CAREER ORIENTATIONS AND CAREER COUNSELLING:
A School Based Intervention Study of Urban and Rural Indigenous High School Students in the East Khasi Hills District, Meghalaya

A thesis submitted to

Martin Luther Christian University, Shillong

for the degree of

Doctor of Philosophy in Counselling Psychology

By

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under the supervision of

Dr. Gideon Arulmani

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DECLARATION

This is to declare that this thesis entitled

CAREER ORIENTATIONS AND CAREER COUNSELLING:

A School Based Intervention Study of Urban and Rural Indigenous High School Students in the East Khasi Hills District, Meghalaya

is a bonafide work carried out by me for the award of the degree of

Doctor of Philosophy in Counselling Psychology

under the guidance and supervision of

Dr. Gideon Arulmani, PhD.

No portion of the work referred to in this thesis has been submitted in support of an application of another degree or qualification to this or any other academic or professional institution.

Place: Shillong, Meghalaya.

Date: 20th May 2014.

Maribon Viray Sangma

Department of Counselling and Psychology

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DEDICATION

I dedicate this work to

my parents, **Mr. Conrado L. Viray and Mrs. Anita M. Viray**,

my husband, **Dr. Larkinson Dagal Sangma**

and my sons **Jeremy Keith Viray Sangma**

and **Jason Viray Sangma**.

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Abstract

This research undertaken in the East Khasi Hills district, Meghalaya, India explored the career preparation status, career belief patterns, and academic achievement motivation level of 492 male and female high school students in rural and urban areas of the district and the relative effectiveness of two models of career counselling programmes: Three-Day career counselling programme and One-Day career counselling programme. The Measure of Guidance Impact (MGI) was also a tool used to find out the impact of the interventions on these career orientations. The theoretical frameworks of this research was derived from the Career Developmental Theory (Super, 1957; Ginzberg, Ginsburg, Axelrad & Herma, 1951), Theory of Circumscription and Compromise (Gottfredson, 1981); Expectancy-value Theory of Motivation (Atkinson, 1957), Attribution Theory of Motivation (Heider, 1958; Weiner, 1986), and Social Cognitive Theory (Bandura, 1986) and Cultural Preparation Process Model (Arulmani, 2014a).

A pre and post with waiting control group design was employed with data collected at Time One (T1) before the intervention, and Time Two (T2) after the intervention. The waiting control group in this study was provided the same intervention only after the T2 data was collected. This was done for ethical reasons. On one hand, the pre-intervention results revealed that the students have low career preparation status, low academic achievement motivation. On the other hand, the students have high negativity in their career belief patterns. There were statistically significant variations in scores across gender and location. However, the same was not observed in all scales across socioeconomic status. The post-intervention results revealed a significant increase in career preparation, academic achievement motivation and Measure of Guidance Impact scores. The post-intervention results showed significant

decrease in the level of negativity in career belief patterns among the students. Comparing the Mean Difference Score between the Three-Day Intervention and the One-day Intervention, the Three-Day Intervention was found to be more effective in increasing the career preparation scores, academic achievement motivation scores, and in decreasing the negativity of the career belief patterns among the students, compared to the One-Day Intervention. Using an Index of Effectiveness (IE), it was further found that the Three-Day Intervention programme was most effective for the career preparation of the urban-female students from middle socioeconomic status background, and for academic achievement motivation of the rural-male students from higher socioeconomic status background. On the other hand, the One-Day Intervention programme was found most effective for the career preparation of the rural-female students from high socioeconomic status background, and for academic achievement motivation of the rural-male from higher socioeconomic status background. Furthermore, those whose negativity in their career belief patterns reduced the most after the Three-Day Intervention were the urban-female students from higher socioeconomic status background while, after the One-Day Intervention, were the urban-female from low socioeconomic status background.

The findings were further discussed in consideration of various social, political, academic, and cultural factors prevalent in a collectivist and matrilineal structure of society prevalent in Meghalaya. Various recommendations presented include the creation of the post of a Counsellor in educational institutions in Meghalaya and inclusion of career counselling programmes within the school system. Structuralising a feasible and cultural resonant career service in the State, capacity building for career service providers, as well as formulation of policy for career guidance curriculum development, monitoring of implementation were also suggested.

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Glossary

Acronym	Full Form
T1	Time 1 (pre-test)
T2	Time 2 (post-test)
IE	Index of Effectiveness
CPSQ	Career Preparation Status Questionnaire
CBPS	Career Belief Pattern Scale
AAMT	Academic Achievement Motivation Test
MGI	Measure of Guidance Impact
SES	Socioeconomic Status
SD	Standard Deviation

Operational Definition

Key word	Definition
Career Orientations	Mindsets, status, and inclination of an individual towards career and career development. In this study, the career orientations are specified as the Career Preparation Status, Career Belief Patterns, Academic Achievement Motivation
Career Preparation Status	Individual's readiness to make career decisions and the degree of decidedness about one's career plan.
Career Belief Patterns	A conglomerate of attitudes, opinions, convictions, and notions which seem to cohere together to create mindsets and beliefs that underlie people's orientation to the idea of a career.
Academic Achievement Motivation	Students' energy and drive to learn, work effectively, and achieve to their potential at school and the behaviours that follow from this energy and drive.
Career Counselling	A process of facilitating an individual's or group's preparation, planning, decision making related to career. It also involves self-awareness, and skill development that is aimed at enhancing one's potential for career growth.
Indigenous students	Refers to the sample belonging to the original people groups in Meghalaya State, Northeast India: the Khasis, Garos, and the Jaintias
School based intervention	Career counselling programme designed to cater to the needs of school going students. All activities in this intervention can be done within a minimum available facility in a school.

Three-Day intervention	Refers to the career counselling programme provided to the students which covered all activities presented in the 3-Day workshop plan (see. Appendix 8.1)
One-Day intervention	Refers to the career counselling programme provided to the students which covered all activities presented in the 1-Day workshop plan (see. Appendix 8.2)
Three-Day experimental condition	Refers to the condition in which pre-test and post test were administered to the sample belonging to the Three-Day experimental group which were provided with the Three-Day intervention as well as the sample in the Three-Day control group which did not receive the intervention.
One-Day experimental condition	Refers to the condition in which pre-test and post test were administered to the sample belonging to the One-Day experimental group which were provided with the One-Day intervention as well as the sample in the One-Day control group which did not receive the intervention.

1. Introduction

1.1. Background

Work in its broadest sense is as old as human existence (Super, 1957). The Oxford English Reference Dictionary (Pearsall & Trumble, 2003) defines work as any application of effort to a purpose, a use of energy, and a task undertaken. Initially people were occupied with tasks related to their daily needs for survival. Hence occupations included hunting, fishing, shelter making, planting, preparation and preservation of food to name just a few. However, Super (1957), Patton and McMahon (2006) expressed a similar view that while these occupations still persist, the demands, tasks and skills required have changed across the ages. Traditional occupations gradually lost their significance as the emergence of industries brought about by the Industrial Revolution needed workers with specific traits and abilities. It is to these demands that vocational counselling emerged as a profession (Jones, 1994). Frank Parsons, who is today known as the father of Vocational Psychology, developed for the first time in 1909, a method this method of matching people with jobs on the basis of their traits, abilities, and talents to suit the new industrial work order (Jones, 1994). As global occupational demands and development continue to evolve, Arulmani and Nag-Arulmani stated that people began to consider work as a path of growth or a path to reach higher levels of personal development. Hence, the concept of *career* was born as an occupational course that one could follow through one's life (Arulmani & Nag-Arulmani, 2004).

Work, in the form of career requires not only the basic skills for survival, but also other aspects such as becoming eligible to execute a particular task however minute the task may appear to be. The sweeping transformations brought about by social, political and economic conditions along with urban growth and

industrialization, and now by information technology and globalization, require individuals to adapt to radically and rapidly changing occupational structures (Savickas & Baker, 2005).

The Organization for Economic Cooperation and Development (OECD,2003) has described career counselling as follows:

> Services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training, and occupational choices and to manage their careers. Such services may be found in schools, colleges, universities, training institutions, public employment services, in the workplace, or in private sectors. The activities may be conducted in an individual or group basis, and may be face-to-face or at a distance (including help lines and web-based services). The career related services usually include provision of carer information, use of assessment tools, counselling interviews, career education programmes, work search programmes, and transition services (p. 41).

An important study that compared career counselling clients with a group of students who did not seek counselling found that career decision making difficulties significantly decreased and life satisfaction increased throughout the intervention for those who came for counselling (e.g., Masdonati, Massoudi & Rossier, 2009). It was also observed that in the recent past, a growing attention was being directed towards career guidance and counselling globally (Fitz, 2010). Relating to the delivery of career counselling services, it has been noted in educational institutions in Hongkong, for instance, teachers seem to be the ones who try to meet the career-related need of students as can be seen in the survey conducted by Leung, Leung, and Chan (2003). The survey further reported that most counselling teachers were aware of their

professional limits, and were willing to seek ways to improve their competence. In other countries like Nigeria, an overview of the national policy of education suggested that strategic planning and management ideals, resource mobilization and programme initiatives for career counselling needed to be explored. The policy further suggested that experts must be appointed to manage the programme, while the administration must provide a counselling-friendly environment for its implementation (Durosaro & Adeoye, 2004). Since career counselling in Asia and in Africa is a fairly recent development historically, this service is facing the challenges of acceptability, relevance and effectiveness. Observers of this phenomenon have pointed out that career counselling can only be effective if each country or culture faces these challenges in a uniquely nationalistic and cultural manner (Pope, 2000; Arulmani, 2009b).

1.2. Career Counselling: National Initiatives and Need Assessment

1.2.1. Status of career counselling services in India

In India, career counselling is a new field and it is a strongly felt need of young people and their families across socioeconomic status groups (Arulmani & Nag-Arulmani, 2005). Career counselling rests on the assumption that there are wide opportunities for young people to choose a variety of careers that are not only professionally satisfying but are also capable of yielding substantial economic and personal benefits to individuals and families (Bimrose, 2010). As traditional occupations provide fewer opportunities, non-traditional jobs have tend to attract young people, especially in the fields of education, information technology, small scale industry, health and engineering sciences (Kalyanram, Gopalan & Kartik, 2014).

In a survey conducted across India, it was found across 15 regions in the country that career related services is an urgent need to be addressed (Arulmani & Nag-Arulmani, 2005). India is one of the world's fastest growing economies and a decade of economic reforms has widened occupational possibilities. It is against this background that the crucial need for effective career preparation services for youth had surfaced.

The government of India has been expanding its efforts to improve access to and quality in education. The recently passed Right to Education Act (RTE) (Ministry of Human Resource Development, Government of India, 2010), offers lower socioeconomic groups greater access to better education. With reform such as this beginning to influence educational systems, career guidance service providers need further training to become more aware of the changing trends in the labour market at large while remaining relevant to the context of the country. Guidance and counselling that would facilitate effective career decision-making, therefore, assume a special urgency in the Indian situation, with several scholars drawing attention particularly to the development of relevant curricula and capacity building (Pandey, 2005; Arulmani & Nag-Arulmani, 2005).

1.2.2. Need for capacity building in Meghalaya

In Meghalaya, Nongbri (1996) suggested that guidance and counselling must be included in the school curriculum, career counsellors must be trained, and teachers must also be trained in counselling. The research also mentioned that the programmes provided by the State Council of Educational Research and Training (SCERT) which were somehow related to career guidance were found to be too short and inadequate.

1.3. Influences on Career Development: Meghalaya Scenario

As indicated above (1.2), contextual factors play a significant role in influencing orientations to career development. Therefore, the first step toward creating a framework within which to execute this study was to examine the possible influences on the career development in this region. This section therefore lays the overall background of Meghalaya where this study has taken place.

1.3.1. Meghalaya: A Background

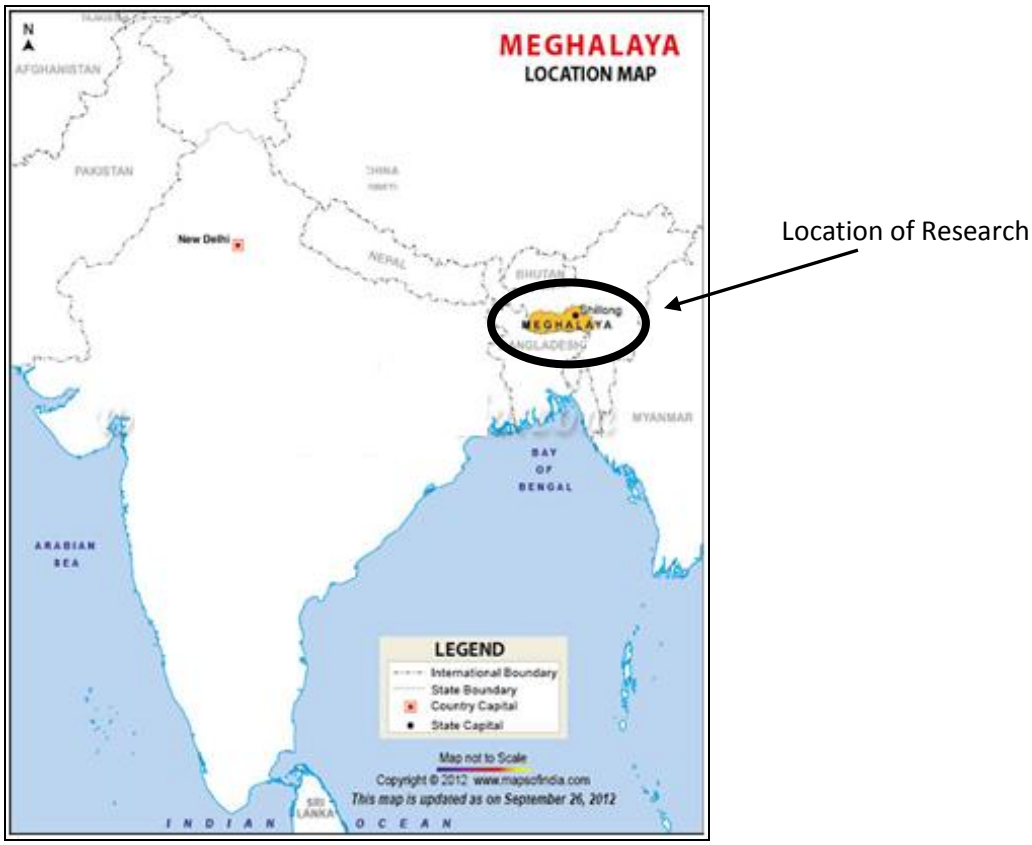
Meghalaya is home to several indigenous groups who are recognised by the government of India as *scheduled tribes* (International Work Group for Indigenous Affairs, n.d). The state is inhabited by the 3 major tribes, the Khasis, the Jaintias and the Garos (Sangma, 2006). As of 2012, it was estimated that there were 5,782 villages in Meghalaya.

East Khasi Hills District has been selected as the location for this study. It forms a central part of Meghalaya. Shillong, which is the capital of the state, is located in this district. It is the centre for commerce and education in the State. Shillong is a fast emerging educational hub for Northeast India. Students from all over the region and even other parts of India come to Shillong for further studies. English is the language generally used in all schools. While Shillong is well connected with other parts of the state by motorable roads, the villages in the interior areas are poorly connected and transport services are inadequate affecting development in the rural areas. Students in rural areas of the district face significant educational, economic and communication challenges (Saxena, 2001).

1.3.2. Location of Meghalaya

This section presents the location map of India showing the state of Meghalaya. A brief description of the location, districts, climatic and environmental factors, industrial and natural resources are presented.

Figure 1
Meghalaya Location Map



Source: Directorate of Information and Public Relations, Government of Meghalaya (2007)

As shown in Figure 1, Meghalaya is in the North East corner of India. This state is bounded by Assam state in the north and east and by Bangladesh in the south and west. Meghalaya means "the abode of clouds" in Sanskrit and other Indo-Iranian languages (Meghalaya, n.d.). Meghalaya covers an area of approximately 300 kilometres in length and about 100 kilometres in breadth (Meghalaya, n.d.).

Figure 2
District Map of Meghalaya

Source: Retrieved from http://www.india.gov.in/maps

Figure 2 shows the 11 districts of Meghalaya States as follows: South West Garo Hills, West Garo Hills, South Garo Hills, East Garo Hills, North Garo Hills, West Khasi Hills, South West Khasi Hills, East Khasi Hills, RiBhoi, West Jaintia Hills, and East Jaintia Hills. Meghalaya has many water bodies. Most of these are rain fed and seasonal. The important ones are Simsang River in Garo Hills and Umiam or Barapani in Khasi Hills region. In the southern Khasi Hills region, some rivers have created deep gorges and several beautiful waterfalls. The elevation of the plateau ranges between 150 m to 1961 m. The highest point in Meghalaya is the Shillong Peak, East Khasi Hills Districts. It has an altitude of 1961 m. While the highest point in Garo Hills is Nokrek Peak with an altitude of 1515 m.

Meghalaya is also known as the "Meghalaya Plateau". It consists mainly of Archean rock formations. These rock formations contain rich deposits of valuable minerals like coal, limestone, uranium and sillimanite. With such rich natural resources, Meghalaya can offer wide range of occupational possibilities with much care given to sustainable development. Effective career guidance could encourage young people to explore these possibilities and link them to their career choices.

1.3.3 The peoples of Meghalaya

Tribal people make up the majority of Meghalaya's population. The Khasis are the largest group (45%), followed by the Garos (27.5%), and the Jaintias (18%). These groups were among those known to the British as "hill tribes." There are also other settlers such the Nepalis (5%), Kochs (2.8), Hajongs (1.8), Shaikhs (0.3%), and people categorized as *others* (4.4%) (National Informatics Centre, Meghalaya, 2011).

Meghalaya is one of three states (along with Nagaland and Mizoram) in India to have a Christian majority with 70.3% of the population practicing Christianity; Hinduism is the next sizeable faith in the Meghalaya with 13.3% of the population practicing it. A sizable minority, 11.5% of the population follow traditional indigenous religions (Census of India, 2011). Muslims make up 4.3% of the population in the State.

Since the 1990s, the growth of Christianity in the Northeast India has lead to the creation of many mission run schools including in Meghalaya. It is possible that such school type has an influence on the career orientations of the students. For instance, many Mission run educational institutions are known to perform better and are organised in a particular way. Although this fact is being observed in Meghalaya, such claim needs further empirical evidence.

Meghalaya has recorded the highest decennial growth of 27.82% among all the seven north-eastern states, as per the provisional report of census 2011. The population of Meghalaya as of 2011 has been estimated at 29, 64,007 of which females comprise 1, 492,668 and males 1,471,339. As per the census of India 2011, the sex ratio in the state was 986 females per 1,000 males which were far higher than the national average of 940. The ratio of females has grown steadily from a 1981 level of 954 per 1,000 males. Traditionally the female sex ratio in the rural areas has

been higher than that in the urban areas. However, as per the census figures for 2001, the urban female sex ratio of 985 was higher than the rural sex ratio of 972. This has often been attributed to the belief that, unlike most other parts of India, there is no special preference for male children in Meghalaya (Census of India, 2011). This trend of no preference for male children could influence males' and females' orientations to personal and career development in differing ways.

1.3.4. The matrilineal society in Meghalaya

The Khasis, the Jaintias and the Garos have a matrilineal structure of society. Descent is traced through the mother, but the father also plays an important role in the material life of the family. While, writing on the Khasi and the Jaintia people, David Roy, one of the Khasis who is known to have initiated development of the Khasis in the 19th and 20th Century, observed that *"a man is the defender of the woman, but the woman is the keeper of his trust"* (National Informatics Centre, Meghalaya, 2011).

In the Khasi society, the woman looks after home and hearth, the man finds the means to support the family, and the maternal uncle settles all social and religious matters. Earlier in the conservative Jaintia non-Christian families, the father only visits the family in the night and is not responsible for the maintenance of the family. It is only the youngest daughter or *Ka Khadduh*, who is eligible to inherit the ancestral property. *Ka Khadduh* is a Khasi word for "youngest daughter". If Ka Khadduh dies without any daughter surviving her, her next elder sister inherits the ancestral property, and after her, the youngest daughter of that sister. Failing all daughters and their female issues, the property goes back to the mother's sister, mother's sister's daughter and so on (National Informatics Centre, Meghalaya, 2011). This custom could be an important aspect that needs to be considered by a young person when

he/she makes career decisions. This may be one of the elements to be discussed in light of the findings that emerge from the present study.

The Khasis consist of four sub-tribes: Khynriam, Pnar, Bhoi and War. The War, divided into War-Jaintia, in the south of the Jaintia Hills and War-Khasi in the south of the Khasi Hills, live on the steep southern slopes leading to Bangladesh. Among the War sub-tribes, the Ka Khadduh's property is actually the ancestral property, and so if she wants to dispose it, she must obtain consent and approval of the uncles and brothers. Among the War-Khasis, however, property passes to the children, male or female, in equal shares but among the War-Jaintias, only the female children get the inheritance (National Informatics Centre, Meghalaya, 2011).

Another major tribe in Meghalaya is the ethnic people who reside in the Garo Hills, known as the Garos. The word Garo has been coined after the name of a small group of the Garos residing in the central part of the southern hills. Besides the Garo hills, there are Garo settlements in the plains of Assam and Bangladesh. The Garo call themselves *A·chik* meaning 'hillmen as they are basically hill tribesmen. *A·chik* denotes steep incline or high hill. Yet, there are others who think that the word *A·chik* could have originated from *a·a chika,* a solemn promise or swearing by biting the earth (Sangma, 2006). Similar to Khasi customs, the Garos consider birth is a matter of joy not only to the family, but also to the community. Till death the new-born baby belongs to the mother's family, irrespective of gender, even after marriage. Except amongst the Nayars in Kerala, this matrilineal system is not found anywhere in the country. It is unique among the Meghalayans in the North-East (Gajrani, 2004)

Marriage within a clan among the Garos is a taboo. It is completely prohibited and severely punishable. Marriage is however, arranged with the formal sanction of the parents (National Informatics Centre, Meghalaya, 2011). The institution of

Bachelors' Dormitories which is gradually disappearing amongst the tribes of North Eastern Region, are found in the Garo villages. In such dormitories young people stay and live together till they are married. They receive various trainings in the dormitories like protection of crops, construction of roads, organising festivals, sports and ceremonies (Sangma, 2006). It is through these trainings that the young people are being prepared for their livelihood in order to sustain their own family. Leadership skills, event management, and financial management are also some of the intangible benefits that the young people acquire by staying in these dormitories.

1.4. The Educational Situation and Occupational Patterns

Meghalaya has a literacy rate of 62.56 percent as per the 2001 census. This has rapidly increased to 74.43 percent in 2011 (Census of India, 2011). However, issues related to youth, education, and employment are some of the most urgently felt issues. Daily newspapers show evidence of increasing concern for the welfare of youth. Although reporting the lowest drop-out rate at the primary level among the states of the Northeast region, Meghalaya has the highest drop-out rate in the country among the middle, high, and higher secondary levels (Lyndem & Kumar, 2004). Some of the reasons for this situation were elicited by the researcher during a series of career counselling workshops in 2010. It was noted that the child's as well as the parent's interest in further education was relatively low. Unfriendly school atmosphere and lack of infrastructure were other reasons. Family related work in the rural areas such as farming, at a young age, instead of going to school, taking care of the younger siblings were observed to be common social practices in rural areas.

The pass percentage of Meghalaya Board of School Education (MBOSE) schools in all the districts of Meghalaya in the past five years (2006-2010) is shown in

Table 1. It must be noted that the 47% average pass percentage recorded by MBOSE schools in 2010 was at a much lower level when compared to the average pass percentage of India 67.86% (World Bank, 2011).

Table 1
Class X Pass Percentage Across 2006-2010

Year	Average Pass Percentage
2006	43.5
2007	42.0
2008	57.4
2009	46.8
2010	45.0
Mean of Average Pass Percentage	47.0

Source: Meghalaya Board of School Education (2006-2010). *Results of the secondary school leaving certificate examination.* Tura, Meghalaya: Meghalaya Board of School Education.

1.4.1. Trends of employment and unemployment in the state

Some of the key terms related to employment/unemployment are described using definitions provided by the Census of India (1981). *Worker* is defined as a person whose main activity is participation in any economically productive work by his physical or mental activity. Work involves not only actual work but also effective supervision and direction of work. The term *labour force* or "economically active" population refer to the population which supply or seek to supply labour for production and therefore, include both employed and unemployed. *Work participation rate* refers to the number of persons usually employed or actively looking for work. *Unemployment rate* refers to the percentage of a labour force that is unemployed at any given time. Keeping these definitions in mind, Table 2 presents the total work participation rate surveyed across 3 Census:

Table 2
Total Work Participation Rate in Meghalaya

Year of Census	Rate in Percentage
1981	45.92
1991	43.06
2001	41.84

Source: Planning Department, (2009). *Meghalaya Human Development Report 2008.* p. 139: Government of Meghalaya, Shillong.

A decreasing rate of employment can be observed from the data reported in Table 2. In the Planning Department, Government of Meghalaya (2009) report from which this data has been extracted further stated that the declined was observed in most of the districts of Meghalaya. The decline was more among males than females. The report also pointed out that among the employed, 62.57% were cultivators, 9.98% were agricultural labourers, 0.84% were household industries which included manufacturing, processing, servicing, and repair, and 17.59% were in the category of *other workers* which included government employees, municipal employees, teachers, factory workers, plantation workers, those engaged in trade, commerce, business, transport, banking, mining, construction, political or social work, priests, and entertainment artists. On the other hand, the mean rate of unemployment in Meghalaya over the past three decades was estimated to be 43.61 percent (Planning Department, Government of Meghalaya (2009). As of 2006 report, 6.4% in rural areas and 7.6% in urban areas of unemployed persons were highly educated youth (Ministry of Labour and Employment, 2006).

The trend of employment and unemployment in the State seems to be an important concern for the school going students. In a study conducted in East Khasi (Lyngdoh, 2000), students felt that the courses offered in the institutions in

Meghalaya were suited only for government jobs and do not provide scope for self-employment. The students further expressed that the courses seem to not suit the emerging needs of the present situation in the state and the region. In the course of interaction with students who participated in this study, one of them also expressed that *"Sometimes, there is no use of studying, because it is difficult to get jobs later"* (Male, 15 years old, Urban). Such comments from the youth of the State need to be heard and further examined in order to address them accurately.

1.4.2. Meghalaya economic status

The economy of Meghalaya is primarily agrarian in nature. The important crops are potatoes, rice, maize, pineapples, bananas, oranges, jute, ginger, sugarcane, chilly, and mustard. Over the recent past, mining has grown to become a major industry. Coal, limestone, clay, granite, and sillimanite are the major minerals mined. The lumber and timber industry is also growing rapidly. In addition, sectors such as real estate, tourism and construction (particularly the production of cement and bricks) are gradually gaining importance. Black smithy, weaving, and food processing, are examples of important cottage and handicraft industries. Meghalaya's gross state domestic product at constant prices stood at Rs. 9,814 crore in 2009-10 (NEDFi Databank, n.d.).

1.4.3. Rural- urban migration

The Census of India (2011) revealed that Meghalaya recorded the second highest rate of rural-urban migration in the country within the state which showed 27.4% and an increase of 30.65% of inter-state migration between 1991 and 2001. These percentages imply an increasing number of people migrating from rural to urban areas within the State as well as from Meghalaya to other states of India and

other countries as well. Although Shillong, the capital of Meghalaya is the education hub of Northeast India, many of its own youth go out of the state to pursue higher education and eventually settle into careers elsewhere. Perhaps this happens due to the high disparity of technological advancement between the schools in Meghalaya and the other institutions in the Metropolitan cities of India. The data shows that 17.15% of migrants from Meghalaya migrated in 2001 for work/employment purposes, 2.46% for business, 3.57% for education, 23.42% for marriage, 1.8% moved after birth, 32.89% moved with household, and 18.7% migrated for other reasons (Census of India, 2011). As is well known, one of the most significant outcomes of rural-urban migration is the loss of manpower in the rural areas to work for farm and for traditional occupations. On the other hand, migration to cities causes congestion and an increasing strain on urban resources such as housing, water, electricity, and sanitation facilities. It could also lead to high unemployment levels and an increase in crime levels. A further issue to be noted by the career guidance professional is that migrants from rural areas provide cheap labour and are often severely exploited by urban employers (Kalyanram, Gopalan, & Kamakshi, 2014).

1.4.4. Social and political issues

There are other social issues in Meghalaya that are relevant to developing services for youth welfare. Ethnic tension, for instance, is simmering between illegal immigrants from neighbouring areas and local people. Another issue is corruption and low infrastructure development in the state. Years of insurgency have led to concerns about security because of kidnapping and extortion. Trafficking both of drugs and weapons are also major problems that affect young people's attitudes toward work, education and career development (Meghalaya, n.d.).

1.5. Career Development Orientations of High Schools Students in Meghalaya

1.5.1. Low academic achievement

School counsellors who were involved in providing intervention to increase academic achievement of students in the US reported that when students have educational and career goals, they do better in school. This statement may imply that those who drop out of school perhaps did not have clear career goals. Examining the reasons why students drop out, in general, researchers have pointed various factors which include family structure, poverty and gender (Willis, 1986). Other studies, such as those conducted in the US have found that these factors tend to be similar in both the urban and rural settings (Brown, 1985). This claim was supported by the observation that the common indicators of educational risk such as attendance, school continuation rates, academic performance, involvement in school activities, student behavior, attitudes toward school, need for employment, nature of family support, involvement in out-of-school activities, and involvement with the juvenile justice system cuts across urban and rural location (Willis, 1986). Brown further categorized high risk youth as either a) alienated who seem to be uninterested in or dissatisfied with the values represented by school and work, and are lacking in motivation to succeed in expected ways, b) disadvantaged and alienated, or c) simply disadvantaged (Brown, 1985).

As indicated in Table 1, there has not been a significant improvement of the matriculation pass percentages between 2006 - 2010. The lack of relevant literature limits the explanation behind the low academic performance of the students in Meghalaya. It was observed during career counselling programmes conducted among class 9-12 students that they were unclear of their career path and career alternatives. While many of them were aware of the known careers such as engineering, medicine,

careers in the army, teacher, and business manager, their knowledge of other careers and exposure to the world of work did not go much beyond what was taught in the class or shown in advertisements. It is possible that this lack of awareness is connected to students' low academic motivation and increasing rates of dropout (Meghalaya: People and Culture, 2011).

1.5.2 Dropout rate in Meghalaya

As indicated earlier in this chapter, an increasing rate of dropout has been a great concern. Many of those who could not pass the matriculation exams stop pursuing other available options such as taking up vocational courses or even trying to re-appear for the exams. It was reported that although the literacy rate of Meghalaya is 75.5 % (Census of India, 2011), the drop-out rate from primary level to secondary level is 41.26% (Lyndem & Kumar, 2004).

1.5.3. Prevailing career orientations of students in Meghalaya

Career counselling workshops conducted by the researcher in several schools, NGO's, and church organizations in Meghalaya over five years, 2009-2013, revealed that many of the class IX and Class X students, though wanting to become "somebody" in the future, were not confident of their career path and not quite clear of their understanding of the world of work. Some of them still remained unsure of what they want to do after class X. In a vocational survey conducted by Nongbri (1996), "more than 80% of the students in the state preferred Science to Arts out of which, Engineering, Medicine, Agriculture, and Business topped the list. There were 89% of the students who expressed definite choice" (p. 233). However, whether the students have pursued their choices or not, and whether those who have expressed

definite choice performed better academically, were not reported. Nevertheless, the Nongbri study highlighted the importance of career guidance in the state.

1.6. Rationale for Selection of Location for the Study.

The brief discussion above makes it clear that career guidance is required in this region. It is also clear that existing forms of career guidance may not be directly suitable given the multiple contextual factors that influence orientations to work, education and career. It is for this reason that high rural-urban migration has been observed. Also, as indicated in Table 1, there has not been a significant improvement in the matriculation examination results over a five year period (2006-2010) and the dropout rate between primary level and secondary level is considerably alarming. English is the language generally used in all schools. With this reason, Shillong as one location for this study was therefore selected on the basis of the sample's language fluency.

Students in high schools are generally adolescents who are experiencing physiological changes and psychosocial adjustment challenges (e.g.,Santrocks, 2007). These challenges are usually coupled with anxieties of passing the final assessments apart from anxieties of facing upcoming educational transition from high school to higher education. This makes career counselling important (Fitz, 2010). Career counselling provides access to the skills and resources students need to overcome obstacles and prepares them to make choices relevant to their personal potential (Fitz, 2010). It has been suggested that guidance and counselling in schools must provide information that would link the students to understanding the world of work, since students struggle in preparing to deal with the long list of requirements to be met before entering the world of higher studies. If students are informed of the

requirements to enter a particular career, they may be able to consider how to break the down these requirements into smaller steps while still in a secondary school (Fitz, 2010). Keeping in perspective the low academic achievement of high school students in Meghalaya and the alarming dropout rate which is the highest in the country, the urgent need for relevant research and intervention is called for.

Till date, there is no existing system for career counselling services in Meghalaya. A trend that only comes once in a year includes education fairs promoting college and universities in India and abroad. Some schools do invite guests once a year to give a lecture on careers and ambitions. A small number of prominent schools, mostly in the urban areas, do have full-time counsellors who provide career guidance among the students. Therefore, testing a specific intervention such as what was used in this study, may provide certain directions to the development of cultural resonant interventions for the youth of Meghalaya.

1.7. Significance of the Study

A research of this kind will contribute to the body of knowledge in the area of Counselling Psychology, Education, Human Resource, and Economics. It could also influence Government policies. The findings will clarify a specific area of capacity building for counselling professionals, social workers, educators and non-government organizations working closely among the youths of Meghalaya. This exercise will also broaden the perspectives of the researcher and thereby allow for the making of sound, culturally relevant, and feasible recommendations to the schools, government policy makers, educators, counsellors, parents and students. These recommendations, when taken up by the government for policy making and implementation, may contribute to a reduction of drop out rate, increase of motivation among students, increase of employment, and job satisfaction, which future researchers may venture to

examine. It must be noted that not only is the rate of drop out increasing but even the students who continue to study do not seem be doing well academically.

Therefore, factors affecting academic motivation of students and career preparation status are worth researching. The findings may bring to light some practical approaches in career counselling as an intervention for the youth, especially high school students, who may be confused or unsure of their career potentials, career path, and career alternatives.

1.8. Problem Statement

Based on the above discussion, the key issues that research focuses on are formulated as follows:

The prevailing low academic performance of students in Meghalaya along with the increasing rate of drop out and unemployment among the educated youth in the state, seem to be related to their orientations to work, education and career development. This may include their preparedness for career decision making, academic motivation as well as their attitudes, opinions and beliefs towards career development tasks. Since no earlier work seems to have been done in this area in Meghalaya, research is required to understand the career preparation of both male and female students across urban and rural areas and across socioeconomic status groups. Students' career preparation status and its association with their underlying career beliefs and academic achievement motivation would perhaps provide insights into the level of their self-understanding and knowledge of the world of work, which are essential to make effective career decisions (Kumar, 2007). The final purpose of this research is to experiment with career guidance interventions for high school students in order to identify the ideal mix of intervention methods that would suit this target

group. The relative effectiveness of the interventions would be seen in the manner in which they promote career preparation, enhance academic achievement motivation and reduce negativity in career beliefs. It is anticipated that at the end of this research, recommendations could be made for the development of specific career counselling programs which would support relatively better career development.

1.9. Research Questions

1. What are the prevailing career orientations among the rural and urban high school students belonging to an indigenous community in Meghalaya with specific reference to their career preparation status, career belief patterns and academic achievement motivation?

2. What is the relative effectiveness of two models of school-based career counselling (Three-Day Intervention and One-Day Intervention) among rural and urban, male and female high school students?

1.10. Research Objectives

1. To determine the career preparation status, academic achievement motivation level, and career belief patterns among high school students.

2. To identify the relative effectiveness of two models of a school-based career counselling (a Three-Day Intervention and a One-Day Intervention) among high school students in both rural and urban settings as indicated by changes in the dependant variables.

3. To make suitable suggestions for wider implementation and for further related research.

1.11. Conclusion

Although Counselling is an emerging career in itself and a growing demand is increasing, yet, Career Psychology has remained an infant science in India. There is a growing need for theoretically sound, culturally and psychologically validated, career counselling services to be made available at a large scale for use in the Indian situation. This requirement becomes all the more special in the case of tribal populations whose cultures are quite unique. Therefore, conducting this research in Meghalaya could contribute to a deeper understanding of the factors that influence orientations to career development, as well as to the development of relevant models to cater to the practical needs of the youth in the state as they face, enter and adjust to the changing and widening world of work.

Grade 10 in India is a crucial stage that determines further career development. Identifying the factors contributing to the academic motivation of the students may help educators, counsellors, and even parents in support to the career development needs of young people. This section introduced the importance of understanding constructs such as career preparation status, academic achievement, motivation level, career beliefs, and other career related issues among high school students in this region. It is also clear that examining the relative effectiveness of different kinds of interventions would contribute to making recommendations for wider implementation and for further related research.

2. Review of Literature

This chapter aims at exploring the literature to identify key constructs that are relevant to career development orientations and thereby develop a theoretical platform for the study. Based on the observations discussed in the Introduction, the themes that are be reviewed in this chapter are career preparation, academic achievement motivation, and social cognitive environment across the demographic variables of socioeconomic status, gender and rural-urban locations. Focus is brought to bear on theories of career preparation, academic achievement motivation, and social cognitive environment with specific reference to the career beliefs of high school students in Meghalaya. Having described the constructs, the next section of this chapter considers the potential interactions that could be possible between the main constructs in this study with variables such as socioeconomic status and gender, with emphasis on rural-urban differences and specific reference to indigenous peoples. Further, various approaches to interventions with specific emphasis on duration of intervention are reviewed. Finally, the interaction between culture and career development are presented.

2.1. Career Preparation Status

"Career" is a Western construct that emerged within a context of materialistic individualism wherein the individual is required to make independent choices based upon a rational evaluation of existing career development possibilities (Arulmani, 2013). However, many Asian contexts, including Meghalaya, are collectivist in orientation. It is possible that important decisions are often made by "others" in the individual's life such as parents and elders (e.g., Arulmani, 2006a). It is also possible that social processes such as prestige attribution play a powerful role in decision

making. Economic forces such as the emergence and availability of career opportunities also have a strong influence on career choices. The literature has indicated that in such contexts, individuals may not be sufficiently prepared to make career decisions. An initial survey among high school and college students in Meghalaya (Chen, 2011) indicated that high school students may not be adequately prepared with the skills necessary to make effective career decisions. Of close relevance to this study therefore, is the construct of Career Preparation Status.

Career Preparation Status, refers to the individual's readiness to make career decisions (Arulmani, 2006a) and the degree of decidedness about one's career plan (Kleiman & Gati, 2004). It has consistently been noted that the state of readiness to make career decisions is an important predictor of the success of career guidance interventions (Arulmani & Nag-Arulmani, 2006). Gaining insights into the patterns of readiness for making important career decisions amongst high school students in Meghalaya could be helpful to understand their orientations to career development. Hence Career Preparation Status was identified as a key indicator for this monitoring and evaluation exercise. The following section provides an overview of the key theories related to career preparation.

2.1.1. Career Developmental Theory

Human beings grow and develop throughout the lifespan. The scientific study of human development seeks to understand and explain how and why people change throughout life. This includes all aspects of human growth, including physical, emotional, intellectual, social, perceptual, and personality development (Kendra, 2010). The concept of human development is one that has been central to theory and practice in Career Psychology. Career Developmental Theory explains that occupational development keeps pace with the individual's cognitive maturation

(Ginzberg, Ginsburg, Axelrad & Herma, 1951) which is said to occur in *stages*. Super (1957), who is perhaps the most well known career developmental theorist postulated that each of these stages present *career developmental tasks*. These tasks need to be resolved in order to progress to the next stage of career development. According to developmental theory, career development is a process that can be composed into *stages* in the life span, and that the result of normal development is increasing maturity. Super (as cited in Wessel, Christian, & Hoff, 2003) explained that career developmental tasks are activities or accomplishments which are related to the world of work, for example, learning about various careers, specifying ones career choice, and continually working on advancing on the occupation. Each stage culminates with a sharpening of the requirement and expectation to master the developmental tasks that are linked to each stage. This can sometimes lead to a *career development crisis*. Failure to deal with a developmental task at the appropriate time could result in a discrepancy between chronological age and career maturity status and has been described as *career development lag* (Arulmani & Nag-Arulmani, 2006). This could impede or delay the individual's career development (Ginzberg et al., 1951).

In this theory, Ginzberg et al. (1951) proposed three life stages which broadly correspond with chronological age namely: the fantasy stage which lasts until 11 years of age; the tentative stage, lasting from ages 11 to 17 years, with the three sub stages of interest, capacity and value; and the realistic stage, which lasts from age 17 years onwards, with sub stages of exploration, crystallisation and specification. According to Ginzberg et al. (1951), the *fantasy stage* is when a child's vocational development begins as a purely play orientation which gradually becomes work-oriented and reflects initial preferences for certain kinds of activities. The *tentative*

stage, on the otherhand, is the stage when a person begins to recognize one's interests, abilities, work rewards, and values related to work. The third, *the realistic stage*, is when an adolescent child is now able to integrate one's capacities and interests, further develop values related to work, choose specific occupation and begin to understand the various patterns of the chosen specific occupation.

This theory of Ginzberg was later extended by Super (1957) and Super, Tiedeman, and Borow (1961) into five stages with some modifications in the different sub-stages. The fresh argument presented was that with time and experience, there is a change in the choice of occupation, competencies, as well as the life situation of an individual. Super (1957, 1990) also developed the concept of vocational maturity which he asserts may or may not correspond to chronological age.

The first stage in Super's stages of career development is the stage of *growth*, which lasts from birth to 14 years. It is during this stage that the child's needs dominate career fantasies with little or no reality orientation. By the time a child reaches the age of 13 to 14, more reality about self and life are incorporated and the child can now relate his or her own skills to specific requirements of jobs (Super 1957, 1980). The second stage, *exploration*, lasting from age 15 to 24 has the sub-stages of crystallization, specification and implementation. During this stage, the major career development tasks are to develop a realistic self-concept and implement a vocational preference through role tryouts and exploration. At this time, there is now a gradual narrowing of choices leading to implementation of a preference. The first sub-stage, *tentative stage* (15 to 17 years), is when tentative choices incorporating needs, interests, and abilities are tried and the individual may be able to identify a field of work and level of work such as doing a part time work or volunteer work. The second sub-stage, *crystallization stage* (18 to 21years), is when a general

preference is converted into specific choice. It is at this time that reality dominates as one enters the job market or training pathways after high school, for instance, choosing a college major or field of training. The third sub-stage, *specifying a vocational preference* (22 to 24 years), is an initial career commitment and the first job is tried out. However the implemented choice is provisional and the person may cycle back through *crystallizing* and *specifying* if not appropriate (Super, 1957).

The third stage in Super's stages of vocational development is the *establishment stage* with the sub-stages of *trial and stabilization, and advancement.* In the stage of *trial and stabilization* (25 to 30 years), a person may go through a process of settling down into a career path. But if this is unsatisfactory he or she may make more changes before the right job is found. It is in the a*dvancement stage* (31 to 44 years) where a person's effort is directed at securing one's position, acquiring seniority, developing skills, and demonstrating superior performance.

The fourth stage, *maintenance stage* (45 to 65 years), is the stage where a person continues to grow in the chosen career. The major task of a person at this stage is to preserve gains and develop non-occupational roles for things one always wanted to do. Little new ground is broken, one continues established work patterns. One faces competition from younger workers. Finally, the fifth stage of *decline* (65 years onwards), with the sub-stages of deceleration, retirement planning and retirement is when the person leaves the world of work (Super 1957, 1980). The tasks include gradual disengagement from the work and preparation for retirement.

In all, Super's five stages (1957, 1980), the concept of "career maturity" is used to denote the degree to which a person is able to fulfill the vocational developmental tasks required at each developmental stage. However, partially due to

the mixed results obtained in empirical research pertaining to career maturity, there have been suggestions to replace career maturity with the concept of adaptability (e.g. Savickas & Briddick, 2002). Super continued to develop his ideas over a fifty year period. A significant development in his theory of career development is his Life Span, Life Space Approach (1980). It describes the different roles that individuals play at different stages of their life span: child, student, leisurite, citizen, worker, spouse, homemaker, parent, pensioner. Super used the concept of life space which refers to life theatres: home, community, education, work. He also used the concept of roles to describe the many aspects of careers throughout an individual's lifespan. Some key ideas include the following: the number of roles an individual plays will vary; all roles are not played by everyone; each role has differing importance at different times for individuals. In this theory, Super (1980) later explained that a passage through the stages of career development-from growth to exploration and then to establishment and maintenance are called *maxi-cycles* and a significant amount of development also occurs *within* each stage which is termed as *mini-cycles*. These characteristics therefore make career development a lifelong process of decision-making by a recycling through the stages of growth, re-exploration and re-establishment.

The development of his ideas about self-concept and vocational adjustment resulted in a redefinition of vocational guidance as: “the process of helping a person to develop an integrated and adequate picture of himself and of his role in the world of work, to test this concept against reality and to convert it into a reality, with satisfaction to himself and benefits to society” (Super, 1988, p.188).

Critiques of Super’s ideas point out that the concept of career development has been conceptualised as a process of proceeding through the career development stages

and transitions in a normative manner. That is, they are almost pre-defined phases in the course of a person's career. It has been pointed out that what is a normative career transition in one cultural setting may not be normative in another (Woolf, 1998; Arulmani, 2013) considering that there may be other factors influencing career development in each context. For adolescents, for example, Blustein (1988) has pointed out that the attitudes of significant others or the social expectations, changes in the economy, and other cultural factors could have a significant role in the direction the adolescent takes when making the transition from education to the world of work. Osipow and Fitzgerald (1996) considered that the original version of the theory was too general to be of much practical use, with its conceptual value being limited by its sweeping style - though this weakness had been addressed by subsequent refinements. They argue that a particular weakness is the failure of the theory to integrate economic and social factors that influence career decisions. This concern is echoed by Scharf (1997) and Brown (1990), who propose that Super's theory does not adequately address the particular challenges that women and ethnic groups face. Despite weaknesses, Brown (1990) suggested that Super's theory, "occupies stage centre, along with Holland's thinking. There seems to be no reason to doubt that it will continue to be of considerable importance in the future" (p.356).

Viewing career preparation status through Super's formulation, it indicates the individual's preparedness to deal with career development tasks of the forthcoming stage successfully. Career preparation status would vary across life span and life space as well as through maxi and mini cycles.

2.1.2. Theory of Circumscription and Compromise

The Theory of Circumscription and Compromise (Gottfredson, 2004) focuses on how young people gradually come to recognize and deal with, or fail to deal with,

the array of vocational choices their society provides. *Circumscription* according to Gottfredson (1981) is the progressive process by which youngsters narrow or eliminate unacceptable occupational alternatives. *Compromise* is the process by which youngsters begin to relinquish their most preferred alternatives for less compatible but more accessible ones. This process is particularly obvious when an individual is unable to implement his or her most preferred choices. Sometimes, even an alternative that was earlier ruled out as unacceptable may become a feasible option (Gottfredson, 1981).

Relevant to this study is the theory's claim that most circumscription occurs without the children knowing, or wondering much about what workers actually do in the jobs that they have earlier rejected (Gottfredson, 1981). According to this theory, Gottfredson (as cited in Brown & Brooks, 1996) explained that all children move through the stages of circumscription but some faster or slower than others depending on their cognitive ability. The ages and grade levels associated with the stages are therefore only approximations. The stages overlap but coincide roughly with the preschool years, elementary school, middle school, and high school. As the present study aims at understanding the career orientations of high school students stages one and two are only presented briefly and stages three and four of this theory are presented in greater detail in this section. Stage one: *Orientaation to Size and Power* (ages three to five) says that children at this stage begin to classify people as big, powerful versus little. They also tend to like to become the inanimate objects that they see or watch when they grow up. They recognize that there are adults and that having jobs are part of adult life. Stage two is the *Orientation to Sex* (ages six to eight) which explains that children at this stage are beginning to understand the

concept of sex roles, but still focus only on some aspects of it such as clothing and outward observable activities overt behaviours.

Stage three: *Orientation to Social Valuation* (9 to 13 years) explains that by this stage children are able to think more abstractly. They recognize more occupations, because they can now conceptualize activities they cannot directly see, for instance, that people who "sit at desks, answer phones, and write things on the computer" (Gottfredson, 1981, p. 14) may actually be carrying out quite different functions (e.g., secretaries, managers, journalists, and research analysts). They have also become aware of status hierarchies and are more sensitive to social evaluation, whether by peers or the larger society (Gottfredson, 2004). By age nine (grade 4), youngsters start to recognize the more obvious symbols of a person's social class (clothing, speech, behavior, possessions brought to school), and by age 13 (grade 8) most rank occupations in prestige the same way that adults do. According to this theory, children now array occupations two-dimensionally, by prestige level as well as sextype as they begin to observe that jobs are typed as feminine or masculine. They also come to understand the tight links among income, education, and occupation. On the other hand, according to this theory, children seldom aspire to the highest level occupations. Rather, they rule out occupations that are too difficult for them to enter with reasonable effort or that pose too high a risk of failure if they try. Gottfredson (2004) names this as the *tolerable-effort boundary* and indicates that the implementation of such boundaries are mostly related to their academic ability.

Stage four: *Orientation to Internal, Unique Self* (Ages 14 and Older) of this theory is a period of vocational development when adolescents engage in an increasingly conscious search for occupations that would be personally fulfilling (Gottfredson, 1981). That is, they begin thinking about which careers would be

compatible with their more personal, psychological selves. Continued cognitive growth has enabled adolescents to apprehend better the abstract, internal, unique aspects of individuals and occupations, such as the interests, abilities, and values exercised while performing different jobs. They are therefore able to distinguish different fields of work, and know that both worker personalities and economic functions differ from one field to another. Career development becomes more difficult and anxiety provoking when adolescents are called on to make vocationally-relevant decisions, such as which courses to take and credentials or training to seek.

One risk at this stage of development is that young people have not gotten, or will not get, sufficient experience for testing their vocational interests and abilities, especially for occupations they have rejected from their social space earlier. Another risk is that, owing either to external pressure or to ignorance, anxiety, or inaction on their part, they may commit themselves to a choice before they really know the options accessible to them (Gottfredson, 2004).

In summary, whereas circumscription is the process by which youngsters progressively eliminate from consideration of occupations they think unacceptable for themselves, compromise is the process by which they begin to relinquish their most preferred alternatives for less compatible but more accessible ones. The process of weighing the relative merits of the alternatives in one's social space, is called *vocational choice*. When forced to select among the minimally acceptable alternatives, choice is influenced by compromise (Gottfredson, 1981). When forced to consider unacceptable alternatives, compromise can become a source of frustration. Indeed, information on which jobs and training programs are actually available and how to enter them is highly specific to particular times, places, and occupations, time-consuming to locate and learn, and quickly outdated. Furthermore, certain jobs

simply have not existed in certain times or places, which is perhaps the case here in Meghalaya, or they have been off limits to certain categories of people. Moreover, there will always be external circumstances, such as the health of the economy or one's family obligations that constrain one's ability to pursue preferred alternatives. Whith such constrains, it is a possibility that the youth here in the State of Meghalaya are unable to circusmcribe, and therefore, are compromising much about what they could have preferred or what they could potentially pursue.

Critiques of Gottfredson's ideas and research into her conceptualisations have resulted in mixed findings. Holt (1989) opined that the model may be an oversimplification of the process. In research done with Asian-Americans, Leung (1993) found that the range and area of how much an person compromised generally became bigger in the adolescent years instead of becoming smaller as predicted by Gottfredson. Leung also found that Asian Americans were more likely to compromise sex-type for prestige. In support of Gottfredson's theory are Henderson, Hesketh, and Tuffin (1988) whose results indicated that sex-typed preferences influence occupational preferences from an earlier age than suggested by Gottfredson, with males demonstrating more rigid sex typing than females. Lapan and Jingeleski (1992) supported the importance of sex-type and prestige in a study with eighth graders, and replicated the Gottfredson cognitive map of vocational aspirations. A study by Hesketh, Durant, and Pryor (1990) that required respondents to rate 27 hypothetical jobs that combining sex-type, prestige, and interests, found no support for the compromise component of Gottfredson's model. However, the same study found that the circumscription component remained viable as the respondents' occupations eliminated at an early age ceased to draw attention and knowledge in later years. Such studies indicate that Gottfredson's theory is more complex than

originally proposed. Hesketh, Pryor, and Gleitzman (1989), for instance, investigated the application of the fuzzy-set theory to the measurement of dimensions relevant to the circumscription and compromise theory. A fuzzy-set is the notion of range of acceptance and rejection in attitude. The study found that the area of acceptable alternatives based on the cognitive map can be measured as a fuzzy-set, resulting in a range of occupational alternatives in an individual's social space rather than a single choice. This actually relates to both components of Gottfredson's theory, circumscription and compromise. Researches mentioned in this section seem to indicate that the theory does provide a useful framework to understanding career decision making.

Viewing career preparation status from the perspective of circumscription and compromise, an important point that must be noted is that career preparation status could be influenced by cognitive factors. It is possible that children with higher cognitive ability will develop higher career preparation status for the career development tasks of their age and stage. It is possible also, that the interaction between circumscription and compromise is mediated by career preparation status. For example the tolerable-effort boundary may be wider when career preparation status in higher.

2.1.3. Developmental theories: relevance to Meghalaya

Formulations in developmental theory offer a valuable framework within which examine career development in the context of Meghalaya. Of particular value is the manner in which career develpoment theories link career development to *human* development. Of value is the life long perspective offered by these theories. It is imporant however to keep in mind that factors that are *not* related to developmental stages, in fact, affect the manifestation of career development tasks. For example

demands vary across educational systems and hence career development tasks could manifest differently in different contexts. The process of circumscription may not occur in the manner that has been described by Gottfredson (1981). Social organisation in Meghalaya is collectivist and major decisions are primarily taken by parents and elders on *behalf* of the child. More often than not, choices are limited to what are known to the family or only what was tested and tried and approved by other elder members of the clan. At times, the eldest in the clan, mama or the "big uncle" in Garo custom, for instance, may also be approached in decisions related to livelihood (Laloo, n.d.). It is highly likely that in such a collectivistic decision making environment, the individual's career choice and career decision may be influenced by the opinions of the group. Hence circumscription may occur as group rather than an individual process in this particular context. Accordingly, compromise may be associated with aligning what the group opinions are, rather than what's one's personal wishes are. Hence choosing to pursue a certain career could be linked to where work opportunities will be likely found where the *family* are easily accessible. Being a close-knitted community, this aspect should be considered in facilitating a students in his or her career preparation. This is especially so for the case of the last daughter who is expected to look after the parents and manage their properties.

Therefore, to establish a better understanding of the career preparation status of the students in Meghalaya, it is imperative to consider the social collectivist structure prevalent in the state. Doing this may perhaps provide a clearer view of the career developmental crisis that a local youth are facing. This may also explain the career developmental lag that may be present. This may also enable one to identify their level of career maturity. This understanding may also provide some insights on how they are circumscribing and compromising in their career choices. Career

development tasks are resolved in all cultures – but may not be at the time, stage or manner that is prescribed by developmental theory. The filling in of the frameworks provided by developmental theory must be based on local investigations. This current research is an example of such an investigation.

2.2. Academic Achievement Motivation and Career Development

Academic Achievement Motivation is explained as the students' energy and drive to learn, work effectively, and achieve to their potential at school and the behaviours that follow from this energy and drive (Martin 2012, p.1). Entwistle (1968) also defined academic motivation as an attitudes toward school and learning, and enthusiasm for academic achievement. He further explained that academic achievement involves the degree to which students possessed certain specific behavioral characteristics related to motivation. Motivation plays a large part in students' interest in and enjoyment of school and study. Motivation also underpins their achievement and students' learning outcomes have proven to be strongly related to their level of motivation (Martin, 2003). Motivation, also referred to as academic engagement, refers to "cognitive, emotional, and behavioral indicators of student investment in and attachment to education" (Tucker, Zayco, & Herman, 2002, p. 477)

Relevant to this study is the claim that career development interventions have been identified as one potential means for promoting motivation and school engagement (Lapan, 2004). Documented gains in academic achievement among students enrolled in career education and guidance programs have been cited as evidence in support of career development interventions (e.g., Lapan, Gysbers, & Petroski, 2001). Additional research revealed that youth attending school-to-work

programs demonstrate modest gains in career development and do better in school than youth whose academic programs do not include work-based learning (e.g., Visher, Bhandari & Medrich, 2004).

This section presents theories of motivation that are found relevant for the present study. Theories on motivation sometimes overlap but they focus on different key ideas as follows:

2.2.1. Expectancy-value theory

Expectancy-value theory has been one of the most important views on the nature of achievement motivation, beginning with Atkinson's (1957) seminal work and continuing through the work of other theorists (e.g., Battle, 1965; Eccles, 1984a). Theorists adopting this perspective posit that individuals' expectancies for success and the value they place on succeeding are important determinants of their motivation to perform different achievement tasks. Atkinson (1957) originally defined expectancies as individuals' anticipations that their performance will be followed by either success or failure, and defined value as the relative attractiveness of succeeding or failing on a task. Researchers in the expectancy value tradition (e.g., Eccles, Adler, Futterman, Goff, Kaczala, Meece & Midgley, 1983) have expanded these definitions, and further discussed how individuals' expectancies for success, subjective task values, and other achievement beliefs mediate their motivation and achievement in educational settings.

The Expectancy-value theory explains that people value a task depending on the value of that particular task. Value here can broadly mean the beliefs about a desired end, for instance, an achievement. One would tend to value what is expected to be achieved. More specifically, Eccles et al. (1983) defined values as how a task meets different needs of individuals. For instance, components of these values may include the usefulness of the task for the future, the cost of how much one has to give

up in order to do a task, as well as the enjoyment of doing a particular task. According to this theory, the expectation to succeed, or avoidance of failure (Covington, 2000) depends on the person's belief about his or her ability as well as the difficulty of the task at hand. The amount of pride one has in his or her ability will also determine the difficulty of the task or interest to engage with the task (Atkinson, 1965). Tollefson (2000) citing the findings of a school-based research done in California, USA indicates that students who expect to do well in school earn higher grades than students who expect to fail. Similarly, in a recent research conducted among students in class 6 to 8, Plante, O'Keefe, and Théorêt (2013) report that goals partially mediate the relation between expectancy-values and achievement outcomes, in predicting course performance, career intentions and academic aspirations. The results of their study suggested that expectancy-value variables predict achievement-related outcomes both directly and indirectly. A study by Kenny, Walsh-Blair, Blustein, Bempechat, & Seltzer (2010) was conducted in Boston, USA among 201 high school students. These students participated in a work-based learning program, that then placed them in work sites for one day a week across the four years of high school along with an academically rigorous schedule. Consistent with expectancy value theory, a positive correlation confirmed the expected relationship between positive, hopeful and planful views towards one's vocational future and a valuing of current educational experiences and feelings of competence in those activities.

This theory therefore provides a framework to discuss the relationship between the Academic Achievement Motivation and prevailing career orientations. The concepts presented in this theory are used to discuss the findings in this study

2.2.2. Attribution theory of motivation

Attribution theories of motivation focus on the factors that a person perceives are responsible for successes and failures. The general attribution model states that environmental and personal factors influence the person's perceived cause of an event (Weiner, 1985). Heider (1958) was the first to propose a psychological theory of attribution, but Weiner (e.g. Weiner, 1986) developed a theoretical framework that has become a major research paradigm of social psychology.

This theory is concerned with how individuals interpret events and how this relates to their thinking and behavior. Attribution theory assumes that people try to determine why people do what they do. A person seeking to understand why another person did something may attribute one or more causes to that behavior. According to Heider, (1958) a person can make two attributions: *internal attribution*, the inference that a person is behaving in a certain way because of something about the person, such as attitude, character or personality. The other is *external attribution*, the inference that a person is behaving a certain way because of something about the situation he or she is in.

Attribution theory has been used to explain the difference in motivation between high and low achievers. According to attribution theory, high achievers will approach rather than avoid tasks which are related to succeeding, because they believe success is due to high ability and effort which they are confident of. Failure is thought by them as something to be caused by bad luck or a poor exam and is not their fault. Thus, failure does not affect their self-esteem but success builds pride and confidence. On the other hand, low achievers avoid success-related chores because they tend to either doubt their ability and/or assume that success is related to luck or to "who you know" or to other factors beyond their control. Therefore, even when

successful, it is not as rewarding to the low achiever because one does not feel responsible and the success it does not increase one's pride and confidence (Heider, 1958; Weiner, 1986). It is understood that this theory is strongly related to achievement motivation particularly in the interpersonal and intrapersonal attributes of motivation (Tollefson, 2000). Since Academic Achievement Motivation includes internal drives as well as external influences, this theory was relevant for this study.

2.2.3. Academic achievement motivation and career goals

The attitude of an individual towards a certain task may actually influence his/her motivation to accomplish a task or reach a goal (Meece, Anderman, & Anderman, 2005). Marchant, Paulson, and Rothlisberg (2001) also suggested that even socioeconomic status was found to have a direct relationship with achievement motivation. Regardless of what influences it, academic achievement motivation is an important variable that influences a child's school functioning (Marchant et al., 2001)

Atkinson (1965) who pioneered the scientific study of human motivation, achievement and behaviour developed this theory of Achievement Motivation. The theory explains that relating to academics, school learning tasks provide an opportunity for students to demonstrate competence against standards of excellence, the very circumstances thought to arouse achievement motives. He asserts that students' successful performances in such achievement settings can be a source of pride and satisfaction. However, the theory further predicts that when an achievement task is perceived to have no relationship to future achievement endeavours, achievement motivation is not aroused. The future goals referred to by this theory are self-relevant and self-defining goals that provide incentive for action. These self-relevant and self-defining goals are self-determined goals (Ryan & Deci, 2000).

Such goals are similar to Bandura's (1986) outcome expectations. These goals include, but are not limited to, important personal aspirations such as getting an education, striving for a career or job.

Therefore, goals are central to the self-regulatory process. They represent the target goals and anticipated outcomes associated with the current actions being performed. Zimmerman (as cited in Weibell, 2011) has indicated that clear and specific proximal goals produce higher levels of achievement and personal satisfaction than vague and distant goals. Although career goals can also be considered a distant goal to some, Bandura (as cited in Miller & Brickman, 2004) recognized that even distant goals play a role in human motivation when he said,

> "Many activities are directed toward outcomes projected into the future. People do things to gain anticipated benefits or to avert future trouble. The anticipation of distal outcomes provides general direction for choosing activities, and it raises the level of involvement in them." (p.13).

These theoretical frameworks provide the background for this study. It is against this theoretical background that academic achievement motivation was selected as a variable for this study.

2.2.4. Achievement motivation among indigenous peoples

Certain special patterns of motivation seem to characterise indigenous peoples. For example, Australian aboriginal students were found to learn better and were motivated when they work as a group and help each other rather than compete to be ahead of the others (Milliken, 2005). Among the aboriginal students in Canada, better outcomes were found when they learned by seeing, doing, and repeating (Robb & John, 2005). For many indigenous students such as Native American children, motivation may be derived from social organization. While poor academic

performance among Native American students was often attributed to low levels of motivation, horizontally-structured, community-based learning strategies provided a more structurally supportive environment for motivating indigenous children, who tend to be driven by "social or affective emphasis, harmony, expressive creativity, and nonverbal communication" (Pewewardy, 2002, p 1.). Such orientations can also be traced to a cultural tradition of community-wide expectations of participation in the activities and goals of the greater group, rather than individualized aspirations of success (Pelletier, 1969).

The relevance of the construct of academic achievement motivation to the sample in this study is seen in the latest record of drop-out rate in the state of Meghalaya: the overall percentage of drop-outs from primary level to secondary level is 41.26% ("High Drop out Rate", 2008). Furthermore, the average matriculation examinations pass percentage among the government run institution across 2006-2010 is only 47% (see Table 1) which was lower than many states in India.

There are other factors that may also influence the academic achievement motivation of students. In the North eastern region of India where Meghalaya lies, insurgency and social instability are widely observed to affect educational systems and institutions. A further observation, although not documented, students who discontinue or drop out of school are at high risk of joining underground groups since they are promised financial benefits and security (extract from discussions between the researcher and a Female Church elder, 55 years old, Shillong, 2010). It is a fact that training and employment schemes are available. However, this information is not widely disseminated. Although schemes maybe available for livelihood opportunities, there is no well defined system that could link these vulnerable youth to courses related to their interests. Another commonly held opinion is that youth who

drop out of school are not so keen in taking vocational training courses because they *"Would rather go for easy money than study and later earn a small income"* (extract from discussions between the researcher and an Male unemployed youth, 18 years old, Shillong, 2010).

These environmental and social conditions in the state may be associated with what attribution theory portrays as *external attribution* where failure is thought to be caused by bad luck is not the person's fault. Young people could avoid tasks designed to promote "success" because they could assume that success is related to luck or to "who you know" or to other factors beyond their control.

2.3. Social Cognitive Environment: Influence on Career Beliefs

Social cognitions can be defined broadly as the outcomes of a process of encoding and decoding the social world which includes information about people, including the self, and about the norms and procedures of the social world (Beera & Ochsnerb, 2006). One component of social cognition is the *social knowledge* that enables people to successfully manage life tasks (Kihlstrom & Cantor, 2000).
In other words, this is a component of social cognition that has to do with what a person can state about the social world. For example, people can state norms about politeness even though they may differ across cultures. In short, social cognition is related to the perception of others, of self, and also the interpersonal knowledge.
The basic cognitive processes underlying social cognition involve the perception of a social stimulus such as the other people and the interaction between people which can be observed in varying degrees of complexity (Beer & Ochsnerb, 2006). These concepts will be expanded within specifc theoretical frameworks below.

2.3.1. Social Cognitive Theory (SCT)

This theory stemmed out of work in the area of S*ocial Learning Theory (SLT)* proposed by Miller and Dollard (1941) which posits that if one was motivated through social cues, responses or rewards, then behaviour would be learned through observations of role models. SLT asserts that *human cognition* acts as a mediator between stimulus and response, placing primacy upon individual control over behavioural responses to stimuli. While there are several versions of the SLT to which researchers currently subscribe, they all share three basic tenets (Crosbie-Brunett & Lewis, 1993). Tenet one says that response consequences (such as rewards or punishments) influence the likelihood that a person will perform a particular behaviour again in a given situation. Tenet two says that humans can learn by observing others, in addition to learning by participating in an act personally. Learning by observing others is called *vicarious learning*. Tenet three says that individuals are most likely to model behaviour observed by others they identify with. *Identification with others* is a function of the degree to which a person is perceived to be similar to one's self, in addition to the degree of emotional attachment that is felt toward an individual. Of relevance to career theory are two interpretations of social learning theory presented by Albert Bandura (1977a) and John Krumblotlz (Krumboltz, Mitchell, & Jones, 1976).

Bandura's SLT focuses on how children and adults operate cognitively on their social experiences and how these cognitions then influence behaviour and development (Bandura, 1977a). In 1986, Bandura renamed his SLT as, Social Cognitive Theory (SCT), as a better description of what he had been advocating since the 1960's (Bandura, 1986). SCT has then been applied to many areas of human functioning such as career choice among many others.

Career belief is a social learning construct introduced by Krumboltz (1994). He said, "people make a number of assumptions and generalizations about themselves and the work world based on their limited experiences. Whether accurate or not, these assumptions affect the way people behave. The way in which people make career decisions depends on what they believe about themselves and the world of work. If their beliefs are accurate and constructive, they will act in ways that are likely to foster the achievement of their goals. If their beliefs are inaccurate and self-defeating, they will act in ways that make sense to them but may hinder accomplishment of their goals" (p.424).

Drawing from the Cognitive Therapy literature, Sampson, Peterson, Lenz, Reardon, and Saunders (1999) have introduced a related concept: *career thoughts*. They defined career thoughts as "outcomes of one's thinking about assumptions, attitudes, behaviours, beliefs, feelings, plans, and/or strategies related to career problem solving and decision making"(p. 1). CTI resets on the assumption that "While dysfunctional thinking in career problem solving and decision making cannot be measured directly, it can be inferred from an individual's endorsement of statements (test items) reflecting a variety of dysfunctional career thoughts" (p.1)

Adapting these concepts to the Asian/Indian context Arulmani (2000) has introduced the notion of a *social-cognitive environment*. Viewing social cognitive processes from a collectivist perspective, he points out that within such systems beliefs are *shared* by the individuals of a community and may cohere into a behaviour pattern that defines reality external to each individual in that community. Hence social cognitions may not be internalised merely within the minds of single individuals but rather in the relational processes of social exchanges and symbolic interaction (Arulmani & Nag-Arulmani, 2004). Of importance is his observation that

social-cognitive environments emerge from a reciprocal interaction between the individual and his or her environment. As noted above, career planning in India, is not a purely individualistic effort and beliefs and values held by the community often play a significant role in the career decision-making process . Arulmani and his colleagues adapt Krumboltz's (1994) notion of career beliefs to the collectivist context and defines it as, "a conglomerate of attitudes, opinions, convictions, and notions which seem to cohere together to create mindsets and beliefs that underlie people's orientation to the idea of a career" Arulmani & Nag-Arulmani, 2004, p.107). In summary, three significant points emerge from Arulmani's (2014) research into social-cognitive environments and career beliefs among adolescents from various socio-economic backgrounds. First, career planning and development vary quite markedly between low and high socio-economic status (SES) groups. Second, it appears that career beliefs held by the lower SES groups could be more negative than their higher SES counterparts. Third, the content of the negative beliefs could be categorized into characteristic themes. Based on these three important points, the Career Belief Patterns Scale (CBPS) which was used for this present study was developed to verify these observations scientifically (Arulmani, 2000, 2008).

In Meghalaya, there has been little or no research conducted on the impact of social cognitions such as career beliefs on career preparation. However some leads may be seen in two studies conducted in Meghalaya. A study conducted by Elizabeth (2000) found that there is a significant difference between urban girls and rural girls in educational aspiration and total academic achievement. Urban girls showed higher mean score in educational aspiration. Only interest in outdoor, persuasive, social service and clerical related works showed to have no difference between the two groups. In a similar research, it was found that the attitudes of students in the East

Khasi Hills District of Meghalaya were not favourable towards taking up vocational courses. It was concluded that this could be related to the the unemployment and employment lag experience in the district (Lyngdoh, 2000). These findings seem to show the link between career beliefs and career preparation among students. Understanding the career orientation of the youth in Meghalaya may bring out the underlying career beliefs which may be influencing them in their career preparation.

In another interesting study, Gneezy, Leonard, and List, (2009) compared the gender difference in competitiveness and its implications to labour market entry and education among young adults coming from a matrilineal and patriarchal society. The study found some interesting patterns in the samples from Tanzania which was characterised by a patriarchal form of society and the Khasis in India who follow the matrilineal form of society. In this study, the Khasi female sample showed much higher level of competitiveness and leadership qualities compared to the Khasi men and compared to women from the patriarchal society.

In addition, the same study reported that although the Khasi tribe seems to elevate the importance of women and the historical evidence shows that they invest significantly in the their daughters, decision-making in Khasi society remains dominated by men. However, the implications of such findings toward career decisions and career preparation were not reported and further research was encouraged. Hence, the constructs of social-cognitive environment and career belief were included as variables for this study.

2.4. Socioeconomic Status and Career Development

Across societies, an almost universal finding was that socioeconomic status (SES) is closely associated with orientations to education, work, and career. Reese

and Vera (2007) support the idea that socioeconomic status is one of the major influences in the career development of a young person. The minority groups of African-American and Latinos in the US between the ages of 15-34 belonging to low socioeconomic status backgrounds were at high risk in involving in juvenile cases and/or dropping out of school. The National Longtitudinal Survey (as cited in Wei-Cheng and Yun-Wha, 2006) among 10, 840 students in 10th Grade in the US reported that across four years, the students from higher socioeconomic status backgrounds were the ones who persisted and performed better in their academic achivement.

In a related study, Ali and Saunders (2009) reported that among 63 high school students from the rural Appalachia, students belonging to lower socioeconomic status group might benefit more from interventions that are designed to increase the confidence and expectations about their future. It was reported that a common situation in America was where academically talented students wanting to pursue higher education were not able to proceed further due to family economic difficulties (Ferry, 2006). This author also reported that apart from financial constraints, the family and community context in which a student lives in also played an important role in career decision making and setting of occupational goals.

Conducted in 2005, across 6530 students in 15 regions and 8 languages, the Work Orientations and Respones to Career Choices – Indian Regional Survey (WORCC-IRS) (Arulmani & Nag-Arulmani, 2005), was one of the largest surveys conducted on Indian young people's work and career orientaitons. A signficant finding throughout the study was that socioeconomic status and career development orientations were closely related. Some of the salient findings with regard to SES and career developemnt from this study are summarised below.

Compared to the students from middle and high SES group, the students from low SES in the survey showed higher interest in finding a job immediately or even a part time job after class 10 or 12 and this high interest was accompanied by parental approval for their career path. It was also found in the survey that students from lower SES backgrounds percieved more barriers to their career preparation as compared to the students from the middle and high SES groups. Financial difficulty was reported as the most significant barrier by the low SES group, followed by other family and personal barriers. In relation to career beliefs, the survey showed that as SES increases, the negativity in career beliefs decreases. Compared to students from the middle and high SES groups, the students from low SES group recorded higher negativity in their mean score. These findings clearly showed that the socioeconomic status of a student can influence his or her orientation to career development.

2.5. Rural-Urban Migration

Reports from the Census of India (2011) pointed to the importance of understanding the phenomenon of migration arising out of various social, economic or political reasons. In addition to the data shown reported in the previous chapter (see 1.4.3), the 2011 census shows that over a period of ten years (2001-2011), a total of 314 million migrated either within Meghalaya (85%) which is about 268 million, inter-state (13%) about 41 million, or outside the country (1.6) about 5.1 million. For a large country like India, the study of the movement of population in different parts of the country helps in understanding the dynamics of the society better. The census (2011) also stated that most of the female migrants have cited Marriage as the reason for migration, especially when the migration was within the state. For males, the major reasons for migration are Work/Employment and Education.

At this junction in the economic development in the country, especially when many states are undergoing faster economic development, particularly in areas, such as, manufacturing, information technology or service sectors, data regarding the migration profile of population has become more important.

2.5.1. Factors to consider in rural-urban migration

Kalyanram, Gopalan and Kartik (2014) presented an analysis of pertaining to rural-urban migration which is of direct pertinence to the present research. Since there is not much in the literature on the interface between rural-urban migration in the context of career orientations, the observations of Kalyanram et al. (2014) are presented below.

Discussing *livelihood versus lifestyle,* these authors observed that the young people in their region, Rayalam of Andhra Pradesh, who wished to migrate tend to want a lifestyle that denotes higher social status. They perceived that urban areas offer more opportunities, excitement, materials, and success in life. On the other hand, the overall feeling amongst these youth was that "life in the village is so predictable" (p.381). Commenting on *passion versus necessity* the authors postulated that at times, people just have to migrate to the urban areas with the hope that they will find a better source of income and thereby support their families at home. So as compared to passion, necessity and the need for something for substantial, may fuel the desire to migrate to cities. *Rootedness versus Mobility* was another factor that these authors commented on. Some of the young people felt "good" about staying close to their roots, enjoying the support system available around them, while others were curious and wanted to explore this city that the television, radio and newspapers, speak about. The factors presented in this study seem to echo the realities of rural-urban migration in Meghalaya and offer important guidelines for the present research.

2.5.2. Challenges resulting from rural-urban migration

Chan and Yao (2008) in their observations of China pointed out that although this country is in the forefront of the global market in terms of economic success, China is not free from the consequences of this success when the benefits and costs of rural-urban migration are examined. They mentioned that although migration to urban areas of China contributes to the increase in income for the poor, provides educational opportunities for migrant workers and their children, increases new knowledge and skills (Glynn, 2007), it also raises issues such as increased environmental degradation and pollution (Chan & Yao, 2008). Furthermore overpopulation in municipalities and sub provincial cities has become evident. Increased migrant populations in the urban suburbs have no access to local health care, education, and workplace protection. Hence, an increasing crime and safety issues have been observed.

The Asian Development Bank (2012) reported similar findings about other countries in Asia. Despite the region's rapid growth, the last two decades have witnessed widening income disparities. Most people in the region, about four-fifths of them, live in countries that are becoming more unequal. The progress in new technology, education, infrastructure and investment are fuelling the divide, particularly between rural and urban areas. It seems that this form of progress tends to favour the owners of capital more than those who provide the labour. The report also highlighted that high-skilled workers were favoured by this form of progress rather than low-skilled workers. In addition, the urban locations seem to have benefitted more than the rural and inland areas. Bridging this growing gap is essential to promote inclusive growth, and to make growth sustainable. Hence, the report

called for governments in Asian countries to focus on policies that share the benefits of development fairly, and thereby maintain healthy growth rates.

As per the recommendations made by this report, these policies are to include employment-friendly measures to encourage the creation of high quality jobs.

In India, Khandelwal and Gilbert (2007) described an innovative programme dedicated to the improvement in livelihood opportunities for poor, migrant labourers of Rajasthan, India, called Aajeevika Bureau. The narrative pointed out that the difficult socioeconomic condition of the rural population of this region presses them to engage in seasonal wage labour, mainly in cities. Some of them work in farms and factories of the neighbouring state like Gujarat where the need for cheap labour draws migrants from across the country. However, these opportunities require skills, confidence and networks on the part of migrants. The mandate of the Bureau is to assist migrants by providing tools such as skill training, life-skill education.

An important insight relevant to the present research from the work of the Aajeevika Bureau refers to how to prepare the school students with skills required for rural-urban migration. Sensitization of communities is one of the critical starting points for education for sustainable development. The narrative also argued that schooling does not adequately prepare rural students for a future of meaningful economic participation, especially in urban, high growth sectors; that there is little linkage of education to livelihood; vocational training in rural schools of Rajasthan is poor; and formal schooling also does not include any inputs on building broader life skills that help in future employability (for example inputs in language, cultural exposure and mobility). Although the Bureau was able to provide a one month long skill development programme, it did not seem to be sufficient. For example, in 2006, the Bureau responded to an invitation from a state-of-the-art unit to send 17 trainees

to a wire harness plant in Gurgaon, Haryana. Despite attractive salaries, the trainees could not adjust to the regime of factory work in a large urban centre and returned to the village after just a few days.

From the information presented in this section, there seem to be growing implications of rural-urban migration that remain a challenge to a person making a career decision as well as to career development service providers. These implications call for an approach to career counselling which should not only be client sensitive, but also culturaly relevant, focused in economic sustainability yet considerate of the regional, national, and global market trends.

2.6. Gender and Career Development

There seem to be different reports from various literature related to gender differences in career decisions and career maturity among high school boys and girls. Research conducted in developed countries reported that both high school boys and girls indicated optimistic desire in relation to achieving their career goals and thereby suggest that career planning needs to begin in this level (Bardick, Bernes, and Magnusson, 2006). However, a salient finding among high school students in Canada, reported that female students have higher levels of career decision making self-efficacy. The researcher explained this findings by pointing out that gender role may have a significant influence among the female students and that they tend to consider a need to balance both family and life (Gianakos, 2001).

In more related researches, Creed and Patton (2003) pointed out that female students in a majority of the studies conducted were found to have higher maturity than their male counterparts, but in other countries such as Nigeria and South Africa, male students have higher maturity. In India, a study among 480 Class X students

between the age of 14 and 16 from Raipur City of Chattisghar reported differences in career maturity between gender. It was found that the male students displayed higher career maturity compared to their female counterpart (Hasan, 2006). In Meghalaya only a few studies related to vocational aspiration among girls (Elizabeth, 2000), and attitude towards vocational education (Sungoh, 1989) were found. However, these studies did not include gender differences in career maturity and patterns of career decision making as variables to be analyzed. The present review of the literature did not reveal other studies related to gender differences in relation to career preparation, academic motivation and career beliefs amongst students in the State of Meghalaya. This highlights the importance of including gender as a variable in this study.

2.7. Cultural Approaches to Understanding Career Development

This section explores the growing trend in identifying the differences between the Western and indigenous approach to psychology and counselling. Paranjpe (2002) described the situation as follows:

> The indigenous Indian approach to psychology is doubly at odds with that of modern psychology because they are separated by two types of cultural gaps. First, the indigenous approach belongs to an ancient culture that is alien not only to Westerners, but also to a majority of Indians who receive a highly westernized education. Second, while the traditional Indian approach is grounded in the 'culture of the humanities', modern psychology is strongly aligned with that of science and technology (p.31).

These points seem to remain true in many aspects of psychology including career psychology. The need to re-examine cultural and cross-cultural career psychology was reflected in the study conducted by Stead (2004). It has become

essential to understand the relationship between culture and career psychology since there are implications on developing relevant models of career counselling (Thomas & Weinrach, 1998). Stead (2004) further underlined that counsellors need to consider the people who may influence an individual when making a career decision particularly in a collectivist culture. Some of the key factors that come into the picture are dicussed below.

2.7.1. Individualism versus collectivism

In psychology, the concepts of individualism and collectivism were of no particular interest until 1980 till when Hofstede (1980) published his study of 40 national cultures, identified and elaborated four dimensions of cultural variation which includes individualism-collectivism. According to Hofstede's (1991) definition, "individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family" (p.51). Collectivism, on the other hand, "pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (p. 51). Hofstede (1991) claimed that industrialized, wealthy, and urbanized societies tend to become increasingly individualistic, whereas traditional, poorer, and rural societies tend to remain collectivistic. In later researches, however, the constructs of individualism and collectivism underwent a series of modifications. For instance, in addition to being used as characteristics of culture, the constructs are also considered to be personality attributes that vary across members of the same cultural group. Many researchers in the field argue that the cultural and individual levels must be separated for both conceptual and empirical purposes (Smith & Schwartz, 1997).

At the cultural level, according to Triandis and Suh (2002), individualism is the polar opposite of collectivism (as also shown by Hofstede), whereas at the individual level of analysis, the two constructs are often found to be orthogonal to each other (Realo, Koido, Ceulemans,& Allik, 2002). This means that presumably, since both are present in all the societies, the effect of individualism and collectivism on the psychological processes must be tested separately (Oyserman, 2006).

In a comprehensive review of the topic, Oyserman, Coon, and Kemmelmeier (2002) concluded that the core elements of individualism are personal uniqueness and independence, whereas duty to the in-group and maintaining harmony are the main constituents of collectivism. Brown and Lavish (2006) reported that the collectivist orientation of Native American students, for instance, show significantly greater salience for participation in, commitment to, and value expectations for their home/family and community service roles compared with their work role. The mediation of culture therefore emerges as a critical factor to be considered.

2.7.2. Approaches to the study of culture in psychology

Leong and Pearce (2014) present three approaches to the study of culture in psychology namely: cross-cultural psychology, cultural psychology, and indigenous psychology. *Cross-cultural psychology* has been defined as "the study of similarities and differences in individual psychological functioning in various cultural and ethnic groups; of their relationship between psychological variables and sociocultural, ecological, and biological variables; and of current changes in these variables" (Berry, Poortinga, Segall, & Dasen, 1992, p.2).

Shweder (1990) defined the second approach, c*ultural psychology* as "the study of the way cultural traditions and social practices regulate, express, transform, and permute the human psyche, resulting less in psychic unity for humankind than in

ethnic divergences in mind, self, and emotion" (p.1). Cultural psychology has grown not only out of dissatisfaction with cross-cultural psychology but also out of anthropologists' desire to understand the person in context. A basic premise of this approach to culture is the integration of psychology and anthropology and their different methodologies (Leong & Pearce, 2014).

The third approach to the study of culture in psychology is *indigenous psychology*. Several researchers (e.g. Erniquez, 1989; Kim & Berry, 1993) have pointed out that this approach has become an academic movement especially in several developing non-Western societies like India. Various definitions of indigenous psychology have emerged. Enriquez (1990) describes it to be a system of psychological thought and practice rooted in a particular cultural tradition. Kim and Berry (1993) defined indigenous psychology as "the scientific study of human behavior (or mind) that is native, that is not transported from other regions, and that is designed for its people" (p. 2). While Ho (1998) viewed indigenous psychology as "the study of human behavior and mental processes within a cultural context that relies on values, concepts, belief systems, methodologies, and other resources indigenous to the specific ethnic or cultural group under investigation" (p. 88). This will be dicussed in later sections of this chapter.

2.7.3. Cultural validity

In relation to understanding career development in various cultural perspectives, there seems to be a growing importance laid upon the careful consideration of the validity of frameworks to be used to predict career choice and work adjustment. For instance, a popular model, *person-by environment models,* which focuses on how fit an individual is for a particular career as a determinant of job satisfaction or job performance may be inadequate because according to Leong,

the culture of the person and the culture associated with the environment or the people in the environment may be ignored (2002). Leong and Pearce (2011) provide an example expressed in the excerpt below:

> . . .while it is currently assumed that vocational choice is a function of a person's general interests, abilities, and values, the decision could be more completely described by including factors specific to the person's culture (i.e., factors specific to the person's race, ethnicity, or nationality, such as collectivism in Asian populations), rather than assuming that all important predictors are global (p. 67).

Leong and Brown (1995) have clarified that *cultural validity* has to do with the appropriateness of scientific models across cultural groups, and *cultural specificity* involves a question of whether scientific models are appropriate within a particular cultural group. Without considering cultural validity and specificity, any assumption may be inappropriately applied to one or more cultures. The inappropriateness of *imposed models* stems from potential issues concerning cultural sensitivity and may be avoided by carefully considering the cultural validity and specificity of an intervention before implementing it in a new cultural setting (Benet-Martinez, 2007; Leong & Brown, 1995). Considering these crucial concepts in relation to vocational psychology research and theory building, Leong and Pearce (2014) recommended several methods for addressing possible related problems when culture is neglected.

First, vocational psychologists need to take into account the dual influence of culture-general and culture specific factors in career choice and work adjustment when initially building scientific models. Second, they called for culture-relevant data (e.g., ethnicity) to be collected consistently and for such constructs to be formally operationalized as significant moderators of existing models in vocational psychology

research. *Third*, they asked that researchers consider the cultural validity of Western models for non-Western contexts as well as the cultural specificity of variables that might provide incremental utility when predicting key vocational outcomes. *Fourth*, Leong and Pearce (2011) indicated that efforts should be made to educate researchers about various models in predicting career choice and work adjustment.

2.7.4. Cultural influences in career development

Leong (2002) describes the notion of *prevailing* and *countervailing forces* that can influence the career development of individuals coming from an indigenous community like the sample of this present study. The prevailing influences like globalization, migration, online information-sharing, and culturally based political events might prompt researchers to consider multicultural issues when developing and implementing scientific models (Laungani, 2005). In many Asian countries like India, their economies and their reliance on science and technology are less well developed than in affluent countries. When viewed in light of this differential, Leong (2002) said that it seems quite evident that there would be a natural gradient in the flow of scientific information and models from the West to the East. This gradient operates through such mechanisms as Asian countries' reliance on Western institutions of higher education to train and educate their political and intellectual elite. Training bias therefore adds further to the monopoly of Western models of science. It involves the natural gradient in which Asian countries send their best and brightest students to be educated in Western colleges and universities. As part of this educational process, these Asian students learn, internalize, and become proficient in the use of the Western models of science, which naturally have Eurocentric bias. After they earn their degrees and return to their home countries, these scientists bring with them a training bias and a reliance on Western models of science.

These prevailing forces seem to also occur among the young people in Meghalaya. Kharkongor and Albert (2014) in their interviews of young people and career counsellors in Meghalya found that the tendency is for urban young people to choose white collar careers. They were more willing to go outside the state than the rural youth. Both groups are as much in need of career counselling support. Much care needs to be given by the career counsellors as both groups are ready to receive what is taught to them (Kharkongor & Albert, 2014). Therefore, career counsellors must be aware of the forces that are prevailing around the students which may influence their career decision making process.

In relation to the prevailing and countervailing forces (Leong and Pearce, 2014) that may be influencing the career development, one example of a prevailing force in the context of the sample in this study can be drawn from a comment made by a student (provide information as indicated for your earlier verbatim above),

"*I want to become a fashion model".* Interestingly, two or three other students joined in agreement. When the researcher inquired further, the students said that "*It is very nice, will give lots of money, and will make one beautiful especially in the TV"*. When using a Western tool of measuring the interest of this particular student, one may get a high score in spatial related scale. However, looking at the feasibility, accessibility, and economic viability of this career in the context of Meghalaya, where there are no courses available to become a fashion model and no platform to provide a viable sustainable livelihood. Therefore, much care must be given in assessing all the other aspects of the students' life before a career counsellor should actually encourage a student to go for this kind of career.

On the other hand, countervailing forces include the following constructs: *ethnocentrism* which is the tendency, often cited as a source of prejudice and racism,

to use one's own culture as the standard for understanding the thoughts and behaviors of persons from other cultures. The *false consensus effect* which involves humans' propensity to assume that one's own thoughts and behaviors are normal and, consequently, to assume that persons from other cultures should think and behave in similar ways. The notion of *psychological reactance* desried by Leong and Pearce, (2014) refers to a person's drive to regain his/her past (lost) freedoms and to oppose people or things that threaten to reduce his current freedoms. Because culticulturalism requires a new framework for thinking about thoughts and behaviors, people may perceive it as a threat to one's familiar ways (i.e., monoculturalism).

In the context of Meghalaya, this may partially explain the growing and deep-rooted underground movement with a never-ending fight for separate statehood, as also the growing tendency to return to traditional religions. The *attraction–selection–attrition cycle* was the title given by Leong and Pearce (2014) to a phenomenon that occurs in many organizations (and, by extension, geographical regions or social groups) during which a particular type of employee (e.g., with regard to personality or demographics) is attracted to an entity and is selected to join it, while other types of employees simultaneously attrite from it. This process ultimately leads to homogeneity within whatever grouping of persons is the entity of interest, potentially making it difficult for new changes (e.g., multiculturalism) to gain momentum.

According to Leong and Pearce (2014) to consider the potential concerns described in these section are worthwhile because whether or not indigenous models of psychology become popular likely depends on the (im)balance of prevailing and countervailing forces in psychology. Leong (2002) introduces the cultural accommodation model for cross-cultural psychology and career counseling which aims to outline the means for identifying culture-specific variables that can be

assessed to enhance the effectiveness and cultural validity of psychological interventions. This model asserts that psychologists must investigate whether any given intervention, practice, or framework can be appropriately applied to a different cultural population than the one it was used for originally (Leong & Brown, 1995). Thus, the cultural accommodation model involves three steps.

First, the psychologist must examine existing theory to determine its cultural validity as well as any "blind spots" that might cause difficulties when applying it to a new cultural population. Second, the psychologist must identify which culturally specific variables might help decrease the likelihood of these difficulties. The third and final step of the cultural accommodation model involves an empirical test of the incremental value of the culturally accommodating version of the theory, intervention, practice, framework, model, and so on, above and beyond its original (non-culturally accommodating) version. If its incremental value is significant, then the new version is worthy of further research and adoption. Taken together, these steps essentially involve investigating and assessing whether the cultural-generalized aspects of Western models should and can be supplemented by including additional culture-specific information. These same steps can be taken to apply the cultural accommodation model for use in indigenous psychology, by identifying, measuring, and "accommodating" for variables specific to particular cultural populations.

2.7.5. The Cultural Preparation Process Model and career development

Proposed by Arulmani (2014), this model argues that the manner in which an individual and group are prepared by their culture (cultural preparedness) explains their engagement with work and career development. He defines cultural preparedness as follows: He explained by saying:

> "Cultural preparedness refers to the bidirectional process of influence between a social group and its members, whereby a society directly or indirectly, formally or informally, transmits to its members, the norms and customs by which it characterizes itself and whereby the dynamics of lifelong cultural learning facilitate the absorbing of attitudes, convictions, opinions, and notions which cohere together to create mindsets and beliefs that guide a people's relationship with themselves and their environment" (p. 8).

Arulmani (2007) points out that Western theories of counselling are based on the realities of Western contexts. In this author's opinion, the success of these approaches could be because both the providers of these services as well as the recipients the service have been culturally prepared to extend and utilize the service in a similar manner. As the author puts it, "they share a comparable vocabulary of values and cherish a particular approach to life" (p.8). However, the same conditions may not be prevalent in other cultures. For example, definitions of career development and academic achievement motivation and the nature of social cognitive environments and career beliefs maybe very different in collectivistic cultures. The cultural preparedness approach offers a framework that could be considered for the development of culturally resonant theorising and models of practice.

Cultural Learning, a construct described by Tomasello (2001), is an important aspect of this model. The notion of *cultural learning* indicates that human learners do not merely imitate their environment, but also modify what is learned. The Cultural Preparation Process Model of Career Development points out that global forces outside the control of the individual, (e.g. globalization, natural disasters, colonization) interact with locally occurring cultural processes (e.g, socialization) to

place the individual /group in a unique state of equilibrium to engage with career development. This is the individual/group's cultural preparation status equilibrium in relation to career development. The model describes the interaction between the forces of acculturation and enculturation. For example, *enculturation* could be seen in the manner in which home and family through the processes of cultural learning transmit culture to the young in the family. On the other hand, *acculturation* could be seen as learning aspects of a culture other than one's own. Kim, Atkinson, and Umemoto (2001) pointed out that people retain selected aspects of their indigenous cultures in aspects related to career development as well. The cultural preparation process model points out that "if enculturation creates a certain status or quality of cultural preparedness, the necessity for acculturation can cause shifts in cultural preparedness, which may or may not be beneficial to the culture that is required to acculturate" (Arulmani, 2013, p.13). Forces of acculturation that are congruent with the individual/group's cultural preparation status would support, enhance, or further stabilize the existing career preparation status equilibrium. On the other hand, the forces of acculturation may not be congruent with the recipient culture and this could disturb the existing career preparation status equilibrium (Arulmani, 2013).

As presented earlier in this chapter, there is lack of studies conducted in Meghalaya in relation to career development among high school students. There is little or no emperical evidence available to explain the cultural implications of career counselling related programmes in this region. The lack of such literature makes it difficult to analyze the cultural influences on the career preparation and decision making process of the high school students in Meghalaya. The present research attempts to provide some background for future research in order to scientifically evaluate the cultural aspects as discussed in this section.

2.8. Indigenous People's Orientations to Work and Career

In the last decade, increasing efforts have been made toward understanding and articulating a contextualized approach in career counselling for minority groups such as the indigenous peoples (e.g., Osipow and Littlejohn, 1995; Arulmani, 2014b). A clear response to this call, is the emergence of the multicultural approaches to counselling. The approach emphasizes the following competencies for a culturally skilled counsellor: awareness of own assumptions, values and biases; understanding the world view of the culturally different clients; developing appropriate intervention strategies and techniques (Sue & Sue, 1999). Additionally, career counsellors need to examine how culture is represented in theories of career development and in models of career counselling (Arthur & McMahon, 2005). For instance, the System Theory Framework (STF) emphasizes the interconnectedness of all the systems which are influencing the career development of an individual. STF encourages an individual to use story telling approach in order to identify influences of one's culture, family, and communities in relation to career decision making (McMahon, 2014).

2.8.1. Description of indigenous peoples

Many descriptions of indegenous people exist. The most well known was offered by the UN which describes indigenous peoples as:

> "Those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing in those territories, or parts of them. They form at present, non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued

existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems." (United Nations, 1986, p. 2)

In some countries, the terms tribes, first peoples/nations, aboriginals or minority ethnic groups are preferred to be used even in the official documents. In India, the Constitution uses the term "tribals" and the government has recognized tribals in the census as a separate demographic entity.

It is against this background, that this study aims at determining the career orientations of the students belonging to the indigenous tribes of Meghalaya to enable the young but growing group of career development service providers to develop culturally relevant career development programs.

2.8.2. Understanding indigenous psychology

Alternate to cultural psychology and cross-cultural models of psychology (see discussion above) is the indigenous model of psychology. Leong and Pearce (2014) underlined that in order to understand the trend of interest in a specific culture, indigenous psychologists seek to first create a culture-specific psychological science using individuals from a particular cultural population (e.g., individuals associated with any given region, nation, ethnicity, language, religion). However, it should be noted that indigenous psychologists are encouraged to use many different scientific methods, theories and interventions to study culture-specific phenomena. No one method or theory is regarded as superior to another and, often times, multiple different or even conflicting paradigms are to be utilized for the same purpose (Kim & Berry, 1993; Yang, 2000).

Leong and Pearce (as cited in Leong & Pearce, 2014) presented several steps to follow when theorists and counselling practitioners try to develop indigenous

psychologies. One step is to challenge whatever are existing models of their *validity* and *specifity* (see discussion above). Another step is for theoreticians and practitioners to also examine the cultural validity of their own models. Through these steps, culture-specific elements may be identified and culture accommodation may be used to develop more valid models.

Several examples were presented by Leong and Pearce (2014) to illustrate the process of moving towards Indigenous Psychology. For example Hardin, Leong, and Osipow (2001) show that the finding that Asian-Americans have "lower" career maturity as compared to European Americans was perhaps due to a bias in the tools that were used to measure the construct. The tool used seems to have used the *lack of independence* as indicative of lower career maturity. However, the authors challenged this by pointing out that *interdependence* is also an important recognized cultural difference in career maturity. Another relevant example, presented by Leong and Pearce (2014) was their investigation into attitudes toward achievement between American and Chinese students. In understanding these findings, it was important to note the difference in how the Americans and Chinese generally view failure. Chang (as cited in Leong and Pearce (2014) mentioned that Americans generally do not view failure as always a "bad thing", while in contrast, Chinese people generally view it as "always a bad thing". From such findings, the authors emphasize that care must be taken in reporting relationships between variables and in arriving at generalizations.

The challenge in Meghalaya literature is to identify specific cultural influences that may be unique among the people in this particular matrilineal society. These cultural influences, when identified, may provide insight in understandding the career orientation prevalent among the students such as the academic achievement motivation as investigated in this present study. Also, being a more collectivist

society, it may also be interesting to find out the prevailing career beliefs that may or may not necessarily influence career decision making negatively.

In Meghalaya where families are generally large and close knitted, decisions in terms of careers and livelihoods, are primarily made by the parents (Bareh, 2001). At times, the eldest in the clan, *Mama* or the 'big uncle' in Garo custom for instance, may also be approached for decisions related to livelihood (Meghalaya, n.d.). Going by this form of decision making, one's career choice may be influenced by such factors. Such social process need to be investigated in order to develop relevant approaches for career counselling. It is therefore crucial not to simply import western models of career counselling (Leong, 2002). Futhermore, the existing tools in India must also be tested among the indigineous populations in India for validity and cultural specifity as emphasized by Leong and Pearce (2014). The question is whether the adolescents from an indigenous community in India, following a matrilineal form of a society, differ from the other population in the country or not. Answers to such question require emperical evidence which may point to accommodating culture specific variables. Although studies based on indigenous career psychology are a fairly new development (Patton & McMahon, 1999), it is essential that these principles are taken into account both for research and practice.

2.9. Career Counselling Interventions and Related Theory

This is an intervention study. Hence this section focuses on reviewing the theory and method underlying approaches to intervention. Similarities as well as differences in outcomes and approach are presented in the following discussions.

Intervention from the root word *intervene* has been defined in general by the Merriam-Webster online dictionary as an action word that means to occur, fall, or come between points of time or events; or to come in or between by way of hindrance

or modification or to interfere with the outcome or course especially of a condition or process as to prevent harm or improve functioning. *Career Interventions* as defined in the Encyclopaedia of Career Development (2006) have been defined as any treatment or effort intended to enhance an individual's career development or to enable the person to make better career-related decisions. This is a broad definition that encompasses a wide range of intervention types, modalities, such as workshops, career classes, computer applications, and self-administered inventories. Given below is an overview of theoretical positions that underlie the development of interventions.

2.9.1. Situational Analysis

The *Ecological Theory* (Bronfenbrenner, 1979) on which situational analysis is based, assumes a socio-historical perspective of human development and encompasses the contributions of many theorists. Those whose views have contributed to this contextualized conceptualization of human interaction relevant to the domain of educational psychology include Urie Bronfenbrenner (1979, John Dewey (1938), and Vygotsly (as cited in Wertsch & Tulviste, 1992).

Bronfenbrenner's ecological model of human development represents forgotten, or previously disregarded, aspects of children's interaction with the world, in a multi-layered socio-cultural milieu (1979). Both Bronfenbrenner and Vygotsky considered human development to occur within the bonds of social relationships. This stance is consistent with the position taken by John Dewey, who contended that individuals' actions are affected by the whole situation in which they are involved and that people interact with one another to form the whole (Dewey, 1938). In effect, ecological theory has functioned as a catalyst for a massive change in direction for educational psychology (Sheridan & Gutkin, 2000). Bronfenbrenner's ecological

theory of human development, and its representation of reciprocal human interaction outlined in the following section, is fundamental to situational analysis.

Situational analysis is a framework for professional practice and research in educational psychology (Annan, 2005). Situational analysis entails a systematic investigation of complex problems or issues impacting on individuals and systems. Several features distinguish this approach: (1) collaborative, evidenced-based decision-making throughout the consultation process; (2) recognition and valuing of the multiple perspectives of participants in any given situation; (3) acknowledgement of the social construction of knowledge and understanding; (4) identification of elements of new solutions in existing situations; (5) recognition of the interaction between people and the multi-systems of their lives; (6) appreciation of the dynamic nature of human performance and (7) systematic application of a problem analysis.

Situational analysis has two main components, *style* and *structure*. Style refers to the *way* in which actions are undertaken and reflects the particular theoretical position taken in the ascription of meaning and the construction of new solutions. Structure denotes the steps taken by practitioners to gather, analyse and use information in the problem-solving process. Used to examine the ecology surrounding individual students or whole school systems, situational analysis helps interventionists develop a clear sense of direction in practice, encourages authentic engagement of people who know the world in various ways and provides a tool to ensure that practice is guided by legitimate knowledge or evidence. The framework ensures that practice has the evidence-based designation called for by Kratochwill and Shernoff (2004) who argued that intervention must reflect demonstrated efficacy in the specified contexts in which it occurs.

Situational analysis is based on an interpretation of the ecological perspective as one that recognizes the influence of environmental factors both internal and external to the individual. Development is influenced by events occurring at all levels. Bronfenbrenner (1979) encourages researchers to look beyond single settings and explore the interaction between settings. Interactions between the levels, and between settings within levels, are potentially as powerful as the events occurring in the immediate settings of the developing person. Differences in the behaviour of people within similar settings are explained through examination of the various meanings they ascribe to settings, their perspectives on the settings being influenced by their social and cultural background and their lived experience. Individuals do not remain passive in the process of development but engage with the surrounding world to co-determine their positions. Ecological practice is, therefore, situated in people's everyday lives.

One of the career-related researches that used Situational Analysis was conducted among the high school students in Samoa (Samoa Qualifications Authority, 2010). The Situational Analysis was conducted by consulting Post School Education Training (PSET) stakeholders which range from Government Ministries, Corporations, Non Government Organisations, Private Businesses and PSET providers and Focus Group Discussions (FGDs) with students of Secondary Schools/Colleges and final year students of PSET providers were identified to obtain information. The multipronged approach taken by this research was found to be effective to understanding the career related needs of the students as it had included a wide range of stake holders (Samoa Qualifications Authority, 2010).

2.9.2. Taxonomy of career interventions

Another approach to understanding career guidance interventons is to look for commonalities between different kinds of approaches. A good example of such a taxonomic approach emerges from the work of Dykeman, Ingram, Wood, Charles, Chen, & Herr (2001). These researchers compiled a comprehensive listing of career guidance interventions being provided to teenagers in the United States. Through consultation with career guidance practitioners and researchers from across the country, as well as through examination of research articles, grant reports, and program manuals, the researchers established a comprehensive list containing 44 interventions. These 44 interventions were then rated on five variables: Time, Mode, Control, Place, and Size, by a group of career guidance experts. These ratings were then cluster analyzed. The analysis produced a four taxon solution. The taxa were (1) Work Based Interventions (2) Advising Interventions (3) Introductory Interventions and (4) Curriculum Based Interventions. Each taxon is described as follows:

Taxon 1: Work Based Interventions is defined as "The class of interventions designed to promote student self-efficacy and motivation through sustained and meaningful interactions with work sites in the community" (Dykeman, Ingram, Wood, Charles, Chen & Herr, 2001, p.2). Historically, this class of interventions has been limited to Career and Technical Education students. However, one of the benefits of the School-to-Career movement in American education is that this class of interventions is beginning to be opened up to all students. Examples of activities or services under this taxon includes, Internship, Job Shadowing, Job Coaching, Job Placement, Mentorship Programs, Service Learning/Volunteer Programs, Work Based Learning Projects, and Work-Study projects.

Taxon 2: Advising Interventions is defined as "The class of interventions designed to provide direction, resolve impediments, and sustain planfulness in students about their goals for the future" (Dykeman, Ingram, Wood, Charles, Chen & Herr, 2001, p.2). This taxon was the only one of the school-based taxa described as delivered on an individual basis. Examples of activities or services under this taxon include Academic Planning Counseling, Career Focused Parent/Student Conference, Career Peer Advising/Tutoring, Career Map, Career Maturity Assessment, Career Counseling, Career Interests Assessment, Career Library/Career Resource Center, Career Passport/Skill Certificate, College Admissions Testing, Computer Assisted Career Guidance, Information Interviewing, Job Hunting Preparation and Referral to External Counseling/Assessment.

Taxon 3: Introductory Interventions is defined as "The class of interventions designed to awaken a student's interest in their own personal and professional growth" (Dykeman, Ingram, Wood, Charles, Chen & Herr, 2001, p.2). The modal Time descriptor for this taxon is "Strong Short" meaning short which emphasizes the introductory and preparatory nature of this class of interventions. Career Day/Career Fair, Career Field Trip, Career Aptitude Assessment, Community Members Teach In Classroom, Guidance Lessons on Personal/Social Development, Guidance Lessons on Career Development, Guidance Lessons on Academic Planning are some of the activities or services included in this taxon.

Taxon 4: Curriculum Based Interventions was defined as follows: "The class of interventions designed to promote core student knowledge and skills through means and content relevant to the world of work" (Dykeman, Ingram, Wood, Charles, Chen & Herr, 2001, p.2). The distinguishing characteristic of this taxon from Taxon 3 is its long-term nature. The interventions contained in this taxon represent the school-

based complements to the interventions that are part of the Work Based Interventions taxon.. The approaches activities, or programmes included in this taxon are Career Information Infused Into Curriculum, Career/Technical Education Course, Career Skills Infused Into Curriculum School-Based Enterprise, Student Clubs/Activities, Personal/Social Counseling Portfolio/Individual Career Plan, Recruiting, Referral to External Training Programs (Dykeman, Ingram, Wood, Charles, Chen & Herr, 2001)

2.9.3. Trait-matching approach

In this approach to career guidance, the key assumption is that when individuals are in jobs best suited to their abilities, their performance is at its best and they become productive as well (Bimrose, 2009). The primary assumption of this approach of course is that it is possible to measure both individual talents and the attributes required in particular job, which can then be matched to achieve a "good fit". This was the core concept which was emphasized by Parson (as cited Bimrose, 2009) who is regarded as the founder of this trait-matching approach. The same forum explaines that over the years, this approach has been used in career counselling practices and has provided careers practitioners with a clear rationale and framework for practice using the methods to assess individual suitability and capability for the labour market.

2.9.4. Solution-focused career counseling therapy

This approach is primarily concerend with efficiency and economy (Davis & Osborne, 2000). The attributes of this model as defined by Koss, Butcher, and Strupp (1986) include the following: time and goals are limited, a strong working alliance is developed, focus is maintained throughout the process, there is a high level of counselor activity which remains flexible, interventions are introduced promptly,

assessments are conducted early and rapidly, and finally, clients are encouraged to express their feelings.

The solution focused approach has been implemented in many schools in the US and in Europe. Research conducted using this approach as a form of a school-based intervention reported mostly positive outcomes (Franklin, Trepper, McCollum, and Gingerich, 2011). Outcomes in a pre and post comparison group study conducted among fifty-two high school students include students returning to their focus on academic goals and improvement in academic outcomes according to Franklin et al. (2007). Thease authors further reported that the outcome priority for schools continue to include problems such as poor academic performance and low career readiness which future researches should emphasize.

2.9.5. Other forms of career interventions

One-on-one counselling usually focuses on the individual's personal over-all aspect of career development (Masdonati, Massoudi, Rossier, 2009). This model aims to aid the individual in self-evaluation, self-understanding, understanding the world of work, planning of educational, career, personal, and social development (Arulmani, 2006). The number of sessions to be conducted may depend on the individual's career planning needs and progress. Also, the use of technology in any model of career counseling may be an area of consideration of service providers. However, researchers warn the user to be mindful of the quality and accuracy of information given on the sites (Harris & Franklin, 2008).

Career development related services vary depending on the individual's circumstances, but it has been known that career development is facilitated at the optimum level when services begin in elementary school and continue through adulthood (Whiston & Blustein, 2013). As a start, services for elementary age

students can include include initial activities which will enable a student to explore one's identity and an intial introduction to the various roles of being a worker. As individuals mature, there is now an increasing need to further facilitat self exploration and further understanding of the world of work. With the current global challenges of unemployment and rapidly shifting needs in the market place, the importance of career development is perhaps more crucial than ever. Increasingly, policy makers and government officials need to make informed decisions about optimal investments based on compelling rationales and strong empirical evidence for the most suitable intervention methods and theoretical persuasions.

2.9.6. Approaches to career intervention in Meghalaya

Career guidance services in Meghalaya on the whole are few and far between. When services are offered, they are usually in the form of career talks or workshops usually conducted as a once-a-year programme in some schools and colleges. Other inputs broadly related to career development are the career fairs organised by private companies from outside the state. These "career melas" and "career fests" come to Meghalaya and display information about various institutions from around the country and even abroad for students who are opting to get admission for further studies. However, studies on the effectiveness or impact of any of these career programmes have not been conducted. It appears that they are largely marketing efforts to promote courses and educational institutions.

With regard to using information technology as a form of intervention in Meghalya, not all the educational institutions have access to the internet and advance technology. In fact, in Meghalaya, only 1.39% of schools have computers (Department of Information System for Education, 2007). Furthermore, issues related

to the relevance and validity of psychometric data, tests, interpretation profiles, issues on privacy and confidentialitymust also be addressd.

2.10. Conclusion

This chapter has presented theoretical frameworks and constructs that are relevant to understanding orientations to work, education and career amongst high school students in Meghalaya. A key point that emerges is that a large proporation of these formulations emerge from schools of thought that are culturally different from the group under study. It is important therefore that these ideas are examined within the cultural frameworks in operational locally. Of particular relevance is the existing situation of low academic performance, low academic achievment motivation and high rates of drop out. This review of literature points to the possibility that if factors that influence career development are identified and addressed, the prevailing low academic achievment motivation might improve. Also of importance is the significantly high rates of rural-urban migration. This too calls for suitable career guidance interventions. Finally, and most importantly the literature shows that very few (if any) investigations have been conducted in relation to the career development of tribal high school students. These indications in the literature offer a platform upon which to develop a framework to better understand factors influencing the career development of tribal high school students in the state of Meghalaya, develop and trial test interventions that could address their career development needs and make suggestions that could have a postivite impact on their career development. The following responses from student who attended career guidance workshops conducted by the researcher some years ago provide an apt conclusion to this chapter:

One boy said*, "Miss, I do not know what to choose after high school, it will depend on my marks only"* (Male, 14, Urban) . Yet another shared, *"I can go study and work outside Meghalaya, but I do not want to be away from my parents"* (Female, 15, Rural). These remarks point to an urgent call for career development that will go beyond merely providing urban-centric career guidance. It is vital that cultural elements influencing career preparedness and academic motivation, as well as underlying career beliefs are taken into consideration.

3. Methodology

This chapter describes the various steps and stages this research followed. The Main Study occurred in 2012-2013, beginning with a series of Exploratory Studies in 2011-2012 to verify trends reported in the literature and to identify the variables to be examined through this research. This chapter provides an overview of the methods followed by this research including the designing of the Main Study, sampling procedures used (with a discussion of the attrition from which this study suffered), the dependant and independent variables examined, the rationale for and details of the Outcomes Assessment Battery compiled for the study, the rationale for and development of the intervention examined in this study, the experimental conditions and the approach to assessment and data analysis. Here, of particular interest, is the Index of Effectiveness (IE) used to examine the impact of the interventions. IE was specifically devised for this study and it could be a contribution to intervention research designs that aim at understanding impact and outcomes.

3.1. Exploratory Studies

The pilot study in this reseach was conducted on 200 high school boys and girls in five randomly selected schools in the East Khasi Hills District of Meghalaya. Various techniques of career guidance were tested, along with questionnaires and scales for the outcomes assessment battery. The sample's response to the interventions were noted and techniques that were too long or difficult to comprehend were dropped. Similarly, outcomes of this pilot study contributed to the compilation of the final outcomes assessment battery and provided insights for modifications of the intervention activities. The details of the findings of these Exploratory Studies are provided below.

3.1.1. Compilation of the intervention activities

The Exploratory Studies allowed the researcher to trial-test a wide variety of careeer guidance activities. An important outcome was the finalisation of the intervention to be used in the Main Study.

3.1.2. Compilation of the outcomes assessment battery

The Exploratory Studies allowed the researcher to trial test a number of scales and questionnares, make the necessary adaptations and compile the final outcomes assessment battery. It was also possible to estimate the time required to administer the battery, which found to be approximately 150 minutes.

3.1.3. The classroom setting

The Exploratory Studies revealed that classrooms had to be arranged in a specific way for optimal impact of the workshop activities. Based on this experience the following standard rules were developed for classroom arrangments across all the participating schools for the Main Study:

1. All student's bag were to be kept in a specified corner to maintain adequate space for working and avoid possible distractions during the workshop.
2. All students used only pencils for easy erasures when needed.
3. Only 3-4 students were asked to sit on one bench to give each student sufficient space for working and to avoid copying form one another.

3.2. Designing the Main Study

As shown by the literature review and the researcher's field experience, career preparation status, academic achievement motivation, career belief patterns, emerged as variables that were likely to be involved in the career development orientations of high school students. It further appeared that gender, location (rural or urban) and

socioeconomic status could mediate the manner in which the above factors manifested in the career development orientations of the high school students. Hence career preparation status, academic achievement motivation, career belief patterns were identified as the dependant variables for this study and gender, location (rural or urban) and socioeconomic status (SES) was identified as the independent variables for the study.

The first objective of the study was to determine manner in which the dependant variables manifested themselves across the independent variables. The second objective was to identify the relative effectiveness of two kinds of school-based career guidance programmes on the career development orientations of male and female, low, middle and upper middle SES high school students in rural and urban settings. To accomplish these objectives, the study was designed to be an intervention study focused on rural and urban schools located in the East Khasi Hills district of Meghalaya. Using a school-based career counselling intervention, a pre-post with control group intervention design was implemented to examine the relative effectiveness of the interventions on the career development orientations of high school boys and girls.

3.3. Sampling Procedure

This section presents the rationale and description of the sample selected for this study.

3.3.1. Rationale for sample selection.

Tenth grade is the tenth year of school post-kindergarten in many parts of the world, as it is in Meghalaya as well. The students are usually 15 to 16 years of age, depending on when their birthday occurs. During this adolescent period students are

faced with hosts of new challenges (Santrocks, 2004). They have to manage major biological, educational, and social role transitions concurrently (Noam, Miller, & Barry, 2002). Adolescents must manage not only pervasive physical changes but difficult educational transitions as well (Bandura, 2001). These educational transitions have a strong influence on the career development trajectory of the individual. For example in the Indian context, students at this educational stage have to choose one of the following educational streams for higher secondary education: science, commerce, humanities or technical education. Choice of a particular stream "casts the die" as it was for career development. For example, if a student were to choose the commerce pathway, he/she cannot later take up a science based career. If a student chooses technical education (in an industrial training institute or polytechnic), he/she more or less opts out of the pathway toward university education. This obviously, makes career counselling important. Career counselling provides the access to the skills and resources that students need to overcome obstacles and prepares them to make choices relevant to their personal potential (Fitz, 2010; Bimrose, 2010).

Furthermore, many high school students think that career planning is something that begins once they have entered college (Bardick, Bernes, & Magnusson, 2006). On the contrary, career planning is a process that begins before high school, and most naturally should continue into the college years. Career planning, in fact, is an ongoing process that allows the career chooser to rethink and re-evaluate personal attributes and career options as he/she has experiences, and grows and develops (Institute for Community Inclusion, 2012).

3.3.2. Identification of the population for the study.

A list of all the schools in the targeted location, East Khasi Hills District, was obtained from the office of the Inspector of Schools, Government of Meghalaya. This comprised a total of 256 schools and was named as List 1 and was taken to be indicative of the population of schools in the targeted region. Of these 256 schools, 157 schools were found to offer education until class 10 under the Meghalaya Board of School Education (MBOSE) and these schools were listed as List 2. A third list of schools was then compiled based on the following exclusion criteria:

1. With a view to ensuring that participants in the study were not already influenced by any kind of formal career guidance, schools where the present batch of Class 10 had already received some form of formal career guidance were excluded from the study.
2. Schools having less than 10 students in class 10 were excluded with an aim to maintain the average representation of students in each school participating in this study as well as to maintain the economy of effort when executing the study.
3. In order to reduce factors which may influence career preparation and motivation of students, as well as the execution of the study, schools which were known to be poorly managed were also excluded from the study. This included not having basic facilities such as library and adequate playground, classrooms not having comfortable and sufficient benches for seating and writing.

Out of 157 schools, 26 schools indicated that they had already received career guidance in some form; 21 schools had less than 10 students; 51 were poor functioning schools. The remaining 59 schools, were named as List 3 and taken to comprise the population from which the sample for the study was drawn. List 3 was categorized as urban and rural schools. This was done with an aim to compare the

variables collected from both the areas. In this list, schools which are government, government-aided, and unaided schools were identified in order to avoid the bias of school-type to influence the selection of the sample.

Table 3
Overview of Schools and Projected Number of Students in List 3

	Government Schools (number of students)	Aided Schools (number of students)	Unaided Schools (number of students)	Total (number of students)
Urban	0 (0)	24(960)	6 (240)	30 (1200)
Rural	0 (0)	28 (1120)	1 (40)	29 (1160)

As indicated in Table 3, the total numbers of schools in the urban and rural locations from the 59 schools comprising List 3 are 30 and 29 respectively. Since records of the exact number of students in each school were not available at the time of designing the study, the number of students in the population was calculated based on an assumed average of 40 students per school. This amounts to an assumed population of 2,360 students: 1200 in the urban and 1160 in the rural schools. The size of the sample was then derived keeping a confidence interval of 2.82 and confidence level of 95%. The derived sample size for urban and rural locations is shown on Table 4.

Table 4
Derived Sample Size

	Assumed size of Population	Derived sample size
Urban	1200	406
Rural	1160	392
Total	2360	798

3.3.3. Designation of the sample based on stratified random sampling

There are two types of school based career counselling programs to be tested in this study namely: Three-Day intervention program and One-Day intervention program. Hence the study groups comprised two experimental groups: the Three-Day intervention group and One-Day intervention group with matched controls. A further objective of the study was to examine the differential impact of the intervention on the independent variables of geographical location (urban versus rural) and gender (boys versus girls), and socioeconomic conditions (low, middle, and high). Hence, the sample was subdivided to ensure that the subgroups in the study would be represented. Stratified random sampling using the lottery method was used to select the sample for each subgroup. This list was used to contact the schools to obtain their permission and also ascertain their suitability for the study (see Appendix 5 and 6).

It may be noted that some schools refused to participate in the study due to reasons such as having many activities during the year, not being able to complete the syllabus, long duration required for testing and intervention for the study, or having holidays ahead of the expected schedule. In such cases, the school name was put back into the pool and another school was randomly drawn.

3.3.4. Attrition of the sample

After the final pool of schools was finalised and the sampling completed, schools withdrew from the study at very short notice (sometimes overnight or in some cases during the intervention). The reasons given were change in school schedule, shortage of time and necessity of completing syllabus, and even an unexpected *bandh* called for by a certain outfit. By this time, the study was already in progress and it was not possible to replace the schools that withdrew. Hence, the study was completed with two urban schools and two rural schools with one matched controls

for the Three-Days intervention program, and three rural schools and three urban schools with one matched controls for the One-Day program. A total of 14 schools participated in this study amounting to a total of 492 students (151 in the Three-Day experimental condition, 156 in the One-Day experimental condition and 86 and 99 in the control conditions respectively).

3.4. Variables

3.4.1. Socioeconomic Status

As argued in Chapter 2 (2.4), socioeconomic status is known to mediate career development orientations. It has been well established for example, that high school students from lower SES homes have a lower levels of readiness for career preparation and higher negativity in their career beliefs (Arulmani, 2006b). Hence SES was taken as an important independent variable for this research.

3.4.2. Gender

The literature has consistently indicated that strong interactions are present between gender and career development both in terms of opportunity availability and career beliefs pertaining to gender (Creed, 2003). Also, the location of the study is predominantly matrilineal in social structure. Gender therefore was included as an important independent variable in this study.

3.4.3. Location: Rural and Urban

It is also well known that orientations to career development vary in rural and urban areas (Bennett, 2008). Meghalaya is a predominantly rural state in which over the recent past significant changes in occupational structures have been noticed leading to an increase in rural-urban migration. Hence location was included as an independent variable for this research.

3.4.4. Career Preparation Status

As discussed in Chapter 1 (1.4 & 1.5), apart from not having a system of career counselling in the state of Meghalaya, issues such as insurgencies, high drop-out rates, and low pass percentage in matriculation exam seem to be some pertinent factors affecting the career preparation of high school students in Meghalaya. Keeping this in mind, career preparation status was surveyed as a dependant variable in this study.

3.4.5. Academic Achievement Motivation

It was earlier argued (Chapter 2.2) that the level of academic achievement motivation has a direct relationship with the students' perception of their goal as much as their career aspiration. In Meghalaya it has also been noted that the motivation to continue to engage in educational pathways is dwindling. Therefore study was designed to investigate this relationship academic achievement motivation and career development.

3.4.6. Career Beliefs

The impact of career beliefs on Indian high school students generally and with specific reference to Meghalaya were discussed earlier (2.3). Differences in career beliefs across socioeconomic status were reported and differences in career aspiration were also presented. This study identified career beliefs as a dependant variable to be examined in terms of their associations with their academic motivation and career preparation status.

3.4.7. Controlled variables

1. <u>Number of participants</u>

The effectiveness of a group intervention could be influenced by group size. Hence an average of 30 to 40 participants comprised one set of participants for each

experimental group. This was observed in order to maintain the quality of classroom management and optimize the learning experience during the intervention.

2. Classroom arrangement

Each classroom used in the study was arranged in such a way that students were at least two to three feet apart. This was strictly maintained in order to provide convenience for the students in answering the tests and in working with the worksheets and other activities required during the intervention. All bags were kept in a specified space in the classroom in order to make sure that students had sufficient table-top space and were free from any disturbance during the workshops. All students used pencil only in all the activities throughout the study, in order to allow for erasures in case necessary.

3. Duration for answering pre and post tests

The time allotted for answering the tests was 2 hours and 30 minutes. This duration was followed as per the findings suggested from the Exploratory Study.

4. Educational level

For this study, only class 10 students were included. It has been earlier argued (1.10) that class 10 is a crucial stage for the adolescents in terms of their career preparation. It was therefore an objective of this study to find out the relative effectives of two types of intervention for this class.

3.5. Compilation of the Outcomes Assessment Battery

In the East Khasi Hills district of Meghalaya, very little research related to career has been conducted and no dissertation was found till date to have tested a career counselling intervention. The present study therefore developed a battery of

tools to gain insights at the base line, pre-intervention stage and later at the post-intervention stage.

3.5.1 Rationale and method of development

1. Trial testing sample

As indicated at the beginning of this chapter, an Exploratory Study was conducted among 200 high school boys and girls in 5 randomly selected schools in East Khasi Hills District, Meghalaya. This group has been referred to in this writing as the Trial Testing Sample. The outcomes of this pilot study have contributed to the compilation of the test battery and pointed to the modifications that were necessary.

2. Criteria for selection of questionnaires and scales

The following criteria were set to assess the suitability of the measures, keeping in mind the fact that the Main Study was designed to focus on a tribal sample.

a. Cultural relevance to the target group.

b. Age appropriateness of the questionnaires.

c. Understandability of test items at the language level of the sample.

d. Length of the scales was an important factor kept in mind given the age of the sample. It was decided that each test chosen should not require more than 20 minutes to complete, since it was anticipated that the entire battery would be quite long.

3.5.2. Selection of the measure to assess Socioeconomic Status (SES)

1. Scale identification and characteristics.

It has been argued above that SES has a significant influence on career development orientations. It has also been pointed out that SES is a multidimensional construct that goes beyond income levels. This study also aims at comparing rural and urban groups. Based on these criteria a literature survey pertaining to Indian

scales that measured SES was conducted. The Socioeconomic Status Questionnaire (SESQ) (Arulmani, 2006b) was selected as the one most appropriate for this study.

The SESQ (Arulmani, 2006b) has been developed on the understanding that socioeconomic status (SES) is a complex concept and has been variously defined. Earlier definitions were restricted to the economic aspect and SES was evaluated on the basis of income levels. The author of the scale pointed out that the list of variables indicating SES has subsequently been enlarged to incorporate a number of other factors that contribute to a person's position along the continuum of socioeconomic status (e.g., Kuppuswamy, 1959; Srivastava, 1991; Kapoor & Singh, 1998; Marks, McMillan, Jones, & Ainley, 2000). Incorporating such indications in the literature, SESQ obtains socioeconomic status information along multiple dimensions as follows: parents' education, parents' occupation, material possessions, family income per month, type of housing, access to basic amenities (e.g., electricity and water) and reading material available in the home. Each of these categories was given a weighted score and summated to obtain a total SES score. Structured around 30 themes, the SESQ follows a mixed item format ranging from scaled responses, multiple choice answers and checklists. A detailed instruction manual provides guidelines for scoring the minimum obtainable score on the SESQ is 23 and the maximum is 240.

2. Psychometric properties

Standardised on an Indian sample of 6530 males and females from 13 different rural and urban regions of India, the SESQ provides norms that allow the classification of SESQ scores into five socioeconomic levels: Low, Lower Middle, Middle, Upper Middle and High SES levels. The author reports a positive, statistically significant correlation of .84 between external criterion estimates and

respondents' SESQ scores. A three month test-retest reliability showed a reliability coefficient of .91.

3. Trial testing and adaptation

The SESQ was administered to the Trial Testing Sample. In addition to answering the questionnaire, respondents were asked to encircle any item they did not understand. The performance of the sample helped the researcher to identify items in the scale that respondents found confusing. Minor alterations were made to a few of the items to address this potential difficulty. It also emerged from this trial that it was possible that some of the information tapped by the SESQ (e.g., Parent Income) may not be available to the sample. Note was made that this information may have to be elicited from other sources during the Main Study. Due to this reason, the simplification of the SES levels to Low, Middle, and High SES was followed.

4. Validation of norms for Meghalaya

Norms for interpretation of SESQ scores into SES levels were generated from the Trial Testing Sample. Only very minor deviations were found between the Meghalaya norms and the original SESQ norms for the rest of India. An illustrative sample of items is shown in Appendix 9.5.

3.5.3. Selection of the measure to assess Career Preparation Status

1. Scale identification and characteristics

Career preparation status tells us how ready the students are to make career decisions. A review of the literature showed that the most suitable tool to measure career preparation status is the Career Preparation Status Questionnaire (CPSQ) (Arulmani, 2006a) which has been developed specifically for this purpose.

The CPSQ (Arulmani, 2006a) was designed to gather information related to 5 categories: General Orientation (GO), Self-Understanding (SU), Understanding the World of Work (WOW), and Career Preparation (CP), and Career Alternative (CA). The questionnaire provided information about the respondent's career preparation status. The CPSQ comprises 31 items and follows a mixed item format ranging from scaled responses, multiple choice answers and short answers. A detailed instruction manual provided guidelines for scoring. The minimum obtainable score is 0 and maximum is 86.

2. Psychometric properties

Standardised on an Indian sample of 6530 males and females from 13 different rural and urban regions of India, the CPSQ provided norms that allow the classification of CPSQ scores into five career preparation status levels: Low, Low Average, Average, High Average and High career preparation status. The author reports a positive, statistically significant correlation of .84 between external criterion estimates and respondents' CPSQ scores. A three month test-retest reliability showed a reliability coefficient of .92.

3. Trial testing and adaptation

The CPSQ was administered to the Trial Testing Sample. The students were found to have the tendency to omit answering the items which require explaining/listing of answers (e.g., items number 1, 2, 9, and 16). This was noted for the final administration of the test. No further adaptation was done.

4. Validation of norms for Meghalaya.

Norms for interpretation of CPSQ scores into career preparation status levels were generated from the Trial Testing Sample. Only very minor deviations were found between the Meghalaya norms and the original SESQ norms for India.

3.5.4. Selection of the measure to assess Academic Achievement Motivation

1. Scale identification and characteristics.

The Academic Achievement Motivation Test (AAMT) tool has been designed for the purpose of identifying how much a boy or a girl is motivated in aspects related to his/her academic experience within the school and various situations connected to their studies (Sharma, 2005). There are 38 items in the test anchored to a binary-choice response format marked as A and B. Respondents were required to select one of these two choices. The items were designed to elicit responses from the students that will determine their level of academic motivation. The minimum obtainable score is 0 and the maximum obtainable score is 38.

2. Psychometric properties

Standardised on an Indian sample of 100 males and females from various schools in Patiala, India, the AAMT provides norms that allow the classification of AAMT scores into three levels: Low Motivation, Average Motivation, High Motivation. The author reported a positive, statistically significant correlation of .69 between external criterion estimates and respondents' AAMT scores. A three month test-retest reliability showed a reliability coefficient of .79 for boys and .80 for girls.

3. Trial Testing and adaptations

The trial testing sample could answer the test within the expected time frame. The items were found to be simple and understandable and at the level of the sample.

The test was originally developed in Hindi and therefore permission for translation to English was sought and subsequently granted by the National Psychological Corporation, Agra, India, the test publisher (see Appendices 3 and 4).

A qualified translator was identified who worked on the item-wise translation of the AAMT. The following criteria were set for selection of the translator: a. Fluency in English and Hindi Languages, b. Knowledge of Psychological testing, c. Work experience among high school students for at least two years. The translated version was submitted to the supervisor for approval before the trial test was administered.

4. Validation of norms for Meghalaya.

Norms for interpretation of AAMT scores into AAMT levels were generated for Trial Testing Sample. Only very minor deviations were found between the Meghalaya norms and the original AAMT norms (see Appendix 9.4)

3.5.5. Selection of the measure to assess Career Belief Patterns (CBPS)

1. Scale identification and characteristics.

The Career Belief Patterns Scale (CBPS) (Arulmani, 2011) has been developed specifically to understand career belief patterns in India. Since, no equivalent scale was found, this scale was selected to measure career beliefs for this study. The CBPS aims at identifying the patterns of career beliefs across various themes such as Control and Self Direction, Culture and Norms, Fatalism, Persistence, Prestige and Social Status, Proficiency, Self Worth. Separate forms have been developed for boys and girls.

2. Psychometric properties

The CBPS is a standardised scale comprising 40 vignettes reflecting real life career development situations. Response choices are structured on a seven-point scale with 1 anchored to the semantic label ‘‘I would not agree with this at all’’ and 7 anchored to the label ‘‘I agree completely’’. Interim numbers from 2 to 6 are linked to semantic labels that reflect increasingly higher negativity in career beliefs. Therefore, higher scores on this scale reflect higher levels of negativity toward career

development. The scale was designed to yield a global career belief patterns score as well as sub-scores for the seven factors it measures. The CBPS has a 6-week test–retest reliability of .84. It has norms for interpreting the scores of Indian males and females in the age range of 13 to 22 years for low, middle and upper-middle SES groups. Percentile norms are presented as low, low-average, average, high-average, and high, where low refers to the lowest range of negativity in career beliefs and high refers to the highest range of negativity tapped by the CBPS.

3. Trial Testing and adaptation.

The trial testing sample was able to answer the scale items within the expected time frame. A few students found the tool to be quite lengthy but understandable. The specific items that were confusing were taken note of for the Main Study. No further additions or adaptations were made to the original tool.

5. Validation of norms for Meghalaya

Norms for interpretation of CBPS scores into CBPS levels were generated for the Trial Testing Sample. Only very minor deviations were found between the Meghalaya norms and the original CBPS norms (see Appendix 9.2).

3.5.6. Selection of the measure to assess guidance impact

1. Scale identification and characteristics

It was noted that a weakness of the present design was that a large number of the scales used in the assessment battery were drawn from the same author (Arulmani, 2011). Therefore a different scale, the Measure of Guidance Impact (MGI) was identified to measure the outcomes of the intervention. The Measure of Guidance Impact (MGI) (Christophers, Stoney, Lines, & Kendall, 1993) addresses four categories of guidance widely used within the guidance service: decision making, opportunity awareness, transition skills, and self-awareness.

The MGI gives an overall score, showing the extent of change that may be attributed to the effect of the guidance they have received. This is achieved by measuring the level of career awareness that clients demonstrated when they come into guidance, compared with the level they attain afterwards. The instrument was intended for use in agencies offering any of a range of guidance services, from simple provision of information to further career counselling. The extent of change provides a measure of the impact of the work of career guidance agencies.

The MGI scale comprises 25 items. The minimum obtainable score is 1 and the maximum obtainable score is 125. The scale is anchored to a five point rating scale for each item. A score of 1 for a question indicates that clients disagree strongly with the statement presented and 5 indicate strong agreement.

2. Psychometric Properties.

Supporting evidence for the reliability of the MGI was found in a test-retest study. The statistics for both the MGI Forms 1 and 2 is .89 which indicates adequate reliability.

3. Trial Testing and adaptation

During the pilot study, the students could answer the tool with clear understanding of the items. No questions were raised by the students relating to the content of the tool.

4. Validation of norms for Meghalaya

Following these observations during the trial test, no further changes and adaptation have been made to the original MGI tool (see Appendix 9.3).

3.5.7. The final Outcomes Assessment Battery

The final Outcomes Assessment Battery composed for this research comprised the following tools:

1. Socio-economic status Questionnaire (SESQ) (Arulmani, 2006)
2. Career Preparation Status Questionnaire (CPSQ) (Arulmani, 2006)
3. Academic Achievement Motivation Test (AAMT) (Sharma, 2006)
4. Career Belief Patterns Scale (Arulmani, 2011)
5. Measure of Guidance Impact, MGI (Christophers, Stoney, Lines, & Kendall, 1993)

3.6. Development of Intervention

This section describes the design and development of the intervention tested in this study and the methods used to implement the study. The subsections covered the rational for the interventions, and the format for the interventions. Specific details pertaining to the activities in each module and worksheets used for the interventions are provided in Appendix 8.1 and 8.2. The section then moves on to the implementation of the study and describes the sampling procedure used, administration of the interventions, collection of data and difficulties encountered during the study.

3.6.1. Development and description of the intervention

The curriculum used as the intervention program in the present research is an adaptation of the *Jiva Approach to Career Guidance and Counselling*, developed by The Promise Foundation, Bangalore, India (Arulmani, 2010). *Jiva* is an approach to career guidance designed to address the career and livelihood planning needs of Indian young people. It draws upon non Western ideas of work and career. As the author reports (Arulmani, 2010) the term *Jiva* means –"life" in most of the Indian languages, and the Jiva program is based on the premise that a healthy career is integrally connected to one's life. All the tools that comprise the Jiva approach (e.g., assessment tools, occupational lists, learning cards, career dictionaries, career

information and student activities) have been developed with specific reference to India. Appendix 7 provides a brief overview of the different materials used by the Jiva method.

Jiva draws upon three theoretical positions which have been discussed in the Review of Literature, namely: The Developmental Approach to Career Guidance (2.1), Social Cognitive Theory (2.3) and the Cultural Preparation Process Model (2.7.5). Jiva is an activity based, student-mediated approach that delivers career guidance using a four-step process that the programme refers to as the Jiva Career Discovery Path (Arulmani, 2010). Figure 3 presents the Jiva Career Discover Path diagrammatically.

Figure 3
The Jiva Career Discovery Path

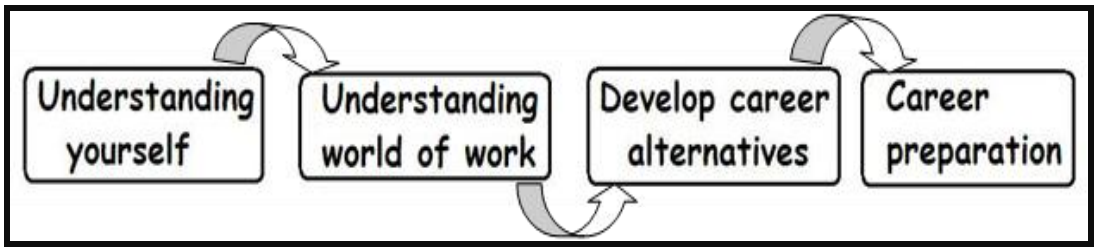


Figure 3 shows the four major components of the Jiva intervention: promoting self-understanding, broadening the career chooser's knowledge of the world of work, helping the career chooser develop career alternatives and finally helping the career chooser develop skills for realising his/her career alternatives. Given below is a brief description of the activities related to each of the steps in the Jiva Career Discover Path:

1. Self-Understanding

A wide range of activities are used to help the student identify his/her interests, aptitudes and potentials. The student also engages in activities that sharpen his/her

sensitivity to how career beliefs could hamper or hinder the realisation of personal potentials.

2. Understanding the World of Work

During this part of the workshop, students are exposed to 164 careers. Students learn career names, career definitions, tasks related to that career and educational pathways leading to that career. This section also sharpens students' sensitivity to the meaning and purpose of work, environmental sensitivity and skills for making decisions.

3. Developing Career Alternatives

During this section, based on their learning from earlier sections, students identify 3 to 5 careers that are related to their potentials and preferences.

4. Career Preparation

During the final step in the process, students learn the skills to optimise their career alternatives by developing five-year career paths, learning how to cope with career barriers and ultimately achieve their career goals.

The workshop includes individual activities that require the student to work individually by himself/herself, large group activities involving the whole group, and small group activities. These activities are supported by learning cards and activity sheets, and group presentations. This group work, as discussed in an earlier chapter (2.2.4) was found to be effective especially among students in this study since they are largely from a collectivist society and prefer to work in groups (2.9.1). Activities that would increase the students' career preparedness include discussions on how to appear in an interview, preparing bio-data, understanding available schemes for education/occupational development and other such career development related activities. Appendix 8 provides an overview of the Jiva method.

3.6.2. Rationale and justification for selection of the Jiva method as the intervention for this research

A thorough review of the literature revealed that the Jiva Approach is perhaps the only approach that has been developed specifically for Indian clientele. It is an approach that by design is committed to integrating Indian/Asian work-values into career guidance. Further, the approach to assessment taken by this method is based on a mixed methods approach that incorporates psychometric devices with qualitative information related to the student's culture, academic history, hobbies and accomplishments. The interpretation of the results of the assessment are not based on a normative approach but instead on an individual based, person centred approach. Interpretation is based on intra-personal factors rather than on normative, inter-personal standards. Also, the careers and their definitions compiled within this method on Indian data bases, reflect Indian educational pathways. Each of these features of the Jiva method are crucial for a culturally-resonant delivery of career guidance services, particularly in contexts such as Meghalaya. Also, the researcher is a fully trained practitioner of the Jiva method and has extensive experience in applying the method at grassroots levels.

Finally, the authors of the Jiva approach have welcomed and called for research into this method to identify its weakness and delineate markers for improvement (Arulmani, 2010). It is against this background that the Jiva Method was selected as the intervention to be studied in this research.

Furthermore, the design of this research keeping the realities of Meghalaya in mind, set the following criteria for the selection of an intervention.

1. Given the large numbers of individuals who are in need of career guidance in the Indian context and especially in Meghalaya, individual based counselling methods are not practical and are expensive. The felt need is for an intervention that would function effectively within the following constraints in the field:

a. Severe resource restrictions (e.g., shortage of skilled manpower, time constraints)

b. The numbers of students who require careers guidance in one academic year runs to many thousands. This makes individual based counselling uneconomical.

c. Assessments of careers interventions have indicated that group interventions have the highest cost-benefit ratio (Oliver & Spokane, 1988).

2. In addition, the requirement in India, as in Meghalaya is for school based career guidance programmes that can be implemented within a classroom setting. Ideally, the mainstreaming of a career guidance programme would be more likely if it lends itself to being integrated into the regular school time table.

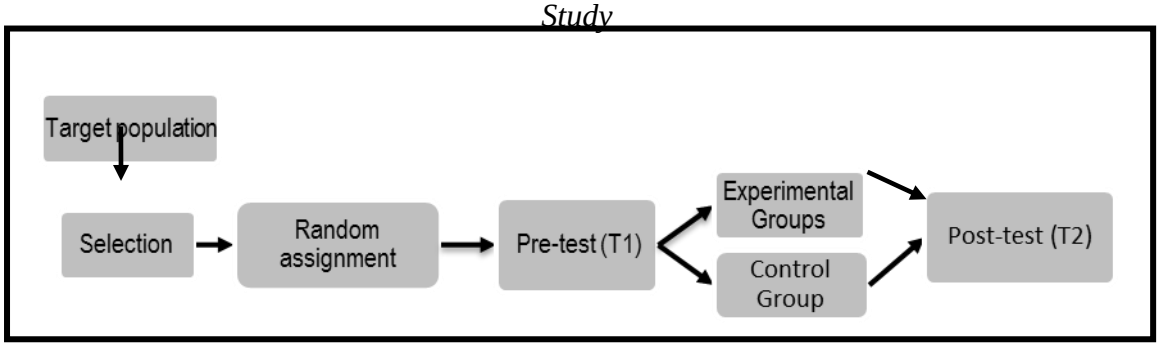
Hence the researcher's experience of the felt need in Meghalaya points to a method of guidance that could be applied as a group intervention at the high school level, within a typical classroom setting for a maximum of 45 students per group, that can in the long run be implemented within the regular school timetable. The researcher's experience with the Jiva Method, the absence of other such methods, and the apparent suitability of the intervention for the felt needs in the context of Meghalaya, led to the selection of the Jiva Method as the intervention that would be investigated in this study.

3.7. Research Design

3.7.1. Experimental design

A pre-test post-test quasi experimental design was selected as most appropriate for this study. The sample was randomly allocated to experimental and control conditions. Figure 4 further illustrates the design used in the study:

Figure 4
Design of the Study



As illustrated in Figure 4, after identifying the target population for the study, a sample was drawn and was randomly assigned to experimental and control conditions. All the groups were administered the outcomes assessment battery before the beginning of the intervention (Time 1: T1). Only the experimental group was given the career counselling workshop as the intervention for this study. After the intervention, post-intervention assessment was conducted once again, using the same assessment battery on both the experimental and control groups. The control groups were provided a career counselling programme after all the data had been collected.

This study tested two group interventions and compared their relative effects on the career orientations of the students as seen in changes on the dependant

variables of career preparation status, academic achievement motivation and career beliefs, along with an external tool, the Measure of Guidance Impact.

3.7.2. The experimental conditions

As indicated in the literature review, the duration of the intervention plays a critical role in the effectiveness of the intervention. At the same time, schools and other institutions catering to the target group of this study have difficulties in allocating sufficient time for career guidance programmes. Hence the impact of the duration of the intervention on the dependant variables under study was taken as an experimental condition for the present research.

1. Three-Day experimental condition

This condition followed the standard design of the Jiva programme as described above and as per the design of the Jiva method, was administered over three days. The intervention program provided all the components of the curriculum. The intervention was provided immediately after the Introduction session followed by the administration of the Pre-test. On the other hand, the post-test was also administered immediately after the intervention. Excluding the time used for pre-test and post-test, the actual intervention ran for approximately 12 hours (see Appendix 8.1). This group had a matched control which did not receive the intervention.

2. One-Day experimental condition

The one day experimental condition was a modified version of the three day programme. While it included the major components of the program, the number of activities was reduced. This condition included the pre and post intervention administration of assessment battery. This group was called the one day Experimental Group. After subtracting the time taken for the pre and post

administration of the assessment battery, this group received a career guidance intervention that was for duration of 6.5 hours (see Appendix 8.2). This group had a matched control which did not receive the intervention.

3.7.3. Implementation of the study

1. Workshop facilitators

The workshops were facilitated exclusively by the researcher. A paid assistant was recruited for the purpose of translating concepts which were difficult to understand in the local language and also for recording common questions raised by the students during the workshop. The assistant was a post graduate in Counselling and Psychology and a certified facilitator of the Jiva programme. The suitability of the assistant was vetted by the author of the Jiva programme.

2. Structure and duration

In its original form, the Jiva programme is designed to be delivered over 3 days amounting to a total of approximately 18 hours. In the standard format, the programme is to be delivered over a period of approximately a month providing a gap of about a week between the three workshop days. The duration of the various activities in the programme range from 10 minutes to 180 minutes. Five minute breaks are provided at the end of each activity, or in between activities, as necessary. This format was adopted for the present study.

3. Session format

Day One began with a broad introduction followed by the pre-intervention administration of the Outcomes Assessment battery. Each subsequent day began with a twenty minute introduction of the whole workshop which was followed by the activities as per the planned schedule (See Appendix 8.1 and 8.2) for details of the schedule). Short breaks and Lunch breaks were provided in between activities. Ten

minutes at the end of the module were devoted to summarising the activities and emphasising the learning outcomes. Day five concluded with the post-intervention administration of the Outcomes Assessment Battery. For the Control Group, pre-intervention assessment was conducted around the same time as the Experimental Groups, and post-intervention assessment was conducted soon after the assessment was completed for the Experimental Groups.

4. Conclusion of the intervention

At the end of the intervention, the researcher took a few more minutes to complete the following:

a. Obtain informal feedback from the students regarding the usefulness of the intervention they had experienced. Although the feedback was not meant for further analysis, it has served as a general indicator that the study was in the right track. For instance, the importance of career guidance was strongly supported across all the schools in the study followed by requests to come back and providing similar career programmes for other students as well.

b. Encourage them to continue to discuss their career plans with their parents.

c. Provide contact information to the students for future follow-up and queries related to their career development.

d. Visited the full Control Group in their class-rooms and requested them to attend the second testing (Time 2) to be held the next day.

3.8. Approach to Assessment and Data Analysis

3.8.1. Overview

Assessments were conducted at two stages in the research as follows:

1. Time 1 (T 1): At the beginning of the research to obtain baseline information on all the variables under study.

2. Time 2 (T 2): One or two days after the interventions, to measure changes in the variables being influenced.

Pre and post intervention changes were measured for the following dependant variables (also called outcome measures):

- Career Preparation Status
- Career Belief Patterns
- Measures of Guidance Impact
- Academic Achievement Motivation

Changes in the dependant variables were observed against the following independent variables:

- socio economic status
- gender
- location: urban rural
- duration of the intervention: one day or three day

3.8.2. Statistical tests and tools:

1. Baseline, pre-intervention analyses:

As indicated above, standardised questionnaires were used to collect base line information pertaining to the career development orientation of the sample. The sample's responses to the scales and questionnaires used were scored as per the structure and norms of the instruments that were used. A combination of descriptive and inferential statistical procedures was used for data analysis.

- Descriptive statistics such as mean and standard deviations were used to describe the status of the sample on the different variables at the pre-

intervention stage. Percentages were also used in order to compare scores across all the scales.

- Using Pearson's test of correlation, the relationship between the variables being studied was analyzed.
- The paired sample t-test and the independent t-test were used for each of the dependent variable parameters examined, and within the various independent variables such as location, gender, and socioeconomic status condition
- A series of 2 x 2 Analysis of Variance (ANOVA) was used to determine the main effect and the interaction between the variables.

The performance of Three-Day Intervention and its control and the performance of One-Day Intervention and its control at Time 1 on the different scales in the battery were analysed to establish non-significant pre-intervention differences on the dependent variables (outcome measures).

2. Difference Score

Data from the post-intervention analyses indicated that pre-intervention and post-intervention scores did not have equal variances and equal reliability. Post-intervention test scores were not normally distributed. Hence the difference score (T2 minus T1), was used for all analyses. The literature indicates that in such situations the difference score maybe reliably used (e.g., Dimitrov & Rumrill, 2003). Most importantly, the research question was interested in the magnitude of change and therefore a Difference Score was the more appropriate measure.

3. Analyses of Difference Scores

The Difference Score calculated from the raw score were converted to a percentage score to allow for comparison across the different scales.

- Percentage Mean Difference Score were used for all further analyses.

- The paired sample t-test, and the independent t-test, one-way ANOVA using Mean Difference Scores was used to examine differences at T1 and T2.
    - Since the students in the Pre- and Post workshop assessment are not independent in each of the Three-Days Intervention and One-Day Intervention, a paired t-test was used to test the null hypothesis of NO impact of the intervention. The paired differences were statistically analysed in terms of Means and Standard Deviations (SD), and probabilities calculated. The probability, $p < 0.05$ was considered statistically significant to reject the null hypothesis. This analysis was done separately for the experimental and control groups, for Three-Day and One-Day Intervention workshops.

Subsequently the means and SD of means in the Three-Day experimental group were compared with the means and SD of means in the experimental group using the Independent t-test, to test the Null Hypothesis that there is NO additional impact of the Three-Day Intervention compared to the One-Day Intervention.

Thus, both paired and independent t-tests were used for each of the dependent parameters examined, and within the various independent variables such as gender, SES and location, wherever possible.

4. Index of Effectiveness

An "Index of Effectiveness" was devised for this study in order to further examine the effectiveness of the interventions The Index of Effectiveness was computed as follows:

- The norms of each scale were used as the frame of reference to compute IE.

- Each score-range was given one IE value. Movement from one score-range to the next score-range was identified as an increase of one IE value.
- To illustrate, the Career Preparation Status Questionnaire (CPSQ) is taken as an example. As per the norms of this scale, scores of 0 to 19 indicate Low Career Preparation Status, 20 to 36 indicate Low Average Preparation Status, 37 to 50 indicate Average Preparation Status, 51 to 58 indicate High Average Preparation Status and 59 to 86 indicate High Preparation Status. Accordingly, if Mean CPSQ score was at 14 at T1 (Low Career Preparation Status) and Mean CPSQ score moved to 23 at T1, this indicates an IE of 1 point. A more detailed description for each scale in the outcomes assessment battery is provided below:

A. For the Career Preparation Status Questionnaire (CPSQ), five levels were determined namely Low, Low Average, Average, High Average, and High. The increase of score value from one level to the next level was given a value of 1. This value has been termed as Index of Effectiveness (IE) in this writing. Therefore, an increase of score from Low to Low average indicates an IE of 1, whereas an increase of score from Low to High indicates an IE of 4.

B. For Career Belief Pattern Scale (CBPS), the five levels were also determined namely Low Negativity, Low Average Negativity, Average Negativity, High Average Negativity, and High Negativity. Here, the decrease of score value from one level to the next level beginning from the High Negativity was given a value of 1. Therefore, a decrease of score from High Negativity to High Average Negativity indicates an IE of 1 whereas a decrease of score from Low Average Negativity to Low Negativity indicates an IE of 4.

C. For Academic Achievement Motivation (AAM), the three levels were also determined namely Low, Average, and High. The increase of score value from one level to the next level was given a value of 1. Therefore, an increase of score from Low to Average indicates an IE of 1 and an increase of score from Average to High indicates an IE of 2.

D. For the Measure of Guidance Impact (MGI), since there were no levels determined on the original norms of the MGI scale, the highest score at T1 and the lowest score was identified and created levels for the sample of this study. There were four levels that were then categorized namely the Low, Low Average, High Average, and High. The increase of score of value from one level to the next level was given a value of 1. Therefore, an increase of score from Low to Low Average indicates an IE of 1 and so forth.

3.9. Conclusion

Being (perhaps) the first pre-test post-test quasi-experimental study on career counselling conducted in the state of Meghalaya, the concept was relatively new among the participants in the study as well as the heads of schools, teachers and parents. The rigour with which the study had to be conducted perhaps also contributed to the attrition from which the study suffered. However as reported in the subsequent chapters, the necessary rigour was maintained albeit for a smaller sample (N= 492), and the research did reveal important findings. In conclusion it must be stated that feedback from all stake holders (including schools that dropped out of the study), indicated a heightening need for career counselling

4. Findings

In this chapter, the findings relating to research questions are described in sequence. First, the pre-intervention findings pertaining to career preparation status, career belief patterns, and academic achievement motivation of the sample are presented by rural and urban locations, gender and socioeconomic status. Second the results of the outcomes of the two experimental conditions: the Three-Day and One-Day interventions are presented. This is followed by a comparison of the relative effectiveness of the Three-Day versus the One-Day interventions.

4.1. Status of the Sample at the Pre-Intervention (T1) Stage

4.1.1. Demographic profile of the sample

Table 5 shows the demographic profile of the sample by age, gender and socioeconomic status.

Table 5
Demographic Profile of the Sample (N = 492)

Location	**Number**	**Mean age (SD)** 15.9 (1.4)	**Gender**		**Socioeconomic Status**		
			Male N= 241	Female N= 251	Low N=182	Middle N=147	High N=163
Rural	201	16.1 (1.214)	107	94	69	68	64
Urban	291	15.8 (1.433)	134	157	113	79	99

Table 5 shows that more students from the urban area participated in the study. The mean age of the total sample is 15.9 years of age. In rural area, there are more male students than female students while in the urban area, there are more female

students who fully participated in the study than male students. There are more students belonging to the low socioeconomic status in the urban area compared to the rural area.

4.1.2. Overview of the mean scores for all the dependent variables at T1

Table 6 presents an overview of the mean scores obtained on all the dependent variables at T1. For ease of reading the Table has been split into Table 6a and Table 6b. Table 6a presents information without combining the dependent and independent variables. Table 6b presents information based on second order combinations of variables: location by gender, socioeconomic status by gender and socioeconomic status by location.

1. Career Preparation Status

As discussed in earlier chapters, career preparation status, refers to the individual's readiness to make career decisions (Arulmani, 2006a). This study used the Career Preparation Status Questionnaire (CPSQ) (Arulmani, 2006a) to collect information about the sample's career preparation status. The findings at the pre-intervention stage of the study are described below.

As per the norms of the CPSQ Questionnaire, Table 6a shows that the mean score (18.27, SD 9.6 against a maximum obtainable score of 86) of this sample places it in the category of *Low* Career Preparation Status which is the lowest category in the CPSQ norms. No significant difference was noted in the career preparation status of male (M=18.40, SD=9.4) versus female students (M=18.14, SD=9.8), t (2,490) = 299, p = .765 and both groups fall in the low Career Preparation Status category. There was a significant difference in the CPSQ mean score of rural students (M=19.59, SD=8.97) versus urban students (M=17.36, SD=9.92), t (2, 490) = 2.542, p = .011, with the urban group showing lower CPSQ mean scores than rural counterparts. One-

way ANOVA revealed that there was no significant difference in CPSQ scores for low (M=18.75, (SD=9.33), middle (M=17.46, SD=9.50), and high (M=18.47, SD=10.0) socioeconomic status conditions [$F(2,489)=.789$, p =.455] .

Moving on to second order combinations of dependent and independent variables as shown in Table 6b, no significant difference was noted in the career preparation status of rural male (M=20.60, SD=8.92) versus rural female students (M=18.44, SD=8.94), t (2,199) = 1.713, p = .088, and urban male (M=16.65, SD=9.46) versus urban female (17.97. SD=10.30), t (2,189) = -1.130, p = .259. Both rural male and female as well as urban male and female groups fall in the Low Career Preparation Status category.

Furthermore, no significant difference was noted in the career preparation status of male students (M=19.55, SD=9.16) versus female students (M=18.08, SD=9.48) belonging to low socioeconomic status, t (1,180) = 1.114, p = .267, male students (M=17.34, SD=9.97) versus female students (M=17.55, SD=9.14) belonging to middle socioeconomic background, t (2,145) = -.131, p = .896 as well as the male students (M=18.7, SD=9.2) and female students (M=18.93; SD=10.87) from the high socioeconomic status, t (2,161) = -.550, p = .587. Similarly, there was no significant difference noted in the CPSQ of urban students (M=20.33, SD=8.58) versus urban students (M=18.34, SD=8.65) belonging to low socioeconomic status t (2,180) = 1.803, p = .073, ; urban students (M=20.11, SD=9.67) versus urban students (M=17.78, SD=9.68) belonging to middle socioeconomic status t (2,147) = 1.046, p = .297; and urban students (M=16.70, SD=10.16) versus urban students (M=17.41, SD=10.1) belonging to high socioeconomic status t (2,161) = 1.691, p = .093.

Table 6a

Status of the Sample on the Dependent Variables by Gender, Location and SES at T1

	CPSQ Score (SD); Score in % (SD) **Interpretation as per norms**	**CBPS Score (SD); Score in % (SD)** **Interpretation as per norms**	**AAMT Score (SD); Score in % (SD)** **Interpretation as per norms**
Total Sample **(N = 492)**	18.27 (9.6); 21.24 (11.16) Low Preparation Status	129.96 (33.89); 46.41(12.10) High negativity	23.14 (4.54); 60.88 (11.96) Low Academic Motivation
Gender			
Male **(N = 241)**	18.40 (9.41); 21.39 (10.94) Low Preparation Status	134.37 (32.15); 47.98 (11.48) High negativity	22.41 (4.79); 58.97 (12.61) Low Academic Motivation
Female **(N = 251)**	18.14 (9.79); 21.09 (11.39) Low Preparation Status	125.74 (35.03); 44.90 (12.51) High negativity	23.83 (4.18); 62.71 (11.01) Low Academic Motivation
Location			
Rural **(N = 201)**	19.59 (8.97); 22.77 (10.42) Low Preparation Status	134.98 (33.46); 48.20 (11.95) High negativity	21.66 (4.18); 56.99 (11) Low Academic Motivation
Urban **(N = 291)**	17.36 (9.92); 20.18 (11.54) Low Preparation Status	126.50 (33.82); 45.17 (12.07) High negativity	24.16 (4.51); 63.57 (11.87) Low Academic Motivation

Socioeconomic Status (SES)			
Low SES **(N = 182)**	18.75 (9.33); 21.80 (10.85) Low Preparation Status	129.05 (34.74); 46.09 (12.41) High negativity	23.41(4.49); 61.61 (11.82) Low Academic Motivation
Middle SES **(N = 147)**	17.46 (9.50); 20.30 (11.04) Low Preparation Status	127.06 (32.47); 45.38 (11.60) High negativity	23.25 (4.29); 61.19 (11.29) Low Academic Motivation
High SES **(N = 163)**	18.47 (10.0); 21.48 (11.16) Low Preparation Status	133.60 (34.09); 47.71 (12.18) High negativity	22.72 (4.82); 59.80 (12.68) Low Academic Motivation

Note. CPSQ = Career Preparation Status Questionnaire. Min-Max Score = 0-86. CBPS = Career Belief Patterns Scale. Min-Max Score = 40-280. High scores indicate high negativity. AAM = Academic Achievement Motivation Test Score. Min-Max Score = 0-38.

Table 6b

Status of the Sample on the Dependent Variables by Gender, Location and SES: Second Order Combinations of Variables at T1

	CPSQ Score (SD); Score in % (SD) **Interpretation as per norms**	**CBPS Score (SD); Score in % (SD)** **Interpretation as per norms**	**AAMT Score (SD); Score in % (SD)** **Interpretation as per norms**
Location by Gender			
Rural Males **(N = 107)**	20.60 (8.91); 23.95(10.36) Low Preparation Status	134.92 (33.47); 48.18 (11.95) High negativity	21.20 (4.58); 55.77(12.07) Low Academic Motivation
Rural Females **(N = 94)**	18.44 (8.93); 21.43 (10.39) Low Preparation Status	135.05 (33.62); 48.23 (12.01) High negativity	22.18 (3.61); 58.37 (9.51) Low Academic Motivation
Urban Males **(N = 134)**	16.65 (9.45); 19.35 (10.99) Low Preparation Status	133.93 (31.18); 47.83(11.13) High negativity	23.38 (4.74); 61.52 (12.49) Low Academic Motivation
Urban Females **(N = 157)**	17.97 (10.30); 20.89 (11.97) Low Preparation Status	120.16 (34.77); 42.91 (12.42) High negativity	24.82 (4.20); 65.32 (11.05) Low Academic Motivation

Socioeconomic Status by Gender

Low SES Males **(N = 87)**	19.55 (9.16); 22.74 (10.65) Low Preparation Status	131.49 (31.78); 46.96 (11.35) High negativity	22.83 (4.82); 60.1 (12.68) Low Academic Motivation
Middle SES Males **(N = 67)**	17.34 (9.97);20.17 (11.59) Low Preparation Status	129.84 (31.97); 46.37 (11.42) High negativity	23.38 (4.23); 61.28 (11.40) Low Academic Motivation
High SES Males **(N = 87)**	18.7 (9.2); 29.0 (10.7) Low Preparation Status	140.57 (32.0); 50.20 (11.43) High negativity	21.32 (4.95); 56.1 (13.0) Low Academic Motivation
Low SES Females **(N = 95)**	18.0 (9.48); 20.93 (11.0) Low Preparation Status	127.40 (36.77); 45.46 (13.13) High negativity	23.95 (4.12); 63.0 (10.84) Low Academic Motivation
Middle SES Females **(N = 80)**	17.55 (9.14); 20.4 (10.63) Low Preparation Status	124.17 (32.95); 44.34 (11.78) High negativity	23.22 (4.28); 61.12 (11.27) Low Academic Motivation
High SES Females **(N = 76)**	18.93 (10.87); 22.0 (12.64) Low Preparation Status	125.0 (34.83); 44.65 (12.44) High negativity	24.33 (4.15); 64.03 (10.91) Low Academic Motivation

Socioeconomic Status by Location

Low SES Rural **(N = 69)**	20.33 (8.58); 23.64 (9.97) Low Preparation Status	135.13 (34.23); 48.26 (12.26) High negativity	21.16 (3.89); 55.69 (10.24) Low Academic Motivation
Middle SES Rural **(N = 68)**	18.34 (8.65); 21.32 (10.1) Low Preparation Status	129.99 (23.7); 46.42 (12.0) High negativity	22.18 (3.97); 58.36 (10.44) Low Academic Motivation
High SES Rural **(N = 64)**	20.11 (9.67); 23.39 (11.26) Low Preparation Status	141.17 (31.44); 50.42 (11.23) High negativity	21.64 (4.68); 56.95 (12.30) Low Academic Motivation
Low SES Urban **(N = 113)**	17.78 (9.68); 20.67 (11.65) Low Preparation Status	124.1 (34.53); 44.31 (12.33) High negativity	24.79 (4.29); 65.23 (11.27) Low Academic Motivation
Middle SES Urban **(N = 79)**	16.70 (10.16); 19.42 (11.81) Low Preparation Status	124.61 (21.4); 44.5 (11.21) High negativity	24.18 (4.36); 63.63 (11.49) Low Academic Motivation
High SES Urban **(N = 99)**	17.41 (10.1); 20.25 (11.74) Low Preparation Status	130.1 (31.84); 46.45 (12.44) High negativity	23.42 (4.8); 61.65 (12.64) Low Academic Motivation

Note. CPSQ = Career Preparation Status Questionnaire. Min-Max Score = 0-86. CBPS = Career Belief Patterns Scale. Min-Max Score = 40-280. High scores indicate high negativity. AAMT = Academic Achievement Motivation Test Score. Min-Max Score = 0-38.

Table 6c

Career Belief Pattern Scale (CBPS) sub-scale Mean Raw Score and Mean Percentage of the whole sample. (N = 492).

Sub-scale	Minimum-Maximum obtainable score	Mean (Raw Score)	Mean (Percentage)
Caste	3 – 21	10.32	49.14
Control & Self Direction	6 – 42	20.73	49.35
Culture & Norms	6 – 42	20.56	48.95
Fatalism	3 – 21	11.39	54.23
Gender	3 – 21	9.74	46.38
Persistence	6 – 42	18.66	44.42
Prestige & Social Status	4 – 28	13.61	48.60
Proficiency	5 – 35	15.0	42.85
Self-worth	4 - 22	9.95	35.53
Overall CBPS Score	280	130.0	46.41

Note: High scores on this scale indicate high *negativity* in career beliefs.

2. Career Belief Patterns

Career belief in this study is defined as "a conglomerate of attitudes, opinions, convictions, and notions which seem to cohere together to create mindsets and beliefs that underlie people's orientation to the idea of a career" (Arulmani & Nag-Arulmani, 2004, p.107). This study used the Career Belief Patterns Scale (CBPS) (Arulmani, 2011) to understand trends in the sample's career beliefs. The findings at the pre-intervention stage of the study as well as the sub-scale of CBPS are described below.

As per the norms of the CBPS Questionnaire, Table 6a shows that the Mean score (M = 129.96, SD = 33.9 against a maximum obtainable score of 280) of this sample places it in the category of *High* negativity which is the highest category in the

CBPS, pointing to the highest level of negativity in career beliefs. A significant difference was noted in the career belief patterns of male (M=134.37, SD= 32.15) versus female students (M= 125.74, SD=35.03), *t* (2,490) = 2.843, p = .005, with males students showing a higher mean score on the CBPS than females. There was also a significant difference in the career belief patterns between students from the rural area (M=134.98, SD=33.46) versus the students from the urban area (M=126.50, SD=33.82), *t* (2,490) = 2.746, p = .006, with rural students showing higher mean score on the CBPS than urban students. One way ANOVA showed that there was no significant difference noted in the career belief patterns of students from the low socioeconomic status (M=129.05, SD=34.74), middle socioeconomic status (M=127.06, SD=32.47), and high socioeconomic status (M=133.6, SD=34.09), [*F*(2,489) = 1.547, p = .214].

Moving on to second order combinations of dependent and independent variables as shown in Table 6b, there was no significant difference in the career belief patterns of the rural male students (M=134.92, SD=33.47) versus the rural female students (M=135.05, SD=33.62), *t* (2,199) = -.029, p = .977. There was a significant difference between male students from urban area (M=133.93, SD=31.18) versus females students from the urban area (M=120.16, SD=34.77), *t* (2,289) = 3.529, p < .001, with urban males recording a higher CBPS score than urban females. There was no significant difference in the career belief patterns between the male students (M=131.49, SD=31.78) versus female students (M=127.40, SD=36.77) belonging to low socioeconomic status *t* (2,180) = .801, p = .424. There was also no significant difference between male students (M=129.84, SD=31.97) versus female students (M=124.17, SD=32.95) from the middle socioeconomic status, *t* (2,145) = 1.060, p = .291. However, it was noted that there was a significant difference between the CBPS

scores of male students (M=140.57, SD=32.0) versus female students (M=125.0, (SD=34.83) belonging to high socioeconomic status, *t* (2,161) = 2.965, p = .003, with high SES males recording a higher mean CBPS score than high SES females Reporting further, there was a significant difference in the career belief patterns of the rural students (M=135.13, SD=34.23) versus urban students (M=124.1, SD=34.53) belonging to the low socioeconomic status, *t* (2,180) = 2.161, p = .032, with rural low SES students recording a higher mean CBPS score than urban low SES students. There was no significant difference noted between the career belief patterns of the rural students (M=129.99, SD=23.7) versus the urban students (M=124.61, SD=21.4) belonging to middle socioeconomic status, *t* (2,145) = .999, p = .319. There was a significant difference between the career belief patterns of the rural students (M=141.17, SD=31.44) versus the urban students (M=130.1, SD=31.84) belonging to the high socioeconomic status, *t* (2,161) = 2.032, p = .045, with rural high SES students recording a higher mean CBPS score that their urban counterparts.

A closer look at the CBPS data, Table 6c shows that there are nine sub-scales of career belief patterns related to the following factors: caste, control and self direction, culture and norms, fatalism, gender, persistence, prestige and social status, proficiency, and self-worth. The sample in this study has scored high negativity in all of the sub-scales. Among the scales, however, belief patterns pertaining to *fatalism* showed higher negativity compared to the other sub-scales. *Fatalism* according to CBPS portrays a sense of resignation and a passive acceptance of one's life situation. The items in the scale are coloured by the feeling of pessimism and a sense that nothing can be changed and that matters are preordained by more powerful forces (Arulmani, 2011).

3. Academic Achievement Motivation

As discussed in earlier chapters, academic achievement motivation was explained as the students' energy and drive to learn, work effectively, and achieve to their potential at school and the behaviours that follow from this energy and drive (Martin 2012, p.1). This study used the Academic Achievement Motivation Test (AAMT) (Sharma, 2006) to collect information about the sample's academic motivation level. The findings at the pre-intervention stage of the study are described in the following section.

As per the norms of the AAM Test, Table 6a shows that the mean score (23.14, SD 4.54 against a maximum obtainable score of 86) of this sample places it in the category of *Low* motivation which is the lowest category in the AAMT. Some differences in the pattern reported so far were seen when the AAMT mean scores were analyzed. An independent-samples *t*-test, showed that there was a significant difference in the male (M=22.41, SD= 4.79) and female (M=23.83, SD= 4.19) conditions: t (2,490) = -3.5, p = .000 with females showing a higher AAM mean score. A one-way ANOVA, showed that no statistically significant difference in the scores for low (M=18.75, SD=9.33), middle (M=17.46, SD=9.50), and high (M=18.47, SD=10.0) socioeconomic status conditions: [F(2,489)=.789, p=.455].

Moving on to second order combinations of dependent and independent variables as shown in Table 6b, there was no significant difference in the academic motivation between of the rural male students (M=21.20, SD=4.58) versus the rural female students (M=22.18, SD=3.61), t (2,199) = -1.674, p = .096. There was a significant difference in the academic motivation of the urban male (M=23.38, SD=4.74) versus the urban female (M=24.82, SD=4.20), t (2,289) = -2.746, p = .006, with urban females showing a higher AAM mean score. There was no significant

difference in the academic achievement motivation of male students (M=22.83, SD=4.82) versus female students (M=23.95, SD= 4.12) from low socioeconomic status, *t* (2, 180) = -1.689, p = .093. Similarly, there was no significant difference in the academic achievement motivation of male students (M=23.38, SD=4.23) versus female students (M=23.22, SD= 4.28) from middle socioeconomic status, *t* (2, 147) = .082, p = .935. However, there was a significant difference in the academic achievement motivation of male students (M=21.32, SD=4.95) versus female students (M=24.33, SD= 4.15) from high socioeconomic status, *t* (2, 163) = -4.170, p < .001, with female high SES students showing a higher AAM mean score.

There was a significant difference noted in the academic motivation score of the rural students (M=21.16, SD=3.89) and urban students (M=24.79, SD=4.29) belonging to low socioeconomic status, *t* (2, 180) = -5.735, p = .000, with urban low SES students showing a higher AAM mean score. There was also a significant difference in the academic motivation score of the rural students (M=22.18, SD=3.97) and urban students (M=24.18, SD=4.36) belonging to middle socioeconomic status, *t* (2,147) = -2.890, p = .004 with urban middle SES students showing a higher a higher mean AAM score. Similarly, there was a significant difference noted in the academic motivation score of the rural students (M=21.64, SD=4.68) and urban students (M=23.42, SD=4.8) belonging to high socioeconomic status, *t* (2,161) = -2.339, p = .021, with urban high SES students showing a higher AAM mean score.

4. Summary

In summary, at the pre-intervention stage, this sample fell into the lowest category of career preparation status as per the norms of the scale used. This seemed to be a uniform pattern across the entire sample. Rural students showed higher

preparation than urban students. However, both scores fall under the Low preparation category.

Assessment of negativity in career beliefs showed that the sample was placed in the category of High negativity which was the highest category in the CBPS. Male students showed higher negativity than female students. It was also noted that the rural students showed higher negativity in their career belief patterns than the students from the urban area. In the urban area, male students showed higher negativity than the female students. Interestingly, male students from high socioeconomic status showed higher negativity than males from both low and middle socioeconomic status. Further comparison by location showed that rural students belonging to low and high socioeconomic status have higher negativity than their counterparts. However, all sub groups fell in the high negativity category of the in the CBPS norms.

The assessment of academic achievement motivation showed that this sample was placed in the low motivation which was the lowest category in the AAMT. Female students showed higher motivation than the male students. In urban area, female students showed higher motivation level than their male counterparts. Female students belonging to high socioeconomic status showed higher motivation level than the female students from low and middle socioeconomic status. Urban students belonging to low, middle, and high socioeconomic status showed higher motivation than the rural students from across socioeconomic status. However, it may be noted that overall, both urban and rural students, male and female students across socioeconomic status showed low academic achievement motivation as per the norms of the scale.

4.2. Comparison of Experimental and Control Groups at the Pre-Intervention (T1) Stage

As per the design of this study, two interventions were compared, namely, a Three-Day and a One-Day intervention. Each intervention group had a matched control. The Three-Day Experimental Group comprised 151 students and its control had 86 students. The One-Day Experimental Group comprised 156 and its control had 99 students. Since this is an intervention study an important requirement is that no significant pre-intervention differences exist between the experimental and control groups on the variables being measured. This section examines the data for non-significant pre-intervention differences between the experimental and control groups.

4.2.1. Three-Day Intervention

The significance of the difference in the mean scores of the experimental and control groups at T1 for the Three-Day intervention were examined using the independent sample t-test.

Table 7

Three-Day Condition: Significance of the Difference of the Mean Scores of Experimental and Control Groups across the Dependent Variables at the Pre-Intervention (T1) Stage

Tests	**Experimental Group N = 151**	**Control Group N = 86**	**p value**
CPSQ	17.07 (9.76)	19.63 (7.47)	ns
CBPS	119.87 (35.27)	129.91 (30.25)	ns
AAMT	21.62 (4.66)	25.33 (4.23)	ns

Note[1]*:* * = p < .05; ** = p <.001; ns = not significant.
Note [2]*:* CPSQ = Career Preparation Status Questionnaire (Min-Max Score = 0-86). CBPS = Career Belief Patterns Scale (Min-Max Score = 40-280). High CBPS scores indicate high negativity. AAMT = Academic Achievement Motivation Test (Min-Max Score = 0-38).

Table 7 shows that the difference between the Three-Day experimental and Three-Day control group mean scores on the CPSQ *t* (2,235) = -2.263, p = .996; CBPS *t* (2,235) = -2.216, p = .940 and AAMT *t* (2,235) = -6.083, p = .836 were not statistically significant at T1. This implies that the experimental and control groups for the Three-Day intervention were at similar levels of career preparation, career belief patterns and academic achievement motivation before the beginning of the study.

4.2.2. One-Day Intervention

The significance of the difference in the mean scores of the experimental and control groups for the One-Day were examined using the independent sample t-test. Table 8 shows that the difference between the One-Day experimental and One-Day control group mean scores on the CPSQ *t* (2,253) = -1.460, p = .145; CBPS *t* (2,253) = -.101, p = .920; and AAMT *t* (2,157) = - 1.768, p = .079 were not significant.

Table 8

One-Day Condition: Significance of the Difference of the Mean Scores of Experimental and Control Groups across the Dependant Variables at the Pre-Intervention (T1) Stage

Tests	**Experimental Group N = 156**	**Control Group N = 99**	**p value**
CPSQ	17.79 (10.72)	19.68 (8.93)	ns
CBPS	135.79 (31.25)	136.22 (35.56)	ns
AAMT	22.88 (4.61)	23.94 (3.56)	ns

Note[1]*:* * = p < .05; ** = p <.001; ns = not significant.
Note [2]*:* CPSQ = Career Preparation Status Questionnaire (Min-Max Score = 0-86). CBPS = Career Belief Patterns Scale (Min-Max Score = 40-280). High CBPS scores indicate high negativity. AAMT = Academic Achievement Motivation Test (Min-Max Score = 0-38).

4.3. Analysis of Impact after the Interventions

The central objective of this research was to experiment with career guidance interventions with a view to identifying their suitability for Meghalaya. This section presents an analysis of the impact of the two interventions (Three-Day and One-Day) on the dependant variables under study. Information about the Three-Day intervention will be presented first followed by information about the One-Day intervention and a comparison of the two interventions.

An important point to be noted is that initial review of the data showed that pre-intervention and post-intervention scores did not have equal variances and equal reliability. It was also found that post-intervention test scores were not normally distributed. The literature indicates that in such situations the Difference Score may be reliably used (e.g., Dimitrov & Rumrill, 2003). Most importantly, the research question was interested in the magnitude of change effected by the interventions. Hence the Difference Score (Time 2 minus Time 1), was used for all analyses.

4.3.1. Impact of the Three-Day Intervention on the dependent variables

This section presents the impact of the Three-Day intervention programme as seen in the Difference Score (Time 2 score minus Time 1 score) on the Career Preparation Status Questionnaire (CPSQ), Career Belief Patterns Scale (CBPS), Academic Achievement Motivation Test (AAMT), and the Measure of Guidance Impact (MGI).

Table 9 shows the mean Difference Scores emerging after the Three-Day intervention programme on all the dependent variables. The independent sample t-test was used to compute the significance of the difference between the means.

An examination of the Mean Difference Scores shows that career preparation status and academic achievement motivation increased and negativity of career beliefs

decreased to a remarkably greater extent for the Experimental Group when compared with the Control Group.

Independent sample t-tests were conducted to examine the significance of the difference in the Mean Difference Scores of the Experimental and Control Group across the dependent variables as shown in Table 9.

Table 9

Three-Day Condition: Significance of the Difference of the Mean Difference Scores of the Experimental and Control Groups across the Dependent Variables at the Post -Intervention (T2) Stage

Tests	**Experimental Group Mean Difference Score (T2 minus T1) N = 151**	**Control Group Mean Difference Score (T2 minus T1) N = 86**	**p value**
CPSQ	40.75	-1.88	**
CBPS	- 47.57	29.88	**
AAMT	10.31	.98	**
MGI	54.99	.65	**

Note[1]*:* ** = p <.001.
Note[2]: CPSQ = Career Preparation Status Questionnaire. CBPS = Career Belief Patterns Scale. High CBPS scores indicate high negativity. AAMT = Academic Achievement Motivation Test.

As shown in Table 9 the difference in the Mean Difference Scores between the Experimental and Control Groups were highly significant for all the scales: CPSQ: t (257,235) = 30.784, p = .000; CBPS: t (257,235) = -15.100, p < .001; AAM: t (257, 235) = 15.842, p = .000; MGI: t (257,253) = 14.056, p < .001. These findings suggest that the career preparation status and academic achievement motivation significantly improved while negativity in career beliefs significantly decreased for students in who experienced the Three-Day career counselling programme as indicated in the increase in their CPSQ, AAMT, and MGI scores as well as the decrease in their CBPS scores as compared to the students in the Control Group who were not given the career counselling programme.

4.3.2. Impact of the One -Day Intervention on the dependent variables

Table 10 shows the mean Difference Scores after the One-Day Intervention programme on all the dependent variables. The independent sample t-test was used to compute the significance of the difference between the means.

Table 10

One-Day Condition: Significance of the Difference of the Mean Difference Scores of the Experimental and Control Groups across the Dependant Variables at the Post - Intervention (T2) Stage

Tests	**Experimental Group Mean Difference Score (T2 minus T1) N = 151**	**Control Group Mean Difference Score (T2 minus T1) N = 86**	**p value**
CPSQ	23.08	-3.06	**
CBPS	-12.08	3.24	**
AAMT	5.33	1.41	**
MGI	21.94	-.22	**

Note[1]*:* ** = p <.001.

Note[2]: CPSQ = Career Preparation Status Questionnaire. CBPS = Career Belief Patterns Scale. High CBPS scores indicate high negativity. AAMT = Academic Achievement Motivation Test.

An examination of the Mean Difference Scores shows that career preparation status and academic achievement motivation increased and negativity of career beliefs decreased to a remarkably greater extent for the Experimental Group that experienced the One-Day intervention when compared with its Control Group. Independent sample t-tests were conducted to examine the significance of the difference in the Mean Difference Score of the Experimental and Control Group across all the dependent variables. As shown in Table 10, the difference in the Mean Difference Scores between the Experimental and Control Groups were highly statistically significant on all the scales: CPSQ: t (257,253) = 17,631, p < .001; CBPS: t (257,253) = -12.539, p < .001; AAM: t (257,253) = 9.229, p =.000; MGI: t (257,253) = 26.803,

$p < .001$. These findings suggest that the students in the Experimental group have also benefitted from the One-Day career counselling programme as compared to the students in the Control Group as indicated in the significant increase in the CPSQ, AAM, and MGI scores and a significant decrease in the CBPS scores.

4.3.3. Impact of the Three-Day Intervention versus the One-Day Intervention on the dependent variables

As discussed in earlier chapters (2.9), it is well-known that the duration of an intervention has an effect on its outcomes. At the same time, schools have difficulties in offering sufficient time in their timetables for career guidance (3.3.3). Hence an objective of this study was to examine the relative effectiveness of career guidance interventions of two durations: Three-Days and One-Day. This section presents data on the relative impacts of these two interventions on the dependant variables under study. Table 11 shows the comparison of the Mean Difference Score between the Three-Day Intervention and the One-Day Intervention programmes.

As seen in Table 11, a high statistically significant difference is seen in the Mean CPSQ Difference scores of the Three-Day and the One-Day interventions: $t\ (305,187) = 11.909$, $p < .001$. An examination of the CPSQ Mean Difference scores shows that the Three-Day intervention group obtained higher scores than the One-Day intervention. This means that although the One-Day intervention has contributed to an increase in students' career preparation the Three-Day intervention has had a more positive outcome.

A similar trend is seen on the Mean CBPS Difference Scores. A high statistically significant difference is seen in the Mean CBPS Difference score between the Three-Day and One-Day intervention: $t\ (305,187) = -2.998$, $p < .001$. An

examination of the CBPS Mean Difference scores shows that the Three-Day intervention group recorded lower scores than the One-Day intervention. This indicates that the Three-Day intervention was more effective in reducing the negativity of students' career beliefs.

Table 11

Comparison of the Three and One-Day Conditions: Significance of the Difference of the Mean Difference Scores of the Experimental and Control Groups across the Dependent Variables at the Post -Intervention (T2).

Tests	**3-Day Intervention Mean Difference Score N = 151**	**1-Day Intervention Mean Difference Score N = 156**	**p value**
CPSQ	40.75	23.08	**
CBPS	-15.92	-12.08	**
AAMT	10.31	5.33	**
MGI	54.98	21.94	**

Note[1]*:* ** = p <.001.
Note[2]: CPSQ = Career Preparation Status Questionnaire. CBPS = Career Belief Patterns Scale. High CBPS scores indicate high negativity. AAMT = Academic Achievement Motivation Test.

The same pattern continues with the AAMT scores. A high statistically significant difference is seen in the Mean AAMT Difference score between the Three-Day and One-Day Intervention: t (305,187) = 9.974, p < .001. Here again, an examination of the Mean AAMT Difference scores shows that the Three-Day intervention group obtained higher AAMT scores than the One-Day intervention.

This finding suggests that the students who participated in the Three-Day intervention became more motivated to engage with academic tasks after the career counseling than the students in the One-Day intervention.

It was observed in Table 11 that there is a high statistically significant difference between the MGI Mean Difference score between the Three-Day intervention and the One-Day intervention: t (305,187) = 28.808, $p < .001$. This finding also suggests that the students who participated in the Three-Day intervention gained better skills for the career development tasks measured by the MGI: decision making, opportunity awareness, transition skills, and self-awareness than the students who were given only the One-Day intervention.

4.4. Index of Effectiveness (IE)

Having determined that the Three-Day intervention had a strong impact on all the dependent variables, the study attempted to further examine the nature of the effectiveness of the intervention. This was determined by creating an Index of Effectiveness (IE). The details are described in an earlier chapter (3.7, number 4) but in summary, IE draws upon the norms of a given scale to create levels of improvement. The following points are description of IE for each of the scales used in the study

A. For the Career Preparation Status Questionnaire (CPSQ), the norms point to five levels of preparedness: Low, Low Average, Average, High Average, and High. The increase of score value from one level to the next level was given a value of 1. This value has been termed as Index of Effectiveness (IE) in this writing. Therefore, an increase of score from Low to Low average or an increase of score from Average to High Average indicates an IE of 1, whereas an increase of score from Low to High indicates an IE of 4. An IE of 0 indicates that there was no movement from level to another. Negative IE scores indicate a decrease in score value after the intervention. A similar categorisation was followed for the CBPS and AAMT.

B. For the Career Belief Pattern Scale (CBPS), five levels were determined namely Low Negativity, Low Average Negativity, Average Negativity, High Average Negativity, and High Negativity. Higher scores on the CBPS indicate higher negativity. Hence, the decrease of score value from one level to the next level *lower* level beginning from the High Negativity was given a value of 1. Therefore, a decrease of score from High Negativity to High Average Negativity indicates an IE of 1 whereas a decrease of score from Low Average Negativity to Low Negativity indicates an IE of 4.

C. For Academic Achievement Motivation (AAMT), the three levels were also determined namely Low, Average, and High. The increase of score value from one level to the next level was given a value of 1. Therefore, an increase of score from Low to Average indicates an IE of 1 and an increase of score from Average to High indicates an IE of 2.

D. After creating the Index of Effectiveness for each of the four scales, the data was queried to identify the number of individuals who moved to higher IE levels after they received the intervention and the number of individuals whose scores showed no improvement. Table 12 presents the Index of Effectiveness for all the dependent variables number of individuals who showed changes for each level.

Table 12 shows that while there are some students who showed no change after the intervention, the overwhelming trend is toward positive change. The highest change is in career preparation status is seen at IE level 3 (42.4% of students). At the same time compared to the other scales, the CPSQ shows the fewest number of students (0.7%) with no change. By contrast, although change is seen across the four IE levels, negativity in career belief seems to be the most resistant to change with the largest number of students (39%) showing no change.

In comparison, the highest change in career preparation status in the Three-Day condition is seen at IE level 3 (42.4% of the students) and in the One-Day condition is seen at IE level 2 (40.4% of the students). The highest change in academic achievement motivation in both the Three-Day and One-Day is seen at level 1 (65.6% of the students) and (59.6% of the students) respectively.

It is quite a contrary that the highest in the career belief patterns in both the Three-Day and On-Day condition is seen at IE with no change (23.8% of the students) and (39.1% of the students) respectively. The IE results seem to show that the interventions were most beneficial in increasing the career preparation and the academic achievement motivation of the sample in both the Three-Day and One-Day conditions. Specific trends in the IE by location, gender and socioeconomic conditions are presented in the following tables.

4.4.1 Three-Day Intervention and One Day Intervention IE by location

Table 13 shows that there are more urban students (78.3%) in the Three-Day intervention whose career preparation increased by three units of positive change and four units of positive changed than the rural students (52.4%). In the career belief patterns, there are more urban students (42.5%) whose scores increased by three units of positive change and four units of positive change than the rural students (27.1%). There are more rural students (64.5%) whose academic achievement motivation scores increased by three units of positive change and four units of positive change than the urban students (59.4%).

In the One-Day intervention, Table 13 shows that there are more rural students (13.2%) in the Three-Day intervention whose career preparation increased by three units of positive change and four units of positive changed than the urban students (11.4%). In the career belief patterns, there are more urban students (17.4%) whose

scores increased by three units of positive change and four units of positive change than the rural students (7.7%). There are more rural students (41.9%) whose academic achievement motivation scores increased by one and two units of positive change than the urban students (34.7%).

Table 12

Index of Effectiveness (IE) and Number (%) of Individuals showing change for each IE level for all the Dependent Variables in the Three-Day and One-Day Experimental Conditions.

Variable	**Index of Effectiveness**									
	0		1		2		3		4	
	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)
CPSQ	1(.7)	3 (1.9)	16 (10.6)	19 (12.2)	31 (20.5)	63 (40.4)	64 (42.4)	61(39.1)	39 (25.8)	10 (6.4)
CBPS	36 (23.8)	61 (39.1)	32 (21.2)	42 (26.9)	25(16.6)	24 (15.4)	27 (17.9)	19 (12.2)	29 (19.2)	10 (6.4)
AAMT	12 (7.9)	60 (38.5)	99 (65.6)	93 (59.6)	40 (26.5)	3 (1.9)	NA	NA	NA	NA

Note[1]: 0 = No Change; 1 = 1 unit of positive change; 2 = 2 units of positive change; 3 = 3 units of positive change; 4 = 4 units of positive change; NA = Not applicable as per norms of the scale.
Note[2]: CPSQ = Career Preparation Status Questionnaire. CBPS = Career Belief Patterns Scale. High CBPS scores indicate high negativity. AAMT = Academic Achievement Motivation Test.
Note[3]: 3-Day = Three-Day Intervention; 1-Day = One-Day Intervention.

Table 13

Index of Effectiveness (IE) and Number (%) of Individuals showing change for each IE level for all the Dependent Variables in the Three-Day and One-Day Experimental Conditions by Location

Variable	**Index of Effectiveness**									
	0		1		2		3		4	
	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)
Career Preparation Status Questionnaire										
Rural 3-Day (N=59) Rural 1-Day (N =68)	1 (1.7)	3 (4.4)	11 (11.6)	16 (23.5)	16 (27.1)	40 (58.8)	25 (42.2)	9 (13.2)	6 (10.2)	0
Urban 3-Day (N=92) Urban 1-Day (N=88)	0	3 (3.4)	5 (5.4)	23 (26.1)	15 (16.3)	52 (59.1)	39 (42.4)	10 (11.4)	33 (35.9)	0
Career Belief Patters Scale										
Rural 3-Day (N=59) Rural 1-Day (N =68)	17 (28.8)	2 (2.0)	16 (27.1)	72 (68.6)	10 (16.9)	23 (21.9)	11 (18.6)	5 (4.8)	5 (8.5)	3 (2.9)
Urban 3-Day (N=92) Urban 1-Day (N=88)	21 (22.8)	86 (57.4)	16 (17.4)	19 (12.7)	15 (16.3)	19 (12.7)	16 (17.4)	16 (10.7)	24 (26.1)	10 (6.7)
Academic Achievement Motivation Test										
Rural 3-Day (N=59) Rural 1-Day (N =68)	34 (35.4)	61 (58.1)	37 (38.5)	44 (41.9)	25 (26.0)	0	0	0	0	0
Urban 3-Day (N=92) Urban 1-Day (N=88)	58 (40.4)	98 (65.3)	69 (48.9)	49 (32.7)	15 (10.6)	3 (2.0)	0	0	0	0

Note[1]: 0 = No Change; 1 = 1 unit of positive change; 2 = 2 units of positive change; 3 = 3 units of positive change; 4 = 4 units of positive change; NA = Not applicable as per norms of the scale.
Note[2]: 3-Day = Three-Day Intervention; 1-Day = One-Day Intervention.

4.4.2. Three-Day Intervention and One Day Intervention IE by gender

Table 13 shows that there are more female students (75.4%) in the Three-Day intervention whose career preparation increased by three units of positive change and four units of positive changed than the male students (60.0%).

In the career belief patterns, there are more female students (43.5%) whose scores increased by three units of positive change and four units of positive change than the rural students (27.1%). There are more male students (64.5%) whose academic achievement motivation scores increased by three units of positive change and four units of positive change than the female students (59.4%). In the One-Day intervention, Table 13 shows that there are more female students (11.4%) whose career preparation increased by three units of positive change and four units of positive changed than the male students (0%). In the career belief patterns, there are more female students (17.4%) whose scores increased by three units of positive change and four units of positive change than the rural students (2.9%). There are more male students (41.9%) whose academic achievement motivation scores increased by one and two units of positive change than the urban students (32.7%).

4.4.3. Three-Day intervention and One Day intervention IE by socioeconomic status

Table 13 shows that there the highest percentage of students in the Three-Day intervention whose career preparation increased by three units of positive change and four units of positive changed were from the middle socioeconomic status (70.6%). In the career belief patterns, there were more students from the high socioeconomic status whose scores increased by three units of positive change and four units of positive change at 39.40%. Similarly, in the academic achievement motivation, there were more students from the high socioeconomic status whose scores increased by one and two units of positive change at 96.40%. In the One-Day intervention, the

students whose career preparation scores increased by three units of positive change and four units of positive changed were those who are from high socioeconomic status at (6.8%). In contrast, the career belief patterns score of students from the low socioeconomic status increased more by three units of positive change and four units of positive change than the rest at (23.6%). Finally, there are more students (59.5%) from the high socioeconomic status whose academic achievement motivation scores increased by one and two units of positive change than the urban students (34.7%).

In summary, the most who have gained from the Three-Day intervention in their career preparation were found to be the Urban-Female students from the middle socioeconomic status while in the One-Day intervention were the Rural-Female students from high socioeconomic status. On the other hand, those whose negativity in their career belief patterns reduced the most after the Three-Day intervention were the Urban-Female students from the high socioeconomic status while after the One-Day intervention, were the Urban-Female from the low socioeconomic status. Finally, the students who have increased the most in their score in the academic achievement motivation after the Three-Day intervention were the Rural-Male students from the high socioeconomic status and after the One-Day intervention were the Rural-Male high socioeconomic status.

Table 14

Index of Effectiveness (IE) and Number (%) of Individuals showing change for each IE level for all the Dependent Variables in the Three-Day and One-Day Experimental Conditions by Gender

Variable	**Index of Effectiveness**									
	0		1		2		3		4	
	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)	3-Day (N = 151)	1-Day (156)
Career Preparation Status Questionnaire										
Male 3-Day (N=69) Male 1-Day (N=68)	1 (1.4)	19 (27.9)	10 (14.3)	40 (58.8)	17 (24.3)	9 (13.2)	22 (31.4)	0	20 (28.6)	0
Female 3-Day = (N=81) Female 1-Day = (N=88)	0	3 (3.4)	6 (7.4)	23 (26.1)	14 (17.3)	52 (59.1)	42 (51.9)	10 (11.4)	19 (23.5)	0
Career Belief Patters Scale										
Male 3-Day (N=69) Male 1-Day (N=68)	17 (28.8)	74 (70.6)	16 (27.1)	23 (21.9)	10 (16.9)	5 (4.8)	11 (18.6)	3 (2.9)	5 (8.5)	0
Female 3-Day = (N=81) Female 1-Day = (N=88)	21 (22.8)	86 (57.4)	16 (17.4)	19 (12.0)	15 (16.3)	19 (12.7)	16 (17.4)	16 (10.7)	24 (26.1)	10 (6.7)
Academic Achievement Motivation Test										
Male 3-Day (N=69) Male 1-Day (N=68)	34 (35.4)	61 (58.1)	37 (38.5)	44 (41.9)	25 (26.0)	0	NA	NA	NA	NA
Female 3-Day = (N=81) Female 1-Day = (N=88)	57 (40.4)	98 (65.3)	69 (48.9)	49 (32.7)	15 (10.6)	0	NA	NA	NA	NA

Note[1]: 0 = No Change; 1 = 1 unit of positive change; 2 = 2 units of positive change; 3 = 3 units of positive change; 4 = 4 units of positive change; NA = Not applicable as per norms of the scale.
Note[2]: 3-Day = Three-Day Intervention; 1-Day = One-Day Intervention.

Table 15

Index of Effectiveness (IE) and Number (%) of Individuals showing change for each IE level for all the Dependent Variables in the Three-Day and One-Day Experimental Conditions by Socioeconomic

Variable	**Index of Effectiveness**									
	0		1		2		3		4	
	3-Day (N = 151)	1-Day (N=156)	3-Day (N = 151)	1-Day (N=156)	3-Day (N = 151)	1-Day (N=156)	3-Day (N = 151)	1-Day (N=156)	3-Day (N = 151)	1-Day (N=156)
Career Preparation Status Questionnaire										
Low SES 3-Day (N=45) 1-Day (N=51)	0	7 (13.8)	3 (6.7)	17 (33.3)	13 (28.9)	22 (43.1)	20 (44.4)	5 (.8)	9 (20.0)	0
Middle SES 3-Day (N=51) 1-Day (N=61)	0	7 (11.4)	8 (15.7)	28 (45.9)	7 (13.7)	24 (39.3)	24 (47.1)	2 (3.3)	12 (23.5)	0
High SES 3-Day (N=55) 1-Day (N=44)	1 (1.8)	8 (18.2)	5 (9.1)	18 (40.9)	11 (20.0)	15 (34.1)	20 (36.4)	3 (6.8)	18 (32.7)	0
Career Belief Patters Scale										
Low SES 3-Day (N=45) 1-Day (N=51)	10 (22.2)	20 (39.2)	11 (24.4)	12 (23.5)	7 (15.6)	7 (13.7)	10 (22.2)	6 (11.8)	7 (15.6)	6 (11.8)
Middle SES 3-Day (N=51) 1-Day (N=61)	14 (27.5)	21 (24.4)	8 (15.7)	20 (32.8)	12 (23.5)	11 (18.0)	5 (9.8)	6 (9.8)	12 (23.5)	3 (4.9)
High SES 3-Day (N=55) 1-Day (N=44)	14 (22.4)	20 (45.5)	13.23.6)	10 (22.7)	6 (10.9)	6 (13.6)	12 (21.8)	7 (15.9)	10 (18.2)	1 (2.3)
Academic Achievement Motivation Test										
Low SES	4 (8.0)	23	32 (64.00)	27 (52.9)	14 (28.0)	1 (2.0)	NA	NA	NA	NA

3-Day (N=45) 1-Day (N=51)		(45.1)								
Middle SES 3-Day (N=51) 1-Day (N=61)	6 (13.3)	23 (37.7)	27 (60.0)	37 (60.7)	12 (26.7)	1 (1.6)	NA	NA	NA	NA
High SES 3-Day (N=55) 1-Day (N=44)	2 (3.6)	14 (31.8)	40 (71.4)	29 (65.9)	14 (25.0)	1 (2.3)	NA	NA	NA	NA

Note[1]: 0 = No Change; 1 = 1 unit of positive change; 2 = 2 units of positive change; 3 = 3 units of positive change; 4 = 4 units of positive change; NA = Not applicable as per norms of the scale.
Note[2]: 3-Day = Three-Day Intervention; 1-Day = One-Day Intervention.

4.5. Conclusion

At the beginning of the study the sample was at the lowest level possible on all the measures. However, after the interventions were provided, both experimental conditions, Three-Day and One-Day showed statistically significant improvement on all dependant variables. The improvements were remarkable. Further statistical analysis showed, the Three-Day intervention was found to be more effective than the One-Day although it must be noted that the One-Day intervention also contributed to improvements of scores at T2. The absence of non significant differences between the Experimental Group and Control Group in the Three-Day conditions for CPSQ, CBPS and AAMT at T1 limits the generalizability of the findings. However, the relevance of career guidance to the sample is clear not only from the extent of improvement by also from students' responses as illustrated below.

For example, at the end of the study, students from the Experimental Group who were provided career counselling gave various feedbacks about the intervention. One of them (Male, age 16, urban) said, *"I wish I had learned some of these things when I was still in class 9".* Most were thankful since they arrived at having clearer idea of their career options. One of the most notable comments was expressed by a boy (age 15, rural) who was studying and helping his parents in the farm and raising animals at the same time, when he said, *"Miss, my family is poor. They need my help. But thank you because now I know even I can have a career."*

The findings reported in this chapter report the strongly felt need for career counselling services. This felt need was not only expressed by the students, but also by the teachers of the students. A common sentiment amongst teachers seemed to be: *"Conduct Awareness first to us, even we do not know much".* Finally, as noted in the earlier chapter (see 1. 4. 2), Meghalaya is an agriculture based economy, and a remark

by one of the headmen of the localities in which the study was conducted is worth noting. He said, "*Not so many young people want to farm any more – this is unfortunate."* As will be discussed in the next chapter, career counselling in Meghalaya has unique challenges to face.

5. Discussion and Conclusions

In this chapter, the results of this research are discussed in terms of possible conclusions, taking into account the consistencies and dissimilarities within the variables, methodological issues, as well as similar report in the literature with the current findings.

The prevailing low academic performance, increasing rate of drop out from mainstream education, and unemployment among educated youth in Meghalaya all call for a culturally and economically relevant career guidance intervention which would support relatively better career development. This study has been an attempt to examine such methods.

5.1. Key Findings at the Pre-Intervention Stage

5.1.1. Career Preparation Status

As defined for the purposes of this research (see 2.1.), career preparation status is related to the broader construct of career maturity (Arulmani, 2006a; Kleiman & Gati, 2004) and reflects the individual's readiness to make career decisions. The students in this study in the East Khasi Hills District of Meghalaya fall in the lowest category of career preparation status, as per the norms of the scale used (see Table 6, p. 118-119). This has important implications at one level for the development of career guidance programmes but at another, deeper level provides insights for a better understanding of the processes that underlie career development in Meghalaya. Key findings are discussed below.

1. Rural students are better prepared.

The trends in this data that the career preparation status of rural students was higher than urban students are noteworthy. The data at hand is not sufficient to

explain this finding. However, this finding could be of importance since it does not concur with expected trends. By and large, existing reports in the literature point to rural youth being at a disadvantage on parameters of development when compared to their urban counterparts. The finding from this study is that rural students are better prepared for career development: a phenomenon that deserves further investigation particularly since this survey was conducted in a socioeconomic context where the rate of rural-urban migration is increasing.

If seen within the framework of career development theory (Super, 1957) with specific reference to the sub-stage of exploration as explained in an earlier chapter of this study (see 2.1.1), the pre-test scores on the career preparation status of students from both rural and urban location could be said to indicate a *low career maturity* (see 7.1). However, it must be kept in mind that this assessment was conducted on a sample that had received almost no career guidance inputs. Seen from that perspective, low career preparation status or low career maturity is almost an expected finding. Hence, rather than classifying or labelling students as being low in maturity, this finding must be taken as indicative of a key career guidance target: provide services that aim at improving students' readiness to engage with career development tasks.

2. No strong gender difference in career preparation.

Viewing the findings from gender perspective, the absence of significant difference in the career preparation status scores of male and female students in this study seem to differ from research conducted elsewhere. For example, research conducted in Australia by Creed and Patton (2003) indicated that gender is one of the main predictors of career maturity. This is perhaps because of certain cultural features that characterise Meghalaya (see 1.3-1.5). As an indigenous community

practicing a matrilineal structure of society with no distinct caste system cultural practices, Meghalaya shows greater gender equity. Hence there is no significant observable gender difference practiced in daily life. Girls for instance are *not* commonly discouraged from pursuing education (Mishra, 2007). Being a matrilineal form of society, women are highly regarded (Laloo, 2013). In another study conducted in Meghalaya (Kharkongor & Albert, 2014) career counsellors in a focus group discussions, also pointed out that most young girls were observed to be keen in their desire to receive education.

3. Circumscription and compromise among the sample differ from what was postulated in the theory of Gottfredson (1981).

Turning to another well known theory of career development, namely circumscription and compromise (see chapter 2.1), that there is a possibility that the process of *circumscription* may not occur in the manner that has been described by Gottfredson (1981). According to this theory, children by the age of 9 to 13 should be able to recognize more occupations, be aware of status hierarchies and become more sensitive to social evaluation, whether by peers or the larger society. But this stage of development children should be able to array occupations two-dimensionally, by prestige level as well as sex type, also come to understand the links between income, education, and occupation (Gottfredson, 2004). By age 14 or so, children are expected to engage in an increasingly conscious search for occupations that would be personally fulfilling and compatible with their more personal, psychological selves (Gottfredson, 1981). As per the findings of this study, the sample does not seem to have reached the stage that is corresponding to their chronological age. This observation may be an influence of several factors which have been elaborated in the

earlier chapter (see Chapter 2). Some of the factors explained in the chapter include the social, economic, political, cultural and educational scenario in Meghalaya.

A feature of particular importance that could explain the process of circumscription in this cultural milieu is the collectivist nature of the people in this region (see 2.7.1). This form of social organisation may actually have a strong influence on an individual's career choice and career decision. Hence circumscription may occur as a group rather than an individual process in this particular context. Accordingly, *compromise*, may be associated with aligning what the group opinions are, rather than what is one's personal wishes are. Hence choosing to pursue a certain career could be linked to where work opportunities can be found where the *family* are easily accessible. This is especially so for the case of the last daughter, *Ka Khadduh*, who is expected to look after the parents and learn to manage their properties. This was again reflected in the report by the career counsellors during the focus group discussion saying that although girls were motivated for career exploration, being away from the family or the state is something that the girls do not seem to prefer.

One of the students (female, 16, urban) said, *"Miss, since I am the youngest in the family, I have to look after my parents, so it is difficult for me to go out of state to study or work"*. Interestingly, another girl (female, 15, urban) commented saying, *"Even if I am the youngest, but I can go out because my married elder sister is already there with my parents".* Remarks like this which were noted during the study serve as notice to all career practitioners in Meghalaya to consider family background, beliefs, and expectations when facilitating a female student in the career decision making process.

5.1.2. Career Belief Patterns

1. Rural students have higher negativity in their career belief patterns.

It is interesting to note that although the career preparation status of the rural group in this sample was higher than the urban group, the rural group's career beliefs were more negative than the urban group. The scores obtained by the sample as a whole places it in the category of the highest level of negativity as per the norms of the scale used. The high negativity scores of the sample may be partly explained by the educational, social, and political challenges faced by students as discussed in earlier chapter (see 1.4). As a career counsellor, it would be important to deal with the specific factors of negativity in their career beliefs of the rural students while taking into account that they have shown higher level of career preparation compared to the urban students.

2. Urban male students from high SES have higher negativity in their career belief patterns.

This finding is noteworthy. What makes the male students for high SES in the urban area feel more negative in their career belief patterns than the female students? Is it possible that an urban male student belonging to a high SES experiences more pressure to maintain the status of the family and thereby creates pressure of sense of tension in relation to career choices and career related decisions? The data at hand is not sufficient to provide an answer to this question. However, it was found that prestige can sometimes play a role in an individual's career decisions (Arulmani, 2009a). Furthermore, a longitudinal study among 31, 731 male and female students from various racial backgrounds in US revealed that male students tend to place more emphasis in making money while female students placed more emphasis in working with people and contributing to the society (Duffy & Sedlacek, 2007). These findings

may be some of the explanation for the higher negativity among the male sample from high SES from the urban area.

3. Rural low and high SES have higher negativity in their career belief patterns.

This finding seems to show similar trend reported in the earlier literature (Arulmani, 2009b) that students from low SES tend to show higher negativity. Although the high SES students also showed higher negativity, it may be noted that that the location, being rural, may have influenced the negativity along with the other social and political issues explained in earlier chapters (see 1.4). To illustrate this further, one of the teachers (female teacher, 43, rural) of the sample expressed concern over several and distinct environment influences towards career development of the young people in the state (1.4.2 & 1.4.4). She mentioned that insurgency, ethnic tension, smuggling of drugs and weapons, including corruption and backwardness of certain districts of the state all contribute to the uncertainty of the young people when thinking of their careers (female teacher, 43, rural). In relation to prevailing career beliefs among the people in urban area, one headman (male, 55, urban) who was also present in one of the intervention days commented, *"It has been a trend that people race for any government post even that of a peon, regardless of how high educational qualification one has. Sadly, such trend kills people's creativity and potential".* Similar findings have been reported in relation to negativity in career beliefs by other scholars (e.g., Arulmani, 2000). Career beliefs have been defined in this study to be *social* cognitions: beliefs and thought patterns present in a community as whole. Hence prevailing negative career belief patterns among the sample may be an influence from the shared beliefs of the community. However, it

may be noted that the differences in the CBPS scores were found modest since all the students fall under the category of high negativity according to the norms of the scale.

5.1.3. Academic Achievement Motivation

1. Females are more motivated.

As per the norms of the scale used to measure academic achievement motivation, the sample falls in the lowest category of motivation. Within this score range, female students from both rural and urban area were found to have higher motivation than their male counterpart. A similar trend was found among urban female students having higher motivation than the urban males

It has been explained earlier (2.2) that academic achievement motivation relates to the energy and drive to learn, work effectively, and achieve to one's potential and the behaviours that follow from this energy and drive (Martin 2012, p.1). Considering this explanation, the finding that showed female students are more motivated than the male students seem to match with the related study conducted by Gneezy, Leonard, and List, (2009) which stated that the Khasi female sample showed much higher level of competitiveness and leadership qualities compared to the Khasi men. These qualities can be widely observed among women in the state across location. Mukhim (2011) presented that in Meghalaya, many women are entrepreneurs. They can be seen in many businesses ranging from managing shops, running fish or vegetable markets, being a contractor, to selling and buying gold among many others.

These observations may also be explained by the Social Cognitive Theory (Bandura, 1977a). Accordingly, it is possible that female students may have developed higher motivation by observing the prevailing qualities of women in the

State. *Vicarious learning, according* to this theory may have influenced the higher level of motivation of female students as compared to the male counterpart. Furthermore, the female students may also be *identifying with others* (Krumboltz, Mitchell, & Jones, 1976), by modelling the behaviour from others they identify with, in this case it can be their mother and other immediate female relatives (see 2.3.1.). Here, the data at hand may not be enough, but the trend seem to point towards a possibility that the matrilineal structure of the society in Meghalaya may perhaps be a strong factor influencing the higher motivation found among female sample in this study (see 1.3.4.).

2. Urban students are more motivated than the rural students.

The urban high school students in the sample showed higher scores on this scale (see Table 6). This finding may be considered keeping the rural-urban divide in view. The desire of rural youth to migrate to cities is well known. However, career-success in an urban environment is largely dependent upon academic success. The lower scores seen in this data on academic motivation for rural youth may be indicative of how daunting it may be for them to engage with academic tasks in order to find career-success in an urban environment. The seemingly better facilities in Shillong compared to the rural area, the slightly faster pace in daily life, possibly more academic pressure among the students in the city may be a reason for this differences. The data at hand is not sufficient to draw this conclusion. But this is a possibility that is worthy of further investigation. This higher motivation among the urban students was found evident across low, middle, and high socioeconomic status.

3. Possible attribution reflected in the findings.

From the Attribution Theory of motivation (Heider, 1958; Weiner, 1986) as explained in earlier chapter (see 2.2.2.), it is possible that the prevailing social and

political situations in the State such as the high rate of educated unemployed, high dropout rates, insurgencies, and corruption (see 3.1) may be associated with *external attribution* that the rural students may be experiencing. According to this theory, failure is thought to be caused by bad luck and is not the person's fault. Young people could possibly avoid tasks designed to promote "success" because they could assume that success is related to luck or to "who you know" or to other factors beyond their control.

It may be noted that all the difference found in the Academic Achievement Motivation Tests (AAMT) scores of the sample were modest since all of the students fall in the category of low motivation according to the norms of AAMT. However, during the present research, a student (Male, 15 years old, Rural) said, *"I will definitely become a businessman whether I pass my high school or not"*. When the researcher enquired further, the student replied saying that their area is full of coal deposits and that coal traders are the richest in the locality. The student further mentioned that coal traders are not educated so one does not need to be educated to become a businessman.

Therefore, measuring such a student's motivation using traditional forms of assessment would yield a low academic achievement motivation score. However the career counsellor in such a context would need to query the meaning of motivation. This student may not be motivated to pursue further education, but he *is* motivated to become a business man. Hence analysis of motivation must take contextual realities into consideration. Such goals are similar to Bandura's (1986) outcome expectations when he explained that such goals include, but are not limited to, important personal aspirations such as getting an education, striving for a career or job.

5.2. Key Findings at the Post-Intervention Stage

5.2.1. Career Preparation Status

Both the experimental groups (Three-Day and One-Day interventions) recorded markedly higher mean Difference Scores (Time 2 score minus Time 1 score) on the CPSQ (see Table 9 and 10) as compared with their control groups. This implies that the career counselling programme may have contributed to the increase in the career preparation status scores.

5.2.2. Career Belief Patterns

The students in both the experimental groups (Three-Day and One-Day interventions) showed marked reductions in their difference scores on the CBPS (see Table 9 and 10) compared to their control groups, indicating a decrease in negativity of career beliefs after the intervention. This implies that the career counselling programme may have influenced the decrease in the career belief patterns.

5.2.3. Academic Achievement Motivation

Both the experimental groups (Three-Day and One-Day interventions) recorded markedly higher motivation scores after the interventions (see Table 9 and 10) compared to their control groups. This implies that the career counselling programme may have influenced the increase in the academic achievement motivation scores of the students.

5.2.4. Duration of the Interventions

As discussed earlier, the duration of an intervention plays a fundamental role (Sibbald et al., 1996). The findings show that although the One-Day intervention programme has yielded significant increases in the post test scores for Career Preparation Status (see Table 10), Academic Achievement Motivation, (see Table 10)

and Measure of Guidance Impact (see Table 10), the findings indicated that the Three-Day experimental group recorded a substantially increase in the post test scores than the One-Day (see Table 9). Similarly, negativity in the career beliefs of the students in the Three-Day Intervention programme decreased much more than the career beliefs of students in the One-Day Intervention programme (see Table 9).

1. Key Findings Based on Index of Effectiveness (IE)

One of the objectives of the study was to determine the relative effectiveness of two types of career counselling as an intervention that is the Three-Day intervention programme and the One-Day Intervention programme. As described in an earlier chapter (see 3.8.2. subsection 4) an index of effectiveness was created to examine the relative effectiveness of the two interventions under study. After a series of descriptive analyses, it was found that the students who have benefitted the most from the Three-Day Intervention in their career preparation were rural female students from the middle socioeconomic status. Those whose negativity in their career belief patterns has reduced the most after the intervention were the urban male students from the middle and high socioeconomic status. Urban female students from the low and high socioeconomic status have increased the most in their academic achievement motivation after the Three-Day intervention.

2. Relative effectiveness

The overall finding is that the Three-Day intervention had better outcomes when compared with the One-Day Intervention. Some constraints that the One-Day programme was characterised by was a lack of sufficient time to consolidate students' learning and address further inquiries related to any aspect of the programme. Although official contact numbers and e-mail address were given to the students, only 8 of them actually contacted the researcher after the programme. This could be one

of the factors that contributed to the better outcomes of the Three-Day intervention. Also, the author of the intervention (Arulmani, 2010) has indicated that all components of the original intervention are necessary and that trial tests of the original intervention indicated that three days is the ideal duration for the programme. The One-Day intervention was an abbreviated version of the Three-Day intervention. It is possible that removing certain components of the original version affected the impact of the programme.

In other developed countries like Australia, due to the advancement and easy availability of information technology and the internet, the shortest session can be conducted within one hour (Sibbald et.al, 1996). Burwell and Chen (2006) have also emphasized the cost-effectiveness of other career counselling programmes such as the solution focused therapy to be conducted in the shortest possible time. According to Burwell and Chen (2006), when applying solution focused therapy to career counselling, the goal is not to find out the cause of the problem but the possible alternative solutions which will remove unnecessary discussions and thereby shorten the length of the session required. Also, the session are also focused on present and future instead of dealing with the past. The duration of counselling in intended to be short-term because this approach claims that "time constraint pushes both the counsellor and the client to work toward solutions with higher effectiveness and efficiency. This trend, in turn, stimulates action implementation in career planning, decision making, and problem solving" (p. 198).

However, the finding that the Three-Day Intervention had a better effect indicates that in contexts such as Meghalaya where students have not been exposed to skills for career dealing with career development tasks, the learning could be slow.

Hence a longer duration is necessary considering their economic and time constraints as students and exposure limitations.

According to 2011 census, there are 253.2 million of adolescent within 10-19 years which is 29.9% of the total population of India (Census, 2011). In Meghalaya, 23.9% of the total population belongs to this age group. Of the rural population, it was recorded by the Annual Status of Education Report (2013) that a total of 17.2% of adolescent population are not in school. In this category, the adolescent who dropped out of school and who never enrolled were included. This survey was conducted in several districts in Meghalaya including East Khasi hills where this study was conducted. Therefore, if career counselling is to be used as an intervention for this age group, it can potentially reach to an estimate of 82.8% of adolescents in this district. However, the lack of urban statistics for adolescents who are not in school limits this claim.

Furthermore, if similar trends of lack of career preparation and low academic achievement motivation among the adolescents in the Northeast are observed, it can be reasonably claimed that this study has wider applicability to tribal societies in the northeast region of India.

5.3. Recommendations

Taking into consideration the findings of this study as well as the researcher's experiences during the study, the following recommendations are presented:

5.3.1. Provide career guidance services:

A. Career counselling programmes

Career counselling programmes should be provided among male and female high school students in both rural and urban areas in Meghalaya. These programmes, not only the ones tested in this study, were found to have facilitated the students

effectively in identification of their career interests and talents. The provision of career information during the programmes were also found to be useful for the students in gaining wider understanding the current market demands, career eligibility, subject requirements, tasks required by certain careers, and many other information that prepares the students for the world of work.

B. Duration of intervention

Both the Three-Day intervention programme and One-Day intervention programme was found to be relatively effective. The findings further presented that the Three-Day programme was more effective than the One-Day programme. However, considering all the challenges experienced by the researcher during the study, as well as the suggestions from the head of schools and teachers, incorporating career counselling throughout the school calendar will be more feasible instead of a one stretch programme. By doing so, the students will be able to come for appointments with the school counsellor and sessions with parents of each student, as much as possible, will also be included. However, for schools which may not be able to employ a full time counsellor, these workshop approaches were also desirable.

C. Appropriate teaching methodology

Among the aboriginal students in Canada, the students expressed what they learn by seeing, doing, and repeating (Robb & John, 2005). Asian students like Korean, Chinese, and Japanese were also found to be strong visual learners (Reid, 1987). The Jiva career counselling programme tested in this study was designed with materials like charts and learning cards to facilitate learning. It also included several group activities as well as individual work. The career counsellor serves as a facilitator more than a teacher in this intervention. This method of delivery may have been found relevant to the sample. The interactions among the students and

creativity that surfaced through activities have contributed to the dynamic learning among the students in the Three-Day Intervention Programme. The individual worksheets activities also provided a space for personal thought processing. Taking into consideration the time, cost involved, nature of the sample, and the family and socio-economic situation among the sample, providing career counselling in a form of a group workshop seems to be more relevant.

It is further recommended that translation of the materials to the vernacular language may also scale up the suitability of the activities especially among the rural population. However, in doing this, much care must be put into making sure that the concepts are clear to the facilitator as some terms such as "career", "work", and "job" all mean the same as "Kam" in the Khasi language. Nevertheless, translation will be found helpful in making more complex term such as "alternatives", "career beliefs", "motivation", and "world of work".

5.3.2. Include other stakeholders:

Although the interventions used in the study were both found to be relatively effective, the scores of the students in the post intervention assessment did not reach the maximum obtainable score in the Career Preparation Status (see Table 9 & 10) and Measure of Guidance Impact (see Table 9 & 10). Keeping this in mind, other suggested methods of intervention may be incorporated:

A. <u>Meeting the parents of the students</u>

When considering this method, the counsellor must be prepared to deal with other practical realities. In this study for example, meeting the parents of 492 students would have been a substantial logistical exercise and would require the strong co-operation of the school authorities. Furthermore, many of the parents of the students in the rural areas are farmers and daily wage labourers. Meeting them implies taking

precious time off their means of survival which does not meet the ethical standards of this study. It also means being prepared to communicate with such parents in the language and idiom in which they are fluent. However, if the counsellor is available in the school throughout the school year, there may be more opportunities of being able to meet the parent/s of each high school student for at least once. This approach may be found appropriate keeping in mind the earlier discussion (see 2.1.3) that Meghalaya seem to be a collectivist society where decisions are mostly made in consideration of the parent's point of view or inputs from clan leaders. Inclusion of parents and the community leaders was also supported by the cadre of Jiva career counsellors in Meghalaya as discussed with Kharkongor and Albert (2014).

b. Inclusion of wider community, teacher, headman and others for building awareness

As expressed by some teachers of students in the sample, they have expressed their willingness to receive some form of awareness programme related to careers. They have recognized the need for them to gain more information so that in turn, they will be able to guide their students as well. The community headmen and leaders equally expressed similar views of disseminating wider awareness for the public. Therefore, further career counselling programme may be planned through community-based participatory approach where all stakeholders can be included in the planning and implementation.

The awareness programme may include sensitization of the public on the importance of identifying the talents and aptitude of the students. Discussions on the career thoughts and prevailing beliefs towards certain careers may also allow clarifications and meaningful interactions. The importance of aligning the interest

and talents of the student with various career alternatives may also be a part of the awareness programme.

Further discussions on existing and fading traditional livelihoods, if any, may also be found relevant. Identification of economically viable career options may be included. Wide dissemination of other career information such as colleges, universities, eligibility requirements, admission procedures, scholarship, schemes for discontinued students or even other vocational courses and trainings for those who are unemployed may also be another aspect of awareness programme that can be planned for the community. Other skills related to preparation for facing panel for job interviews, writing of curriculum vitae or filling up of job application forms may also be found helpful not only for those who are seeking jobs but also for students. Awareness on such skills may facilitate further career preparation.

5.3.3. Build capacity

A. Capacity building is necessary at various levels

Career counselling service providers need to be well trained with various capacities to deliver services among high schools students in both rural and urban areas of Meghalaya State. Individuals who have strong interest and have had at least few years of work experience among youth from rural or urban location may be identified. Knowledge of the vernacular language, in this case, Khasi, Jaintia, and Garo language may be helpful while working especially among the youth in the rural areas of Meghalaya. This may ease the interaction between the counsellor and the parents, teacher, and other community leaders who can be a part of any career related initiatives to be planned.

Furthermore, as suggested by a group of Jiva career counsellors in Meghalaya during a focus group discussion (Kharkongor & Albert, 2014), career service providers should be trained to have familiarity with indigenous worldviews. In addition to this, they need to be knowledgeable of the traditional occupations existing in the State. They also suggested that training these counsellors in the use of narratives and story-telling as a method of counselling may be relevant in the context of Meghalaya.

In relation to market trends counsellors should also be equipped to identify careers that may or may not be economically viable in the State as well as other part of the country. Having this knowledge will enable the counsellor to carefully assess and thereby suggest certain careers to the students. In so doing, the counsellor will then be facilitating the process of circumscription and compromise which is related to the theory of Gottfredson (1981) explained in the earlier section (see 2.1.2). In relation to this, a substantially wide range of knowledge of career information must be a part of the training for future career service providers. They should be equipped with updated career names, tasks that are required by each career, the eligibility for entering each career, the possible career paths for each career, as well as possible areas of specialization and work prospects for each career.

B. Development of policy

The government and policy makers should take notice of the findings in this study and develop a system that would cater to a wider spectrum in providing career related services that are sensitive to the cultural uniqueness of the people in the state. Policy may include:

- Create a post for school counsellor.

- Ensure that the school counsellor is trained or holds a special training on career guidance.
- Mandate that career counselling be incorporated in the academic calendar.
- Create a sub-committee which includes psychologists, economists, educationist, government representatives, professional counsellors and trained career counsellors in drafting the policy that may be incorporated in the Meghalaya Education Policy.
- Develop and regularly update a cultural resonant career counselling curriculum to be sponsored by the government.
- Annual Career Mela sponsored by the government may be incorporated in annual activities of every block or, to start with, every district of Meghalaya.

C. Conduct future related research

Recognizing the limitations of the current study, it is highly recommended that More research should be conducted in relation to the career development in order to find more ways and means to facilitate the school to work transition among the students in the State. Few of the research themes can be as follows:

- Career transitions for older age groups such as the higher secondary students.
- Comparison of different kinds of intervention.
- Development and testing of original interventions.
- Longitudinal studies that examines the outcomes of career guidance intervention over time.
- Identification of specific influences from the community on career development.
- Identification of traditional forms of career-related guidance.

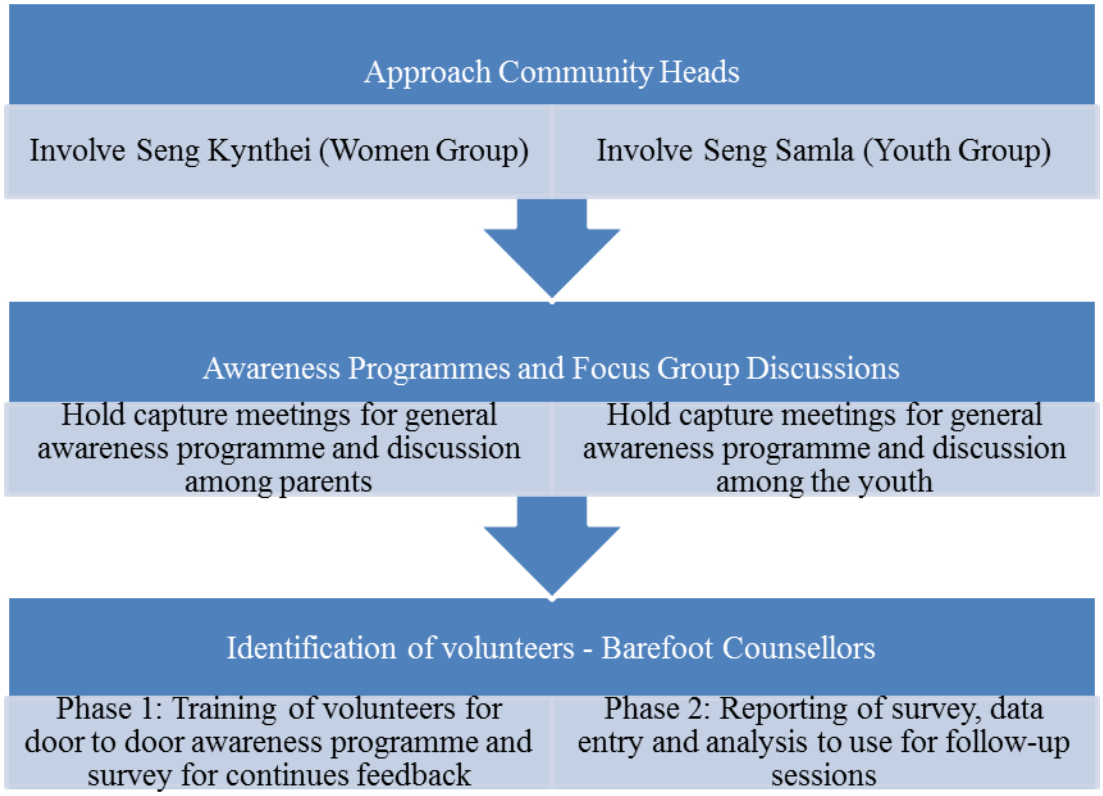
- Examinations of traditional occupations as viable career options.

5.3.4. Suggested model for career counselling among the indigenous high school students in Meghalaya.

The model below is suggested to be tested by future researchers who may consider exploring more suitable and relevant career counselling interventions among the youth belonging to indigenous populations such as the sample in this study.

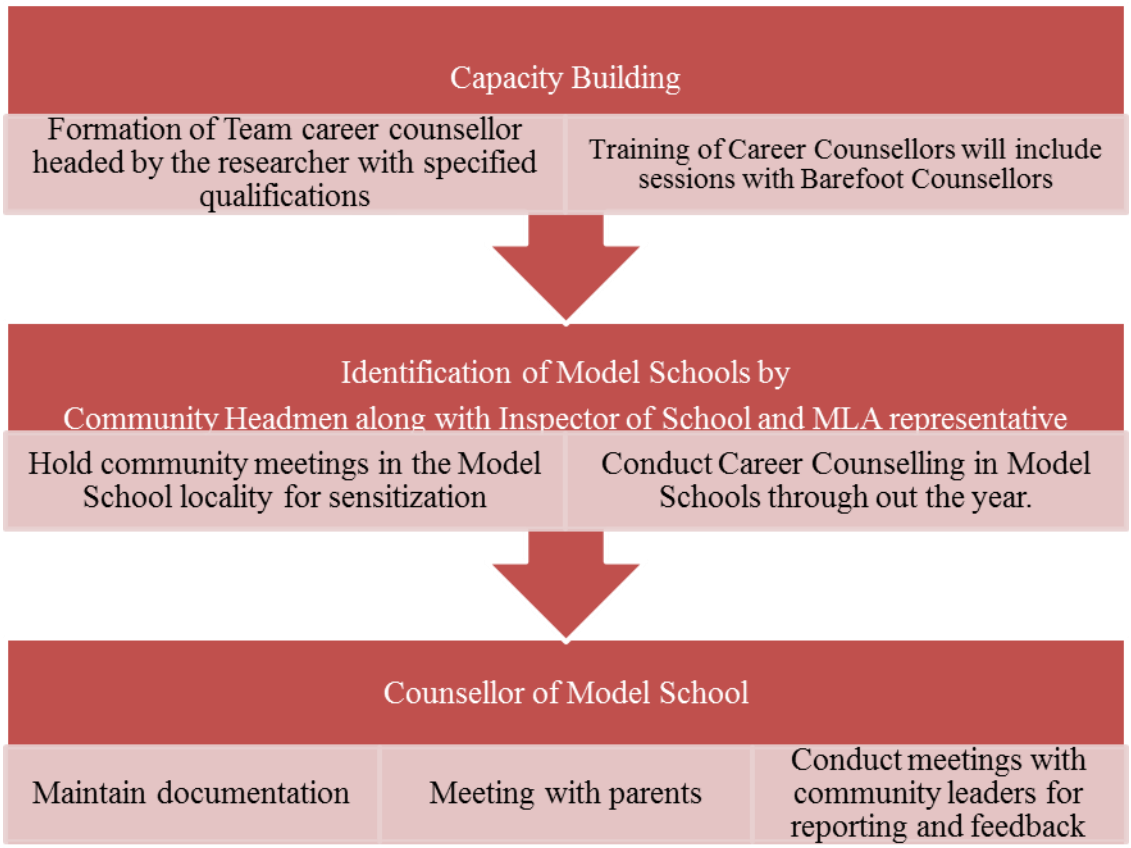
Community-based Career Counselling model (CCC model)

PART 1: Community participation and sensitization

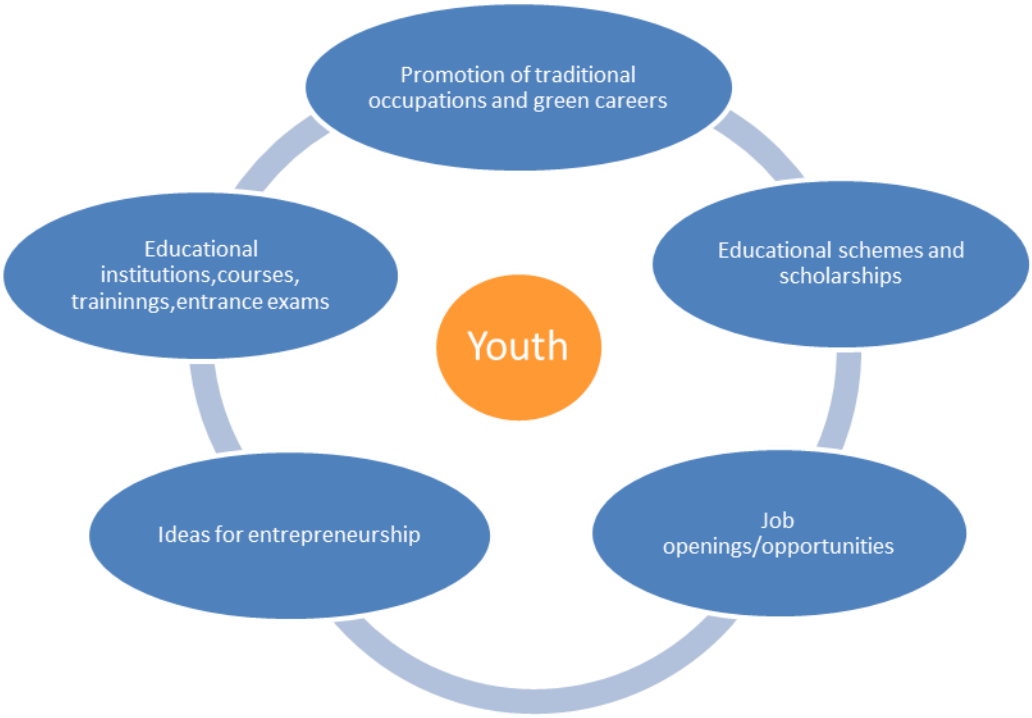


PART 2: School-based Career

Counselling



PART 3: Career Mela: to be conducted in the locality of the Model School



The model presented in this section encapsulates the overall experience of the researcher throughout the period of conducting this study. Part one show the inclusion of the community leaders which are traditionally and politically recognized by the indigenous peoples in Meghalaya. These community leaders which include the headmen, women group and the youth group were observed to have been playing an important role in addressing community related concerns which concerns the welfare of the family, youth, and the community at large. By including these important leaders, the career counsellor will already have a possible network for implementing the components in this model. This model also suggests a bottom-top approach in creating awareness and sensitization while waiting for any possible financial support from the District or State offices. The Barefoot Counsellors may be identified by the community leaders who will serve in voluntary basis. A special training must be provided for these cadres to ensure that they understand the scientific rigour of a research. They may help in the house to house visit in order to survey career related issue of every household.

In continuation to Part one, the researcher needs to ensure that a focus group discussion will be held among the Barefoot Counsellors and research assistants. The themes that will be extracted for the discussion along with other important data collected during the process of Part one and initial stage of Part two may lead to the creation of a curriculum for conducting career counselling among the youth. Once a curriculum similar to the ones tested in this study have been developed or adapted, this needs to be tested by incorporating this curriculum in the school calendar of selected Model Schools in a specified location. With the official support of the MLA, Inspector of School as well as the local community leaders, the Model Schools will be indentified. A longitudinal and cross sectional study will now be carried out as the career counselling sessions are going on in the Model Schools. Sessions with the parents and regular meetings with the community leaders and Barefoot Counsellors may also be scheduled for follow-up and feedback.

Part three shows a suggested component of a career mela which may be conducted in the Model School or in the locality where the Model School is located. If the model will be found relevant, this model can be replicated in other locations.

5.4. Conclusion

Although the original intention of this study was to conduct a randomised control trial, at best this study has come close to being a quasi-experimental study due to severe field realities. A critical difficult encounter was attrition of the sample. The following points outline the difficulties that this study encountered. It also presents the general and specific learning acquired by the researcher:

5.4.1. Challenges in the study

A. Language barrier

The data collection from the rural schools was conducted from October – December, 2012 and the data collection for the urban sample was conducted from February – April, 2013. The students were generally cooperative during the study. However, one major challenge was the language barrier. Since the tools have been constructed in English language and the Intervention is also conducted in English Language, some students from the rural area could not comprehend some of the important concepts such as *occupation, belief, motivation, back up, alternatives, and assessment.* In fact, there seem to be no specific local language equivalence for *career*. It was due to this reason that a Research Assistant was required as explained in 3.7.3 subsection1.

B. Irregular attendance

The irregular attendance of some students was another challenge in this study. For instance, a student may be present at Time 1 (pre-intervention) but may be absent during the Time 2 (post-intervention). This attrition of the sample reduced the number of completed protocols to be included in the study.

C. Number of days required for the study

Another challenge encountered by the researcher was the major change in the number of days allowed to conduct the study by the school authorities although they had earlier agreed to the study requirements. Since the rural data collection fell during the later part of the school year, factors such as final exams and school closing functions affected the dates allotted for the study. Some heads of institutions without prior intimation either called off the programme or asked for a reduction in the number of days. These challenges led to the creation of the One-Day Intervention in addition to the Three-Day intervention. By doing so, even the schools who have

changed the number of dates were still included in the study and the students in that schools were still provided career counselling programmes.

5.4.2. Important personal learning for the researcher

A. Research and methodology

This study has provided wide opportunity for the researcher to gain more insight as well as apply the methods involved in conducting a scientific research. The stringent rules in using psychological scales, scoring, data entry, and analysis using statistical tools and software are some of the research and methodology related learning that the researcher was trained to follow throughout the process of the study. Along with these learning is the exercise of following the APA manual to be used in academic writing for behavioural science related researches such as this study. The process of analytical review of literature has also broadened the understanding of the researcher on various theoretical frameworks that explain career development.

B. Approach to career counselling

As a career counsellor, it was an important lesson for the researcher to determine the cultural, social, political and economic environment of the sample in order to incorporate the observations inferred from the environment with the findings in the study. This lesson remains paramount as the sample belongs to a unique indigenous population in Meghalaya, whose strengths, challenges, values as well as priorities and potentials are yet to be documented as factors influencing the career development of the youth in this community.

In the practice of career counselling among this population, it is important for the counsellor to consider the collectivist nature of the society. The opinions of the

parents, teachers, and headman need to be highly considered along with the careful identification of the individual's interest and potential for career development. It was also learned that a counsellor among these populations should make sure of his/her own biases and career beliefs. This surfaced after it was clearly observed that at the end of the intervention, the students who participated had shown equally strong interest and motivation on developing their careers regardless of gender and socioeconomic status.

C. Dealing with attrition

The field realities encountered by the researcher during the process of the study served as a practical teacher in the need to maintain ethics and professionalism yet maintaining a warm approach in dealing with all level of transactions required by the study. These transactions ranged from asking the permission from the Inspector of Schools or meeting with the Director of Education of State to dealing with principals, teachers, parents, community headman and leaders, students and with the daily most awaited person in each school, the doorman.

Maintaining a positive attitude in dealing with attrition was found to be crucial. In so doing, positive connections were bridged between the researcher, the institution she represented and the school authorities, government officials, and families of the students who were given career counselling which seemed to have created ripples of productive transactions even after the study. For instance, after the study, the researcher was invited by number of schools who were not part of the study to conduct similar programmes for their students. Some government offices such as the National Centre for Educational Research and Training (NCERT) approached the researcher to write a career preparation chapter for a Teacher's Manual. The National

Service Schemes (NSS) invited the researcher to take session among over 300 youth from all over the North East Region. Most importantly, after the declaration of the matriculation results 2014, some students and some principals called to thank the researcher for conducting the intervention indicating that the intervention also contributed to positive academic outcomes.

The researcher strongly believes that there is a great potential in every human being and that each one should be given an opportunity to discover those potentials and develop them further. Although the pre-intervention findings of the sample displayed the lowest career preparation, lowest academic motivation and highest negativity in their career beliefs according to the Indian norms, the post-intervention revealed that the sample are receptive to career intervention. Finally, the urgent message was clearly expressed in the flow of the following statements from a student, a parent, and a teacher:

"*Miss, I just do not know what to do after class 10"* (Male, 16, Urban)

"Let them choose whatever they want, it is up to them, I have no idea, I only know farming" (Parent, 55, Rural)

"Miss, please come again and conduct workshop for us also, we do not know how to guide the students" (Female class 10 Teacher, 37, Urban).

Appendix 1:

Application Letter for Ethics Approval

To
The Rev EH Kharkongor
Registrar
MLCU

Subject: Application for Ethics Approval

Date: September 12, 2012

Dear Sir,

As part of the requirements for the completion of the degree Doctor of Philosophy, I do hereby seek for Ethics Approval for my research entitled "Models of Career Counselling in High Schools in Meghalaya". A copy of the research proposal, ethical aspect of the research as well as a sample consent form has been attached herewith for your reference.

Your kind consideration of my application will be much appreciated.

Thanking you.

Sincerely yours,

Maribon V. Sangma
PhD student,
Lecturer, Dept. of Counselling and Psychology,
Martin Luther Christian University, Shillong

ETHICAL GUIDELINES FOR MY RESEARCH

1. All references must be properly noted.
2. All structured tools must be cited. Researcher must follow legal procedures before using Tools which needs permission before modification or usage.
3. Informed consent must be given before administering ing any questionnaire.
4. Control Group schools in the study will be given the intervention free of cost after the research has been completed.
5. Report of findings must be shared with the participating schools after the whole research study has been finally accepted and approved.
6. No aspect of the study must be carried out by the researcher without consulting the Guide.
7. Respect towards School Authorities and students must be observed by the researcher and other team members involved in the research.
8. Confidentiality must be highly observed for any issues shared by any participating individuals.
9. All procedures and requirements of the Guide and the MLCU Doctoral Committee must be fulfilled by the researcher to qualify for the granting of the degree opted for.
10. All financial aspects of the research must be recorded and maintained for transparency and accountability.
11. Usage of words in the research report must be carefully drafted to avoid demeaning any individual, institution, and government of Meghalaya and India.

Informed Consent Form

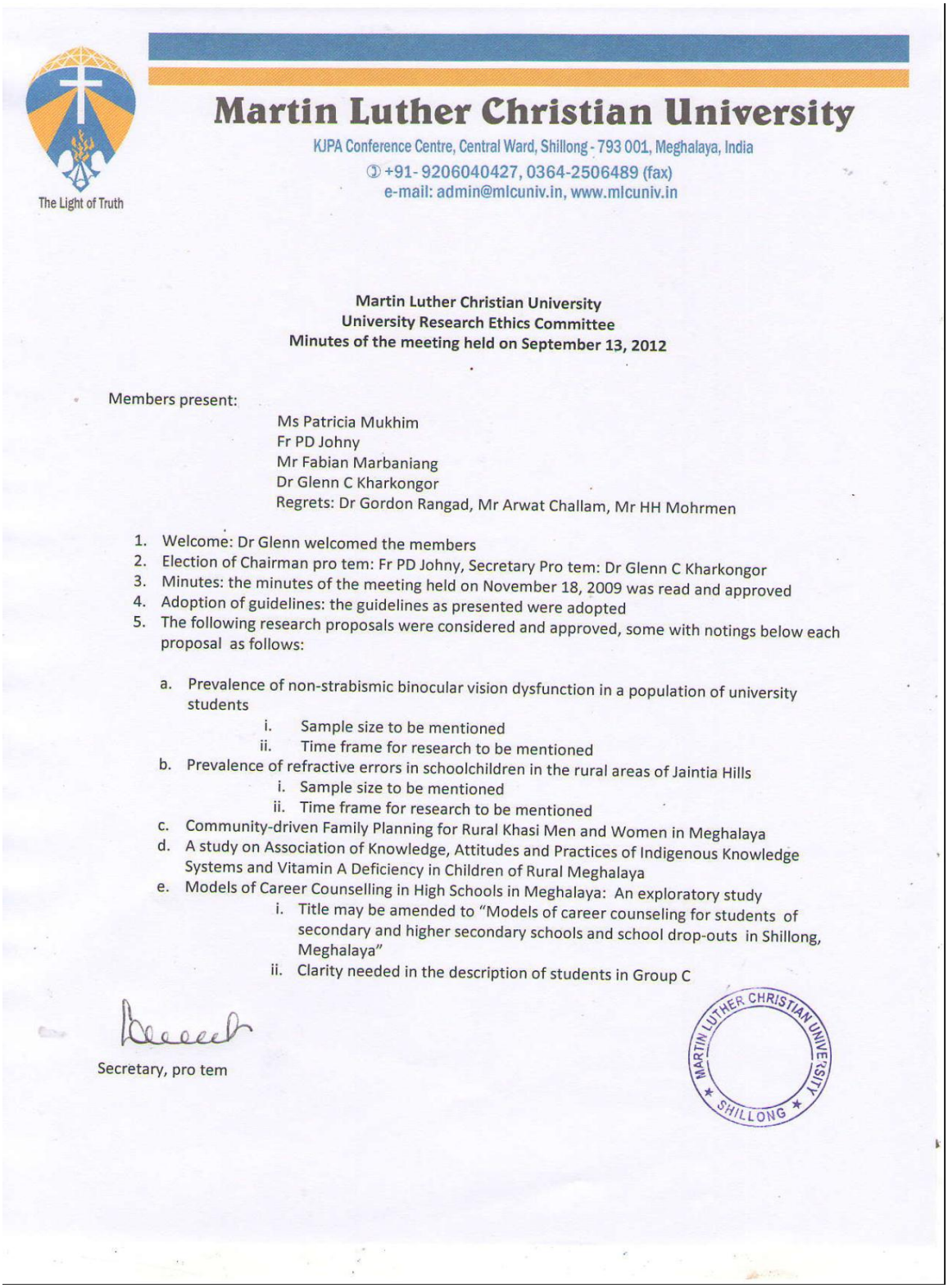
I have been informed about the procedures to be used and agree to participate in this Survey. I understand that participation in this study is optional. I also understand that all the information about me will be kept confidential and that my name will not be used in connection with the results in any way. I understand that I have the right to obtain information about the findings of the Survey and about how they will be used after the Survey is completed.

Student Name:

Student Signature: Date.

Appendix 2:

Ethics Committee Approval Letter



The Light of Truth

Martin Luther Christian University

KJPA Conference Centre, Central Ward, Shillong - 793 001, Meghalaya, India
✆ +91- 9206040427, 0364-2506489 (fax)
e-mail: admin@mlcuniv.in, www.mlcuniv.in

Martin Luther Christian University
University Research Ethics Committee
Minutes of the meeting held on September 13, 2012

Members present:

Ms Patricia Mukhim
Fr PD Johny
Mr Fabian Marbaniang
Dr Glenn C Kharkongor
Regrets: Dr Gordon Rangad, Mr Arwat Challam, Mr HH Mohrmen

1. Welcome: Dr Glenn welcomed the members
2. Election of Chairman pro tem: Fr PD Johny, Secretary Pro tem: Dr Glenn C Kharkongor
3. Minutes: the minutes of the meeting held on November 18, 2009 was read and approved
4. Adoption of guidelines: the guidelines as presented were adopted
5. The following research proposals were considered and approved, some with notings below each proposal as follows:

   a. Prevalence of non-strabismic binocular vision dysfunction in a population of university students
      i. Sample size to be mentioned
      ii. Time frame for research to be mentioned
   b. Prevalence of refractive errors in schoolchildren in the rural areas of Jaintia Hills
      i. Sample size to be mentioned
      ii. Time frame for research to be mentioned
   c. Community-driven Family Planning for Rural Khasi Men and Women in Meghalaya
   d. A study on Association of Knowledge, Attitudes and Practices of Indigenous Knowledge Systems and Vitamin A Deficiency in Children of Rural Meghalaya
   e. Models of Career Counselling in High Schools in Meghalaya: An exploratory study
      i. Title may be amended to "Models of career counseling for students of secondary and higher secondary schools and school drop-outs in Shillong, Meghalaya"
      ii. Clarity needed in the description of students in Group C

Secretary, pro tem

MARTIN LUTHER CHRISTIAN UNIVERSITY ★ SHILLONG ★

Appendix 3:

Letter of Request for Translation

Date: October 3, 2012

To

Administrator
National Psychological Corporation of India
Agra, India

Subject: Request for Translation

Dear Sir/Madam

I, Maribon V. Sangma, is a faculty of Counselling and Psychology Department, Martin Luther Christian University, Shillong, Meghalaya State. I am currently pursuing my Ph.D degree from the same university. In my research, I plan to use the Academic Achievement Motivation Test (AAMT, Sharma) as one of my tools.

However, most of the participants in my sample are not well verse in Hindi language. Since AAMT is in Hindi language, I hereby request your permission to translate this tool from Hindi to English. I am confident that using AAMT will contribute much to the completion of my study. Your permission in this regard will be highly appreciated.

Tool: Academic Achievement Motivation Test by Dr. T. R. Sharma, Professor and Dean (Retd.), Faculty of Education, Panjabi University, Patiala.

Thanking you.

Sincerely yours,

Maribon V. Sangma
PhD Scholar
Counselling and Psychology Department
Martin Luther Christian University
Shillong, Meghalaya
9436703984

Appendix 4:

Permission Letter for Tool Translation

National Psychological Corporation
E-mail : npc_agra@yahoo.com Website : www.npcindia.com
: 0562-2464926
Fax : 2463929
4/230, Kacheri Ghat,
Agra-282004 (INDIA)

To,
Maribon Viray Sangma,(PhD Student)
Faculty , Department of Counselling and Psychology
Martin Luther Christian University,
Shillong, Meghalaya
Cont.No.: 09436703984 &
Mail ID : yvonnebgo@yahoo.com

Subject: translation of tools

We hereby authorize you to translate the psychological scales – 'Academic Achievement Motivation Test(AAMT)'-by Dr. T.R.Sharma published by us in your research use in English language you wish.

Thanking you and best wishes

FROM

NATIONAL PSYCHOLOGICAL CORPORATION

Appendix 5:

Request for Permission to Conduct Research

To
The Inspector of Schools
East Khasi Hills District
Shillong

Subject: Application

Date: March 7, 2012

Dear Madam,

I, Maribon Sangma, hereby inform your office that the schools listed below were randomly selected as the sample for the survey and intervention for the purpose of my research. My research is entitled "Models of Career Counselling in High Schools in Meghalaya" under the guidance of Dr. Gideon Arulmani, Director of Promise Foundation, India. I am a registered Ph.D student in the Martin Luther Christian University, Shillong.

In this regards, I humbly seek your permission to kindly allow me to conduct a survey and intervention in the schools mentioned in the list attached herewith. Your permission will be highly appreciated.

Thanking you.

Yours faithfully,

Maribon V. Sangma
PhD Scholar
Counselling Psychology Department,
Martin Luther Christian University
Shillong

List of Schools:

1. Mylliem Secondary School, Mylliem
2. Pliti Syiem Memorial Secondary School, Laitkor
3. Buddha VidyaNiketan Secondary School, Pynthormukhrah
4. Rilbong PNC Secondary School, Rilbong, Shillong
5. San Shnong Secondary School, Kynton Nongkseh, Shillong
6. Smit Secondary School, Smit
7. Rama Krishna Mission Secondary School, Mylliem
8. Mawkhanu Secondary School, Mawkhanu
9. Kelian Secondary School, Malki, Shillong
10. Nongkwar Secondary School, Mawlai
11. Christ Church Secondary School, Mawlai
12. St. Gabriel Secondary School, Upper Shillong
13. Don Bosco Secondary School, Smit
14. St. Peter Secondary School, Laitlyngkot

Appendix 6:

Permission Letter from the Inspector of Schools, East Khasi Hills District

OFFICE OF THE
DISTRICT SCHOOL EDUCATION OFFICER:::EAST KHASI HILLS DISTRICT,
SHILLONG.

No. DSEO/Estt/Per/2011/ Dated Shillong, the March, 2012.

From : Smt.T.Lyngdoh,
District School Education Officer,
East Khasi Hills District,
Shillong

To,

Rev. E.H.Kharkongor,
Registrar,
Martin Luther Christian University.

Subject: **Survey and Intervention among students and Permission thereof.**

Sir,

With reference to the subject cited above and as requested in your letter dated 07.03.2012, I have the honour to state that Permission is hereby granted to Mrs Maribon Sangma, Faculty Member of your University to conduct the Survey and Intervention among students in the listed schools mentioned in your letter as part of her PhD Research Programme entitled **"Models of Career Counselling in High Schools in Meghalaya".**

However, it is requested that care should be taken to avoid untoward incidents and that it does not hamper the smooth functioning of the Schools.

Yours faithfully,

District School Education Officer,
East Khasi Hills District,
Shillong.

Memo No. DSEO/Estt/Per/2011/ 18353-54 Dated Shillong, the 15 March, 2012.

Copy To :

1. The Director of School Education & Literacy, Meghalaya Shillong.
2. Mrs. Maribon Sangma, PhD research of Martin Luther Christian University for favour of your kind information and necessary action.

14/3/12

District School Education Officer,
East Khasi Hills District,
Shillong.

****

Appendix 7:

Materials used by the Jiva Method of Career Guidance

Name of Material	Description
Counsellor Manual	A comprehensive handbook covering theory and skills along with detailed Facilitator's Notes.
Flip Charts	A set of large sized Flip Charts that the Facilitator used for the workshop. The set is thematically arranged to match the content of each workshop.
Students Worksheets	A set of photocopiable worksheets the students used in each workshop.
Career Information Cards	Cards covering 164 careers with definitions, career paths, eligibility criteria and specialisations. These cards come in an attractive satchel that is designed for self-access.
Learning Cards	Stories, questions, case studies on attractive cards for small group discussions.
Careers Dictionaries	Booklets with career names and brief career definitions used by the students. Each Kit comprises a pack of 20 dictionaries.
Career Resource Handbook	Vital information about schemes, scholarships, government departments related to career development with specific emphasis on resources for the disadvantaged.
Jiva Life Lines Board	A portable bulletin board that provides a space for students to learn more, put up their own career development information and link one workshop to another.

Appendix 8. Workshop Modules

8.1 Three- Day workshop plan

Activity Number	Activity with brief description and Intended Learning Outcomes	Time for activity
Day 1		
	Introduction to the programme.	20 mts
	T 1 Testing	150 mts
	Total Time	170 mts
Day 2		
1	The Jiva Career, understanding the Jiva framework	45 mts
2	Life Purposes in stages, Exploration of the stages in career development	30 mts
3	The Career Discovery Path, Discovering the steps for the career decision making	10 mts
4	Self Understanding, Understanding more of self in relation to career	20 mts
5	I Believe, Self exploration	35 mts
6	Panchaloka, Understanding multiple intelligences	40 mts
7	My Interest Profile, self exploration through questionnaires	50 mts
8	Find your strengths, self exploration through questionnaires	30 mts
9	Self Understanding (1st portion of My Jiva Journey Poster), summary 1	30 mts
	Total Time	290 mts
End of Day 2 Scoring of potential profile to be completed by facilitator overnight		
Day 3		
10	Potential Profile	10 mts
11	Career Alternatives (3rd portion of My Jiva Journey Poster), summary 3	50 mts
	Total Time	60 mts
End of Day 3		
Day 4		
12	Work…Job…Career, understanding their differences and commonalities	20 mts
13	The Science of Subjects, to understand that science in every subjects	30 mts
14	The Subject of Subjects, to gain insight on various family of sciences	10 mts
15	Subjects and Careers, understanding different careers working together to solve global crisis	75 mts
16	Two kinds of Information, identifying information required for career planning	50 mts
17	World of Work (2nd portion of My Jiva Journey Poster), summary 2	20 mts
18	Life Lines, deciding for own career path	20 mts
19	Give in order to Receive, understanding the principle of contributing to the society through careers	10 mts
20	Career Path: Educational Milestones	40 mts
21	My Career Plan (4th portion of My Jiva Journey Poster), summary 4	55 mts
	Total Time	330 mts
End of Day 4		
Day 5		
22	Compilation of Jiva Journey poster and conclusion	20
	T 2 Testing	150 mts
	Total Time	170 mts

8.2. One-Day workshop plan

Activity Number	Activity with brief description and Intended Learning Outcomes	Time for activity	Rationale
Day 1			
	Introduction to the programme.	20 mts	Required to orient the group
	T 1 Testing	150 mts	
1	The Jiva Career, understanding the Jiva framework	45 mts	This is central to the method being used.
2	The Career Discovery Path, Discovering the steps for the career decision making	30 mts	Time increased. This summarizes self-understanding, World of work, and career preparation
3	Panchaloka, Understanding multiple intelligences	30 mts	Time reduced due to time constraint. The original worksheet will not be used. This will be presented as a discussion using flip chart.
4	My Interest Profile, self exploration through questionnaires	50 mts	This is central to the method being used
5	Find your strengths, self exploration through questionnaires	30 mts	This is central to the method being used
	Total Time	355 mts	
End of Day 1 Scoring of potential profile to be completed by facilitator overnight			
Day 2			
6	Potential Profile	10 mts	This is central to the method being used
7	Career Alternatives (3rd portion of My Jiva Journey Poster), summary 3	50 mts	This is central to the method being used.
8	Work…Job…Career, understanding their differences and commonalities	10 mts	Time reduced due to time constraint
9	The Science of Subjects, to understand that science in every subjects	35 mts	This is central to the method being used.
10	Subjects and Careers, understanding different careers working together to solve global crisis	40 mts	Time reduced due to time constraints. Original activities will not be followed. Flip charts will facilitate the discussions
11	Two kinds of Information, identifying information required for career planning	40 mts	Reduced to 40 minutes since sharing on "How did you become you" is not included
12	Career Path: Educational Milestones	40 mts	This is central to the method being used.
	T 2 Testing	120 mts	
	Total Time	325 mts	
End of Day 2			

Appendix 9: Test battery

9.1. Career Preparation Status Questionnaire (CPSQ): An illustrative sample of items.

Instruction: Career preparation status tells us how ready we are to make career decisions. Given below is a questionnaire that helps you understand your career preparation status. Go through the questions. Mark the answer that is most suitable for you. You can choose only 1 answer. Please note that some questions require you to write an answer.

1. Write down 4 different kinds of information needed to make a career choice.

2. What is self-understanding? Explain with 3 points.

3. This is a question about your interests and talents:

   a. Which one of the following is your highest interest and talent?

      Circle ONE Of the following: Using language *or* applying logic *or* designing *or* understanding people *or* using physical skills *or* working with tools and machines.

   b. I have a vague idea. But am not able to say exactly what my interests and talents are.

   c. I don't know what my interests or talents are.

4. Name one career that is related to your interests and talents

   a. My career choice: _____
   b. I'm not sure which career I should plan for.

5. Indicate whether the following statement is true or false.

   "The word *interest* means something I am good at.

   a. False b. True

6. What is the world of work? Explain with 4 points.

9:2. Career Beliefs Pattern Scale (CBPS): An illustrative sample of items.

Career Belief Pattern Scale (*Form for Boys)*

WHAT DO YOU BELIEVE ABOUT CAREER CHOICES?

Imagine the people described below are just like you. Given below are the opinions they gave to a counsellor about their experiences. For each item, indicate how much you agree or disagree with them. The higher the number you choose, the higher is your agreement with the statement.

How much do you agree?						
1	2	3	4	5	6	7
I do not agree with this at all						

Practice item:

Sr. No.	Item	Rating
	Shanti is doing very well in school. She gets high marks in all subjects and she also is the school leader. When someone has a difficulty they turn to her for help. But Shanti is a girl. Her first responsibility is to the family. Studies, job and career are not as important for a girl as they are for a boy. Shanti must give higher attention to marriage and starting a family and lower importance to studies and career.	1 2 3 4 5 6 7

9.3. Measure of Guidance Impact (MGI): An illustrative sample of items.

MEASURE OF GUIDANCE IMPACT (MGI)

Please encircle the number corresponding to your response to each item.

	Strongly agree	Disagree	Undecided or Not Applicable	Agree	Strongly Agree
I know myself well enough to know what kinds of help I want.	1	2	3	4	5
I need to know more about what I really want.	1	2	3	4	5
I know what my real interests are.	1	2	3	4	5
I feel positive about making job applications.	1	2	3	4	5
I never know what to write on an application form where it asks you about yourself.	1	2	3	4	5
1. **I feel that there is more to find out before I decide**	1	2	3	4	5

9.4. Academic Achievement Motivation Test (AAMT): An illustrative sample of items.

You have to read both the options carefully and choose an option which is correct according to you. Along each option a box is given, you have to mark a tick (√) along the option you have chosen.

Serial No.	Questions	Answers
1.	**In the class, I like to sit with students who are**	
	(A) good in studies.	☐
	(B) my friends.	☐
2.	**During my vacation, I would like to**	
	(A) visit different places with my friends.	☐
	(B) work on my weak areas of studies with my friends.	☐
3.	**I will be very happy if**	
	(A) I score more marks in an examination than before.	☐
	(B) I win 10,000 Rupees in lottery.	☐
4.	**If I fail in an examination, I will go to school because**	
	(A) I will work hard and get pass marks in the next examination.	☐
	(B) my parents will force me to go.	☐

9.5. Socio-Economic Status Questionnaire (SESQ): An illustrative sample of items.

SECTION A: Personal and Family Information

A1. CONTACT DETAILS

1.1 Name:_____

1.2 Residential Address: _____

1.3 Phone Number (mention whose & type): _____

A2. PERSONAL DETAILS

2.1 Age: _____ 2.2 Sex: Male/Female (tick)

2.3 First Language: _____ 2.4 Other Languages in which Fluent: _____

2.5 Caste/Tribe: _____ 2.6 Community/State of Origin: _____

2.7 Religion: _____

SECTION B: Academic and School Information

B1 Class:

1.1 Class 9 _____; Class 10 _____

1.2 Last class passed: _____

B2 SCHOOL AND ACADEMIC PERFORMANCE

2.1 School Name:							
2.2 School Address:							
2.3 School Type:	***a***. *Government*	***b***. *Private Aided*	***c***. *Private Unaided*	*Other:*			
2.4 School Board:	***a.*** *State*	***b***. *ISCE*	***c.*** *CBSE*	***d.*** *GCSE*	***e***. *IB*	***f***. *NIOS*	***g***. *Other:*
2.5 Overall Percentage in Class 8: *For 9th standard students*							
2.6 Overall Percentage in Class 9: *For 10th standard students*							
2.7 Medium of Instruction:	***a.*** *Primary School:*	***b***. *Middle School:*	***c.*** *High School:*	***d***. *Home Language:*			
2.8 Are you getting a scholarship?	***a.*** *No*	***b***. *Yes*					
2.9 Are you in a free hostel?	***a.*** *No*	***b***. *Yes*					
2.10 Do you go for tuition?	***a.*** *No*	***b***. *Yes*					

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