super (1957) articulated fourteen propositions that help explain career development. Super suggested that success in the work field and the ability to meet the occupation’s demand depends first on an individual’s readiness. In other words, an individual needs to be career matured. Career maturity, as defined by Super, is the point reached on the continuum of vocational development, that is as “the individual’s readiness to cope with the developmental tasks with which he or she is confronted because of his or her biological and social developments and because of the society’s expectation of people who have reached that stage of development” (1990, p. 213). Therefore, an individual who is highly career matured will have strong will power to cope with the demands of the environment in order to meet the desired career goals.

Super aimed to develop a career theory that would involve all the aspects such as “developmental, differential, social, personality and phenomenological psychology and held together by self-concept and learning theory” (Super, 1990, p. 199). He believed that both “learning and decision making are career development processes” (Savickas, 1997b, p. 252). Two of the main aspects of Super’s theory are career readiness and career maturity. In 1955, Super “identified maturation as the central process in adolescent career development” (Savickas, 1997b, p. 254). An adolescent’s ability to reach his or her career maturity level indicates their readiness to make appropriate academic and vocational choices.
Savickas (1994a) categorized Super as a “planful explorer”. “Planfulness refers to how an individual implements his/her abilities, values, and interests through many social roles, not just the work role” (Allison and Cossette, 2007, p. 6). Super devised a rainbow model to explain career development throughout the life-span. Career maturity is the first part of his rainbow model. The second dimension in the Life-Career Rainbow is life space. The outer band of the Life-Career Rainbow represents the major life stages: Growth, Exploration, Establishment, Maintenance, and Disengagement. Smart (1998) carried out research to find support for Super’s career stage theory. His results supported Super’s exploration, establishment and maintenance stages. He found that satisfaction and involvement progressively increased throughout these stages. Super’s theory of career development has also proved very helpful in the current research.

For the present research, Super’s theory is an essential input because it provides a framework that helps to understand the exploration stage of adolescence, the stage in which students are involved in schoolwork as well as extra-curricular activities that aid them in collecting ideas regarding their career. Super (1990) believed that as individuals develop and explore their surroundings, their decision making skills also strengthen and expand, enhancing their ability to make career choices. In order to plan for the career, children need ample information and motivation in developing their interests in career activities, it is also important for children to realize the sense of control over their future goals (internal locus of control) (Sharf, 2010).

2.1.3 Careership Theory

Careership theory is a sociological theory tending to look at the career decision making process and the factors that affect vocational choices from a sociological point of view. Careership theory recognizes the importance of culture, one’s social background, class structures and individual preferences. Theorists like Hodkinson and Sparkes (1997) and Bourdieu (1977) explain career development by incorporating the sociological environment as well.

Hodkinson and Sparkes (1997, p. 32) attempted to “blend in social and cultural factors with personal choices; to build in a more sophisticated model of learning; to merge individual preferences with opportunity structures in a way that incorporates serendipity”. Hodkinson and Sparkes (1997) found that young people usually did not follow any policies for decision making;
nonetheless, they were able to make pragmatically rational career choices. Another of their findings was that the decision making process is influenced by the environment, family context, culture and the life history of the person. From these factors youths derive information on what is known within their context and familiar to them.

Culture and life history play a crucial role in a person’s development. Bourdieu (1977) reminds us that a person’s action and belief are always deeply culturally and socially rooted. A person’s career decision can only be fully understood by studying his or her culture and life history. The social class and structures have an impact on the beliefs and decisions of an individual. Social class and structure can either widen or limit one’s career horizons. Similarly to class divisions in societies, gender roles also limit vocational opportunities. These limitations usually arise because of the environment in which one is brought up.

Bourdieu (1977) has adopted the term “habitus” to explain the typical ways in which a person’s cognition is unconsciously directed by his or her culture and the environment that he or she inhabits. He describes habitus as a “system of dispositions which acts as a mediation between structures and practice” (Bourdieu, 1997, p. 487). Hence, to understand the decision making process, it is equally important to understand fully the habitus of the person.

Bourdieu’s (1977) concept of habitus can be demonstrated in the differences between educational achievements of indigenous Fijians. As part of her research on affirmative action and racial inequalities in education in Fiji, Puamau (1999) found explanations for racial inequalities in school in three different dimensions: socio-cultural deficit, psychological and historical structural models.

Discussing socio-cultural deficits, she points out how the physical, social and cultural environments of Indigenous Fijians suppress their academic achievement. In addition to these, socio-economic statuses, cultural orientations of not only the students but also the parents contribute to underachievement of students. Another finding is that students from rural areas are further disadvantaged by not having the same access to benefits as do students in urban areas. Moreover, a vicious cycle was found in the socio-economic and low level educational achievement of parents, which further contributed to students’ underachievement. Puamau’s
findings (1999) that geographical location (urban, rural distinctions) limit Indigenous Fijian students’ academic achievement point to the probability that these students would not be exposed to various career horizons and so the vicious cycle of underachievement is maintained. Banks, Bates, Breakwell, Bynner, Elmer, Jamieson and Roberts (1992) argued that educational achievements or the level of qualification gained and geographical location were significant factors in career decision making in adolescents.

In terms of psychological deficits, Paumau (1999) identified Indigenous Fijian attitudes on academic achievement as a factor leading to academic failure. The third explanatory model, which is historical structural, refers to the “negative impact of the colonial experience which is manifested in neocolonial educational structures of the curriculum, pedagogy, assessment and the language of schooling” (Paumau, 1999, p.179). In research by Smith (1974) with 1,126 high school students, it was found that higher scores of career maturity were found in students from urban schools. In another study Smith (1976) found that students of lower socio-economic backgrounds scored lower scores in career maturity. Smith (1974) suggested that students in rural areas need considerable vocational counselling as a means of improving their career developmental process. This shows that the individual cannot be considered in isolation from psychological, cultural and historical context. Hence, it is important to focus on these three concepts to get a clear idea of an individual’s decision making.

2.1.3 Culture, Ethnicity and Career Choices

Much local research has been carried out to identify the differences in academic achievement among ethnic groups, particularly between Fijians and Indo-Fijians. The educational system is the same for the vast majority of schools throughout Fiji. Also, the external examinations are the same for the vast majority of schools. In spite of this, prominent ethnic differences have been noticed over decades and continue to be apparent in the results. Fiji is a multicultural society with two major ethnic groups, i-Taukei (or Indigenous Fijians) and Indo-Fijians. Over the years, many differences in academic achievement have been observed between these two groups. Hence, in order to understand the career decision making process, it may be of considerable importance to understand the cultural background of the two ethnic groups.
Study of one’s culture must proceed before carrying out any research because a person’s thinking; perceptions and beliefs are grounded in his or her culture. Guiso, Sapienza and Zingales (2006) define culture as those “customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation”. Vygotsky (1978) used these elements and integrated them into his theory of human development. He believed that human development is based on culture. An individual’s personality can be described by looking at his or her culture. This is because one’s beliefs and values are rooted in their culture. In addition, culture does not change overnight. According to Smith (2000), cultural values are sustained and preserved over a long period of time. Cultural beliefs predict the life pattern of a person. The way a person prioritizes his or her life can be attributed to his or her culture. Similarly, the importance an individual gives to his or her academic achievement is dependent on their cultural values. Otsuka (2006) monitored academic achievement of i-Taukei and Indo-Fijian students (Fiji’s two main ethnic groups), in line with the stereotype that Indo-Fijian students perform better than i-Taukei students at both secondary and tertiary levels. The hypothesis of Otsuka’s (2006) research was that cultural factors are the dominant predictors of i-Taukei and Indo-Fijian academic success and failure.

Indo-Fijian parents constantly encourage their children to do well in their studies. According to Nabuka (1983) in the Indo-Fijian culture education is mostly perceived as bringing pride and glory to the family. An individual’s status is credited based on their academic and career success. For Indo-Fijians, academic success is the key to achieving their freedom and security. Sometimes, the academic pressure on children is so great that at times students resort to suicide or suicide attempts because of academic failure (Narayan, 2003a). In i-Taukei culture, on the other hand, children are motivated to “develop a strong sense of their loyalty to vakaturaga in vanua ethos” (Nabobo, 2001, pg. 5). The term “vanua” here means land. Fijian culture places much emphasis on vanua. For the ethnic Fijians, their vanua forms their identity and their status is weighed based on their rights over their vanua. Vanua is of vital importance to understand their cultural values and beliefs. The land is a source not only of identity, but also strength, insurance and livelihood (Nabobo, 2001). Fijians refer to the vanua in describing their emotional attachment to the land in the area they come from. This attachment also means a loyalty to the land and a duty to protect it for use by future generations.
students prioritize their vanua. For the ethnic Fijians, participation in communal work is more important than investing in education.

A lot of local studies have been carried out to explore the significant factors contributing to the academic achievement and failure. Baba (1979) carried out a research to look for an explanation for the difference between academic achievement and failure. He looked at this issue from four different perspectives – socio-economic, political and cultural factors; institutional factors; structural factors; and psychological factors – which he found were the four major factors that had a hand in managing academic performance of the students. In terms of socio-economic, political and cultural factors, Baba’s (1979) findings were supported by Narayan’s (2003a) results. Both of them observed that Fijians place more emphasis on social obligations and community activities whereas Indo-Fijians have a more individualist way of living. Apart from that, Narayan (2003a) found that some of the institutional factors causing academic downfall in Fijian students were related to access to school (transportation) and the quality of schools, teaching and learning.

Interestingly, Baba (1979) also considered psychological possibilities that affect academic performance of Fijian students. Some of the factors that he identified were attitudes towards schooling, interest, motivation and aspiration, locus of control, self-concept, self-efficacy and self-esteem. Puamau (1999, p. 104) states explicitly that “Fijian attitudes and the impact on children when they live away from home when attending school are identified as two important factors to explain school failure”. Basow (1982) and Kishor (1981, 1983) carried out local studies to investigate psychological factors (such as locus of control and self-esteem) affecting academic performance. Both these researchers “concluded that Fijians have lower levels of self-concept and a more external locus of control than Indians” (Puamau, 1999, p. 101).

Ethnicity plays an important role in career decision making self-efficacy. For instance, Brown, Darden, Shelton (1999) found that a lower number of minority students in a classroom tends to accompany low career decision making self-efficacy. Mau (2000) carried out another study of 540 American students and 1026 Taiwanese students in USA. Taiwanese students returned a significantly lower self-efficacy score than the American students, a difference that was
attributed to culture. Taiwanese students, being from a collectivist society, were assumed to rely less on individual abilities and more on group efforts, whereas American students are perceived to attribute decisions to their own choices.

Clearly, it is important to consider socio-psychological factors in academic performance. In most cases, psychological factors are overlooked. This may be because psychological factors are embedded deeply in one’s cognition. People usually act or behave as their cultures expect them to. These behaviours eventually predict the personality of a person. Hence, cultural factors and psychological factors are interlinked. One aim of the present research is to find out if ethnic differences in career choices exist in career maturity of the students.

2.2 Career Readiness of Adolescents

Developing career readiness in adolescents is a prime task. Career readiness is noted as the “readiness to cope with the developmental tasks of one’s life stage, to make socially required career-decisions, and to cope appropriately with the tasks with which the society confronts the developing youth and adult” (Super & Jordan, 1973, p.4). Skorikov (2007) regards adolescence is a pivotal time for vocational preparation for future career development. The choices that adolescents make have their implications for well-being and adjustment and career development and achievement. According to Phillips and Blustein (1994), achievement of a well-developed career-choice readiness is one of the key components of adolescent career preparation. Career readiness can, thus, be defined as the readiness and ability of a person to reach a well-founded career decision (Phillips & Blustein, 1994).

Several studies have sought to find a relationship between career and career-choice readiness. Some of the important concepts explored involved the understanding of how and the elements involved in the development of career choice attitudes in adolescences. Hirschi, for instance, carried out a study in 2011 to find out Swiss students’ career-choice readiness. The 325 Swiss students involved were assessed four times at five-monthly intervals, from seventh through to eighth grade students. A variable-centred approach applying latent curve modeling showed not only a linear increase of readiness over time but also significant inter-individual differences in the level and development of readiness. This means that readiness differs in individuals in
different ways. Self-esteem, generalized self-efficacy and occupational information were predicted to be the factors that produced a higher level of career readiness. On the other hand, a person-centred approach was applied to analyze latent class growth, with four distinct developmental trajectories. Students with different trajectories showed significant differences in core self-evaluations, occupational knowledge and barriers. The results suggest that environmental demands promote a developmental trend in readiness development that overrules individual differences for the majority of students. Individual differences affect the level of readiness to a greater extent than in the process of its development.

Creed, Prideaux and Patton (2005) carried out a longitudinal study on students to find out the career, well-being and social variables. This study was conducted by following students in Grade 8 until they reached Grade 10. The variables that were looked at under career were maturity, barriers, indecision, decision-making and self-efficacy, whereas well-being comprised self-esteem, life satisfaction, and coping. Under social, the factors focused on were school achievement and paid work experiences. The researchers hypothesized that those students who were undecided about their career would have poorer career and well-being and lower expectations of social outcomes. This hypothesis was supported. The undecided group had few experiences in terms of having paid work. It was also found that females were more likely to report being undecided in career.

It is important to understand the level to which students are ready to decide on their career path. Equally important is to understand how mature these students are in terms of career choices. Students who are not ready or mature enough are always undecided about their career. The following section will discuss the role of career maturity in career decision making.

**2.2.1 Career Maturity of Adolescents**

The construct of career maturity embraces readiness, attitude and competency to cope as the three main roots for career development tasks. Super (1955) defined the concept of career maturity as the individual’s readiness to cope with the developmental tasks with which he or she is confronted because of his or her biological and social developments and because of the society’s expectation of people who have reached that stage of development. Career maturity is
thus, the degree in which one has acquired cognitive, emotional and other psychological factors by which one develops the capacity to make realistic and mature career choices.

Another dimension of career maturity is in terms of the “extent to which an individual is able to master certain career developmental tasks that are applicable to his/her life stage” (Salami, 2008). According to this definition of career maturity there are certain key concepts that help an individual acquire his or her goals, including recognizing and obtaining information about oneself and then applying this information to self-knowledge (Salami, 2008). Another essential element of career decision making is gathering career information and converting it into knowledge of the occupational world. After acquiring knowledge about self and the knowledge about the occupational world, it is important to integrate both these types of knowledge in order to discern the discrepancies between the two. Equally important is, mastering decision-making skill and using this skill in the decision-making process. With regards to Salami (2008), this will assist in successful career planning.

Frank Parsons is regarded as the founder of the vocational guidance movement (Sharf, 2012). He developed the talent-matching approach, which was later developed into the Trait and Factor Theory of Occupational Choice. Parsons states that occupational decision making occurs when people have achieved: an accurate understanding of their individual traits; a knowledge of jobs and the labour market; rational and objective judgment about the relationship between their individual traits, and the labour market (Sharf, 2012).

Researchers interested to find the career maturity of students mostly use a career maturity inventory (Crites, 1978b). For instance, Niekerk and Niekerk (1990) carried out research to find the relative degrees of career maturity among the different population groups, namely among the black, coloured and the white groups. The research was carried out with Psychology students from different ethnic groups. The age range of the participants was seventeen to twenty-three. A career maturity attitude scale was used which consisted of 50 true or false questions. One-way analysis of variance was used to find the differences in career maturity of the three groups. The difference among the three groups (black, white and coloured) was found to be significant. These were explained in terms of differences in culture, exposure to the world of work and differences in educational background and the researchers suggested the implementation of both one-to-one
counselling and group counselling with the students. However, the research was limited to only career maturity attitude; career maturity competencies also need to be investigated.

Another study looked at the association between career maturity and commitment to work as well as sex and socio-economic status (Baumgardner, 1977). The participants involved were 372 undergraduate students. The Career Development Inventory was used to find the dimensions of career development. It was found that for commitment to work, attitudinal and cognitive factors were the predictors of career maturity. Nonetheless, no relationship was found between sex and socio-economic status.

Yon, Choi and Goh (2012) investigated the career maturity growth curve on the basis of a longitudinal study involving 3,241 male and 3,029 female Korean adolescent students in Korea. The aim of the study was to explore the career maturity growth curve and the correlations of sex-role stereotyping, gender and socio-economic status on the growth curve. It was found that the growth of career maturity was in a cubic form. Also, a significant correlation was found between socio-economic status and career maturity. A significant negative correlation was found between sex-role stereotyping and career maturity.

It is often assumed that a career-matured person is able to make wise and appropriate career choices by considering their attitude and their competency to meet their goals. Career matured individuals are more capable of making realistic career choices and decisions. Adolescents who have successfully identified their interests and have outlined their career preferences usually have congruent ideal and real career goals. According to Salami (2008) career mature individuals have the ability to identify specific occupational preferences and to implement activities in order to achieve their goals. These individuals are ready to make well informed (by doing some research on the job market) as well as age-appropriate career decisions if they are not interrupted by social and economic factors.

### 2.2.2 Career Decision-Making Self-Efficacy

People go through different developmental stages across the life span. Along these stages, one has to manage and control one’s life events. People vary significantly in the way they successfully administer their life experiences. The belief that one holds about one’s capabilities
to produce the desired results is an influential factor in terms of decision making of the events in one’s life. Bandura’s theory on agentic perspective (1997) describes people as self-organizing, proactive, self-regulating and self-reflecting. This simply means that people themselves are the agents who have the power to manipulate and to control their life circumstances. Realizing one’s capabilities to produce results enhances “self-motivation, well-being and accomplishments” (Bandura, 1997, p. 115). Unless people believe that they can reach and produce their goals by their own actions, they will have very little incentive and will power to tackle obstacles that come their way. A strong self-belief will also aid in the making of effective alterations and adjustments that will enable people to reach their goals.

Another concept closely related to self-belief is self-efficacy. Engler (2009, p. 244) defines self-efficacy as “a central mechanism of personal agency and self-regulation.” Efficacy beliefs affect whether individuals think optimistically or pessimistically, in self-enhancing or self-debilitating ways. Such beliefs affect people’s goals and aspirations, how well they motivate themselves, and their perseverance in the face of difficulties and adversity. Efficacy beliefs have an impact on cognitive, motivational and decisional processes. People with high efficacy beliefs are very optimistic hence, they are better able to reach and sustain their decisions. From Scheier’s and Carver’s (1993, p. 26) perspective, optimism is a generalized tendency to expect positive outcomes or the belief that “good rather than bad things will happen in a person’s life.” With this positive belief, one will be easily able to cope with the difficulties that would intrude from the external environment.

Efficacy belief structures one’s life in several ways. For example, it empowers academic performance and confidence (Engler, 2009). Efficacy belief is an important variable in the study of vocational development, mainly during the adolescence stage. It influences vocational choices, educational preparation and level of accomplishment. Bandura’s (1977) self-efficacy theory and Crite’s (1978) career maturity theory were later applied by Taylor and Betz (1983) in their development of a career decision making self-efficacy scale (CDMSE). A study undertaken by Betz, Klein and Taylor (1996, p.47), rated self-efficacy as “one of the most theoretically, heuristically and practically useful concepts formulated in modern psychology”. Hackett and Betz (1981, p.330) explained that “career decisions, achievements and adjustment behaviors
were subject to the influence of self-efficacy”. This was evident in both men and women. Hence, they argued that for an individual to have successful development of career decision making, he or she needs to have a high self-efficacy.

The Career Decision Making Self-Efficacy scale (CDMSE) Taylor and Betz (1983) developed measures the extent to which self-efficacy influences career choices. It was used to measure self-efficacy expectations in terms of goal selection, occupational information, problem solving, planning and self-appraisal. Additionally, the CDMSE scale was used to indicate the extent to which an individual is decided about their career (Taylor and Betz, 1983). Many researchers intending to explore and understand career development have used the CDMSE scale. Social cognitive career theory also employs the concept of self-efficacy to demonstrate how self-efficacy career decision-making correlates with one’s goal and one’s commitment to achieving it (Chung, 2002).

Priest (2002) investigated the influence of learning activities on the career decision making self-efficacy of high school students in agricultural education, using the CDMSE scale as its descriptor. The results showed that on average, the participants scored 3.94, which is a demonstration of moderate self-efficacy. The mean was found for each construct (gathering occupational information, goal selection, making plans for the future and problem solving). It was shown that gathering occupational information and accurate self-appraisal contributed more towards career decision making self-efficacy compared to goal selection, planning and problem solving. Priest’s (2002) study showed that the participants who were exposed to more activities that provided them with occupational information had moderate career decision making self-efficacy.

Gianakos (2002) investigated the patterns of career choice and career decision-making self-efficacy. His aim was to study four patterns of career choice development during the adolescence stage. His study showed that those adolescents whose career choice development reflected a stable pattern represented a higher level of career decision-making self-efficacy as compared to those who showed unstable patterns. This in turn affects the choices that the adolescents make. For example, those adolescents with higher self-efficacy will probably have higher job
satisfaction levels whereas those with unstable patterns will have lower satisfaction scores as well as encountering problems at workplace.

In another study carried out to explore the relation of self-efficacy beliefs and vocational choices, Lent, Robert, Brown, Steven, Larkin and Kevin (1986) aimed to investigate educational choice and performance by assessing the extent to which “efficacy beliefs, in concert with other relevant variables, predicted academic grades, persistence and perceived career options” (Lent, Robert, Brown et.al., 1986, p. 265). This study involved 105 science and engineering students. The results were analyzed using hierarchical regression and it was proved that “self-efficacy contributed significant unique variance to the prediction of grades, persistence, and range of perceived career options” (Lent, Robert, Brown et.al., 1986).

Luzzo (1993a) carried out research to find the relationship between career maturity and career decision making self-efficacy. He noticed that participants who were more confident with the choices they made were better able to engage in the career decision making process. He also noted that these participants had a higher career maturity. His empirical analysis presented career maturity as positively related to self-efficacy. Betz, Klein and Taylor (1996b) reported a similar correlation between career maturity and career decision making self-efficacy. They found that career decision making self-efficacy was one of the significant predictors of career maturity in school students.

May (2007) found a similar correlation between career maturity and career decision making self-efficacy. Her study was based on high school students and she found a weak but direct positive correlation between the two variables. Despite the direct positive correlation, weak correlation showed that participants with a higher career maturity may not necessarily have a higher self-efficacy score. This discrepancy in the result was attributed to the scales that were used. The career maturity scale for the study was based on career choice attitude while the career decision making self-efficacy scale was related to career competence. Nonetheless, career maturity and career decision making self-efficacy are related to each other; an increase in career maturity will lead to an increase in career decision making self-efficacy (Crites, 1978a).
Similarly, Gushue (2004) found that career planning and outcome expectation were mediated by self-efficacy. Many research surveys involving vocational choices have proven that efficacy belief exercises a strong influence on career decision-making as well as on psychological factors such as interests, values and career goals (Bandura, 1995). For instance, Hackett and Betz (1981, cited in Bandura, 1995) found that efficacy belief, particularly in terms of vocational development, plays a more dominant role than interest. This helps to explain how one’s self-efficacy helps to develop their interest in a particular field of study and job. Having a strong self-efficacy belief will boost one’s interest and enthusiasm towards their career goals. Therefore, one will be determined to reach his or her career goals. Individuals with strong self-efficacy belief will always be goal oriented as compared to those individuals who are undecided about their vocational choices.

Apart from this, the career decision making self-efficacy scale has been used to find out other variables affecting career decision-making. For instance, Chung (2002) carried out research to find out the relationship between CDMSE and career commitment among college students. With reference to social cognitive career theory (SCCT), self-efficacy belief influences a person’s commitment to their career goals. In other words commitment and the power to reach one’s goals are founded on one’s self-efficacy career beliefs. Chung (2002) hypothesized that CDMSE had a moderate and a positive correlation with career commitment, that is, those individuals with a strong career self-efficacy belief will be highly committed to their career goals. For his study, Chung (2002) examined the CDMSE by evaluating the scale’s internal consistency with a sample of 165 American undergraduate students in Southern universities. Apart from commitment, Chung’s (2002) study also considered gender and ethnicity. For this research, the research instrument he used was the career decision-making self-efficacy scale, initially revised by Betz et al. (1996) and containing 25 items that were responded to using a 5-point scale. The results were analyzed using coefficient alpha and as hypothesized, a positive correlation between the CDMSE and self-efficacy beliefs was demonstrated. However, no significant differences were noted in terms of gender comparisons. Similarly, Kostko (2008) found no significant gender differences in his study. He carried out a study to investigate career decision making self-efficacy among public and private high school students in Bangkok and Thailand. He found
differences in career decision making self-efficacy in the two different schools and also in terms of gender; however, these differences were not significant.

By contrast, Kaiser (2003) found significant gender differences in career decision making self-efficacy. He carried out a study in America with 86 white students and 86 racial and ethnic minority students who consisted of 80 males and 92 females. Pearson correlation analysis showed a positive correlation between career decision making self-efficacy and ethnic identity. Gender differences were also found; White males had a higher career decision scores compared to their counterpart group.

Glorian and Hird (1999) investigated the differences in trait anxiety, ethnic identity, other group orientation and career decision-making self-efficacy. For the study, he used 351 female and 336 male university students. The two ethnic groups that he looked at were white students and racial and ethnic minority students (Asian, biracial, international, Latino, Pacific Islander, American Indian and African American). His results showed significant ethnic differences between the two groups. White students were found to have higher career decision making self-efficacy than the minority racial students. The limitation of this study was in terms of sample size; the white sample had 589 students and the racial and ethnic minority sample consisted of only 98 students. The significance of career decision-making self-efficacy has also been supported by Holland (1997). According to Holland’s theory on career development, personality and job environment play an important role in one’s career development. Nonetheless, he believes that “self-efficacy is embedded into one’s overall personality structure” (Bullock-Yowell, Peterson, Wright, Reardon & Mohn, 2011, p. 470). He implies that self-efficacy is actually one of the core factors in predicting personality types. Also, he argues that one’s interest in a particular field reflects self-confidence to perform well, which in a way also indicates one’s level of self-efficacy belief in that field (Bullock-Yowell et al., 2011). Roney (1983) also found that the measurement of interest could be used to predict self-efficacy.

Initially, self-efficacy theory was applied to women’s career choice to explore two reoccurring issues, first, women’s “under-representation in many male dominated career fields” (Hackett & Betz, 1981, p. 279) and secondly, their ideal career path. Many empirical researchers have proven that there are gender differences when it comes to traditional career fields. For example,
Hackett and Betz (1981) attempted to use self-efficacy theory to explain the career choice process and to find out if any gender differences exist in this process. The participants were asked to answer questions regarding their caliber in academic achievements and job duties of 10 traditional occupations and 10 non-traditional occupations. Traditional occupations are defined here as those occupations in which a majority of the members are females, while non-traditional occupations are those in which males constitute a majority. No major differences were seen in the overall occupational self-efficacy. Nonetheless, significant differences were observed in both males and females when self-efficacy was assessed on traditional occupations (Hackett & Betz, 1981). Hence, this suggests that career choice is initiated by one’s self-efficacy, which is in turn affected by gender role ideology.

Therefore, self-efficacy indeed plays a role in the heart of the career decision-making process. In terms of women’s career choices and preferences, self-efficacy helps us to understand why most of the women choose traditional jobs compared to jobs such as engineering and computer and technology.

### 2.2.3 Gender-Role Ideology and Career Choice

Traditional concepts and gender roles still influence women’s choices, be it in terms of domestic work, home or career field. Fiji, as a developing country, is facing many challenges in tackling issues related to women’s career development. Fiji proposed a development plan “to ensure that women are integrated into the national development process” (Mara, 1987, p. 12). The present interim government is trying to ensure that there are equal employment opportunities for all. Many organizations (such as the Fiji Women’s Rights Movement) have organized workshops and awareness programs to empower and promote women’s hand towards economic development of the country. Despite all these, Nilan (2009, p. 1) claims, “Indigenous Fijian women are still considerably under-represented in the labour force and public life in Fiji”. One of the reasons for this could be because of socio-psychological factors (such as self-efficacy and locus of control) that are still embedded in their schema. Many research studies have been carried out to explore how traditional and non-traditional gender roles affect women’s careers in Fiji.
Nilan (2009) carried out a research project in schools in Fiji to investigate the school to work/career transition. The participants in this project were female youths from nine different schools in Fiji. Data were collected from 576 Fijian and 390 Indo-Fijian females. In addition, school principals and career counselors were interviewed. Data collected using ethnographic methods showed that most female youths were still shaped by their traditional representatives of women’s role as wife and mothers. Most of the youths tend to follow the career path of older women in their family. It was found that career options were enclosed within the traditional women’s career fields such as nursing and teaching. Nilan (2009) came across an interesting case in which the female youth was employed as a lab technician and was earning a good living; however, her aunt was not pleased with her career choice because she believed that it was a man’s job and it will hinder the young woman’s marriage options. Thus, culture and traditional attitudes towards gender roles limit female career options. Nilan (2009) suggested that the local environment (such as culture) was more authoritative in determining career options than other sources such as pamphlets provided in schools for career explorations. Similarly, Tavola (2000) argued that more females enter secondary and tertiary schools as compared to the male population but females are not able to make a successful transition into later career development as they are bound by their perceptions regarding successful marriage.

It has also been noted that there are gender differences when it comes to science subjects in schools. It has been observed over the years that the female to male ratio is quite low in science subjects (Baker, 1991). Linn and Hyde (1989) attribute social and cultural factors as explaining the differences in the male to female ratio. According to Lateef (1987), both gender and ethnic issues were related to career preferences. For instance, she noted that many trade and managerial occupations were closed to women due to stereotypes. Moreover, some cultures did not approve of women doing overtime or night shifts.

Rennie and Dunne (1994) carried out research to investigate the relationship between gender and ethnicity and social factors that contribute to students’ career choice in Fiji. One of the many objectives of the study was to explore students’ preference for science related careers and sex-stereotypes of science-related careers. The research was carried out by giving questionnaires to form five students. The results were in contrast to other research based on gender and ethnicity.
and career choices. Rennie and Dunne (1994) found that there were no major gender differences in science subjects and it was noted that science was actually perceived positively by the participants. Hence, it cannot be generalized that science subjects are mostly supported by males.

Another piece of research analyzed the multicultural factors influencing career choice for women in the information technology field (Trauth, Quesenberry, Hwang, 2008). A lot of research has shown that women are hardly recognized in the information technology field (Finquelivich, 2008) so this research aimed to explore this statement from the root level, that is, from subject choices in secondary school to university choices and in the employment sector. Data were collected from four different countries: Australia, New Zealand, Ireland and the United States. It was found that cultural values regarding gender role indeed influences women’s career choice in the information technology field. Differences were noted across nationality and ethnicity. Some of the themes that emerged in terms of women’s role in the society were regarding maternity, child-care and parental care. Secondly, in terms of socio-cultural factors, the themes that arose were about social class, economic opportunity and gender stereotypes. Hence, this research shows that different cultures exert their views on women and gender roles in different ways. Similarly, Galpin (2002) argued that women’s participation in the global information technology workforce is influenced by culture and the immediate society, which differs from one country to another. This simply means that different societies/cultures have different perceptions regarding women and their preferred job environments.

Luzzo (1995) investigated the gender differences in the career maturity of students. Overall, 401 participants were used for the study. Career maturity, career decision making skills, and vocational congruence scales were used. Interestingly, it was found that females tend to have a significantly higher career maturity than males. One-third of the participants were also interviewed and it was found that perception of career barriers affected career maturity.

Haworth, Povey and Cliff (1986) used an Attitudes towards Women Scale (1986) on middle-class and working-class women. The study was administered to four groups of male and female adolescents. The participants were trainee engineers, and students pursuing a career in traditional occupations. The research found no significant difference in the attitudes of women. However, males had significantly more traditional attitudes towards women. Hence, gender role attitudes
affect the decisions that the adolescents take. Similarly, Faul (1981) found an association between career maturity and gender role ideology. His results showed a statistically significant positive correlation between the two variables. Adolescents who have a traditional view of gender roles tend to have lower career maturity as compared to those who are not much concerned about the society’s perception on gender roles. Also, it was reported that participants who had an egalitarian view were more confident in their decisions; hence they had a higher self-efficacy in career decision making (Faul, 1981).

Research has also been carried out to see if there are any gender differences in the career maturity scores. Some research has shown that there are gender differences in career maturity scores (Alvi & Khan, 1983; Luzzo, 1995). The majority of the studies find that females tend have a higher career maturity than the male group, though some studies found that females scored higher on certain subscales only (Fouad, 1988). Austin (2009) carried out research with 378 female students and 353 male students to study the factors that influence African American high school students in career decision making self-efficacy and engineering related goal intentions. He found significant differences in the scores between the two groups.

Research undertaken in South Africa with high school students found no major gender differences in career maturity scores of the participants (Watson & Van Aarde, 1986). Patton, Watson and Creed (2004) compared the gender as well as ethnicity of Australian and South African high school students. They used 1090 high school students, out of which 656 were Australian students and 434 were South African students. Their study showed gender difference in career maturity of Australian students. Australian female participants scored higher career maturity scores than the males. Interestingly, the same result was not found for the South African participants. Research in the South African sample showed no gender difference in career maturity.

Interestingly, Themba (2010) did find gender difference between males and females in career maturity but the differences were not significant. His study showed that males had relatively higher career maturity than females. However, at 95% confidence level, the differences were found not significant. The results, therefore suggest that there are no differences in career maturity of the male and female groups. Similarly, Lee (2001) conducted cross-cultural research
on career maturity between Korean and the US students. His results showed that career maturity was similar for the two cultures; however, no significant gender differences were reported for the study. Salami (2008) carried out a regression analysis and found that gender did not contribute the career maturity level of the students. Hence, these studies suggest that there are no major gender differences in the career maturity of the adolescents.

While women are generally looked down upon in male dominated career fields, self-efficacy is believed to play a key role in promoting women’s participation in such fields (May, 2007). Marra, Rodgers, Shen and Bogue (2009) carried out a study on how self-efficacy is situated in understanding the constructs that have an impact on the success of women studying engineering. The researchers collected data in 2003 and 2004 from female students from five different engineering schools. They found that a strong sense of self-efficacy can boost and enable female students to become better practicing engineers. Females will have more confidence in engaging in activities that possess gender roles. This will also increase career maturity of the females.

Women are most of the time degraded and excluded from career opportunities because of traditional gender roles (May, 2007). Self-efficacy is one of the predictors of good career decisions. Nevill and Schlecker (1988) investigated how career decision making self-efficacy correlated with women’s belief in engaging in non-traditional career options. He found that those women who had a higher career decision making self-efficacy were more willing to make non-traditional career choices than women who had lower self-efficacy in career decision making. The results show that the higher self-efficacy women have, the more they are willing to take non-traditional options.

In some countries, such as Iran, female students face many barriers in academic achievement. Rezaei (2010) was fascinated by the increase in the enrolment and academic achievement of female students in Iranian Universities. Therefore, he hypothesized that the increase in academic performance of the female students can be attributed to their gender-based self-confidence and their self-efficacy. The result revealed that even though the female students scored higher on their gender-based self-confidence and self-efficacy, they still tend to have a more negative perception of their gender. Also, there was no difference between the male and the female self-efficacy scores.
Super’s (1990) model is helpful in understanding early career development in an individual. Gottfredson’s (1981) throws light on how career exploration has been restricted by gender role stereotyping. Her theory explains how one’s psychological self has been structured by societal and environmental factors such as gender and prestige. Her theory is a unique one because it is the only theory that explains how biological and environmental factors affect a child’s vocational interest (Sharf, 2010). Interest are generally, initiated by the environment around a person while temperaments and intellect are mostly determined by the genetic make-up. Hence, the environment and the genetic make-up work together either allowing or limiting career exploration. Two important concepts used by Gottfredson are circumscription and compromise. “Circumscription is a process in which young people eliminate alternatives that they feel will not be appropriate to them whereas compromise is a process in which young people give up alternatives that they may like for ones that may be more accessible to them” (Sharf, 2010, p.200). According to Gottfredson (1981), children give priority to their social space hence, selecting those occupations that they find compatible and unconsciously eliminating the ones that are in opposition to their defined gender roles (circumscription). In compromise, children tend to forgo some of the choices that they have highly desired. Compromise is mostly determined by how convenient other options are. Compromise and circumscription are visible in societies that observe gender role ideologies.

Hence, gender role ideology still affects women’s career maturity and career decision making self-efficacy. Women’s role in the work arena is still limited despite efforts from organizations and governments. One of the factors contributing to gender-role ideology is culture. Culture cannot change overnight; therefore, women’s traditional roles and opinions still linger in the career decision making process.

2.3.4 Locus of Control and Career Decision Making

Everyone has his or her own expectations and attributions to a particular cause. These expectancies and explanations of the cause can be evaluated using social learning theories. Rotter (1966) explained behaviour using the locus of control. Locus of control (Rotter, 1966) refers to one’s belief in his or her abilities to control life events. The term locus of control is often used interchangeably with self-efficacy. However, the terms are not equivalent. While self-efficacy
focuses on the perception of ability to act competently and effectively, locus of control focuses on the perception of control (Bandura, 1977a).

Expectations of success or failure are related directly to attributions, that is, the way that an individual gives message to himself or herself regarding the causes of events that they come across. According to Engler (2009), locus of control anticipates whether one’s actions will influence outcomes. Locus of control can be internal or external. An individual with an internal locus of control believes that outcomes are related to his or her behaviour or personal investment, while an individual with an external locus of control believes that outcomes are not related to his or her behaviour but to external forces beyond his or her control. Individuals with an external locus of control may perceive life events to be controlled by luck, chance, fate, or powerful others. Stated differently, individuals with an internal locus of control are more likely to change their behaviour following reinforcement than are individuals with an external locus of control (Marks, 1998).

An individual’s sense of control over events that occur or affect their life has important bearing in their decision-making behaviour. Locus of control plays a vital role in the learning process. For instance, a research study was done on school students and their attributions to the success and failure in academic achievement. Students who attributed success and failure to internal, controllable causes were more likely to take action to produce positive outcomes and develop an expectation of success whereas students who attributed both success and failure to causes outside themselves over which they have no control are likely to feel helpless and to develop expectations of failure (Seifert, 2004). Additionally, Coleman and Deleire, (2000) state that locus of control strongly influences academic achievement and career decision making. Hence, it also affects the educational and vocational decision-making processes. The choices that an individual makes depend on the way he or she pictures the path to achieve it.

Many socio-psychological factors influence academic achievement and decisions. One of these factors is locus of control. To highlight the importance of locus of control in academic achievement, Tella, Tella and Adeniyi (2009) carried out a survey on 500 school students, of whom 300 were boys and 200 were girls. The participants were selected from 25 schools by using stratified random techniques. In order to analyze the data multiple regression analysis,
ANOVA and t-test statistical tools were utilized. The results showed a positive relation between academic achievement and internal locus of control. This research supports the claim that socio-psychological factors such as locus of control indeed have notable influence on academic and vocational achievement. Nonetheless, there were some limitations to this research. Firstly, this was an ex post facto or causal comparative study; hence assumptions of any causal relationship between locus of control, interest in schooling and self-efficacy are not possible. Hence it is important to study the concept of locus of control because it is also related to academic behaviour and career decisional process.

Kishor (1981, p. 228) carried out research to “examine the effect and relationship of self-esteem and locus of control orientation to educational and vocational decisional statuses on individuals”. He hypothesized that those individuals who have decided on their vocational choices have higher self-esteem and more developed internal locus of control than those who have not yet committed themselves to their career field. For his research, he used 111 males and 113 females from both Indo-Fijian and Fijian societies. To measure locus of control orientation, he used Children’s Nowicki-Strickland Internal–External Control Scale (CNS-IE). The results of his research showed that those adolescents who had crystallized (as stated by Super, 1995) a career choice have high self-esteem and more internal locus of control. Kishor’s (1981) research is congruent with Super’s theory of adolescent career development. Both the studies show the importance of self-esteem and locus of control in vocational choices. Kishor (1981) carried out a study on career maturity and locus of control of students. His study showed that locus of control played a role in career maturity of students and their performance in academic work.

Much other research has shown a correlation between locus of control and career maturity (Nowicki& Strickland, 1973; Gardner, 1981). Wilson (1975) investigated the association between career maturity and locus of control in high school students. His research showed external locus of control was negatively related to career maturity. This finding suggests that participants whose scores were more towards internality had higher career maturity score. These participants were also believed to be achievers (Wilson, 1975).

A study conducted by Taylor and Popma (1990) aimed to determine the relationship between career decision-making self-efficacy, career salience, locus of control and vocational indecision.
Four hundred and seven participants were involved in this research, out of which two hundred and three were females and two hundred and four were male college students. The results showed that Career Decision-Making Self-Efficacy (CDMSE) was ‘moderately and negatively related to vocational indecision and external locus of control whereas a moderate positive relationship was found between CDMSE and vocational decidedness and occupational self-efficacy’ (Taylor and Popma, 1990, p. 20).

Therefore, it is important to consider locus of control when considering the factors that influence career maturity of adolescents. This is because locus of control, to some extent, has an impact on the decisions that adolescents make regarding their vocational choice.

2.2.4 Participation in Career Related Activities and in Extra-Curricular Activities in School

Participation in career related activities and participation in extra-curricular activities in schools also affects career decisions (May, 2007). Most of the schools and universities in Fiji encourage their students to take part in extra-curricular and career related activities. For instance, the USP Research Office often organizes workshops and programs to expose students to the variety of career fields. In addition to this, USP Campus Life and USP Students Association are always mounting events that increase students’ extra-curricular participation. Students’ involvement in such activities increases their career maturity. Therefore, in this study, these two factors were considered as background variables.

The University of the South Pacific is continuously organizing workshops and campus life activities to enhance holistic development in students. For instance, they organized motivation/study skills and effective time management workshops. From these workshops, students who participated were better able to understand their strengths, weaknesses and how to manage time and work effectively towards reaching one’s goals (Prasad, 2012). This workshop also enhanced students’ research skills in using library materials and Google search more effectively. This would help students in expanding their exploratory skills. Students, who attended these workshops, reported that they now have much greater confidence in deciding on their goals and motives. They also reported that they are now aware of links and places where
they can start with their search when seeking information on studies and career attachments (Prasad, 2012).

Holland and Andre (1987) reviewed literature relating to students’ participation in extracurricular activities and adolescent development. They identified five areas of academic performance, namely, personal–social characteristics, academic achievement, educational aspirations and attainments, participants’ roles in activities, and environmental social context. They found that those students who were involved in extracurricular activities turned out to have a higher self-efficacy and confidence. Participation in such activities also positively correlated with improved race relations and academic ability. Hence, participation in extracurricular activities boosted one’s confidence and self-efficacy, which would better enable them to build their career aspirations. Similarly, Packard and Nguyen (2003) researched how adolescent girls view themselves as future scientists. The majority of the participants suggested that participation in career-related internships and intensive academic programs will help yield a more favourable response towards becoming scientists in future.

Dilley (1965) investigated the decision making ability and vocational maturity of high school students. The study was administered with 174 high school students randomly selected from four metropolitan high schools. Data were analyzed using chi-square and ANOVA. The results showed that high scores were associated with high intelligence, achievement and high frequency of participating in extracurricular activities. Moreover, Yon, Joeng and Goh (2012) carried out a longitudinal study with 3,449 high school students to find the determinants of career maturity. Data were analyzed using the linear regression model and it was revealed that personal factors (gender, work values, career efficacy, career development activities, extracurricular activities, school achievement, sex role stereotyping, pressure for academic achievement and part-time experiences) and contextual predictors (career conversations with parents, relationships with friends and private education expense) were the significant determinants of career maturity.

Similarly, Carns, Carns, Wooten and Lesley (1995) looked at the association between students’ participation in extracurricular activities and career maturity and career decision making self-efficacy. The instruments used for the study were the Career Maturity Inventory and the Career Decision Making Self-Efficacy Scale. The results showed a significant positive correlation
between career maturity and participation in extracurricular activities and career decision making self-efficacy and career maturity.

Another study was carried out to find the career decision making self-efficacy of the students during a semester (Scott & Ciani, 2008). Eighty eight students were tested for their career decision making self-efficacy before taking career courses and after taking the courses. The results showed that after taking the career courses, students tend to show more adaptive self-efficacy beliefs. Another interesting finding reported was that the career courses proved more effective in increasing women’s self-efficacy for career planning and problem solving. Therefore, participation in extracurricular activities and in career related activities, increases one’s career maturity.

2.2.5 May’s (2007) Career Readiness Model

May (2007) carried out a study to find the career maturity, career decision making self-efficacy, interdependent self-construal, locus of control and gender role ideology of Chinese adolescents in Hong Kong. May’s (2007) study showed that there is a direct positive relationship between career maturity and career decision making self-efficacy ($\beta = .12, p<.01$); and gender role ideology ($\beta = .13, p<.01$); negative correlation between locus of control ($\beta = .29, p<.001$). However, she found an insignificant negative correlation between career related activities ($\beta = .09$) and an insignificant positive correlation between participation in extracurricular activities ($\beta = .08$). The career readiness model was tested using path analysis and a satisfactory goodness of fit was found. Her study showed that career decision making self-efficacy, gender role ideology and locus of control contribute significantly to career maturity. May’s (2007) career maturity model was explained by 16% variance by career decision-making self-efficacy, interdependent self-construal, locus of control, gender role ideology, gender as well as participation in career-related activities in combination.

2.3 Summary

The review of the career related theories; social cognitive career theory, Super’s theory of career development, Careership theory and Gottfredson’s theory, provided a clear understanding of the various factors that are involved in the development of one’s career choices. Different theories
shed different lights on the career development process, across life-span and adolescence. From the foregoing literature review, it can be assumed that predominant factors that influence career decision making are career maturity, career decision making self-efficacy, gender role ideology, locus of control, participation in extra-curricular activities and participation in academic and career related activities.

Both career maturity and career decision making self-efficacy have direct positive influence on career readiness. Locus of control and gender, however, are influenced by cultural values. The literatures reviewed provided both the negative and positive associations between career maturity and the other variables and between career decision making self-efficacy and other variables. Also, the literatures have presented how career maturity and career decision making self-efficacy are affected by gender, ethnicity and socio-economic status.

The two main ethnic groups that this research focused on were iTaukei and Indo-Fijians. As supported by the literature, iTaukei students tend to rely more on external locus of control than do Indo-Fijians. To date, gender role ideology still limits career options of both males and females, hence tending to undermine career maturity and career readiness. Some of these factors are deeply embedded in cultural values and personality of adolescents without even realizing how one affects the other. Therefore, it is important to highlight these hidden attributes of career maturity and career readiness.
3.0 Chapter 3 Methodology

The initial section of this chapter will present the career maturity model. This study is a replication of May’s (2007) study on Career Maturity, Career Decision Making Self-Efficacy, Interdependent Self-Construal, Locus of Control and Gender Role Ideology of Chinese Adolescents in Hong Kong. This chapter will firstly, provide a brief introduction on May’s (2007) career readiness model and then present the career model which was used for the current study. Further, the purpose of the study, hypothesis, materials, and procedure and data analysis will be discussed.

3.1 Career Maturity Model

Past research and literature have shown many factors and the correlations of these factors to career readiness. In order to grasp how career maturity, career decision making self-efficacy, gender role ideology and locus of control affect career readiness, a career readiness model was developed as a guiding tool. May (2007), prepared two separate models; the first one, to show career readiness only with the main variables (career maturity, career decision-making self-efficacy, interdependent self-construal, gender role ideology and locus of control). The second model incorporated the background variables (career related activities and extra-curricular activity). However, for the present study, only one career maturity model was prepared, which looked at all the variables. This model was looked from 2 different perspectives. First, gender differences were looked at followed by ethnic differences. It is important to consider these two factors because they are also amalgamated in the decision making process. An individual cannot be understood only psychologically (in terms of career maturity and self-efficacy); culture, ethnicity, gender and socioeconomic class play important roles.
The career development theories that this study incorporates, suggest that a correlation exists between career readiness process and career maturity, career decision making self-efficacy, gender role ideology, and locus of control. Other independent variables that affect career maturity of adolescents and have been emphasized in this research are gender, participation in extra-curricular activities and participation in academic and career related activities. Career matured students are highly capable of making practical decisions; hence career maturity is positively related to career readiness of students.

However, there are many factors that decide the level of career maturity. To begin with, self-efficacy acts as an initiator agent of an individual’s action. The confidence that one holds in successfully implementing his or her plans is the most influential factor in decision making. This is because, people themselves are the agents who can control and manipulate the situation they are in. Hence, those individuals who have high self-efficacy will be able to take on the
challenges in making their career choice a reality. Therefore, career decision making self-efficacy is positively related to career maturity and career readiness. Closely related to self-efficacy is locus of control. Locus of control is identified in this context as a sense of self-rule and control of the steps and necessary activities that are important in the planning and exploration stage. Locus of control falls on a continuum ranging from internal to external. Individuals, who have high internal locus of control, believe that they are in control of the situation they are in. They attribute their success and failure to their own actions. On the other hand, those individuals who have high external locus of control belief that the situation is beyond their control. These individuals will spend less time in focusing and planning their vocational choices. Research has shown that students who attributed both success and failure to causes outside themselves over which they have no control are likely to feel helpless and to develop expectations of failure (Seifert, 2004). Therefore, students with external locus of control are less career matured (Lokan et al., 1982). Also it is found that the career decision making level of these students is often lower (Taylor & Popma, 1990a). Locus of control is measured using Rotter’s Locus of Control scale. A high score on the scale indicates a tendency to an internal locus of control. Hence, locus of control is positively related to both career decision making self-efficacy and career maturity.

The traditional concept of gender roles has also been one of the hindrances in career achievement. Adolescents with non-traditional gender role ideology will not be affected by the belief in “men’s role and women’s role”. These adolescents will be able to make their career choice freely without the fear of being rejected by the society. Despite this ideology, not all students resort to occupations that are gender specific. There are students who do believe in equal employment opportunities, yet choose not to occupy positions which contain gender labels. On the other hand, people with traditional gender role concepts will always be drawn back by the society’s perception of a particular occupation. These individuals will show a lower self-efficacy and career maturity because of their limited perception of vocational choices. Participation in extra-curricular activities and participation in academic and career related activities also affects the career maturity level of students. According to Tan (1998), a direct positive relationship exists between participation in career-related activities and extra-curricular activities and with career development. Hirschi, Niles and Akos (2011) carried out a longitudinal study to find how
students’ engagement in career related programs correlates with career preparation. They found that participation in such activities increases the career decidedness and career congruence status of students. Hence, adolescents’ involvement in extra-curricular activities such as cultural activities and sports and in activities related to career increase their career maturity level.

3.2 Purpose of the study

Choosing a right career has always been a concern for adolescents. At times, students are indecisive of their career and so they keep changing their courses, not only delaying their graduation but also affecting their academic results. Therefore, it is important to know the career maturity and how much confidence students have when they choose a course. Local researches have been carried out to find out the ethnic differences in academic performance and career choices, the relationship between locus of control and career choices and traditional and non-traditional gender role ideology. However, there had been no clear and comprehensive past local research that has examined the relationships between career maturity, career decision making self-efficacy, gender role ideology and locus of control and how these variables are amalgamated with gender, ethnicity and social class.

This study attempted to gauge the career maturity level of the participants. Another purpose of the study was to investigate how gender role ideology and locus of control affect career maturity and career decision making self-efficacy of adolescent at USP. Also, other factors such as participation in extra-curricular activities and participation in career related activities were considered. Participation in extra-curricular activities and career related activities, give adolescents a variety of ideas and also give them a chance to explore and consider the many career choices. Hence, it is important to incorporate these two variables.

Another purpose in carrying out this research is to compare May’s career readiness model (2007) which was based on Hong Kong Chinese students with the model prepared in the current study which was based on i-Taukei and Indo-Fijian students.

It is important to investigate career maturity of adolescents because it will help to recognize the importance of psychological, cultural and social factors that affect the choices that students make in choosing their appropriate career goals. Students often face difficulties in terms of deciding on
their career. Another benefit of assessing career maturity of students is that it will help the students, teachers, and also career counselors in developing better career guidelines and workshops which can help students to avoid making decisions that are not appropriate to their interests, environment and calibre.

3.3 Focus of the Study

3.3.1 Aim

The aim of this research was to find the career maturity and career decision making self-efficacy of the participants. Another aim of the current study was to find the relationships among career maturity, career decision-making self-efficacy, gender role ideology and locus of control and how these were affected by gender, culture and social class.

3.3.2 Research Questions and Hypotheses

Career Maturity was measured at 3 levels: well-prepared, average pace and not well-prepared. Those who scored more than 20 were considered well-prepared, scores ranging from 16 to 19 meant that participants were developing their career maturity at an average pace. Participants with less than 15 scores were considered not prepared.

Career Decision Making Self-Efficacy was measured using a 25 items questionnaire. Participants scoring above 3.5 were considered to possess high confidence in approaching career related behaviours. Participants with less than 3.5 score indicated low confidence.

Based on the career readiness model, following research questions and hypotheses were drawn:

1. What is the career maturity level of the participants?

   \textit{H1. The participants will be developing career maturity at an average pace.}

2. How confident are the participants when making career decisions?

   \textit{H2. The participants will have little confidence when making career decisions.}
3. What is the relationship among career maturity, career decision making self-efficacy, gender role ideology, and locus of control?

H3. Career maturity is positively related to career decision making self-efficacy.

H4. Career maturity is positively related gender role ideology.

H5. Career maturity is positively related to internal locus of control.

H6. Career decision making self-efficacy is positively related to gender role ideology.

H7. Career decision making self-efficacy is positively related to internal locus of control.

4. Does participation in extra curricula activities affect career maturity, career decision making self-efficacy, gender role ideology and locus of control?

H8. Participation in extra curricula activities positively affects career maturity.

H9. Participation in extra curricula activities positively affects career decision making self-efficacy.

H10. Participation in extra curricula activities positively affects gender role ideology.

H11. Participation in extra curricula activities positively affects internal locus of control.

5. Does participation in academic and career related activities affect career maturity, career decision making self-efficacy, gender role ideology and locus of control?

H12. Participation in academic and career related activities positively affects career maturity.

H13. Participation in academic and career related activities positively affects career decision making self-efficacy.

H14. Participation in academic and career related activities positively affects gender role ideology.

H15. Participation in academic and career related activities positively affects internal locus of control.
6. What is the difference in career maturity, career decision making self-efficacy, male and female groups?

**H16.** Male group will have higher scores in career maturity as compared to the female group.

**H17.** Male group will have higher scores in career decision making self-efficacy as compared to the female group.

7. What is the difference in career maturity, career decision making self-efficacy, of i-Taukei and Indo-Fijian groups?

**H18.** Indo-Fijian group will have higher scores in career maturity as compared to the i-Taukei group.

**H19.** Indo-Fijian group will have higher scores career decision making self-efficacy as compared to the i-Taukei group.

8. What is the difference in career maturity, career decision making self-efficacy, of students from the Central, Western and Northern division of Fiji?

**H20.** Students from the Central division will have higher scores in career maturity as compared to the students from the Western and Northern division.

**H21.** Students from the Central division will have higher scores in career decision making self-efficacy compared to the students from the Western and Northern division.

9. Are there any differences in the career maturity model of May’s (study) and the current study?

**3.4 Definitions**

Career maturity- *Super (1955) defined the concept of career maturity as the place reached on the continuum of vocational development from exploration to decline.* Career maturity denotes the degree to which one’s achievements in terms of cognitive, emotional and other psychological factors have equipped one to make realistic and mature career choices.

Career decision making self-efficacy- *It is the belief that one holds about their capabilities to produce their desired results in terms of successfully completing their career decisions (Betz, ...*
Taylor, 2000). One’s self-efficacy in making career-related decisions relates to one’s belief in one’s own capability to produce the desired results when making career-related decisions.

Locus of control- Locus of control (Rotter, 1966) refers to one’s belief in one’s own abilities to control life events. According to Engler (2009), locus of control anticipates whether one’s actions will influence outcomes. Locus of control can be internal and external. A high score on Rotter’s locus of control scale indicates an internal locus of control.

Gender role ideology- It is defined as the opinions and beliefs about the ways that family and work roles do and should differ based on gender (Harris & Firestone, 1998).

### 3.5 Participants

The participants for this study were 212 University of the South Pacific Laucala campus students. The sample included 80 (37.7 per cent) males and 132 (62.3 per cent) females. All the participants were between the ages of 19 and 21 years; 12.3 per cent were 19 years, 42.9% were 20 years old while 44.8 per cent were of 21 years. The participants were from the two major ethnic groups; i-Taukei (64 participants) and Indo-Fijians (148 participants). The participants who were selected were enrolled in Bachelor of Commerce.

The background variables were also taken into account. Table 1 exhibits a summary of the background variables.

<table>
<thead>
<tr>
<th>Description</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Participation in extra-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>curricular activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>30</td>
<td>29.5</td>
<td>29.7</td>
</tr>
<tr>
<td>Fair</td>
<td>65</td>
<td>50.8</td>
<td>56.1</td>
</tr>
<tr>
<td>Non active</td>
<td>5</td>
<td>19.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Never participated</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Active</td>
<td>35</td>
<td>18.2</td>
<td>24.5</td>
</tr>
<tr>
<td>Fair</td>
<td>62.5</td>
<td>52.3</td>
<td>56.1</td>
</tr>
</tbody>
</table>

Table 3.1 Summary of the Participants’ Participation in ECA and ARA
Participation in career related activities

<table>
<thead>
<tr>
<th></th>
<th>Non active</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>26.5</td>
<td>16.5</td>
<td>16.5</td>
</tr>
<tr>
<td>participated</td>
<td>2.5</td>
<td>2.5</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note: ECA- extracurricular activities; ARA- academic related activities

3.6 Instruments

The fundamental purpose of the study was to throw light on the relationships among career maturity, career decision-making self-efficacy, gender role ideology and locus of control of BCom students’ career readiness. Therefore, this study used four instruments to measure career readiness and career related attributes. These four instruments were first, the Career Maturity Inventory (CMI) (Savickas, Porfeli, 2011), which was used to measure career maturity of BCom students. Secondly, Career Decision-Making Self-efficacy Scale (Taylor & Betz, 1983) was used to assess self-efficacy of students in terms of career decisions. Also, Attitude toward Women Scale (Spence & Helmreich, 1987) was used to measure gender role ideology of both male and female participants. Lastly, Locus of Control (Rotter, 1966) was used to find whether students were internals or externals.

3.6.1 Reliability of the Measures

The internal consistency of the instruments was calculated using Cronbach’s Alpha. The internal consistency was measured for both the male and female samples.

Table 3.2 Reliability Estimates for the Instruments of the Sample of USP Adolescents: Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMI</td>
<td>.74</td>
<td>.75</td>
<td>.72</td>
</tr>
<tr>
<td>CDMSE</td>
<td>.92</td>
<td>.91</td>
<td>.81</td>
</tr>
<tr>
<td>AWS</td>
<td>.80</td>
<td>.71</td>
<td>.75</td>
</tr>
<tr>
<td>LOC</td>
<td>.80</td>
<td>.77</td>
<td>.77</td>
</tr>
</tbody>
</table>
The alpha coefficients of the instruments CMI, CDMSE, AWS and LOC were found to be 0.72, 0.81, 0.75 and 0.77 respectively. Table 1 also shows the alpha coefficients of males and females separately. There were only slight differences in the alpha coefficients of the two groups. The male sample had a slightly higher alpha value as compared to the female sample. For instance, the AWS alpha coefficient of the male sample was 0.80 whereas the female sample had an alpha coefficient of 0.71. Nonetheless, the overall coefficients of the sample were above 0.6 which portrays quite a reliable use of all four of the instruments used in the present study.

### 3.6.2 Career Maturity Scale

The Career Maturity Inventory- Attitude Scale (CMI) (Crites, 1978b) was used in this study to measure the career maturity level of USP students. CMI is an instrument that measures the content of “occupational choices and the process of career decision making” (Savickas, Loienski, 2007). CMI was formerly developed in 1969 (Savickas and Porfeli, 2011). Later, a revised version of CMI was created (Crites and Savickas, 1995). Similar to the former version, career decision making- revised (CMI-R) was used to measure how accurate and realistic goals, students set in when making career decisions.

The original CMI was a reliable and a valid instrument, nonetheless a handful of flaws identified. For instance it contained 150 questions (both Competence and Attitude Test), therefore, administering CMI was time consuming. Secondly, “the test was not applicable to postsecondary students and employed adults. In addition to this, the subscales were not useful; also there was limited use for career counseling. Lastly, there were limited scoring options” (Walker, 2010). In 1996 Crites and Savikas revised CMI.. According to Walker (2010) CMI-R is more applicable to undergraduate students since it deals with career attitudes for the college population. According to Savikas (1984), the Attitude scale of CMI-R is a reliable means of career maturity of college students. In a pilot study with 147 secondary school students, May (2007) found the coefficient alphas for CMI-R to be .66. Hence, this research used CMI-R to assess the extent to which University of the South Pacific students that were ready to make reasonable career decisions.
The Career Maturity Inventory comprised of four important concepts, the first being concern (Savickas & Porfeli, 2011). Concern measures the degree of a person’s involvement and participation in the career decision making process. Secondly, curiosity as the name suggests looks at an individual’s initiative in exploring the world of work and gathering information that will assist them in career readiness. Thirdly, the concept of confidence deals with an individual’s faith in their ability to make realistic decisions. Finally, consultation was used to measure the extent to which an individual goes to others in order to seek career related advice. Each concept was explored using 6 questions (Savickas & Porfeli, 2011).

The responses of the scale were dichotomous and the answers were solicited accepted only as either “agree or disagree”. The responses were scored as “1” for disagree and “0” for agree. Higher scores indicate a higher maturity level. Participants who scored above 20 were assumed to be well prepared for career planning activities. Participants whose scores ranged between 16 and 19 were categorized as developing at an average pace whereas those participants who scored less than 15 were considered as not ready to make career decisions. Therefore, CMI-R had been used in this research to explore the five concepts and its relation to career readiness.

3.6.3 Career Decision Making Self-Efficacy

In order to find out career decision making self-efficacy of the students, Career Decision Making Self-Efficacy – short form (CDMSE-SF) scales was used. This scale determines the degree of trust that an individual holds for him or herself in successfully completing the necessary steps in aiming for career goals.

Similar to the CMI original scale, CDMSE initially contained 50 questions (Taylor & Betz, 1983). The five career choice competencies that the scale consists of are (a) accurate self-appraisal, (b) gathering occupational information, (c) goal selection, (d) making plans for the future, and (e) problem solving. Because administering the original version was time consuming, a shorter version was created to make it easier to assess self-efficacy in terms of career decision making. Each competency was reduced to 5 questions from 10 questions. Hence, the shorter version contained only 25 questions (Betz, Klein & Taylor, 1996). The scale was assessed by using a 5-point continuum likert-type scale ranging from 1 (no confidence at all) to 5 (complete
confidence). Similar to CMI, all the items were summed to arrive at a total score for each participant. Higher scores indicate a higher level of career decision self-efficacy. If the mean score of the CDMSE scale is 3.5 or above, it is identified as willingness to approach behaviour with moderate to high confidence. A score below 3.5 shows little confidence in approaching behaviour (Betz & Taylor, 2006).

With regards to “Betz & Taylor (2006)”, both the versions have proven to be highly reliable. Nonetheless, May (2007) claims that the shorter version is one-dimensional and it cannot be analyzed using the five theorized subscales. Taylor and Betz (1983) found that the internal consistency and reliability of the scale had an alpha coefficient of 0.97 and item total score correlations from 0.50 to 0.80. Luzzo (1993a) carried out test-retest reliability and found a coefficient of 0.83 for the scale. Researches were also carried out on CDMSE-SF. Betz, Klein and Taylor, (1996) reported the internal consistency reliability from 0.73 to 0.83 for the five item subscales and found an alpha of 0.94 for the 25-item total score. A more recent study by Nilsson, Schmidt and Meek (2002) demonstrated an alpha of 0.97. Hence, it can be assumed that CDMSE-SF is a reliable scale that can be used to assess career decision making self-efficacy of students.

The present study used CDMSE-SF to find out the correlation between career decision making self-efficacy and career maturity. Previous studies have shown a positive relationship between career decision making self-efficacy and vocational decidedness with r = 0.46 (Taylor and Popma, 1990). Because of the high reliability of CDMSE-SF, it was the most appropriate inventory for the present study.

3.6.4 Attitudes Toward Women Scale (AWS)

This study also looked at how gender role ideology affects career decision making. It is important to study gender role ideology as some of the studies (Nilan, 2009; Lateef, 1987, Rennie & Dunne, 1994) have demonstrated a link between gender role ideology and vocational preferences. In order to measure gender role ideology, the Attitude toward Women Scale (AWS) (Spence & Helmreich, 1987) was used. With regards to May (2007), AWS is the most readily
used scale to find out the relationship between career decision planning and gender role ideology. Spence and Hahn (1997) described AWS as a measure of attitudes toward women’s rights.

The original version of AWS was a 55-item scale (Spence & Helmreich, 1987) which was later reduced to 25-item scale. Some researchers found even the new 25-item scale to be time consuming; subsequently a 15-item scale was created for better convenience (Spence & Helmreich, 1987). Participants were supposed to rate their responses on a 4-point Likert scale. The responses ranged from A (agree strongly) to D (disagree strongly). In scoring the items, A=0, B=1, C=2, D=3 except for the items numbered 2, 3, 4, 6, 11 and 14, where the scale is reversed. A high score indicated a pro-feminist, egalitarian attitude, while a low score indicated a traditional, conservative attitude. Some of the items in the scale are: “swearing and obscenity are more repulsive in the speech of women than a man; woman should be as free as a man to propose marriage, and sons in a family should be given more encouragement to go to college than daughters” (Spence & Helmreich, 1987).

AWS includes statements that portray a holistic perspective of women’s role and behaviour. In simple terms, it attempts to capture the beliefs about women and rights and roles as compared to men. Researchers have shown that AWS is particularly feasible for use with college students (Daugherty & Dambrot, 1986). Research carried out in a sample of US college students found a correlation of 0.91 while the Cronbach alpha was found to be 0.89. Daugherty and Dambrot, (1986) found the test-retest reliability of the scale to be 0.86. AWS has also been found to be culturally practical. For instance, Chia, Moore, Lam, Chuang and Cheng (1994) administered AWS, in Chinese to Taiwanese college students and also in English to U.S. college students. Their study achieved a reliability of (Daugherty & Dambrot, 1986) 0.80.

English being the most widely used and acceptable language in the colleges and institutes in Fiji the English version of the scale was used. Looking at the high reliability and Cronbach alpha, the 15-item version of AWS was used in the present study.

3.6.5 Locus of Control

Locus of control (Rotter, 1966) refers to one’s belief in his or her abilities to control life events. This study also explored the extent to which students believed they were in control of their life
and the choices that they made. This was measured by using the Locus of Control Scale (Rotter, 1966). It measures generalized expectancies for internal versus external control of reinforcement. People with an internal locus of control believe that their own actions determine the rewards that they obtain, while those with an external locus of control believe that their own behaviour does not matter much and that rewards in life are generally outside of their control. Rotter’s Locus of Control I-E Scale is the most widely used scale to measure internal and external locus of control (Fournier &Jeanrie, 2003).

Originally, the Locus of Control I-E Scale contained 29 items which included six filler items to make the purpose of the instrument more confusing. The scale is evaluated by summing up the total number of external choices. One piece of research was carried out with both high school and college students and the split- half internal consistency coefficients of the scale ranged from 0.65 to 0.79 (Rotter, 1966). Later, a shorter version of I-E Scale was introduced which included only 23 items. This scale contained dichotomous answers in terms of “agree” or “disagree”. The agreed responses were awarded 0 point whereas disagreed responses were awarded with 1 point. Lange and Tiggemann (2010) studied the dimensionality and reliability of Rotter’s internal-external control scale by examining Australian students’ performance. He found that the scale is multidimensional with a test-retest reliability of 0.61.

Some of the items contained in this scale were “Many times I feel I have little influence over the things that happen to me”, “There are many occasions for which I need to toss a coin to decide”, “The world is ruled by a small number of dominant, powerful people; people with no power would not contribute much in ruling the world”.

3.6.6 Demographic and Background Information Questionnaire

The demographic and background questions were included as part of the questionnaire. The participants were also asked to indicate their ethnicity. The participants were asked to rate their participation in extracurricular activities and participation in academic related activities on a scale from 1 to 4 where 1 represented participate highly actively and 4 meant never participate. Further, the participants were asked to indicate their geographical location.
3.7 Procedure

3.7.1 Pilot Study

A pilot study was carried out to find out how accurately the scales can measure career maturity and other variables. Another purpose of carrying out a pilot test was to find out how the actual research design and procedure can be implemented. The pilot was carried out with twenty participants, all of them University of the South Pacific, Laucala Campus students.

After carrying out the pilot survey, the data were computed using SPSS to find out the reliability of the instruments used. The reliability of the instruments was found out using Cronbach’s alpha. All the inventories showed the alpha value above 0.7 which implies that the instruments were reliable and applicable to the present research.

Table 3.3 Reliability Estimates for the Instruments of the Sample of USP Adolescents: Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMI</td>
<td>.77</td>
</tr>
<tr>
<td>CDMSE</td>
<td>.86</td>
</tr>
<tr>
<td>AWS</td>
<td>.64</td>
</tr>
<tr>
<td>LOC</td>
<td>.84</td>
</tr>
</tbody>
</table>

Table 3.3 shows the reliability estimates for the instruments used. Career Decision Making Self-Efficacy short form scale and Rotter’s Locus of Control scale had the highest reliability. Attitudes toward Women scale, which was used to measure gender role ideology, had the lowest reliability.

3.7.2 Main Study

The participants of this study were selected from Bachelor of Commerce (BCom) sample. A list of all students enrolled at the University of the South Pacific was obtained from the Quality, Planning Office, USP. From the list, BCom students aged 19-21 years were selected. Based on
the number of students from the list, an appropriate sample size was calculated using the online sample size calculator. At 90% confidence level and 5% margin of error, the appropriate sample size was found to be 212. This sample was later categorized into male and female sample groups.

The survey included three of the country’s administrative divisions: Central, Western and Northern. The participants were contacted either through email or in person. Questionnaires were created online using Google email survey and were emailed to the selected students. The participants were provided with the consent form which included the details about the research and the participants were asked if they would agree to take part in this research. Their rights of voluntary participation and their rights to withdraw at any time were explained to them. They were also informed that the data will only be used for the research and will be kept confidential. Only after the participants fully understood the research purpose were the questionnaires given out. After the completion of each questionnaire, the participants were thanked for their time and cooperation and were awarded with recharge cards.

After the survey was completed, all the data were compiled and entered into SPSS (Statistical Package for Social Science). The mean, standard deviation and frequencies were found for each variable. Correlation, ANOVA and multiple regressions were used for data analysis. Table shows the analysis used for each research hypothesis.

3.8 Data Analysis

The data were analyzed based on the type of research questions and hypotheses. For research questions 1 and 2, simple descriptive analysis was used. For research questions 3, 4 and 5 Pearson’s correlation was used. Independent t-test was used to answer questions 6 and 7 while one-way ANOVA was employed to question 8. Finally regression analysis was used to find the predictors of career maturity and career decision making self-efficacy. This was used to prepare a making career maturity model. Table provides a summary of the data analysis method used to test each hypothesis.
<table>
<thead>
<tr>
<th>Research questions</th>
<th>Hypothesis</th>
<th>Analysis used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the career maturity level of the participants?</td>
<td><em>H1. The participants will be developing career maturity at an average pace</em></td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td>2. How confident are the participants when making career decisions?</td>
<td><em>H2. The participants will have little confidence when making career decisions</em></td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td>3. What is the relationship among career maturity, career decision making self-efficacy, gender role ideology, and locus of control?</td>
<td><em>H3. Career maturity is positively related to career decision making self-efficacy.</em></td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td></td>
<td><em>H4. Career maturity is positively related gender role ideology.</em></td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td></td>
<td><em>H5. Career maturity is positively related to internal locus of control.</em></td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td></td>
<td><em>H6. Career decision making self-efficacy is positively related to gender role ideology.</em></td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td></td>
<td><em>H7. Career decision making self-efficacy is positively related to internal locus of control.</em></td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td></td>
<td>Does participation in extra curricula activities affect career maturity, career decision making self-efficacy, gender role ideology and locus of control?</td>
<td><strong>H8. Participation in extra curricula activities positively affects career maturity</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Does participation in academic and career related activities affect career maturity, career decision making self-efficacy, gender role ideology and locus of control?</td>
<td><strong>H12. Participation in academic and career related activities positively affects career maturity</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>H13. Participation in academic and career related activities positively affects career decision making self-efficacy</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>H14. Participation in</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td><em>academic and career related activities positively affects gender role ideology</em></td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td>H15.</td>
<td>Participation in academic and career related activities positively affects internal locus of control</td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td>6.</td>
<td>What is the difference in career maturity, career decision making self-efficacy, male and female groups?</td>
<td>H16. Male group will have higher scores in career maturity as compared to the female group.</td>
</tr>
<tr>
<td></td>
<td>H17. Male group will have higher scores in career decision making self-efficacy as compared to the female group.</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>7.</td>
<td>What is the difference in career maturity, career decision making self-efficacy, of i-Taukei and Indo-Fijian groups?</td>
<td>H18. Indo-Fijian group will have higher scores in career maturity as compared to the i-Taukei group.</td>
</tr>
<tr>
<td></td>
<td>H19. Indo-Fijian group will have higher scores career decision making self-efficacy as compared to the i-Taukei group.</td>
<td>Independent t-test</td>
</tr>
</tbody>
</table>
This chapter has presented the methodology for the current research. The aim of this research was to find the level of career maturity and career decision-making self-efficacy of the participants and also to find if there were any relationships among career maturity, career decision-making self-efficacy, gender role ideology and locus of control and how these were affected by gender, culture and social class. A quantitative approach was taken using survey questionnaire. The questionnaire included some relevant demographic information of the

### 3.9 Summary

8. What is the difference in career maturity, career decision making self-efficacy, of students from the Central, Western and Northern division of Fiji?

\[ H_20. \text{ Students from the Central division will have higher scores in career maturity as compared to the students from the Western and Northern division.} \]

One way ANOVA

\[ H_21. \text{ Students from the Central division will have higher scores in career decision making self-efficacy compared to the students from the Western and Northern division.} \]

One way ANOVA

9. Are there any differences in the career maturity model of May’s (study) and the current study?

Regression
participants. Others sections of the questionnaire included 4 scales which had been made and tested by previous researchers. Career Maturity Inventory - Attitude Scale (CMI) (Crites, 1978b), Career Decision-Making Self-efficacy Scale (Taylor & Betz, 1983), Attitude toward Women Scale (Spence & Helmreich, 1987) and Locus of Control scales (Rotter, 1966) were employed in the study to test the hypotheses. A pilot test was carried out first to find the reliability of the scales followed by the main study. The main study consisted of 212 participants taking BA at the USP. The data were compiled and analyzed using SPSS. The analysis tests used were simple descriptive, Pearson’s correlation, independent t-test and ANOVA. Regression analysis was also used to make a career maturity model.
4.0 Chapter 4 Results

This chapter looks at the data analysis. There were 8 research questions and 15 hypotheses for this study. Descriptive analysis, Pearson’s correlation test, independent t-test, ANOVA and finally regression analysis was used to test the hypotheses.

4.1 Descriptive Analysis

Descriptive statistics were used to comprehensively summarize the overall scores and the mean scores of the constructs (concern, curiosity, confidence, consultation) of career maturity and career decision making self-efficacy. The descriptive statistics of career maturity are provided in table 4.1 and table 4.2 and the descriptive statistics for career decision making self-efficacy are presented in table 4.3.

<table>
<thead>
<tr>
<th></th>
<th>Concern</th>
<th>Curiosity</th>
<th>Confidence</th>
<th>Consultation</th>
<th>Total CM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>3.96</td>
<td>3.73</td>
<td>2.76</td>
<td>2.26</td>
<td>12.73</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>1.38</td>
<td>1.74</td>
<td>1.59</td>
<td>1.23</td>
<td>4</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>212</td>
<td>212</td>
<td>212</td>
<td>212</td>
<td>212</td>
</tr>
</tbody>
</table>

Table 1 shows the descriptive statistics for career maturity scores of the participants. From a total of 24, the mean score of career maturity was 12.73 with a standard deviation of 4. The participants showed a lower career maturity score. Concern, curiosity, confidence and consultation are the four indicators of career maturity. Out of these four, concern and curiosity possess the highest mean score of 3.96 and 3.73 respectively.
Table 4.2 *Career Maturity Level of the Participants*

<table>
<thead>
<tr>
<th>Score</th>
<th>Total</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-prepared</td>
<td>&gt;20</td>
<td>8</td>
</tr>
<tr>
<td>Normal pace</td>
<td>16-19</td>
<td>57</td>
</tr>
<tr>
<td>Not well prepared</td>
<td>&lt;15</td>
<td>147</td>
</tr>
<tr>
<td><strong>Total (N)</strong></td>
<td></td>
<td>212</td>
</tr>
</tbody>
</table>

Table 4.2 shows that 147 participants out of the 212 participants, showed that they were not well prepared for their career choice. The mean score of this group was 10.62.

Table 4.3 *Career Decision Making Self-Efficacy Scores of the Participants*

<table>
<thead>
<tr>
<th>Information</th>
<th>Selection</th>
<th>Plan</th>
<th>Solving</th>
<th>Appraisal</th>
<th>Total CDMSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>3.4</td>
<td>3.5</td>
<td>3.6</td>
<td>3.2</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>3.6</td>
<td>3.4</td>
<td>3.6</td>
<td>3.2</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>3.6</td>
<td>3.4</td>
<td>4.2</td>
<td>3.22</td>
<td>4</td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td>.74</td>
<td>.70</td>
<td>.78</td>
<td>.72</td>
<td>.68</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>212</td>
<td>212</td>
<td>212</td>
<td>212</td>
<td>212</td>
</tr>
</tbody>
</table>

Table 4.3 shows the mean scores for each of the five CDMSE constructs (gathering occupational information, goal selection, making plans for the future, problem solving and accurate self-appraisal). Total mean score of career decision making self-efficacy was found to be 3.4 with a standard deviation of .62. The total mean score indicates a high confidence level of the
participants when making career decision. Out of the five indicators of career decision making self-efficacy, making plans for the future seems to have the highest mean score (mean=3.6) closely followed by accurate self-appraisal (mean=3.5) and goal selection (mean=3.5). With respect to Betz and Taylor (2006), CDMSE mean score 3.5 or more than that indicates moderate to high self-efficacy in making career decisions.

4.2 Correlation Analysis

A correlation is found between two variables when they are connected with each other in some way or ways (Goodwin, 2010). For the present research Pearson’s r parametric test of correlation was used. The correlation test was carried out to find out how the six variables (career maturity, career decision making self-efficacy, gender role ideology (measured by AWS), locus of control, and the background variables, participation in extracurricular activities and participation in academic related activities) were associated with each other. Table 3 presents the bivariate correlations of these variables.
Table 4.4 Correlation Analyses of the Instruments and Selected Variables of the Participants

<table>
<thead>
<tr>
<th></th>
<th>CMI</th>
<th>DMSE</th>
<th>GRI</th>
<th>LOC</th>
<th>ECA</th>
<th>Gender</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDMSE</td>
<td>376**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI</td>
<td>304**</td>
<td>.155*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOC</td>
<td>387**</td>
<td>250**</td>
<td>.122*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECA &amp;</td>
<td>223**</td>
<td>518**</td>
<td>.119</td>
<td>.102</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.020</td>
<td>.213**</td>
<td>373**</td>
<td>.163**</td>
<td>-.109</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.158*</td>
<td>301**</td>
<td>242**</td>
<td>.042</td>
<td>278**</td>
<td>-.215**</td>
<td>1</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01
Table 4.5 Correlates of Career Maturity

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMSE</td>
<td>.376</td>
</tr>
<tr>
<td>GRI</td>
<td>.304</td>
</tr>
<tr>
<td>LOC</td>
<td>.387</td>
</tr>
<tr>
<td>ECA &amp; ARA</td>
<td>.223</td>
</tr>
</tbody>
</table>

Table 4.4 shows the variables have only weak to moderate correlations. Career maturity has a moderate positive correlation ($r = .376$) with career decision making self-efficacy and a positive weak correlation with gender role ideology ($r = .304$) and locus of control ($r = .387$). Participation in extra-curricular activities and participation in academic related activities ($r = .518$) showed a medium positive correlation with career maturity. Generally, the correlation tests exhibit no direct strong correlations between the background variables and the main variables.

Table 4.6 Correlates of Career Decision Making Self-Efficacy ($N=212$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM</td>
<td>.376</td>
</tr>
<tr>
<td>GRI</td>
<td>.155</td>
</tr>
<tr>
<td>LOC</td>
<td>.250</td>
</tr>
<tr>
<td>ECA &amp; ARA</td>
<td>.518</td>
</tr>
</tbody>
</table>

Career decision making self-efficacy on the other hand had a weak correlation of $r = .155$ and $r = .250$ with both gender role ideology and locus of control, respectively. However, a positive moderate correlation was found between career decision making self-efficacy and participation in extra-curricular activities and academic related activities ($r = 0.518$).
4.3 Inferential Statistics

Inferential statistics were used to find if generalization could be made to the entire population. It shows whether the differences in the means were due to genuine reasons or occurred because of chance. The inferential statistics of CMI, CDMSE, AWS and LOC of the two samples: male and female, i-Taukei and Indo-Fijian, and Central, Northern and Western were found using the mean and standard deviation. The t-test was carried out to find gender and ethnic differences in participants’ mean scores, and one-way ANOVA to find differences with geographical location.

Table 4.7 Descriptive Analyses of the Variables by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (sd.)</th>
<th>T</th>
<th>Df</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMI</td>
<td>12.83(3.87)</td>
<td>12.66(4.22)</td>
<td>1.59</td>
<td>210</td>
</tr>
<tr>
<td>CDMSE</td>
<td>89.95(18.88)</td>
<td>83.09(15.55)</td>
<td>4.51 **</td>
<td>210</td>
</tr>
<tr>
<td>AWS</td>
<td>41.53(5.18)</td>
<td>46.15(5.8)</td>
<td>.29 **</td>
<td>210</td>
</tr>
<tr>
<td>LOC</td>
<td>8.58(4.20)</td>
<td>7.17(4.14)</td>
<td>3.15 **</td>
<td>210</td>
</tr>
<tr>
<td>ECA</td>
<td>3.25(.54)</td>
<td>3.11(.69)</td>
<td>5.83 *</td>
<td>210</td>
</tr>
<tr>
<td>ACA</td>
<td>3.30(.60)</td>
<td>2.86(.74)</td>
<td>2.39 **</td>
<td>210</td>
</tr>
</tbody>
</table>

**p<0.01   *p< 0.05
Table 4.7 demonstrates no major gender differences (mean difference = .17) in career maturity of the two samples (males = 12.83, females = 4.22). The 95% confidence interval for the estimated mean difference in the population was -.97 and 1.31. An independent t-test showed that the differences in degree of career maturity reported by male and female samples were not significant (t = 1.59, df = 210, p = .38 one tailed).

However, a significant difference in the mean of CDMSE score in the male and female population was found. The male sample group had a higher CMI score (mean = 89.95) as compared to the female sample (mean = 83). The mean differences between the two groups were 6.8. The 95% confidence interval for the estimated mean difference in the population was 2.5 and 11.12 with a small effect size of .4. An independent t-test showed that the differences in the score of career decision making self-efficacy as reported by male and female samples were significant (t = 3.15, df = 210 and p = .002 ). The mean difference in the AWS and ARA score was also found to be significant, with a large effect size of .84 and .66 respectively.

*Figure 4.1* Comparison of CDMSE Score of Male and Female Groups
Figure 4.1 shows that the male groups have a higher mean score of 89.95 than the female group (mean = 83.09). For the male group at 95% confidence interval for the mean, the lower bound is 86.63 while the upper bound is 93.26. On the other hand, the female group has a lower of 80.41 and upper bound of 85.77.

![Box plot showing gender differences in score](image)

Figure 4.2 shows that the female group (mean = 46.15) have a higher degree of egalitarian view of gender role as compared to the male group (mean = 41.53). At 95% confidence interval for mean of the male group, the lower bound is 40.38 and the upper bound is 42.69. However, the female group has lower and upper bound of 45.15 and 47.15 respectively, both higher than the male group.
Figure 4.3 Comparison of LOC Score of Male and female Groups

Figure 3 presents that the male group (mean = 8.58) have a slightly higher degree external locus of control than the female group (mean = 7.17). At 95% confidence interval for mean of the male group, the lower bound is 7.65 and the upper bound is 9.52. The female group has lower and upper bound of 6.46 and 7.88 respectively.
Table 4.8 Descriptive Analyses of the Variables by Ethnicity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (sd.) i-Taukei</th>
<th>Mean (sd.) Indo-Fijians</th>
<th>T</th>
<th>Df</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMI</td>
<td>11.75 (3.74)</td>
<td>13.15 (4.17)</td>
<td>2.32*</td>
<td>210</td>
<td>.35</td>
</tr>
<tr>
<td>CDMSE</td>
<td>78.54 (15.78)</td>
<td>88.77 (14.56)</td>
<td>4.57*</td>
<td>210</td>
<td>.67</td>
</tr>
<tr>
<td>AWS</td>
<td>42.20 (5.69)</td>
<td>45.36 (5.90)</td>
<td>3.61*</td>
<td>210</td>
<td>.54</td>
</tr>
<tr>
<td>LOC</td>
<td>7.43 (4.15)</td>
<td>7.82 (4.24)</td>
<td>.61</td>
<td>210</td>
<td>.09</td>
</tr>
<tr>
<td>ECA</td>
<td>2.89 (.66)</td>
<td>3.28 (.59)</td>
<td>4.18*</td>
<td>210</td>
<td>.60</td>
</tr>
<tr>
<td>ACA</td>
<td>2.83 (.63)</td>
<td>3.11 (.74)</td>
<td>2.61*</td>
<td>210</td>
<td>.41</td>
</tr>
</tbody>
</table>

Note: *P<0.01.

Table 4.8 shows the descriptive analysis of the variables in the two ethnic groups, i-Taukei and Indo-Fijian. For career maturity, the Indo-Fijian group had a higher mean score (13.15) than the i-Taukei group (11.75). A significant mean difference of 1.40 was found between the two groups with a small effect size of .35. Interestingly, in terms of career decision making self-efficacy, Indo-Fijians had a much higher mean score (88.77) as compared to the i-Taukei group (78.54). The 95% confidence interval for the estimated mean difference in the population was -14.62 and -5.18. An independent t-test showed that the differences in the scores for career decision making self-efficacy reported by i-Taukei and Indo-Fijian samples was significant (t = 4.57, df = 210 and p < 0.01 ). Except for locus of control, significant mean difference was found in career maturity, career decision making self-efficacy, gender role ideology, participation in extra curricula activities and participation in academic related activities.
Figure 4.4 Comparison of CM Score of i-Taukei and Indo-Fijian Groups

Figure 4.4 shows that the Indo-Fijian group had a higher career maturity mean of 13.15 with lower bound of 12.47 and upper bound of 13.83 at 95% confidence interval level. The i-Taukei group on the other hand, had a mean of 11.57 with lower bound of 10.81 and upper bound of 12.68 at 95% confidence interval level.
Figure 4.5 Comparisons of CDMSE Score of i-Taukei and Indo-Fijian Groups

Figure 4.5 demonstrates the comparison between the i-Taukei and the Indo-Fijian group in terms of their CDMSE scores. Similar to CM scores, the Indo-Fijian group (mean = 88.77) showed a higher degree of self-efficacy than the i-Taukei group (mean = 78.54). At 95% confidence interval for mean for Indo-Fijian group and i-Taukei group, the lower bound and upper bound was 86.4 and 91, and 74.6 and 82.4 respectively.
Figure 4.6 Comparisons of AWS Score of i-Taukei and Indo-Fijian Groups

Figure 4.6 portrays the attitude towards women score of the i-Taukei and the Indo-Fijian groups. The Indo-Fijian group (mean = 45.36) showed a higher attitude towards women score than the i-Taukei group (mean = 42.2). At 95% confidence interval for mean for Indo-Fijian group and i-Taukei group, the lower bound and upper bound was 44.4 and 46.32, and 40.78 and 43.62 respectively.

4.4 Analysis of Variance for Career Maturity for Geographical Location

To find the mean differences in the three sample groups, Central, Western and Northern, one-way ANOVA test was carried out. One-way ANOVA was used to test if the participants from the Central division scored higher in career maturity and career decision making self-efficacy than the participants from the Western and the Northern division.
Table 4.9 *Descriptive of Career Maturity and Geographical Locations*

<table>
<thead>
<tr>
<th>Geographical locations</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>13.74</td>
<td>3.91</td>
<td>66</td>
</tr>
<tr>
<td>Western</td>
<td>12.72</td>
<td>4.21</td>
<td>84</td>
</tr>
<tr>
<td>Northern</td>
<td>11.66</td>
<td>3.91</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td>12.75</td>
<td>4.09</td>
<td>212</td>
</tr>
</tbody>
</table>

4.7 A comparison of Geographical Location of Career Maturity

Figure 4.7 presents the means for career maturity of Western, Central and Northern groups. The Central group had the highest career maturity mean (mean = 13.74) compared to the Western
(mean = 12.72) and Northern (mean = 11.66) group. The one-way ANOVA test showed a statistically significant difference between the three geographical locations ($F(2,209) = 4.267, p < .015$).

Table 4.10 *Pairwise Comparisons of Career Maturity of Western, Central and Northern Divisions*

<table>
<thead>
<tr>
<th>Geographical location</th>
<th>Mean difference</th>
<th>Std Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>1.01</td>
<td>.663</td>
</tr>
<tr>
<td>Western</td>
<td>Northern</td>
<td>1.06</td>
</tr>
<tr>
<td>Central</td>
<td>Western</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>2.08*</td>
</tr>
<tr>
<td>Northern</td>
<td>Western</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>2.08*</td>
</tr>
</tbody>
</table>

*Note*  

A further analysis was done using pairwise comparisons. Table 9 shows the comparisons between the three geographical locations. Although there is a mean difference between Western and Central (mean difference = 1.01), Western and Northern (mean difference = 1.06), the pairwise comparison analysis showed that the differences were not significant. The mean difference between Central and Northern division, however, was found to be significant (mean difference = 2.08, $p < .05$).
Table 4.11 *Descriptive Statistics of the Interception between Gender, Ethnicity and Geographical Interaction of Career Maturity*

<table>
<thead>
<tr>
<th>Ethnic affiliation</th>
<th>Geographical Location</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>iTaukei</td>
<td>Western</td>
<td>13.5000</td>
<td>2.54951</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>12.5000</td>
<td>4.04145</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13.2143</td>
<td>2.91359</td>
<td>14</td>
</tr>
<tr>
<td>Indo-Fijian</td>
<td>Western</td>
<td>10.8667</td>
<td>2.94877</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>15.1379</td>
<td>3.45092</td>
<td>29</td>
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<tr>
<td></td>
<td>Northern</td>
<td>10.9091</td>
<td>3.95100</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>12.7576</td>
<td>4.06887</td>
<td>66</td>
</tr>
<tr>
<td>Total</td>
<td>Western</td>
<td>11.9200</td>
<td>3.04029</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>14.8182</td>
<td>3.56594</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>10.9091</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>12.8375</td>
<td>3.87933</td>
<td>66</td>
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<tr>
<td>iTaukei</td>
<td>Western</td>
<td>10.6538</td>
<td>3.67633</td>
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<tr>
<td></td>
<td>Central</td>
<td>12.7000</td>
<td>3.36815</td>
<td>10</td>
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<tr>
<td></td>
<td>Northern</td>
<td>11.6429</td>
<td>4.48257</td>
<td>14</td>
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<tr>
<td></td>
<td>Total</td>
<td>11.3400</td>
<td>3.86829</td>
<td>50</td>
</tr>
<tr>
<td>Indo-Fijian</td>
<td>Western</td>
<td>14.9697</td>
<td>4.39805</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>12.6522</td>
<td>4.24916</td>
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<td>13.4756</td>
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<td>4.60084</td>
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<td>3.95021</td>
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<tr>
<td></td>
<td>Northern</td>
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<td>3.88546</td>
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</tr>
<tr>
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<td>3.41055</td>
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<td>4.41061</td>
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<tr>
<td></td>
<td>Central</td>
<td>14.0385</td>
<td>3.98508</td>
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</table>
Table 4.11 shows the interception between gender, ethnicity and geographical location. Three-way between groups ANOVA was used to find if there is an interaction among gender, ethnicity and geographical location. The analysis showed that the interception between the three groups was significant ($F (1,201) = 9.595, p <0.01$, $\eta^2 = 0.46$). This shows that gender, ethnicity and geographical location in combination influence career maturity of students. However, the interception between gender and ethnicity ($F (1,201) = 1.879, p >0.05$) and gender and geographical location ($F (2,201) = .759, p >0.05$) and the interception between ethnicity and geographical location ($F (2,201) = .471, p >0.05$) was found to be not significant.

Table 4.11 Descriptive Statistics of the Interception between Gender, Ethnicity and Geographical Interaction of Career Maturity

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnic affiliation</th>
<th>Geographical Location</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>N</th>
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</thead>
<tbody>
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<td></td>
<td></td>
<td>Central</td>
<td>12.5000</td>
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<td>4</td>
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<td>3.86829</td>
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<td>3.88546</td>
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<td></td>
<td>Total</td>
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<td>4.22581</td>
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<td>3.98508</td>
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</tr>
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<td></td>
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<td>Total</td>
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<td>4.09003</td>
</tr>
</tbody>
</table>

Three-way ANOVA was also carried out to find if there was an interception between gender, ethnicity and geographical location with respect to career decision making self-efficacy. The results showed that gender, ethnicity and geographical location together had a significant influence on the career decision making self-efficacy of the students ($F(1,201) = 6.867$, $p < 0.01$, $\eta^2 = 0.33$). Another significant interception was found between ethnicity and geographical location ($F(2,201) = 4.508$, $p < 0.05$, $\eta^2 = 0.43$). However, gender and ethnicity ($F(1,201) = 0.537$, $p > 0.05$), and gender and geographical location ($F(2,201) = 0.429$, $p > 0.05$), did not determine career decision making self-efficacy of the students.
4.5 Regression Analysis

Regression analysis was used to find the relationship between career maturity, career decision making self-efficacy, gender role ideology, locus of control, participation in extra-curricular activities and participation in academic related activities. Using the enter model method, a significant model emerged: $F (4,207) = 25.030, p < .001$. The model explains 31.30% of the variance (Adjusted $R^2 = .313$). Table 13 gives information for the predictor variables entered into the model.

Table 4.13 The Unstandardized and Standardized Regression Coefficients for Career Maturity

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard error</th>
<th>$B$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMSE</td>
<td>.057</td>
<td>.018</td>
<td>.217*</td>
</tr>
<tr>
<td>GRI</td>
<td>.211</td>
<td>.040</td>
<td>.310**</td>
</tr>
<tr>
<td>LOC</td>
<td>.356</td>
<td>.058</td>
<td>.367**</td>
</tr>
<tr>
<td>ECA &amp; ARA</td>
<td>.133</td>
<td>.249</td>
<td>.036</td>
</tr>
</tbody>
</table>

Note: *$p < .05$, **$p < .001$.

Table 4.14 The Unstandardized and Standardized Regression Coefficients for Career Decision Making Self-Efficacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard error</th>
<th>$B$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM</td>
<td>.797</td>
<td>.254</td>
<td>.209*</td>
</tr>
<tr>
<td>GRI</td>
<td>.139</td>
<td>.159</td>
<td>.053</td>
</tr>
<tr>
<td>LOC</td>
<td>.480</td>
<td>.234</td>
<td>.129*</td>
</tr>
<tr>
<td>ECA &amp; ARA</td>
<td>6.441</td>
<td>.819</td>
<td>.452**</td>
</tr>
</tbody>
</table>

Note: *$p < .05$, **$p < .001$.

Table 4.14 shows the predictors of career decision making self-efficacy. Using the enter model, a significant model emerged: $F (4,207) = 28.265, p < .001$. The model explains 34.10% of the
variance (Adjusted $R^2 = .341$). Table 13 gives information for the predictor variables entered into the model.

Figure 4.8 The model showing the predictors of career maturity and career decision making self-efficacy

Figure 4.8 shows the career maturity model predicted by career decision making self-efficacy, gender role ideology, locus of control and participation in extracurricular and career related activities. Out of these predictors, locus of control was perceived to have the strongest effect on career maturity ($\beta = .367$). Also, it was seen from the results that career maturity was a stronger predictor of career decision making self-efficacy ($\beta = .217$) than vice versa ($\beta = .209$). Participation in extracurricular activities and career related activities were the strongest predictors of career decision making self-efficacy.

Note: *$p < .05$, **$p < .001$
### 4.6 Summary of the Results

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Hypothesis</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the career maturity level of the participants?</td>
<td><em>H1. The participants will be developing career maturity at an average pace</em></td>
<td>Hypothesis was not supported</td>
</tr>
<tr>
<td>2. How confident are the participants when making career decisions?</td>
<td><em>H2. The participants will have little confidence when making career decisions</em></td>
<td>Hypothesis was supported</td>
</tr>
<tr>
<td>3. What is the relationship among career maturity, career decision making self-efficacy, gender role ideology, and locus of control?</td>
<td><em>H3. Career maturity is positively related to career decision making self-efficacy.</em></td>
<td>Hypothesis was supported</td>
</tr>
<tr>
<td></td>
<td><em>H4. Career maturity is positively related gender role ideology.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>H5. Career maturity is positively related to internal locus of control.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>H6. Career decision making self-efficacy is positively related to gender role ideology.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>H7. Career decision making self-efficacy is positively related to internal locus of control.</em></td>
<td></td>
</tr>
</tbody>
</table>
4. Does participation in extracurricular activities and academic related activities affect career maturity, career decision making self-efficacy, gender role ideology and locus of control?

<table>
<thead>
<tr>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8. Participation in extra curricula activities and academic related activities positively affects career maturity</td>
</tr>
<tr>
<td>Hypothesis was supported</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H9. Participation in extracurricular activities and academic related activities positively affects career decision making self-efficacy</td>
</tr>
<tr>
<td>Hypothesis was supported</td>
</tr>
</tbody>
</table>

5. What is the difference in career maturity and career decision making self-efficacy in male and female groups?

<table>
<thead>
<tr>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H10. The male group will have higher scores in career maturity as compared to the female group.</td>
</tr>
<tr>
<td>Hypothesis was not supported</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H11. The male group will have higher scores in career decision making self-efficacy as compared to the female group.</td>
</tr>
<tr>
<td>Hypothesis was supported</td>
</tr>
</tbody>
</table>

6. What is the difference in career maturity and career decision making self-efficacy of i-Taukei and Indo-Fijian groups?

<table>
<thead>
<tr>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H12. The Indo-Fijian group will have higher scores in career maturity as compared to the i-Taukei group.</td>
</tr>
<tr>
<td>Hypothesis was supported</td>
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<table>
<thead>
<tr>
<th>Hypothesis</th>
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<tr>
<td>H13. The Indo-Fijian group will have higher scores in</td>
</tr>
<tr>
<td>Hypothesis was supported</td>
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</table>
4.7 Summary

This chapter has looked at the results of the current study. There were 8 research questions and 15 hypotheses. Hypothesis 1, 10 and 15 were not supported. Upon the completion of the analysis it was found that the participants had a below average career maturity scores. It was surprising to
find that there was no gender difference in career maturity of the participants. Also, it was interesting to note that there were no significant differences in career decision making self-efficacy of the participants due to geographical location. The career maturity model that was tested using regression analysis showed 31.30 per cent variance whereas career decision making self-efficacy model showed 34.10 per cent variance. Career decision making self-efficacy model showed a better fit compared career maturity model.
5.0 Chapter 5 Discussion

5.1 Career Maturity

The first hypothesis of this study was that the participants will be developing career maturity at a normal pace. The present study used the career maturity inventory (Crites, 1978b), in line with which participants that scored above 20 were assumed to be well prepared for career planning activities. Participants whose scores ranged across 16–19 were categorized as developing their career maturity at a normal pace whereas those participants who scored less than 15 were considered as not ready to make career decisions. The descriptive analysis of the data showed that overall, the mean score of the participants was 12.73, indicating that the participants had a low career maturity score (Table 4.2). Of the 212 participants, only 8 were found to be well-prepared for their career, with a mean score for this group of 21.5.

By way of comparison, it may be noted that Niekerk and Niekerk (1990) found similar results for the black participants in their study. These participants showed a lower career maturity score with a mean of 27.73 on a 50-item scale. The present study, however, used a 24-item scale. Also it can be seen in the present study that 57 out of 212 participants were developing career maturity at a normal pace. These results accord with Hirschi’s (2011) suggestion that the pace at which individuals develop career maturity differs.

The career maturity scale was also used to investigate the four competencies (concern, curiosity, confidence, consultation) (table 4.1). The results showed that on average, participants scored higher in concern and curiosity (mean = 3.96 and 3.73, respectively) than in confidence and consultation (mean = 2.76 and 2.26, respectively). Even though participants show higher levels of concern and curiosity in their behaviour towards their career choice, they still need to have high confidence and consultation in order to increase their overall career maturity. Participants demonstrating a high confidence will have strong faith when deciding their career goal (Savickas & Porfeli, 2011). Perhaps this is why the participants had a low career maturity score.

The low performance of participants in career maturity can be attributed to their low self-efficacy, traditional gender role ideology and external locus of control (May, 2007). Also, career
maturity can be linked with gender, ethnicity and social class. The following section will discuss the correlates of career maturity.

5.2 Career Maturity and Career Decision Making Self-Efficacy

This study showed that career decision making self-efficacy had a direct positive correlation with career maturity \( (r = 0.41, p < 0.01) \) (table 4.4). The correlation nonetheless was a weak one. This suggests that an increase in career decision making self-efficacy will lead to a small increase in career maturity. Participants who possess strong belief and faith in their choice will confidently be able to reach their goal without changing their courses. This relation can also be seen in the components of career maturity. Participants’ low performance in career maturity can be attributed to their low achievement in confidence in the career maturity scale (table 4.1). Therefore, for participants to increase their overall career maturity, they need to focus on their confidence.

The finding of this study is parallel to the findings of Betz, Klein, and Taylor (1996b), Luzzo (1993a) and May (2007). Luzzo (1993a) found that career decision making self-efficacy had a direct positive effect on career maturity. The present study is more consistent with May’s (2007) study since in both the studies a weak correlation was reported. The weak association between career maturity and career decision making self-efficacy can be explained in terms of the two inventories used.

Career maturity and career decision making self-efficacy, two interrelated concepts, help to facilitate better vocational choices (Crites, 1978a). The career maturity scale that was used for the present study considered the attitude of the participants towards their career choice. On the other hand, for career decision making self-efficacy, the scale was based on the career competence of the participants. Although the two scales were looking at career decision making, they were in fact measuring two different aspects of it. Hence, career decision making self-efficacy does positively affect career maturity but the weak correlation exists due to the fact that two different dimensions of career decision making were measured. This finding can be supported based on the findings of Alvi and Khan (1983). They proposed that the association between Attitude Scale (Career Maturity) and Competence Test (Career Decision Making Self-
Efficacy) will have a tendency to a positive correlation but with a small Pearson’s correlation (r) value.

Therefore, for further studies, it would be wise to use the Career Maturity Competence test with Career Decision Making Self-Efficacy Competence test. This is because both of these inventories will focus on the competency of the student when making career decisions.

5.3 Career Maturity and Gender Role Ideology

The results of the present study showed that gender role ideology has a direct positive impact on career maturity (r = .304) (table 4.4). Even though the correlation is a weak one, the results indicate that gender role ideology does predict career maturity. Participants who scored higher in the Attitude towards Women Scale showed a more egalitarian view of gender roles. These participants also scored higher in career maturity, suggesting that one’s egalitarian perspective on gender roles is associated with high career maturity. In addition to this, multiple regression analysis also showed a positive relationship between career maturity and gender role ideology (measured by Attitude towards Women Scale) at $\beta = .310$, $p<.001$ (table 4.13). Hence, it can be concluded that not only is there a positive relationship between the two variables; gender role ideology is also a predictor of career maturity.

This study is parallel to studies by Haworth, Povey and Cliff (1986), Faul (1981) and Luzzo (1995). Faul (1981) used an Attitude towards Women Scale to find the relationship between gender role ideology and career maturity. His results were similar to the present study, that is, a positive relationship was found between career maturity and gender role ideology. He found that participants with traditional gender role perspectives scored lower marks in career maturity.

In that gender role ideology is one of the factors that affect career maturity, adolescents, who have a traditional gender role ideology will be restricted from exploring other possible factors that offer career options. These adolescents will be hesitant to consider career options that are believed to be specific to another gender than their own. This will limit their self-confidence and curiosity to know more about other options and they will be tentative about consulting others on such options.
5.4 Career maturity and Locus of Control

One of the hypotheses of this research was that locus of control is positively related to career maturity, meaning that if one scores low on the locus of control scale (low scores indicate an external locus of control), they will have a lower career maturity ranking. This hypothesis was proved to be statistically significant for a positive correlation ($r = .387$, $p < .01$) (table 4.4).

The finding of the present study is similar to the findings of Nowicki and Strickland (1973) and Gardner (1981). Their studies showed that career maturity was associated with locus of control of high school students. High internal locus of control was associated with high career maturity. The present study also shows that participants who are more internally controlled have a higher career maturity.

Generally speaking, locus of control is one’s ability to have control over one’s own decision making. Those individuals who attribute causation to their own action have more internal locus of control and these are the individuals who have high career maturity scores. Coleman and Deleire, (2000) suggest that the locus of control of an individual strongly influences not only academic achievement but also career decisions, mainly because these individuals are ready to make their own career choices rather than being suppressed or dominated by external factors such as fate, destiny, parents’ wishes, careers advisers and sponsors. Hence, a high locus of control indicates a high career maturity and vice versa. To have better career maturity scores, adolescents should be more internally controlling their career choices.

Nonetheless, there were some limitations to this study. These limitations are in terms of the scale used to measure locus of control of the participants, cross cultural application of the scale and the age of the participants. Firstly, for the current study, Rotter’s (1966) Internal–External Locus of Control scale was used. This scale measured generalized expectancies for internal versus external control of reinforcement. It can be inferred that the scale used has measured the overall locus of control of the participants and the results obtained are not specific to career decision or career maturity. People differ in their performance in all areas. For example, a student who does well in science subjects will have a higher self-confidence and more faith in those areas. The same person may not be good at another subject, say history, and may not have higher internal locus of
control for that particular subject. In other words, the locus of control can differ for different subjects.

Secondly, Fiji is a collectivist society, and people are usually dominated by many socio-cultural factors such as kin relationships and obligations, gender and ethnicity. Since most decisions made are attributed to external causes, the locus of control scale used should have items that can be applied to the context of Fiji. Thirdly, the participants for the present study were adolescents. It would have been better if the locus of control scale used was specific to the sample age group, which was a little older than this. For instance, Kishor (1981) used Children’s Nowicki-Strickland Internal–External Control Scale (CNS–IE) to measure locus of control of both Indo-Fijian and i-Taukei students.

Hence, if a career specific locus of control scale had been used then the results would have been different. For future research, it would be wise to devise a locus of control scale that is specific to the sample age, to the concept being explored and relevant to the culture.

5.5 Career Maturity and Participation in Extracurricular Activities and Participation in Academic Related Activities

The study showed participation in extracurricular activities and participation in academic related activities have a statistically significant direct positive correlation with career maturity ($r = 0.223$, $p < 0.01$) (table 4.4). The correlation between the two variables was a small one, indicating that participants who take more part in extracurricular activities and academic related activities will also be more likely to have a high career maturity.

This finding is congruent with the findings of Dilley (1965) who also found that high career maturity scores were related to high frequency of participating in extracurricular activities. Similarly, a Yon, Joeng and Goh study (2012) also showed that participating in extracurricular and school related activities is one of the determinants of career maturity.

Participating in extracurricular activities and academic related activities gives the students greater exposure. Experiencing the world outside their books helps them to increase their knowledge and to use their skills in exploring all the possible opportunities that can benefit them. Students who are engaging in such activities are better able to recognize their talents and build
their confidence in that particular area, hence better able to prepare themselves for their career. Therefore, participating in extracurricular and academic related activities will enable students to have a better career maturity.

However, there were some shortcomings to the current research. First, only two questions were asked to find the participants’ engagement in extracurricular and academic related activities. The participants were asked to rate their response on a scale of 4, on the question of how actively they participated in extracurricular and academic related activities. The results would have been much better if participants had been asked also how many activities they are in involved in. This would have given a better understanding of what activities the participants are involved in and how it helps them to prepare towards their career.

All in all, the more students engage in extracurricular activities, the greater are the chances that they will have a higher career maturity.

### 5.6 Career Decision Making Self Efficacy

Career decision making self-efficacy explains the confidence that one has in making decisions regarding their career. Table 4.2 shows the mean scores for the five constructs underpinning career decision making self-efficacy – gathering occupational information, goal selection, making plans for the future, problem solving and accurate self-appraisal. The participants had a total mean score of 3.4 and standard deviation of 0.62, which placed them just below moderate to high confidence. This showing of low confidence in approaching career choice behaviour is incongruent with the findings of Priest (2002), whose study found a moderate CDMSE with a mean of 3.94.

Moreover, individual constructs were also considered. Table 2 shows that on average, making plans for the future had a higher mean of 3.6 (sd = .78) followed by goal selection (m = 3.5, sd = .70), planning (mean = 3.5, sd = 0.78), information gathering (mean = 3.4, sd = .74) and problem solving (mean = 3.2, sd = 0.72). This shows that participants had more confidence in planning for the future but they had very low confidence in problem solving. This may explain why on average the participants had a low CDMSE. If participants increase their confidence in information gathering then they will perhaps be better at adapting to ideas in solving problems,
hence increasing their overall CDMSE. Priest’s (2002) study showed that participants had the highest mean score for gathering information (mean = 4.11, sd = 0.74) and self-appraisal (mean = 4.10, sd = 0.71) but lowest score in problem solving (mean = 3.75, sd = 0.73). Students’ low confidence in gathering information for career options can be one of the factors lowering the CDMSE. Thus, all the five constructs equally contribute to the overall CDMSE score. Having a high confidence in planning and goal selection is not enough. Students should also demonstrate high confidence in gathering information and problem solving.

It is important for students to have moderate to high CDMSE because students who are more confident with the choices they make are considered better able to engage in the career decision making process (Luzzo, 1993a). Students with high CDMSE will also demonstrate a greater commitment to career (Chung, 2002).

5.7 Career Decision Making Self-Efficacy and Gender Role Ideology

Another hypothesis tested in this research was that career decision making self-efficacy is positively associated with gender role ideology. That is, participants with an egalitarian view of gender roles will have a higher career decision making self-efficacy. Table 6 shows that career decision making self-efficacy has a weak positive correlation with gender role ideology (r = 0.155). Hence the hypothesis has been supported by the research.

The results of the study are in agreement with the findings of Faul (1981). He suggested that students who had an egalitarian view were more confident in their decisions; hence they had a higher self-efficacy in career decision making. Generally speaking, students with an egalitarian perception of gender role will be less worried about the different gender expectations attached to their desired occupation. Hence, they will be able to make their decisions on the basis of their preference and approach career behaviour with confidence. Similarly, Marra, Rodgers, Shen and Bogue (2009) and Nevill and Schlecker (1988) showed that a self-efficacy can help female students to adapt better to non-traditional gender occupations.

An egalitarian perception of gender role is positively associated with career decision making self-efficacy whereas increase in traditional perception of gender role will limit the growth of one’s career decision making self-efficacy. Fiji, as a developing country, is continuously going
through economic ups and downs. Many organizations are involved in promoting equal employment opportunities for everyone. However, studies by Nilan (2009), Baker (1989) and Rennie and Dunne (1994) have shown that traditional views still affect females’ career options, thus limiting their career decision making self-efficacy. Similarly, Rezaei (2010) has found that even though females score higher confidence in attitudes towards women, they still hold a somewhat negative view of their own gender.

Apart from this, in terms of the participants there were some limitations to the research. Those selected for the present study were all BA students. The results would have been more interesting if the participants were from a male stigmatized and a female stigmatized occupation. This would have helped understand whether having an egalitarian perception of gender role does match the career choice. Some participants may show a high egalitarian perception but may still be hesitant to engage in occupations that are gender stereotyped.

5.8 Career Decision Making Self-Efficacy and Locus of Control

Self-efficacy and locus of control are closely related terms. Self-efficacy focuses on the perception of ability to act competently and effectively, locus of control focuses on the perception of control (Bandura, 1977a). Table 4.6 shows a weak positive correlation between career decision making self-efficacy and locus of control. This means that participants with an internal locus of control will tend to have a higher career decision making self-efficacy, participants with an external locus of control a lower career decision making self-efficacy. Though the two variables are positively associated, the association is a weak one (r = 0.250).

Participants with an internal locus of control believe that they themselves do have control over their action, hence show a high confidence in approaching behaviour. On the other hand, those whose locus of control is external, believing that their actions are controlled by outside factors such as fate and destiny, feel helpless and show avoidance behaviour. The results are in line with the findings of Kishor (1981), who also found that those adolescents who had crystallized (as stated by Super, 1995) a career choice have high self-esteem and more internal locus of control. Even more, Taylor and Popma (1990) found a positive relationship between internal locus of control and career decision making self-efficacy.
Thus, the results from the present study are supported by the literature and it shows that internal locus of control will show a high career decision making self-efficacy. It is important to take account of students’ locus of control because it will help understand how students evaluate their career choices and their attributions to the preferences they have made. If students have an internal locus of control then they will be able to select goals confidently, appraise themselves accurately, solve problems and plan future goals.

5.9 Career Decision Making Self-Efficacy and Participation in Extracurricular Activities and Participation in Academic Related Activities

Pearson’s correlation analysis was done to find the relationship between career decision making self-efficacy and participation in extracurricular activities and participation in academic related activities. The result showed that there is a medium positive correlation between the two variables ($r = 0.518$, $p < 0.01$).

These findings match the studies of Carns, Carns, Wooten and Lesley (1995) and Scott and Ciani, (2008). Their studies also showed that as participation in extracurricular activities increases, the career decision making self-efficacy of the students also increases. A strong explanatory reason for this could be that participation in such activities builds one’s confidence. Hence, an individual is able to explore further and approach career behaviour with confidence.

5.10 Gender Difference in Career Maturity

Gender difference in career maturity was found using independent t-test analysis (table 7). The descriptive statistics showed that there is only a slight difference in the mean scores of the male and female groups. The male group reported mean score of 12.83 ($sd = 3.87$) whereas the female group a mean score of 12.66 ($sd = 4.22$), though inferential statistical analysis found that these differences were not significant. Further analysis was done using Pearson’s correlation to find if there is a relationship between career maturity and gender. Table 4.6 shows that there is a weak negative relationship between gender and career maturity (females show high career maturity). However, again the relationship found was not significant.
The findings are not, however, in line with the studies by Luzzo (1995), Alvi and Khan (1983) and Fouad (1988), who all reported gender differences in career maturity scores of their participants. Yet research by Patton, Watson and Creed (2004), Themba (2010) and Lee (2001) also reported no significant gender differences in career maturity of the students. Hence, the literature tends to support the finding of the current study that there is no significant difference in career maturity between the male and female groups.

One of the reasons for the absence of marked differences between the groups could be that both groups are exposed to the same educational system, which will enable the development of career maturity at a more even pace across the groups. Another reason could be that the two groups were maybe from same cultures.

5.11 Gender Difference in Career Decision Making Self-Efficacy

Gender differences in career decision making self-efficacy were also found using the independent t-test. Table 4.7 shows the mean of males (mean = 89.95, sd = 18.88) and females (mean = 83.09, sd = 15.55). The mean difference between the male and female group was 6.86. The mean difference was found to be significant (t = 4.51, df = 210, p < 0.01). Moreover, a medium effect size was found (d = 0.40). The results show males have significantly higher career decision making self-efficacy than females.

One of the possible explanations for this difference can be because of gender role ideology. For instance, table 6 shows that gender role ideology is positively related to career decision making self-efficacy. Also, table 4 shows that gender is positively correlated with gender role ideology (r = 0.373, p < 0.01). Hence, the difference in the mean scores of the male and female groups can be because of gender role ideology. Another explanation could be as suggested by Nilan (2009) that local environment such as culture plays a dominant role in determining career options of adolescents, particularly females. Also, Tavola (2000) pointed out that more females enter secondary and tertiary schools but the female population tends to decrease when it comes to later transition into the career field. The finding of this study suggests that lower female career decision making self-efficacy can be blamed for the decline in the female population in the labour workforce.

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The results are similar to the findings of Kaiser (2003). He also found significant gender differences in career decision making self-efficacy of the participants. Like career maturity, the difference in the career decision making self-efficacy score of the male and female sample can be attributed to their gender role ideology perception. However, the results of this study are not congruent with the studies by Chung (2002) and Kostko (2008), which found no significant differences between the male and female groups in their career decision making self-efficacy.

Career decision making self-efficacy is one of the important factors that determine one's confidence in entering a career field. The present study shows that there is significant difference in the scores of career decision making self-efficacy of male and female sample groups.

5.12 Ethnic Difference in Career Maturity

Ethnic difference in career maturity scores was also investigated. The two major ethnic groups used were the i-Taukei and Indo-Fijian groups. Independent t-test was carried out to find the ethnic differences. The results showed that on average the Indo-Fijian group scored a higher career maturity (mean = 13.15, sd = 4.17) than the i-Taukei group (mean = 11.75, sd = 3.74) (table 8). The mean difference between the two groups was found to be significant (t = 2.32, p < 0.01). Also, a small effect size was reported (d = .35). The results are in line with the findings of Niekerk and Niekerk (1990), whose study with black and white ethnic groups also showed differences in career maturity scores.

Studies by Otsuka (2006), Nabuka, (1983), Nabolo, (2001), Baba (1979), Basow (1982) and Kishor (1981, 1983) could be used to provide some possible explanations for the differences in career maturity scores between the i-Taukei and Indo-Fijian groups. These writers also looked at the academic achievement of the two groups. Culture plays a core role in predicting academic performance. Indo-Fijians, being concerned to develop their career through academic achievement, have higher career maturity than their counterpart i-Taukei adolescents. But even though differences exist in the career maturity scores of the two ethnic groups, both groups have mean scores below 15, suggesting that neither group is well prepared for their career choices.
5.13 Ethnic differences in Career Decision Making Self-Efficacy

Similar to career maturity, ethnic differences were also considered in relation to career decision making self-efficacy. Indo-Fijians’ mean score (88.77) was much higher than that for the i-Taukei group (78.54). The 95% confidence interval for the estimated mean difference in the population was -14.62 and -5.18. An independent t-test showed that the differences in the score of career decision making self-efficacy reported by the i-Taukei and Indo-Fijian samples was significant (t = 4.57, df = 210 and p < 0.01). A medium effect size was reported at d = 0.67.

The findings are similar to the findings of Glorian and Hird (1999), a study that also showed ethnic differences in the white and the minority racial and ethnic groups. Local study by Kishor (1981, 1983) as showed that Fijians have lower levels of self-concept and a more external locus of control than Indians.

Hence, ethnic differences are present in both career maturity and in career decision making self-efficacy. Since career decision making self-efficacy is positively correlated to career maturity, developing career decision making self-efficacy can help increase career maturity in i-Taukei adolescents.

However, the sample size, and particularly the imbalance of participants between the two groups, was a limitation to this research. The i-Taukei group consisted of only 64 participants whereas the Indo-Fijian group consisted of 148 participants.

5.14 Geographical Location and Career Maturity

Analysis of variance was carried out to find if there was a geographical difference in career maturity of the students doing BA. The three geographical locations considered were the Central, Western and Northern divisions. The one-way ANOVA showed that there is significant difference among the three geographical locations (F(2,209)) = 4.267, p < .015) (figure 9). Further analysis was done using a pair-wise comparison (table 4.10). The results showed that the career maturity mean difference between Western and Central (mean difference = 1.01), whereas between Western and Northern (mean difference = 1.06) it was not significant. The mean
difference between Central and Northern divisions, however, was found to be significant (mean difference = 2.08, p<0.05).

This finding suggests that the students from Northern Division have a lower career maturity score overall compared to the other two locations. The students have less exposure to career planning, are less career concerned or curious and have low confidence in consulting others for career information.

One of the reasons for these differences could be because of the culture and the educational exposure that students are surrounded by in each geographical location. According to Bourdieu (1977) people’s actions and cognitions are dominated by their habitus. Puamau (1999) found that students from rural areas were disadvantaged by not having the same access to benefits as do students in urban areas. Similarly, Banks, Bates, Breakwell, Bynner, Elmer, Jamieson and Roberts (1992) argued that educational achievements or the level of qualification gained and geographical location were significant factors in career decision making.

### 5.15 Interception among Gender, Ethnicity and Geographical Location In Career Maturity and Career Decision Making Self-Efficacy

Table 11 shows the interception among gender, ethnicity and geographical location. Simply put, this table explains whether being male or female from a particular ethnic group from a particular geographical location affects career maturity. The results clearly show that there is significant interception among the three. Therefore, an individual’s career maturity is affected not only by gender, ethnicity and geographical location individually but also by them in combination. For instance, table 4.11 shows that male Indo-Fijian participants from Central Division have the highest career maturity mean (m = 15.1379, sd = 3.45) compared to other groups of participants. This suggests that male Indo-Fijian students from the Central Division are the most concerned and curious about their career.

Similar results were reported in terms of career decision making self-efficacy. Male Indo-Fijian participants from Central Division have the highest career decision making self-efficacy mean (m = 94.06, sd = 15.26) compared to other group of participants. One reason for this group of participants returning the highest mean in both career maturity and career decision making self-
efficacy can be given in terms of gender role ideology, culture and urban–rural access to educational facilities. It has been shown that males on average have scored the highest in career maturity and career decision making self-efficacy. It has also been seen that Indo-Fijians have scored highest scores in the variables explored. Finally, participants belonging to the Central Division also showed highest career maturity and career decision making self-efficacy scores. Hence, students from these three groups have more advantages in getting information for career readiness.

Nonetheless, the number of participants in each of the groups was not even. Therefore, for future studies it would be a better decision to consider equal numbers of participants for each of the gender, ethnic and geographical groups.

5.16 Career Maturity and Career Decision Making Self-Efficacy Model

Regression analysis was carried out to find the predictors of career maturity and career decision making self-efficacy of adolescents. A significant career maturity and career decision making self-efficacy model was found. Table 4.13 shows that career maturity model had an adjusted $R^2$ of 31.3% that means the model accounts for 31.3% of the variance of the predictor variables (career decision making self-efficacy, gender role ideology, locus of control, and extracurricular and academic related activities). The model shows that locus of control is a strong predictor of career maturity ($\beta = .367, p < 0.001$) followed by gender role ideology ($\beta = .310, p < 0.001$) and career decision making self-efficacy ($\beta = .217, p < 0.05$). However, extent of participation in extracurricular activities and academic related activities was not a significant predictor of career maturity.

For career decision making self-efficacy, extracurricular activities and academic related activities were found to be the strongest predictor ($\beta = .452, p < 0.01$). Locus of control ($\beta = .129, p < 0.05$) and career maturity ($\beta = .209, p < 0.05$) were also significant predictors of career decision making and self-efficacy. Nonetheless, gender role ideology was not a significant predictor of career decision making self-efficacy.

The two models (career maturity and career decision making self-efficacy) together present career maturity of adolescents (figure 8). It can be concluded that gender role ideology, career
decision making self-efficacy and locus of control are related to career maturity of adolescents. Participation in extracurricular activities and academic related activities influences career maturity through career decision making self-efficacy.

5.17 Comparison with May’s (2007) Career Readiness Model

May (2007) carried out a similar study with Chinese students in Hong Kong. Her study showed a direct positive relationship between career maturity and career decision making self-efficacy ($\beta=0.12$, $p<0.01$). The current study also found a positive association between career maturity and career decision making self-efficacy ($\beta=0.217$, $p<0.05$). The current study showed a stronger influence of career decision making self-efficacy on career maturity compared to May’s (2007) study. In terms of gender role ideology, May found $\beta$ value of 0.13 while the current study showed the $\beta$ of 0.310. Again the current study found a gender as a stronger predictor of career maturity. May (2007) found a negative correlation between career maturity and locus of control whereas this study showed that there was a significant positive relationship between the two variables. Both the studies found that participation in extracurricular activities and participation in academic related activities were not significantly related. May’s (2007) career maturity model was explained by 16% variance by career decision-making self-efficacy, interdependent self-construal, locus of control, gender role ideology, gender as well as participation in career-related activities in combination. Of the total variation in career maturity for the current study, 31.30% was explained by the variables used by May (2007) except for interdependent self-construal.

5.18 Limitations and Recommendations

For the current study, 15 hypotheses were tested, out which only 3 were not supported. Also, a good fit of career maturity model was found with 31.30 per cent of variances while 34.10 per cent of variances were found for career decision making self-efficacy. Despite these, there were some limitations of the study. These limitations are in terms of the inventories used and sample size.

Four inventories were used to conduct this research. These inventories had closed ended questions (either dichotomous questions or likert-type scale questions) hence, limiting the
responses of the participants and not offering them with choices that could actually reveal their perceptions of the career decisions. Another limitation of using the inventories was that the questions were standardized. This was overcome by conducting a pilot study before the main study. The length of the questionnaires was also a disadvantage. Each inventory contained more than 10 questions and consumed around 15-20 minutes of each participant’s time. This may have resulted in some of the participants overlooking at the questions or giving biased answers by just tick either “right” or “wrong” and selecting any one of the options in the Likert scale. The biased responses were tried to control by explaining to the participants the importance and the benefit of the study.

Moreover, in order to know the participants’ participation in extracurricular activities and career related activities, only 2 Likert-type questions were asked. It would have been helpful if more than 2 questions were asked. Also, for future studies it would be a sensible decision to take into consideration of all the extracurricular and academic related activities that students are normally involved in.

Sample size was also a drawback of this research. There were uneven balance gender and ethnicity in the sample size. This has limited the research in the prediction of the extent to which each group affect career maturity and career decision making of the student. All the participants were enrolled in BA, hence it was not possible to foresee the maturity of students taking other course. For future study, it would be interesting to take a course that perceived as specific to a particular gender such as an electrical engineer or a nurse. In this way, a complete generalization can be made on gender role ideology and career maturity and career decision making self-efficacy.

Moreover, the sample consisted of participants who were currently enrolled at the University of the South Pacific; this limited students who were enrolled in other institutes such as Fiji National University and University of Fiji. Also, the current study only looked at students taking BA and neglecting those enrolled in other subjects such as engineering, mechanical courses, and science courses. Hence, this limits the generalizability of the results to students taking other courses other than BA and also to those students who did not choose to attend universities.
All in all, efforts were made to minimize the limitations that were encountered in the study but not all could have been controlled. The two limitations that were faced by this research were with respect to the inventories used and the sample size. Recommendations for future study would be to use an inventory that is relevant to the culture and context being explored by the researcher. The theories and models used for this study were from Western countries, hence cross validation of these are important so that they can be applied to developing countries like Fiji. Perhaps, it would be practical to design new career inventories that are adapted culturally in order to prove useful in explaining the career maturity of the adolescence in Fiji.

5.19 Summary

Overall, this chapter has looked at the discussion of the hypotheses that were tested. It was found that career maturity has a significant positive association with career decision making self-efficacy, gender role ideology, locus of control and participation in extracurricular and academic related activities. Significant positive correlations were also found for career decision making self-efficacy and gender role ideology, locus of control and participation in extracurricular and academic related activities. These findings were also supported by the literatures.

It was found that there were no significant gender differences in career maturity but significant differences in career decision making self-efficacy. With regards to ethnicity, Indo-Fijian sample group showed significant higher scores in both career maturity and career decision making self-efficacy. Geographical differences were observed in career maturity with the participants from central division getting highest scores in career maturity. Significant mean difference in career maturity was seen between the central and the northern division.

Finally, regression analysis showed the predictors of the career maturity and career decision making self-efficacy and a model was prepared. It was found that participation in extracurricular activities and participation in academic related activities did not predict career maturity. Locus of control was found to be the strongest predictor of career maturity. For career decision making self-efficacy, participation in extracurricular activities and academic related activities were proven to be the strongest predictors whereas gender role ideology failed to be a predictor.
Despite the limitations, this study was able to produce a good fit model for career maturity and also for career decision making self-efficacy. This model can be used to study how gender role ideology, attitude toward women, locus of control affect career maturity and career decision making self-efficacy of adolescence. The model clearly represents the correlation between each of these variables; hence it would be easy to understand which aspects to improve in order to increase career maturity of an individual. For instance, this study showed the importance of extracurricular activities and academic related activities in the enhancement of career decision making self-efficacy. Students’ participation in such activities build up on their confidence to approach career related behaviours. It is important that career counselors emphasize on the importance of having career related activities in the curriculum as this will affect career self-efficacy which in turn will determine career maturity.

This study also showed the important role played by gender role ideology in predicting career maturity. Fiji is a developing country which is constantly being influenced by overseas countries and technologies. Despite this, there are some areas in career choices that need to be proven as equally liable for both males and females. Both the genders should be shown open doors to the career related activities. Only through this, curiosity and exploration would be enhanced and not limited as pointed out by Gottfredson (1981).

Therefore, in preparing adolescence for work environment, a good career maturity level would be helpful. This would ensure stability and confidence in successfully meeting the requirements of the job. Career counselors should bear in mind the how each of the following career self-efficacy, gender role ideology, locus of control, ethnicity, gender and geographical location affect career maturity.
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Appendix 1

Career Maturity and Career Readiness of USP Students

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Date: 03/05/2012

CONSENT FORM

You are required to take part in a survey conducted on career maturity and career readiness of USP students. As such you will be asked questions that have influenced your decision regarding your career choice. Participation is entirely voluntary and will take only 20 minutes of your time. Please note that once you start answering (1) you can refuse to answer questions that you don’t want to and (2) choose to withdraw from the study at any point you wish to. Please also note that responses will be kept anonymous. The information given below will be kept confidential; it will only be used for research purpose.

Demographic and Background Information

1. Gender
   A. Male  B. Female

2. Age
   A. 19    B. 20    C. 21

3. Ethnic affiliation
   A. iTaukei  B. Indo-Fijian

4. Programme
   A. BScGCED  B. BCOM  C. BAED

5. Hometown

__________________________

6. Compared with other classmates, my participation in academic and career guidance activities is:
   A      B      C       D
   Active  Fair  Non-active  Never participate in any ECA

7. Compared with other classmates, my participation in the extra-curriculum activities (ECA) is:
   A      B      C       D
   Active  Fair  Non-active  Never participate in any ECA

__________________________
Appendix 2

Career Maturity Inventory

There are 24 statements about choosing the kind of job or work that you would probably do when you finish your degree. You can either agree or disagree with the statement. Beside each statement you can write “A” for agree and “D” for disagree.

1. There is no point in deciding on a job when the future is so uncertain.
2. I know very little about the requirements of a job.
3. I have so many interests that it is hard to choose just one occupation.
4. Choosing a job is something that you do on your own.
5. I can’t seem to become very concerned about my future occupation.
6. I don’t know how to go about getting into the kind of work I want to do.
7. Everyone seems to tell me something different; as a result I don’t know what kind of work to choose.
8. If you have doubts about what you want to do, ask your parents or friends for advice.
9. I seldom think about the job that I want to enter.
10. I am having difficulty in preparing myself for the work that I want to do.
11. I keep changing my occupational choice.
12. When it comes to choosing a career, I will ask other people to help me.
13. I’m not going to worry about choosing an occupation until I am out of school.
14. I don’t know what courses I should take in school.
15. I often daydream about what I want to be, but I really have not chosen an occupation yet.
16. I will choose my career without paying attention to the feelings of other people.
17. As far as choosing an occupation is concerned, something will come along sooner or later.
18. I don’t know whether my occupational plans are realistic.
19. There are so many things to consider in choosing an occupation; it is hard to make a decision.
20. It is important to consult close friends and get their ideas before making an occupational choice.
21. I really can’t find any work that has much appeal to me.

22. I keep wondering how I can reconcile the kind of person I am with the kind of person I want to be in my occupation.

23. I can’t understand how some people can be so certain about what they want to do.

24. In making career choices, one should pay attention to the thoughts and feelings of family members.
Appendix 3

Career Decision Self-Efficacy Scale-Short Form (CDSE-SF)

For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the key.

NO CONFIDENCE  VERY LITTLE  MODERATE  MUCH  COMPLETE
AT ALL  CONFIDENCE  CONFIDENCE  CONFIDENCE  CONFIDENCE  CONFIDENCE
1  2  3  4  5

Example:
How much confidence do you have that you could:
a. Summarize the skills you have developed in the jobs you have held?
If your response was "Moderate Confidence," you would fill out the number 3 on the answer sheet.

HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD:

1. Find information in the library about occupations you are interested in.
2. Select one major from a list of potential majors you are considering.
3. Make a plan of your goals for the next five years.
4. Determine the steps to take if you are having academic trouble with an aspect of your chosen major.
5. Accurately assess your abilities.
6. Select one occupation from a list of potential occupations you are considering.
7. Determine the steps you need to take to successfully complete your chosen major.
8. Persistently work at your major or career goal even when you get frustrated.
9. Determine what your ideal job would be.
10. Find out the employment trends for an occupation over the next ten years.
11. Choose a career that will fit your preferred lifestyle.
12. Prepare a good resume.
13. Change majors if you did not like your first choice.
15. Find out about the average yearly earnings of people in an occupation.

16. Make a career decision and then not worry whether it was right or wrong.

17. Change occupations if you are not satisfied with the one you enter.

18. Figure out what you are and are not ready to sacrifice to achieve your career goals.

19. Talk with a person already employed in a field you are interested in.

20. Choose a major or career that will fit your interests.

21. Identify employers, firms, and institutions relevant to your career possibilities.

22. Define the type of lifestyle you would like to live.

23. Find information about graduate or professional schools.

24. Successfully manage the job interview process.

25. Identify some reasonable major or career alternatives if you are unable to get your first choice.
Appendix 4
ATTITUDES TOWARD WOMEN SCALE (SPENCE & HELMREICH, 1978)

Instructions:
The statements listed below describe attitudes toward the roles of women in society which different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement by indicating whether you (A) agree strongly, (B) agree mildly, (C) disagree mildly, or (D) disagree strongly.

1. Swearing and obscenity are more repulsive in the speech of a woman than a man.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

2. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing laundry.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

3. It is insulting to women to have the “obey” clause remain in the marriage service.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

4. A woman should be free as a man to propose marriage.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

5. Women should worry less about their rights and more about becoming good wives and mothers.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

6. Women should assume their rightful place in business and all the professions along with men.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

7. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
   A  B  C  D
   Agree strongly  Agree mildly  Disagree mildly  Disagree strongly

8. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

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A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
9. The intellectual leadership of a community should be largely in the hands of men.
A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
10.* Women should be given equal opportunity with men for apprenticeship in the various trades.
A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
11.* Women earning as much as their dates should bear equally the expense when they go out together.
A B C D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
12. Sons in a family should be given more encouragement to go to college than daughters
A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
13. In general, the father should have greater authority than the mother in the bringing up of the children.
A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
14.* Economic and social freedom is worth far more to women than acceptance of the ideal of femininity
which has been set up by men.
A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
15. There are many jobs in which men should be given preference over women in being hired or
promoted.
A      B     C     D
Agree strongly   Agree mildly   Disagree mildly  Disagree strongly
Appendix 5

Rotter Internal-External Locus of Control Scale (I-E Scale)

Please read the following sentences, from that select right or wrong according to your views in most of the time. Please tick √ to reflect your opinion.

Right    Wrong

1. The world is ruled by a small number of dominated, powerful people; people with no power would not contribute much in ruling the world.
   □    □

2. Too long-term planning is unnecessary, because a lot of things are decided by luck.
   □    □

3. There are many occasions which I need to toss a coin to decide.
   □    □

4. I always discover that “things that are predicted to happen” will happen.
   □    □

5. Many times exam questions tend to be so unrelated to course work that studying is really useless.
   □    □

6. Finding a good job mainly depends on the factors: right timing and right place
   □    □

7. I sometimes find it difficult to understand how the teachers score or mark (our work)
   □    □

8. Many times I feel I have little influence over the things that happen to me.
   □    □

9. Trying hard to please other people is not useful, because if they like you, they will like you
   □    □

10. The majority of the students are not aware of how much the unexpected things can influence their academic results
    □    □

11. Without the right breaks one cannot be an effective leader.
    □    □

12. No matter how hard you try, there are people who do not like you

   □    □
13. There are many sad things in life, part of them are caused by bad luck

14. No matter how people want to stop the war, it still happens

15. Unfortunately, no matter how hard someone tries, his value might not be accepted

16. Who gets to be the boss often depends on who was lucky enough to be in the right place first

17. About world events, the vast majority of people are the victims of the things that we cannot understand or control

18. Most people do not understand how accidental events can control their lives.

19. It is hard to control what the politicians are doing

20. In a long run, the bad things we have encounters will be balanced by the good things

21. To know if someone really likes you is difficult

22. Sometimes I feel that I don’t have enough control over the direction my life is taking.

23. Most of the time, I cannot explain the behavior of the politicians.