Work Orientations and Responses to Career Choices – Indian Regional Survey (WORCC-IRS)

Draft Report
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This project has been a tremendous effort and it is our sincere hope that WORCC-IRS and NCCP will make an important contribution to the potential realization of the young people of our country.

Gideon Arulmani
(Principal Investigator)

Sonali Nag-Arulmani
(Research Partner)

Date: 25th December 2005.
Bangalore, India.

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Chapter 1

Background

1. Introduction

1.1. Career counselling and the Indian context

The young person's transition into the world of work marks one of the most important milestones in his or her life. Reaching and crossing this milestone is influenced by numerous socioeconomic, cultural and psychological forces. In some families it is the culmination of a process of being prepared and educated, allowing the young person to make this transition from a position of strength. In other families socioeconomic forces forestall such preparatory efforts and the young person may have to enter the world of work from a position of disadvantage.

Presently the term 'career' is often related to something that only the 'rich' can afford and is sometimes dismissed as being irrelevant to the needs of those who are disadvantaged and living in poverty. It is essential that *c*areer counselling is defined within the multiple realities and paradoxes that compose the Indian situation. When understood to mean livelihood or occupation or vocation or in its most simple sense: *a suitable job*, its crosscutting relevance to all sections of a population become immediately evident. From this broader perspective, career counselling could serve as a tool to support young people, irrespective of their backgrounds, to choose and plan effectively for a successful career.

The relevance of career counseling to the Indian context becomes sharper against the background of economic reforms that have helped India become one of the world's fastest growing economies. An obvious corollary to economic development is the widening of the array of occupational possibilities. The optimal utilisation of human resource to fulfil the demands of these occupational roles becomes vital to sustain growth and development. It could become difficult for young people to understand and navigate a personal pathway through this new and perhaps unfamiliar array of work options. It is at this point that career counselling becomes crucial to long term progress.

Formal vocational guidance services have been described to be a part of economic development, where the division of labour that follows industrialisation eventually extends to a point where traditional mechanisms of role allocation start to break down and formal guidance services are required to supplement them (Watts, 1996). Vocational Guidance and Career Counselling in India are currently at this stage of development. Guidance and counselling that would facilitate effective career decision-making therefore assume a special urgency in the Indian situation.

1.2. Methods and systems that facilitate career choice

Individuals repeatedly encounter crossroads along their journey toward and within the world of work. Early along this journey, the questions surrounding *entry* into this world may be the most pressing. Further ahead on this journey, issues pertaining to *progressing* within this world could emerge. Specialisation, making career changes, exiting from a certain career path, recovering from unemployment, retraining are all realities that the modern worker could encounter. It is in response to the individual's need for skills and support to steer through these career crossroads that specialised forms of counselling emerged. Vocational Guidance, Career Counselling and Career Psychology are three facets of this field of knowledge.

Career Psychology has emerged today as a distinct branch of behavioural science. It is multidisciplinary in character and draws from a variety of disciplines such as Counselling Psychology, Educational Theory, Economics and Sociology. In effect Career Psychology provides the theoretical and research basis for the practice of Vocational Guidance and Career Counselling.

2. Why career counselling?

2.1. Capitalising on suitability

In the absence of effective systems for career counselling, the career decision-making process could continue to be influenced by the various psycho-social, educational and socio-economic factors that may not lead to effective choices. Typically, the young career aspirant in India makes choices based on hearsay, prevailing career beliefs and prestige variables pertaining to specific careers. Students who have gone through comprehensive career counselling are far more discerning in their career choices. It is well known that individuals who make career choices based on personal interests and abilities show significantly higher levels of job satisfaction and are more productive workers. Students who make career choices without adequate and accurate counselling and guidance, are at risk to being impelled to choose careers that are popular – forsaking careers for which they might have a higher suitability.

2.2. Reducing career development lag

A career development lag is a delay between qualifying for a career and actually entering a career. Our observations (Arulmani, 1995, 1998, 2000; Nag-Arulmani, 2004) have indicated that the longest lag periods are associated with poor career planning. Career development can last a lifetime. When this process allows movement from one effective choice to another, benefits accrue and resources are conserved. When it becomes a blundering from one ineffective decision to another, career development can become costly both to the individual and the nation. This is one of the factors that keeps the basket of the educated unemployed brimming and full, in India.

2.3. Capitalising on emerging opportunities:

India is a developing country. New occupational opportunities are constantly emerging. Mindsets that place occupations on a prestige hierarchy quite often prevent young career aspirants from actualising their talents for emerging careers. Our earlier work has shown that a large number of Indian career choosers are typically restricted in the range of careers they are willing to consider. India today however presents a rapidly increasing range of employment opportunities. The benefits of this development are more likely to accrue to those who approach the employment market place with an attitude that is unencumbered by limiting social conventions. It is at this intersection between the individual and the emerging world of work that career counselling can play a crucial role.

3. The relevance of the present project

3.1. Paucity of research

The importance of career counselling has been emphasised in India from as early as 1938 when the Acharya Narendra Dev Committee underlined the importance of guidance in education. Various committees and commissions (e.g. The Mudaliar Commission, 1952; the Kothari Education Commission, 1964-66) have subsequently made recommendations for the formalisation of guidance and counselling services at a national level.

The tremendous changes in the world of work, place a high degree of pressure on the Indian young person to make effective career choices. The earliest recommendations for the development of formal career guidance services in India were made almost five decades ago (Barnette, 1954). Yet, Career Psychology has remained an infant science in India. Theoretically sound, culturally and psychologically validated, career counselling services do not yet seem to be available for large scale use in the Indian situation.

3.2. Relevance, reliability and validity

It is important when considering career counselling for the Indian context, that we keep in mind the historical differences between Western and Indian approaches to work. Vocational Guidance first emerged as a strongly felt need from within an industrial, mechanised and individualistic work culture. Although 'career' has become an integral aspect of modern Indian culture, career choice and development progresses in India in a manner that is quite different from the West. It is essential that these differences are taken into account for the development of a reliable and valid method of guidance and counselling for Indian young people.

4. Project methodology

The development of Career Psychology in India is poised at a point when work and career are moving into a new phase in their evolution. India is today described to be a developing nation and opportunities in the world of work are immense. Effective guidance and counselling could play a vital role in drawing the young person and the worker closer to these opportunities.

It is against this background of a paucity of research into the field of Career Psychology, coupled with a pressing demand for career counselling services, that this project has been conceived and executed in partnership with the Sir. Ratan Tata Trust. We have approached this project at two levels briefly described below:

4.1. Work Orientations and Responses to Career Choices – Indian Regional Survey (WORCC-IRS)

WORCC-IRS is a survey conducted in 15 different regions of the country on a sample of high school, higher secondary and vocational (ITI and polytechnic) students. A small sample of working youth and those in informal training programmes is also included.

The survey has been conducted in 8 different languages and is designed to collect information about young people's orientations to work and livelihood and the manner in which they make career / vocational choices in these different regions.

The WORCC-IRS data has been analysed within a framework of 6 interrelated themes. These findings have been collated into the present *Draft Report*.

4.2. The National Consultation on Career Psychology (NCCP)

In its contemporary forms career counselling draws upon a number of disciplines: *psychology, education, sociology and labour economics*. It is our objective therefore to approach this important issue from an interdisciplinary point of view. The format for the NCCP therefore is to present the findings of the WORCC-IRS to scholars, government officials, NGOs, international agencies, school boards, principals, counsellors and others for discussion and interpretation into the larger context of the Indian situation. These interactions would be documented and collated into a *Final Report* for wider circulation and publication.

4.3. Anticipated outcomes

It is expected that the WORCC-IRS and NCCP together would contribute to the following:

- Develop guidelines for the delivery of career and vocational counselling services.
- Address issues of capacity building for the appropriate delivery of these services.
- Develop guidelines for a curriculum framework for Career Psychology that could be offered as a systematic, culturally validated course for counsellors in India.
- Consider policy recommendations for the systematisation of a national careers service.

It is anticipated that this interdisciplinary consultation would lead to a better understanding of Indian young people's orientations to work and lay the foundations for a service that would help them make effective transitions into the world of work.
The next chapter provides an overview of the conceptual and theoretical foundations upon which the rationale for the WORCC-IRS project rests.

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Chapter 2

Rationale

Three important theoretical constructs have influenced contemporary trends in Career Psychology. The chapter begins with a brief description of these approaches followed by a discussion of the key constructs that compose the rationale for the study.

1. The developmental and life-span oriented approaches

1.1. Stages and developmental tasks

The concept of human development is one that has been central to theory development and practice in Career Psychology. Career Developmental Theory, puts forth the idea that occupational development keeps pace with the individual's cognitive maturation (Ginzberg, Ginzburg, Axelrod and Herma, 1951; Super, 1957). Career development is said to occur in *stages*. As with other aspects of human development, each of these stages present *career development tasks*, the successful resolution of which is critical to the passage into and comfort in the next stage of career development. An integral aspect of this conceptualisation of career development is the concept of *career maturity* which reflects the individual's level of career progress in relation to his or her career-related development tasks.

The framework offered by the developmental perspective where 'readiness' is juxtaposed against 'tasks', is useful and relevant across different cultures. It is at the next step, namely, the proposition that career development keeps pace with cognitive maturation that a departure is in evidence in the Indian context. As we will see in later chapters, a variety of non-normative factors such as contextual realities, economic cycles, educational systems, socio-economic status and social-cognitive environments play a significant role in altering the trajectory of career development.

1.2. Trait and factor theory

Embedded within the developmental formulation is the important construct of personal traits. In psychological terms, a trait is a theoretical construct that describes an underlying constituent of the individual's personality, which explains the consistent and cohesive manner in which a person behaves. Interests and aptitudes are two specific constructs that are emphasised and the assessment of interests and aptitudes continue to remain an important pillar on which career counselling rests.

1.3 Circumscription and compromise

One conception of career development sees a gradual narrowing down of occupational possibilities according to emerging self-concepts (Gottfredson, 1981). *Circumscription* involves the inclusion and elimination of occupational alternatives through an age graded

developmental sequence. *Compromise* is a process of closing the gap between the ideal and the reality in the world of work.

2. Social Cognitive Theory

Albert Bandura's Social Cognitive model of psycho-social behaviour analyses the diverse ways in which beliefs of personal efficacy operate within a network of socio-cultural and socio-economic influences, to shape life paths. The central theme is that people's belief in their personal efficacy to manage life's demands affects their psychological well-being, their accomplishments and the direction their lives take. Bandura describes three social cognitive mechanisms:

2.1. Self-efficacy beliefs

Bandura (1977a) defines self-efficacy expectations as beliefs about one's own ability to be successful in the performance of a task. The concept of self-efficacy rests on the premise that self-referent thought influences human behaviour. Bandura has been able to demonstrate that self-efficacy cognitions determine whether behaviour will be initiated, how much energy will be expended and the duration of the maintenance of this behaviour in the face of obstacles and adverse experiences.

Bandura (1986) describes four main sources of influence that contribute to the formation of self-efficacy beliefs:

A. Performance accomplishments

Performance Accomplishments describe the individual's actual performance on a task and his or her ability to attribute success on the task to personal effort. Repeated failure on a career development task is likely to affect the career aspirant's self-efficacy for career preparation.

B. Vicarious experience

Going through the experience of watching someone (a role model) similar to themselves succeed by consistent effort raises observers' belief that they too can master similar activities. In the same way, observations of others' failures despite strong efforts, undermines observers' judgement of their own efficacy and lowers motivational levels. A young person who is surrounded by role models who have succeeded in career preparation is likely to have a higher self-efficacy for career preparation.

C. Verbal Persuasion

Verbal persuasion refers to the individual being persuaded and encouraged by someone else that they possess the capabilities to master a task. Conversely, consistent verbal feedback that questions a person's capabilities would cause him or her to avoid challenging activities and give up quickly in the face of adversity. Being consistently discouraged from going on for further education by family and community, could lessen the career aspirant's self-efficacy for career preparation through further education.

D. Physiological and emotional arousal

People partly rely on their physiological capabilities and emotional states, to assess their own capabilities and personal stress reactions tend to be interpreted as the precursor to poor performance (Bandura, 1995). If career preparation tasks consistently evoke feelings of fear and frustration the individual's self-efficacy for that task could diminish.

According to Social Cognitive Theory, these factors work together to influence the individual's over all self-efficacy for a particular task.

2.2. Outcome expectations

The second socio-cognitive mechanism that Bandura describes, namely, outcome expectations are the person's imagined consequences of performing particular behaviours and the value people place on the outcomes of their actions. An outcome expectation is a person's estimate that a given behaviour will lead to certain outcomes. If the imagined consequence of taking up an Arts course is unemployment, while the Science courses are expected to lead to 'good' careers the individual is more likely to be predisposed toward Science courses.

2.3. Goal setting and planning

This is the third social cognitive mechanism described by Social Cognitive Theory. A goal may be defined as the determination to engage in a particular activity or to effect a particular future outcome (Bandura, 1995). Goals operate principally through people's capacity to symbolically represent future outcomes and to react self-evaluatively to their own behaviour, based on internal standards of performance.

3. Social Learning Theory of career development

3.1. Habitual ways of thinking

According to John Krumboltz (1979), the experiences that an individual has, lead this person to develop a picture of him or herself – a *self-view* which reflect the person's interests, personal values and confidence in performing specific tasks related to career preparation. In addition to the formation of a view of self, the individual also forms a particular view of the environment. That vocational courses are only for the poor is an example of a commonly held *world view generalisation* among career aspirants in India. Such generalisations guide the individual's career decision-making.

Habitual ways of thinking begin to characterise the individual's orientation to the world of work. These interpretations influence the development of skills with which an individual deals with career development tasks. A young girl who believes for example that her socio-economic status renders her helpless to overcome obstacles is likely, when difficulties emerge, to give up without approaching the task that is before her.

3.2. Career Beliefs

Drawing from the Social Cognitive and Social Learning theories, we have made the observation that a conglomerate of attitudes, opinions, convictions and notions seem to cohere together to create mindsets and beliefs that underlie people's orientation to the idea of a career. We have referred to these deeply held convictions about activities linked to career development as *career beliefs.* It appeared from our field experiences that the impact of career beliefs on the career development process within the Indian situation was marked and critical (Arulmani, 1998, 1999, 2000; Arulmani & Nag-Arulmani, 2001, 2002, 2003, 2004). In fact we found that the outcomes of career counselling were often rendered meaningless when they were not consistent with prevailing career beliefs.

4. Key constructs underpinning the WORCC-IRS

4.1. Social cognitive-environments

As with other human activities work occurs within a social context – a context characterised by patterns of beliefs and ways of thinking. This influence of the mind on behaviour is particularly significant when entire societies begin to think in a particular manner, internalise belief structures and demonstrate certain mindsets. Psychologists use the term *social cognitions* to describe patterns of thinking that have become habitual across social groups (Bandura, 1989). Social cognitions are patterns of beliefs that exist within a community and guide the behaviour of the individuals in that community. Arbib and Hesse (1986) point out that beliefs held by the individuals of a community may cohere into a pattern of *commonly held* cognitions characterising an entire community or social group. These belief structures may not be internalised within the minds of single individuals but rather in the relational processes of social exchanges.

Social cognitions seem to play a powerful and significant role in the evolution of work as well. Mindsets engendered by social and moral frames of reference give a particular colouring and interpretation to the meaning and purpose of work. Prevailing ideologies and the experiences of a community create *social-cognitive environments*. Within these environments, positive or negative values could be attributed to work in general as well as toward occupational clusters. These social-cognitive environments foster the evolution of a *work ethic*: a set of social norms that describe a particular approach to work. For example a certain work ethic may place a positive moral value on hard work based on the belief that work has innate value and must be pursued for its own sake. Similarly another social-cognitive environment may promote a work ethic wherein aspiring to high prestige careers maybe looked upon with scepticism. A work ethic is a collection of social cognitions about work, which then guide and influence people's work behaviour.

Cognitions and beliefs arise from a reciprocal interaction between the individual and his or her environment. Career planning in India, is not a purely individualistic effort and beliefs and values held by the community could play a significant role in the career decision-making process. Beliefs pertaining to career choice and planning could be

affected by the attitudes of the young person's family and community to further education, job acquisition and to the future as a whole.
It is likely that career development is not merely a function of the maturation and the unfolding of personal interests and aptitudes or the crystallisation of personal identities. Personal attributes unfold within a certain social-cognitive environment. The characteristics of this environment influence the manner in which personal attributes are linked to career development.

It seems therefore that the nature of a social-cognitive environment plays a defining role in career development. Based on this argument, social-cognitions and social cognitive environments have been taken as core variables for examination by the present study.

The literature, as well as our earlier research, points to the following variables as perhaps describing a social-cognitive environment:

A. *Career Beliefs* as characterised by habitual ways of thinking about work and orientation to career development.

B. *Goal setting and planning* as characterised by the nature of occupational aspirations and efforts directed toward setting career development targets.

D. *Decision-making styles* against the continuum of collectivism-individualism.

E. *Community influences* as characterised by the nature and extent of parent involvement, pressure to make career choices, access to role models and community support.

4.2. Self efficacy for career preparation

Self-efficacy is the confidence in the personal ability to be successful in the performance of a task. The career development task confronting the Indian high school student is decision making regarding what he or she is going to do after high school. Behavioural outcomes at this stage in the career development process points to three possibilities:

- preparing for a future career by pursuing further education
- discontinuing education to seek employment
- remaining unoccupied

WORCC-IRS has two additional objectives, which this Draft Report has not commented on. These are:

- to explore how an individual's self efficacy mediates career development
- the nature of career development tasks in the Indian context and the place that career maturity has in the career decision making process within the Indian education system.

Analysis of these issues from the WORCC-IRS dataset will be presented in the final report.

5. Propositions and research questions

WORCC-IRS is an exploratory study. A post hoc approach has been taken to explore the data. However some of the relationships that we set out to look for are as follows:

5.1. Proposition 1: Types of social-cognitive environments

A social-cognitive environment by its very nature would vary in character across different social groups. It seems possible therefore that a typology of social-cognitive environments could exist and that these environments could be grouped into families according to the manner in which career beliefs, outcome expectations, goal setting, decision-making styles, and community influences manifest themselves. Preliminary analysis of this construct is presented in this Draft Report.

5.2. Proposition 2: Development of career preparation self-efficacy

Self-efficacy is said to be formed by clearly definable 'sources' located within the individual's environment (Bandura 1986). It is possible therefore that different social-cognitive environments impact the development of self-efficacy in different ways. Preliminary analysis of this construct this presented in is Draft Report.

5.3. Proposition 3: Orientations to career paths

Three kinds of orientations to the future that emerge at the end of high school, are work immediately, pursue part time work and study, and pursue further education. It is possible that the nature of the social-cognitive environments and the quality of career preparation self-efficacy influence these orientations. Preliminary analysis on orientations to career paths is presented in this Draft Report.

5.4. Proposition 4: Impact of career beliefs on career preparation

Our observations point to the possibility that social cognitive variables in the form of career beliefs influence the career decision-making process. It is likely that some of these career beliefs are *common* across communities and SES groups while other belief themes would differ *between* communities and SES groups. Preliminary analysis about career beliefs is presented in this Draft Report.

This is the theoretical and conceptual background that has guided the design of the WORCC-IRS project. Admittedly, these theories are Western in their origin. Rather than dismiss all western models as unsuitable, we have attempted to explore the extent to which existing theoretical frameworks could be *adapted* to the Indian situation and the eveloping world. It is our hope that the WORCC-IRS and the National Consultation on Careers Psychology (NCCP) would lay the foundations for theory development and model building in the area of career counselling for the Indian context.

Chapter: 3

The Research Design: A Summary

The Promise Foundation worked under the guidance of an Advisory Committee and in partnership with a team of Research Partners to design and execute the WORCC-IRS. Given the wide scope of the study and the multiple disciplines that it would draw from, advisors represented a variety of disciplines including psychology, psychiatry, education, statistics, anthropology and sociology. Research Partners were drawn from different regions, to allow access to samples in different parts of the country. Further details about the Advisory Committee and the Research Partners are provided in Appendices 1 & 2.

A detailed Research Design (WORCC-IRS: Research Design, 2005, TPF) was developed in consultation with the Advisory Committee and the team of Research Partners was trained to execute the study as per this design. The key points of the methodology and design are presented in this chapter.

1. Collation of Indian research on Career Psychology

A literature search was undertaken to develop an overview of Indian research in the field. The titles of a total of 229 journal articles, doctoral dissertations, books, monographs, Government documents, newspaper articles that seemed to have addressed the issue of career choice were identified. Attempts were made to contact each of the individuals / teams that produced these writings. Abstracts and where possible the complete articles were obtained from those who responded.

The review indicated that the salient research themes were as follows:

- Socioeconomic status and career choice.
- Gender and career choice.
- Personal identity and career choice.
- Career maturity.

Information gleaned from these studies helped in formulating the design for the WORCC-IRS. However, barring a few, most of this research was atheoretical and did not reflect contemporary trends in Career Psychology. Details of the sources reviewed are provided in Appendix 2.

2. Formation of a core group of Research Partners

Based on relationships that developed during the literature survey and The Promise Foundation's national network of honorary youth workers, a core team of Research Partners was formed. Selection was based on the following criteria:

- Fluency in English and local language, with past experience in English to local language translation.
- Access to the sample under consideration with specific emphasis on exposure to student welfare work and interest or past experience in career counselling.
- Willingness to undergo an orientation to Career Psychology and be trained in the research methodology.

The survey was conducted in districts that the Research Partners had access to. Details of the survey locations are provided in Table 1.

Table 1: WORCC-IRS Locations and languages

District	State	Language
Bangalore	Karnataka	Kannada and English
Chandigarh	Chandigarh	Hindi and English
Chennai	Tamil Nadu	Tamil and English
Dhule	Maharashtra	Marathi
Dehradoon	Uttaranchal	Hindi and English
Guwahati	Assam	Assamese and English
Nagercoil	Tamil Nadu	Tamil and English
New Delhi	New Delhi	Hindi and English
Rampur	Himachal Pradesh	Hindi and English
Shimoga	Karnataka	Kannada and English
South Goa	Goa	English
Srinagar	Jammu and Kashmir	Urdu and English
Ukhrul	Manipur	English

3. The survey protocol

3.1. Identification of themes

Ten themes were identified as being relevant to understanding career development in the Indian context based on The Promise Foundation's past experience in the field, and a comprehensive review of Indian and international literature.

The WORCC-IRS protocol is composed of ten sections as follows:

Section 1: Personal details, socio-demographic and socio-economic information.
Section 2: Orientation to work, career and subject choice.
Section 3: Career interests, occupational prestige and parental attitudes toward career choices.

Section 4: Career decision-making difficulties.
Section 5: Social-cognitions and career beliefs.
Section 6: Perception of career barriers and the confidence to ovecome these barriers.
Section 7: The influence of individualistic vs. collectivistic orientations on career choice.
Section 8: Sources of self-efficacy in the form of opportunites for success experiences, role models and social persuasion.
Section 9: Outcome expectations and imagined consequences of choosing certain career paths.
Section 10: Career preparation self-efficacy

3.2. Development of the battery

Both the qualitative and quantitative approaches were used in an attempt to collect data in as comprehensive a manner as possible. Items in the protocol were therefore of two types:

A. Qualitative sections

These sections were in the form of narratives in response to open-ended questions. In addition, Research Partners were provided with an Observation Sheet (Appendix 3) and were required to document their experience of every session. This also proved to be a valuable source of information. The methodology used to cull qualitative information from the data is discussed in Section 9.3 below.

B. Quantitative items

Our reviews of the Indian literature indicated that much of the information that WORCC-IRS aimed to collect might not have been collected before in the Indian context. Therefore, the study relied on scales, questionnaires and inventories developed by The Promise Foundation. In addition the battery incorporated the Career Decision making Difficulties Questionnaire developed by Prof. Itamar Gati (2000), which has been standardised for international use. Further details about each of these scales are provided in the chapters under which they are discussed.

3.3. Pilot Studies

The first version of the WORCC-IRS battery was developed in English and trial tested through *pilot studies* on groups approximating the sample characteristics for the final Survey. The responses received through the pilot studies were discussed with the Advisory Committee and a draft form of the protocol was developed in English.

3.4. Vetting of the WORCC-IRS protocol

The draft protocol was presented to the Research Partners and discussed in detail. The necessary changes were made based on the feedback given by Research Partners. The emphasis was on ensuring that the protocol was locally relevant and at the same time applicable in all the regions under the study.

3.5. Translations and standardisation

Research Partners, worked in teams under the supervision of The Promise Foundation to produce the initial translation of the English original into their local languages. The objective was to balance a literary style with colloquial language that would be easily understood by students.

The first version of the local language protocol was put through a *standardised back-translation procedure*, to establish the equivalence of the vernacular versions to the English original. Individuals who were fluent in a given vernacular as well as in English were identified. These persons were blind to the English original and were given the vernacular versions for back-translations into English. This English translation was then compared with the English original to check for discrepancies in meaning. This process continued iteratively until a vernacular version that was equivalent to the English original was obtained for all the languages.

The final versions of the WORCC-IRS protocols have been developed in 8 different languages. Details are provided in Table 1 (Section 2).

4. Sample definition

The transition from school to work is a crucial stage in career development. A closer look at this stage of career development in the Indian situation indicates that a key developmental task is linked to *preparing* to enter the world of work. Given the critical nature of this age group and crucial nature of this career development task, WORCC-IRS focused on the career *preparation* behaviour of young people from the middle of adolescence to early adult hood. The following criteria were used to define the sample:

4.1. Age and Schooling:

Some of the most far-reaching career decisions are made between the end of high school and the end of the higher secondary years. Four orientations to career development seem to be manifested in the Indian situation, namely, begin working immediately, pursue college education, enter vocational training and no career plans. This is both a function of the young person's maturation for decision making, as well as requirements from the existing educational system in India. Occupation and job is also a matter of relevance to young people who are not in school because of various 'push out factors' and other socio-cultural and economic influences.

Hence the sample comprised individuals in the age range of 14 to 21 years, who are:

- in Classes, 10 and 12
- following Vocational Courses

A total of 88 institutions participated in WORCC- IRS (Appendix 5).

Attempts were made to also include the following in the sample:

- those who are within this age range but have not completed schooling
- those who have completed schooling but are presently unoccupied

4.2. Gender

The literature has consistently indicated that strong interactions are present between gender and career development. The sample therefore drew from both genders.

4.3. Socio-economic status (SES)

Researchers almost universally accept that SES has a defining impact on career development. This study covered the low, middle and upper middle SES groups.

4.4. Sampling procedure

The stratified random sampling procedure was used. Details of sample selection are given in Section 7.2.

A *nested design* was followed to study groups with unique needs. The nested design was followed by certain Research Partners only, and these samples would not be representative of all regions in the WORCC-IRS.

5. Ethical considerations

Participants' *Informed Consent* was obtained after they were explained the nature of the Survey and its purpose. Students who did not wish to participate were at liberty to leave.

Confidentiality has been preserved and the identity of individual participants / schools will not be revealed in relation to specific findings.

All participants were offered a free *Career Information Workshop*, after the Survey. The workshop gives students information about new careers emerging today and informs them about the talents and aptitudes required for these careers. All students in the target classes were invited to attend the workshop. Details are provided in Section 8 below.

6. Preparation for the survey

6.1. Pre-training orientation for Research Partners

Communications with Research Partners were initiated in the early part of March, 2005, approximately 3 months before the first consultation. During this time, the orientation to the basic principles of Career Psychology was initiated. Research Partners were supplied with the following study material:

- A summary of our review of the Indian literature.
- A Handbook on career counselling produced by The Promise Foundation

(Career Counselling: A Handbook, Tata McGraw Hill).
- Guided work sheets.

Data collection was combined with training. The emphasis at this stage was to collect information about attitudes pertaining to work and career, influences on career choices, career beliefs and other such qualitative information.

6.2. Adminstration Manual

A detailed Administration Manual (WORCC-IRS: Administration Manual, 2005, TPF) providing the rationale of the study and the methods for executing its various components was prepared. All training of Research Partners was located around this document.

6.3. The first consultation

The first consultation with the Research Partners was held from the 1st to the 5th of May, 2005 in Bangalore. Some of the important objectives of the consultation were as follows:

A.. Theoretical orientation

The self-study and pre-training orientation was used as a foundation to provide the Research Partners with a broader understanding of Career Psychology. The key principles of Career Psychology were presented, with particular emphasis on the Indian context.

B. Training on the method of administration

The Administration Manual was used to provide Research Partners a detailed orientation to the method and approach of the study. Most importantly, training focussed on applicational issues. Findings of pilot studies were presented as illustrations.
Some of the key themes that the training addressed and demonstrated were as follows:

- *Consistency* and *congruence* in approach across all regions.
- Remaining a *neutral and objective* observer was demonstrated. The importance of ensuring personal opinions did not influence respondents was emphasised.
- Giving *instructions* in a standardised manner.
- Answering students consistently giving the same or similar response to all students. The Administration Manual included answers to a list of *anticipated questions*.
- Ethical considerations with particular emphasis on confidentiality and professional conduct during the Survey.

C. Practicals

Research Partners interacted individually with a small number of young people who were representative of the final sample. Research Partners could actually experiment with the training they had been given.

D. Translations

The English to vernacular translations were initiated during this consultation under the supervision of experts from The Promise Foundation.

7. Execution of the WORCC-IRS: Survey component

Research Partners interacted with the respondents at two levels, namely the Survey and the Career Information Workshop. In all cases the Survey preceded the Career Information Workshop.

7.1. Survey: Format and design

Research Partners have been trained to follow an identical administration procedure to ensure consistency across the various regions. A variance in the procedure has been planned for samples participating in the *nested design.*

A group format was followed and group size ranged between 15 and 45 individuals. The time taken for the Survey ranged from 2 to 4 hours per group.

It was anticipated that respondents could become tired and bored if they had to go on answering questions. It was also anticipated that many would not be used to responding to the kind of questions presented by the WORCC-IRS battery. Therefore, Research Partners were trained to take each group through short activities designed to 'set the stage' for the next section. These activities were expected to be a break from writing and answering questions as well as provide a 'trial run' before respondents began on the actual questions. These activities are in a lighter vein and designed to also create some fun and a break from the monotony.

7.2. Survey: Participant recruitment and procedure

The sample definition has been discussed earlier. The procedure for sample selection was as follows:

- All institutions were selected from within a specific district.
- School types were classified as per the following criteria: Government Schools, Government Aided Schools and Unaided private schools
- Under the Vocational category, ITIs and Polytechnics were selected separately. Vocational school types were classified as per the same criteria used for selection of schools.
- In each school type, enough schools were identified to ensure a minimum of 90 students. Students selected for the survey were therefore from one institution or spread across 2 to 3 different institutions.
- The roll numbers of students were taken across the different institutions selected, for each school type. Lots were used to randomly select roll numbers to make up the survey sample. For each school type the survey sample comprised a minimum of 70 students.

- Research Partners then visited schools with the list of pre-selected roll-numbers, to conduct the Survey.

8. Execution of the WORCC-IRS: Career Information Workshop

In keeping with the project's objectives all Survey groups were offered a free half-a-day Career Information Workshop.

8.1. Content

The orientation of the Career Information Workshop was not toward a complete counselling programme. Instead, the objective was to offer information about occupations and careers to sensitise and inspire participants. All Research Partners were trained on a method developed by The Promise Foundation for group career counselling interventions. The Career Information Workshop was conducted *after* the survey.

The method uses *a multiple potentials* framework according to which participants learn about the different ways in which their talents could be manifested. Career choices are often limited to the careers the young person has heard about or has been exposed to. An objective of the Career Information Workshop therefore was to widen this horizon so as to provide a broader range of choice.

8.2. The Career Information Workshop Kit

The workshop is supported by a kit comprising, Career Name Flashcards and Career Definition Flashcards. Students' response to the Career Information Workshop across all regions has been overwhelmingly positive. This feedback once again highlights the urgent need for systematic and culturally validated career counselling.

9. Execution of the WORCC-IRS: Data management

9.1. Data Collection

Research Partners encountered numerous difficulties during data collection. Obtaining permissions to conduct the survey in private schools was particularly difficult. However most of them were able to overcome these difficulties and have worked hard to achieve the targets that have been set. The survey was also affected by natural calamities. Rains and floods in many parts of the country and the earthquake in Kashmir affected access to the sample. This delayed data collection and dispatch of completed protocols from some of the regions to our office in Bangalore. As a result, the original time lines could not be maintained.

9.2. Re-translation of student responses

In most regions the protocol was administered in the local language, apart from a limited number in English. Research Partners then re-translated student responses from the local

language into English. They had been trained on this procedure during the first consultation.

9.3. Management of qualitative data

Qualitative data emerging from the narratives and open-ended questions were examined using a modified analytic inductive approach (McMahon, Patton &Watson, 2003). The steps followed were:

- Open coding: through theme analysis for data reduction and categorization.
- Axial coding: to develop connections and linkages between themes and categories.
- Selective coding: to validate core categories or central themes around which other categories could be refined to consequently generate a conceptual framework.

9.4. Management of quantitative data

The WORCC-IRS protocol used standardised questionnaires, inventories and scales to collate quantitative data. This data was analysed as per the structure and norms of the instruments that were used. Further details are provided in later chapters.

9.5. Coding and data entry

This part of the project followed a three step process:

- Items were coded by trained staff from The Promise Foundation.
- Data entry was conducted through a team of data entry professionals who were oriented to the nature of the data and method of data entry required.
- Data cleaning and quality control was managed by the project leaders from The Promise Foundation. A random sample of 20% of the dataset was re-checked.

9.6. Data Analysis

SPSS was used as the primary software for data analysis.

A combination of statistical procedures were used for data analysis which included one way ANOVAs, Pearson's correlations, Principal Components Analysis and Non Parametric (Chi-square) tests. Details are provided in later chapters.

The WORCC-IRS design at this stage attempted to lay out a broad frame of reference within which to conduct the study. It was anticipated however that as the study progressed, new variables would emerge that may have to be controlled or included in the study. It was vital therefore that the approach to this investigation was kept flexible without being loose, and target driven without being rigid. The changes that occurred are reported in later chapters.

The following chapters present the WORCC-IRS findings.

Chapter 4

An Introduction to the sample

This chapter presents an overview of the WORCC-IRS sample details across socio-economic status, caste, gender, urban-rural divisions, location, school type and school board. Subsequent chapters will consider the interactions between these variables and crosscutting themes such as the process of career decision making, social cognitive influences, socio-cultural and psycho-social influences and self-efficacy for career preparation.

Conducting this survey presented challenges at multiple levels. It is important that the following limitations and qualifying criteria are kept in mind when interpreting the WORCC-IRS data.

1. Qualifying criteria

1.1. Earlier research

First of all WORCC-IRS attempted to address questions that do not seem to have been asked before in the Indian context. As a result there is not much in the form of a previously established body of knowledge that the study could be based upon.

1.2. Assessment tools

Tools for assessment and observation that are standardised for use in the Indian context are not many. An immediate challenge therefore was to blend the use of qualitative methods with quantitative techniques to study the multiple variables that this study set out to examine.

1.3. Linguistic diversity

Language diversity was a further challenge. It was necessary to take a multi-lingual approach. Concerted efforts were directed toward ensuring cross-language parity for the WORCC-IRS battery. After the survey, it was vital to ensure that nuances of narratives and descriptive information captured in different languages were preserved in translation into English.

1.4. Sample Size

WORCC-IRS has reached a total of approximately 7000 individuals in the regions under study. However due to delays caused by natural calamities and other unforeseen events, the planned timelines could not be maintained. Hence all the data has not been analysed in time for the Draft Report. This report presents information from 3799 completed protocols. Care has been taken to ensure that this number is representative of the entire

sample across age, region, class, school type and gender. Information from the remaining protocols will be included in the Final Report that will follow the NCCP.

1.5. Missing Data

In cases where small parts of a questionnaire (e.g. 2 to 3 items) were empty, the student's mean score was used to compensate for the missing data. Approximately 15% of the protocols had missing data of this nature. When an entire section was left unanswered, the protocol was dropped from the analysis. Approximately 4% of the protocols had to be rejected.

2. Socioeconomic status

2.1. Classification of SES groups

Research from different cultural contexts including the Indian environment has consistently revealed a strong relationship between socio-economic status (SES) and career preparation. WORCC-IRS will lay particular emphasis on understanding the interactions between SES and career preparation.

SES is itself a complex concept and it has been variously defined. Earlier definitions were restricted to the economic aspect and evaluated on the basis of income levels. 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 socio-economic status (e.g. Kuppuswamy, 1959; Srivastava, 1991; Kapoor & Singh, 1998). Drawing from the ideas of Indian social scientists the WORCC-IRS SES Scale obtains socio-economic status information along multiple dimensions as follows:

- Parents' education
- Parents' occupation
- Material Possessions
- Family income per month
- Type of housing
- Electricity / water connection
- Reading material available in the home

Each of these categories are given a weighted score and summated to obtain a total SES score. The maximum obtainable score on the WORCC-IRS SES scale is 191. Analysis of the SES data indicated that the survey did not reach individuals from the high SES level. Therefore the total SES score has been classified into 3 groups, namely, Low SES, Middle SES and Upper middle SES.

All heads of institutions from where this data was collected were also required to provide an estimate of their student's SES backgrounds. Research Partners also provided a similar rating. These external criteria were used to validate the SES classification obtained through the WORCC-IRS SES scale.

2.2. A description of the SES groups

Information provided in Table 2 gives some insight into the three SES groups.

Table 2: An overview of parental employment, parental education and monthly income across low, middle and upper middle SES groups *(All values are in %)*

Descriptor	**Details**	**Low SES** (N = 1316)	**Middle SES** (N = 1233)	**Upper Mid. SES** (N = 1250)
Father's Employment	Unemployed for more than a year	34.3	12.6	0.28
	Irregular	15.3	2.1	0.2
	Temporary	31.4	22.0	4.0
	Permanent	18.8	63.3	93
Mother's Employment	Unemployed or not working	69.7	83.5	73.0
	Irregular	12.5	2.6	0.6
	Temporary	14.1	7.6	4.7
	Permanent	3.8	6.3	21.6
Father's education	Illiterate	22.6	3.3	0.2
	Primary School	30.4	9.2	1.5
	High School	35.4	41.2	10.3
	Intermediate	7.3	16.5	6.4
	Diploma	1.1	4.9	7.0
	Graduation	2.4	20.0	39.4
	Post Graduation	0.8	4.5	31.6
	Doctorate	0	0.3	3.5
Mother's education	Illiterate	40.6	16.0	3.4
	Primary School	33.7	22.4	5.5
	High School	21.9	42.1	18.2
	Intermediate	2.8	9.7	8.5
	Diploma	0.5	1.0	4.4
	Graduation	0.4	7.6	35.8
	Post Graduation	0.1	1.2	21.7
	Doctorate	0.1	0.1	2.6
Monthly Family Income	Range of income amongst majority of sample	Rs. 2,000 to Rs. 6,000	Rs. 6,000 to Rs. 20,000	Rs. 20,000 to Rs. 50,000

2.3. Type of parental occupations:

Low SES group:

Parental occupations mainly fall into the unskilled and semiskilled categories. Examples of occupations are: coolie, driver, office boy, sweeper, street vendors, farmer, watchman, milkman. A large percentage of mothers amongst this group worked as housemaids.

Middle SES group:

The majority of parental occupations fall in the skilled manual or skilled non manual categories. Examples of occupations are: clerk, supervisor, assistant manager, small sized business or industry, non officer level jobs in government departments, accountant.

Upper middle SES group:

The majority of parental occupations fall in the professional and managerial category. Examples of occupations are: lawyer, teacher, engineer, doctor, chartered accountant, manager, small - medium sized business or industry, architect.

3. Caste

The roots of caste run deep into the Indian psyche and have become intertwined with personal and occupational identity. Given the strong historical relationship between caste and occupation, WORCC-IRS included caste as an important variable to be studied. Classification was conducted under the supervision of a senior anthropologist who is also one of the WORCC-IRS advisors.

Details of Caste/tribe/religion were classified into the following scheme:

- General Caste (referring primarily to upper castes)
- Scheduled Castes
- Scheduled Tribes
- Backward Classes
- Religious Minorities
- Others

The identification and classification of Backward Classes is based on data drawn from the National Commission of backward Classes (Government of India) state-wise list (2005), identification and classification as Scheduled Caste and Tribes (from Part I-Rules and Orders under the Constitution, Vol II-Sec J). Much of the data and verification of General Caste and religious groups has been confirmed by referring to the book, 'People of India" by K S Singh (Oxford University Press, Delhi, 1992).

An effort has been made to represent sociological reality and the official classification of castes and tribes. Under General Caste, all groups such as Brahmins, Baniya, Vaishya, Mudhaliyar, Chettiyar, Jains, Sikhs etc have been included. Although Vokkaligas and Lingayats in Karnataka enjoy a dominant caste position in society, they are classified as 'Backward Classes' in the state and therefore have been placed under 'Backward Class' for this study. Nepalies and Gurkhas have been classified as 'others'. Attention has been paid to state-based variations such as Nayak in Karnantaka who are classified as 'Scheduled Tribe' and Nayak of Uttaranchal who are classified as 'Backward Classes'.

4. A Socio-demographic overview of the complete sample

The following pages introduce the reader to the socio-demographic and regional details of the WORCC-IRS sample.

Table 3: The complete sample: An overview of Age and Gender (N = 3799)

Data presented as: Number (%)

Age in years Mean age = 16.13 (SD:1.53)			Gender	
13 to 15	16 to 18	> 19	Male	Female
1523 (40)	2030 (53.5)	246 (6.5)	2036 (53.6)	1763 (46.4)

Table 4: The complete sample: An overview of Class, School Type and School Board (N = 3799)

Data presented as: Number (%)

Class			School Type			School Board		
10	12	Vocational	Govt.	Private Aided	Private Unaided	State	ICSE	CBSE
2028 (53.4)	1254 (33.0)	517 (13.6)	1607 (42.3)	1126 (29.6)	1066 (28.1)	2588 (68.1)	212 (5.6)	999 (26.3)

Table: 5 The complete sample: An overview of Socio-economic Status and Caste (N = 3799)

Data presented as: Number (%)

Socio-economic Status (SES)			Caste						
Low	Middle	Upper Middle	General	SC	ST	BC	R M	Other	NI
1316 (34.6)	1233 (32.5)	1250 (32.9)	1220 (32.1)	393 (10.3)	279 (7.3)	657 (17.3)	266 (7.0)	5 (0.1)	979 (25.8)

General: Primarily upper castes; SC = Scheduled Castes; ST = Scheduled Tribes; BC = Backward Classes; Rm = Religious Minorities; Other = Nepalis and Ghurkas; NI = Not indicated

Table 6: An overview of the sample by region (N = 3799)
Data presented as: Number (%)

Place	Number	Age in years			Class			Gender		School Type			School Board		
		13 to 15	*16 to 18*	*> 19*	*10*	*12*	*Voc.*	*Male*	*Female*	*Govt.*	*Pvt. Aided*	*Pvt. Unaided*	*State*	*ICSE*	*CBSE*
Bangalore	706 (18.6)	430 (60.9)	263 (37.25)	13 (1.84)	498 (70.5)	208 (29.5)	0	409 (57.9)	297 (42.1)	213 (30.2)	77 (10.9)	416 (58.9)	353 (50)	141 (20)	212 (30)
Chennai	559 (14.6)	126 (22.54)	415 (74.23)	18 (3.22)	138 (24.7)	212 (37.9)	209 (37.4)	314 (56.2)	245 (43.8)	172 (30.8)	277 (49.6)	110 (19.7)	489 (87.5)	0	70 (12.5)
Dehradoon	485 (12.8)	199 (41.03)	273 (56.28)	13 (2.68)	280 (57.7)	205 (42.3)	0	208 (42.9)	277 (57.1)	140 (28.9)	145 (29.9)	200 (41.2)	280 (57.7)	70 (14.4)	135 (27.8)
Delhi	420 (11.1)	341 (56.19)	77 (18.33)	2 (0.47)	321 (76.4)	99 (23.6)	0	163 (38.8)	257 (61.2)	267 (63.6)	0	153 (36.4)	0	0	420* (100)
Guwahati	117 (3.1)	24 (20.51)	46 (31.39)	47 (40.17)	23 (19.7)	44 (37.6)	50 (42.7)	47 (40.2)	70 (59.8)	73 (62.4)	44 (37.6)	0	94 (80.3)	0	23 (19.7)
Goa	277 (7.3)	116 (41.87)	130 (46.93)	31 (11.19)	141 (50.9)	70 (25.3)	66 (23.8)	160 (57.8)	117 (42.2)	207 (74.7)	70 (25.3)	0	138 (49.8)	0	139 (50.2)
Rampur	252 (6.6)	83 (32.93)	159 (63.09)	10 (3.96)	140 (55.6)	112 (44.4)	0	140 (55.6)	112 (44.4)	252 (100)	0	0	252 (100)	0	0
Shimoga	558 (14.7)	177 (31.72)	279 (53.22)	84 (15.05)	210 (37.6)	206 (36.9)	142 (25.4)	347 (62.2)	211 (37.8)	211 (37.8)	275 (49.3)	72 (12.9)	558 (100)	0	0
Srinagar	209 (5.5)	67 (32.05)	137 (65.55)	5 (2.39)	140 (67.0)	69 (33.0)	0	146 (69.9)	63 (30.1)	72 (34.4)	137 65.6	0	209 (100)	0	0
Ukrul	216 (5.7)	73 (33.79)	120 (55.55)	23 (10.64)	137 (63.4)	29 (13.4)	50 (23.1)	102 (47.2)	114 (52.8)	0	102 (47.2)	114 (52.8)	216 (100)	0	0

Note: * State schools in these locations follow the CBSE.

As indicated above, the Draft Report is based on our analysis of the responses of this section of the sample, amounting to a total of 3799 individuals. It is anticipated that further guidelines for analysis will emerge from the National Consultation on Career Psychology. The final analysis will be conducted after the NCCP and the findings collated into the Final Report.

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Chapter 5

Privilege and Disadvantage

1. Chapter Focus

This chapter presents WORCC-IRS findings in relation to socio-economic status and career choices. As earlier defined (Chapter 4 Section 2), the present analysis is conducted across three SES groups, namely, low, middle and upper middle SES.

The analysis will focus on two specific issues as follows:

- The process of career preparation highlighting the following:
  - Differences across SES groups in orientation to career paths. Specific emphasis on interest, self-efficacy, prestige and perception of parental support.
- Social cognitive influences focussing on the following:
  - Perception of career barriers.
  - Career beliefs within each SES group.

2. Methods of analysis

2.1. Questionnaires

- The Career Path Orientation Scale – CPOS (Arulmani 2004).
- The Perceived Career Barriers Scale – PCBS (Arulmani 2004).
- The Career Belief Patterns Scale – (Arulmani, Van Laar & Easton 2004; Arulmani & Nag-Arulmani, 2004).

2.2. Narratives

Participants were encouraged to write narratives about their experience of career related barriers and career beliefs in their communities.

2.3. Data analysis

Statistical analysis for this chapter used the following methods:

- Descriptive analyses, including frequency and percentage analysis.
- Inferential analyses. A series of one way analysis of variance (anova). Post hoc comparisons using the Tukey's HSD were used to further analyse the significance of difference between SES groups at the 0.05 level.

All data is presented in Appendix 4.

A thematic analysis of the narratives was also conducted. Exemplars of themes found in the texts will also be presented in the following sections.

3. Clarification of terms

3.1. Career path:

Three career paths seem to commonly present themselves to the Indian young person at the point of transition from school:

1. Start working immediately if job is available, *without* further qualifications.
2. Find part time job and study side by side.
3. Take up further studies (either college or vocational training).

3.2. Interests:

Career interests are patterns of likes, dislikes and indifferences related to career development and occupations. Interests motivate and move a person toward or away from a certain activity. During the initial stages of career development, the child may be drawn toward a wide range of activities. As the individual grows and matures economic, social and cultural factors shape initial orientations into interests that are more socially acceptable.

3.3. Self-efficacy:

Self-efficacy is the confidence in the personal ability to be successful in the performance of a task. In this case self-efficacy for the three career paths described above was assessed.

3.4 Parental approval:

This term refers to the young person's perception of the extent to which their parents would support a given career choice. WORCC-IRS did not interact directly with parents. Instead data has been collected on participants' perception of their parents support and approval and endorsement of career options.

3.5. Career barriers:

Barriers are internal or external blocks that interfere or disrupt career preparation. Internal barriers may be related to self-concept, motivation to achieve and negative beliefs. External barriers may be related to external frustrations arising from lack of resources, discrimination, lack of information and so on. The manner in which an individual *perceives* a barrier determines to a large extent how the person will approach the barrier.

3.6. Career beliefs:

Career beliefs are a conglomerate of attitudes, opinions, convictions and notions that seem to cohere together to create mindsets that underlie people's orientation to the idea of a career. These patterns of thinking may or may not be grounded in rationality. Yet, whether accurate or not, these assumptions predispose the individual to making career decisions in a certain manner.

4. SES and career path orientations

This section presents the participant's orientations to three career paths:

- Start working immediately (without acquiring qualifications or skills).
- Find a part time job and study side by side.
- Take up full time studies (College or vocational).

The Career Path Orientation Scale – CPOS (Arulmani, 2004), was used to examine the participants' interest, self-efficacy, prestige attribution and perception of parental attitudes to the three paths described above. Participants are required to indicate their choices on a 5 point scale, where 1 indicates the lowest value and 5 indicates the highest value.

A percentage analysis of the participant's ratings on each of the dimensions was conducted, for each SES group. The percentages and Mean rating of each SES group on the 3 career paths are reported in Tables 7 to 10, in Appendix 4.

In the following sub-sections the low SES group is contrasted with the upper middle SES group. The middle SES groups were in the middle in all the data trends in this section.

4.1. Working Immediately

Participants are divided along SES lines in their response to the '*Start working immediately if a job is available'* career path option. As high as 46% of the low SES group rated this option as 'very interested' when compared to around 16% in the upper middle SES group. While almost 39% of the low SES group said they are 'very confident' to begin working immediately, only 13% reported the same degree of confidence in the upper middle SES groups. The uneven prestige allotted to such a career path emerges quite starkly on the ratings given across the SES groups. While almost 40% in the low SES group have rated this option as having 'high to very high prestige', in the upper middle SES group 40% have rated this option as having 'very low to somewhat low prestige'. We find these differences continuing on the parent approval dimension as well. While 60% of the low SES group reported that they perceived 'high and very high' parent approval for starting work immediately, 50% of the upper middle SES group reported 'low and somewhat low' parent approval for this career path option.

In summary, the low SES group's higher *interest* in finding work as soon as possible was also accompanied by a high self-efficacy along with a high prestige rating and parental approval for this career path. In contrast, the upper middle SES groups showed low self-efficacy, attributed low prestige and reported low parental approval for the option of beginning to work immediately after Std. 10 or 12.

4.2. Part Time Job with Study

Here again, *interest* in working part time and studying alongside seems to vary with SES level. While 26% in the low SES group have rated this option as 'very interested', 12%

have done so in the upper middle SES group. Around 22% report being 'very confident to take this option among the low SES groups, but only 11% in the upper middle SES group. The prestige level assigned to the part time job with study option is 'very low to somewhat low' in around 40% of the upper middle SES groups, while around 38% among the low SES groups assign 'high to very high prestige' for this option. A similar trend is seen in the parental approval for this career path. While more than 50% of the upper middle SES group have reported 'low and some low support', almost 50% of the low SES group have reported 'high to very high support'.

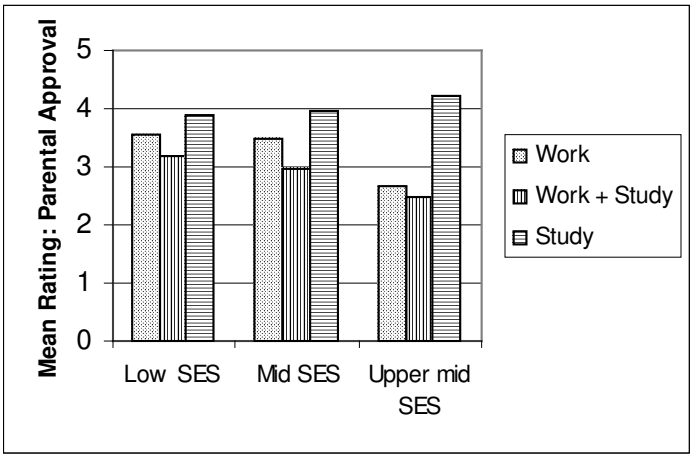
In summary, the low SES group's higher interest in part time job with studying was also matched by a high self-efficacy along with a high prestige rating and parental approval for this career path. In contrast, the upper middle SES groups showed a low prestige, low self-efficacy as well as low parental approval for this career path.

4.3. Full Time Studies

Interestingly, the stark differences seen in the earlier two career path options were not found for full time studies as an option. The *interest* expressed by the three SES groups for the full time studies career path option was somewhat similar. The ratings of 'quite interested and very interested' were given by around 65% in both the low SES group and upper middle SES groups. Around 15% in both groups rated as 'very low and somewhat low' in confidence to take up this option, in both groups; 6% and 3% of low and upper middle SES groups respectively said they would have 'very low support' from parents for this option.

An interesting pattern of *parental approval* emerges from this survey. All three SES groups perceive parental approval to be the highest for further studies full time after high school, as captured in Figure 1 below. However, as seen in Figure 1, the parental support for all three options seem to be somewhat uniform in the low SES groups, but quite mixed in the upper middle SES groups. Parental approval for further studies full time is substantially more than for work immediately and taking part time job and study.

Figure 1: Differences between SES groups' perception of parental approval for three career paths



4.4. SES and Career Paths: Excerpts from narratives

Participants' orientations to career paths was elicited through narratives they were asked to write on the theme: 'Which career path are you going to take? What are the benefits of taking this path?' A sample of participants' narratives is presented in Table 11 below.

Table 11: Narratives of participants from different SES groups on the theme: *'Which career path are you going to take? What are its benefits?'*

- Find part time job after class 10th and also study. Learning while earning what I like most. It is what I have to do to help my family.
  Boy, Class 10, 14 years, low SES, Dehradun.

- I would prefer professional course because it has high salary and good status in society.
  Girl, Class 10, 14years, middle SES, Vasco, Goa.

- I will start working after 10th. I have to become financially independent.
  Boy, Class 10, 14 years, low SES, Shimoga.

- I will take up arts after my 10th. This is a subject that will allow me to reach my goals easily.
  Girl, Class 10, 14 years, low SES, Bangalore.

- I would like to take up commerce after 10th. I would like to take up MBA. I will able to make lots of money and have a successful career.
  Girl, Class 10, 15 years, upper middle SES, Bangalore.

- I will like to go for Technical training. Because it would help me in getting jobs. Now-a-days technical jobs are mostly taken into consideration.
  Girl, Class 10, Age 15 years, middle SES, Guwahati.

- After 10th, go for technical training. Complete the studies in short duration and can start working
  Girl, 17yrs, 2nd year Diploma, middle SES, Bhadravati.

- Find a part time job and study for higher secondary because as I finish my studies I will have some experience of job. Also I can earn and give some money at home.
  Boy, Class 12, 17 years, middle SES, Cuncolim, Goa.

- Finish higher secondary and go for vocational courses. If I take this path I will get a job soon after completion of this course.
  Girl, Class 12, 18 years, middle SES, Guwahati.

- Take up arts subjects after class10. It will benefit us in speaking English.
  Boy, Class 12, 18 years, middle SES, Ukhrul,

- I want to become an Engineer. As it will give happiness and money. I will get a beautiful wife which will make my parents proud.
  Boy, Class 12, 18 years, middle SES, Dhule.

- First you should take up a technical course. Then you should take a job after completion of education than you get rid of poverty and you are in a position to spend money.
  Boy, Diploma 2nd year,18 years, middle SES, Dhule.

- After 10th I will take up science and continue in this field. Because we can achieve whatever we want in life. Science is the bases of good careers.
  Girl, Class 10, 15years, upper middle SES, Bangalore.

4.5. Salient trends

Interest:

- The highest interest is for full time further studies after school completion. This is consistent across all SES groups.
- The middle and upper middle SES groups place a significantly lower value on starting to work immediately or taking a part time job, when compared with their low SES counterparts.

Self-efficacy:

- The low SES group shows high self-efficacy for all three career paths.
- The middle and upper middle SES groups show significantly lower self-efficacy for starting to work immediately and taking a part time job, in comparison to their self-efficacy for entering full time study after school completion.

Prestige:

- All SES groups place the highest prestige on pursuing full time studies.
- The middle and upper middle SES groups place a higher value on full time study as a career path than the low SES group.

Parental Approval:

- There is a markedly lower level of perceived parental approval for career paths other than full time study amongst the middle and upper middle SES groups.
- Perceived parental approval is highest for full time study also amongst the low SES group. Importantly, parental approval is high also for work immediately and part time work options. The quantum of difference in parental approval *between* the three career paths is therefore not as marked as it is for the middle and upper middle groups.

5. Perceived barriers and expression of self efficacy

The Perception of Career Barriers Scale – PCBS (Arulmani, 2004) was used to examine the participant's perception of barriers to career preparation. This scale comprises 24 items anchored to a 5 point scale. A rating of 1 on this scale indicates that the item presents a very small barrier and 5 indicates a significant barrier.

Data will be first presented on the consolidated scores related to perception of barriers and expression of self-efficacy (Section 4.1). Two specific career barrier themes will then be discussed:

- Barriers pertaining to Family Situation (Section 4.2).
- Barriers pertaining to Personal Capacity (Section 4.3)

For each of the above areas a series of one way anovas were conducted to analyse the significance of difference of the mean ratings between the SES groups. Table 12 in Appendix 4 presents the Mean ratings, the F ratios and the outcomes of post hoc tests

5.1. Overall perception of barriers and expression of self-efficacy

Perception of barriers is highest amongst the low SES group, lower amongst the middle SES group and lowest amongst the upper middle SES. In other words, low SES participants in this study seem to perceive more barriers to their career preparation than their higher SES counterparts.

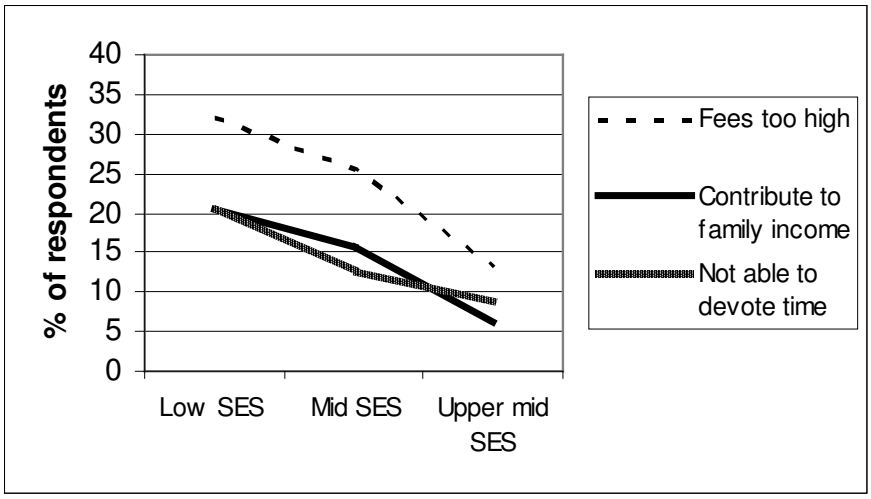
The participants' expression of *self-efficacy* to face and overcome barriers also appears to be along similar lines. The mean rating of the upper middle SES group is significantly higher than the middle and low SES groups. The mean difference in the self-efficacy scores of the low SES group and the middle SES group are *not significant*. One interpretation of these findings is that the upper middle SES groups are more confident to overcome barriers they may face in relation to their career development when compared with their middle and low SES counterparts. This theme will be discussed further in the later sections.

5.2. Barriers pertaining to Family Situation and expression of self-efficacy

The perception of barriers pertaining to Family Situation is lowest amongst the upper middle SES and highest amongst the low SES group. The middle SES group falls in between.

Within Family Situation, the biggest barrier for the low SES group seems to be related to *financial difficulties* and *family responsibilities*. Figure 2 below presents the participant's ratings of some of the items to illustrate the stark differences between SES groups

Figure 2: % of participants, across SES groups, rating 3 statements as 'significant barrier' to career preparation



Statement 1: *The fees I have to pay for further education is too high and my family will not be able to afford sending me for further education.*

23.1% of the low SES group rated this statement to be a 'significant barrier'. 15.4% of the middle SES and just 13% of the upper middle SES group marked this item at the same level on the barrier scale.

Statement 2: *My family expects me to start contributing to the family income as soon as possible. As a result I will not be able to go for further education.*

While 20.3% of the low SES group rated this item as a significant barrier, lower percentages of participants at the middle (15.7%) and upper middle (6.3%) SES level gave a similar rating.

Statement 3: *I have to do many things to help my family and so I may not be able to devote time or effort for career preparation.*

The trends are very similar to Statement 2. The largest percentage of participants rating this item as a 'significant barrier' belong to the low SES group (20.3%). On the other hand, 12.3% of middle and just 8.5% of the upper middle SES groups give a similar rating

Participants' *self-efficacy* to deal with the barriers to their career development was also examined. Self-efficacy to overcome barriers related to Family Situation was the lowest for the low SES and highest for the upper middle SES group. The difference in mean self-efficacy scores for overcoming barriers related to the family situation is *not* significantly different between the low and middle SES groups.

5.3. Barriers pertaining to Personal Capacity and expression of self-efficacy

The perception of *Personal Capacity* as a 'significant barrier' was the lowest amongst the upper middle SES group. The low SES group and middle SES group have higher barrier scores for Personal Capacity. Perception of barriers pertaining to personal capacity between participants of the low and middle SES groups is *not significantly different*.

Within Personal Capacity, difficulties related to *academic performance* seem to be the strongest barrier perceived by the low SES group. Responses to the following statement provide an example:

Statement: *My poor performance in studies will make it difficult for me to study further.*

22.4% of the low SES group rated this item as a significant barrier. In contrast, 17.1% from the middle and 12.9% of the upper middle SES groups rated this statement as a significant barrier.

Self-efficacy to overcome barriers related to Personal Capacity was the lowest for the low SES group and highest for the upper middle SES. As with self efficacy for Family Situation described above the mean self-efficacy score for overcoming barriers related to Personal Capacity is *not significantly different* between the low and middle SES groups.

5.4. SES and perception of career barriers: Excerpts from narratives

Participants' perceptions of career barriers were elicited through narratives they were asked to write on the theme: 'What are the kinds of barriers that you may face when you plan your career?' Excerpts from these narratives are presented in Table 13 below.

Table 13: Narratives of participants from different SES groups on the theme: *'What kind of barriers will you face when you plan your career?'*

- I have to work because of poverty and because of many loans. This will be a barrier to further studies and career development.
  Boy, Class 10, 17years, low SES, Bangalore

- The barriers in my life are many. My family has financial problems, so I can't study for long. We have no suitable guidance or information about how to develop our careers. Politics in India is improper. No value is given for intelligence or merit. Only caste group is taken.
  Boy, Class 2nd year diploma, 17years, middle SES, Bhadravathi.

- I cannot speak English properly. I am scared of questions.
  Boy, Class 2nd year diploma, 17years, low SES, Bhadravathi.

- I want to become a doctor. But there is no doctor in my village. If my village had a doctor I could have gone to him to know about this career. My father is not in a position to pay my tuition fee
  Boy, 15 years, Class 10, middle SES, Srinagar.

- Higher studies take long time. Employment opportunities are limited in our state.
  Boy, 15 years, Class 10, middle SES, Srinagar.

- Different opinions from parents. I want to become a doctor but my parents want me to become lawyer. After my marriage my in-laws might not allow me to work.
  Girl, 15 years Class 10, middle SES, Srinagar.

- Getting less marks, financial problem, less information about career, opposition of elderly people. Educational facility not available and travelling facility is not available.
  Boy, 15 years, Class 10, middle SES, Dhule.

- Parents want me to work immediately after Diploma but I want to study BE
  Boy, 17 years, 2nd year diploma, middle SES, Chennai.

- My confidence is low. City educated boys are capable to face all problems. Due to change of language I am afraid of being taunted.
  Boy, 17 years, 2nd year diploma, middle SES, Dhule.

- As we are poor to prepare for a career is difficult. But why to study? Even when we have good degree we do not get a job.
  Boy, 15 years Class 10, middle SES, New Delhi.

5.5. Salient trends

- The number of barriers perceived and the significance of these barriers seems to increase with SES. The lowest SES group perceives the largest number of barriers to their career preparation.
- Two barrier themes, namely, barriers related to Family Situation and Personal Capacity were examined. Here again, the low SES group's perception of barriers was significantly higher than the high SES group for both the themes. Financial difficulties topped the list of barriers for the low SES group followed by family responsibilities and difficulties with academic performance.
- A similar inverse relationship was noted between SES and expression of self-efficacy to overcome barriers. Lower SES groups, perceived a higher level of barriers, and expressed a lower level of self-efficacy to overcome these barriers.
- Ironically, the higher SES groups experience a lower level of barriers, and express a higher self-efficacy.

6. SES and career beliefs

The Career Belief Patterns Scale – CBPS (Arulmani 2004) was used to examine the participant's social cognitions expressed in the form of career beliefs. The CBPS taps different kinds of career beliefs across 7 factors. Participants are presented with vignettes of real life situations and are required to indicate on a 7 point scale, the extent to which they agree with the manner in which the character in the vignette resolved the career preparation issue. A rating of 1 indicates the lowest level of agreement and 7 indicates the highest level of agreement. Higher scores reveal higher levels of *negativity* in career beliefs.

This section begins with information about the consolidated career beliefs of the three SES groups in the study. This is followed by details about career beliefs across the following categories:

- *Fatalistic beliefs*: Cognitions reflecting a defeatist and pessimistic attitude to career preparation.
- *Control and Self Direction Beliefs*: Beliefs reflecting the willingness to take control of one's life and make the best of what is available.

For each of the above areas a series of one way anovas were conducted to analyse the significance of difference of the mean ratings between the SES groups. Table 14 in Appendix 4 presents the Mean ratings, the F ratios and the outcomes of post hoc tests

6.1. Overall career belief patterns seen amongst the participant

The data shows that CBPS scores decrease as SES increases. The consolidated mean score obtained by the low SES group indicate a higher level of negativity in career beliefs in comparison to the middle and upper middle groups.

6.2. Fatalistic beliefs

The responses of the middle and upper middle groups indicate significantly lower fatalistic content in their career beliefs than the low SES group. Responses to the following item provide a pertinent illustration:

Statement: *I have seen how others have tried to develop their lives. I realise that building a career is difficult. I think it is better to just take what I get and manage.*

Amongst the low SES group, 18.2% of students rated this item at the highest level of agreement (7 points). Only 15.2% of the middle SES group and a mere 9% of the upper middle group gave a similar response.

It seems possible that the life situation of the low SES group predisposes them to view career preparation with fatalistic overtones.

6.3. Control and Self-direction beliefs

The low SES groups seem to have a lower orientation to exercising control over the trajectory of their lives. In contrast, the middle and upper middle groups show a stronger orientation to take control and engage with career development tasks. Responses to the following item provide an example:

Statement*:* *I do not know what kinds of difficulties I may face if I prepare for a career. Therefore I may not be successful in preparing for a career.*

Amongst the low SES group, 15.5% of students rated this item at the highest level of agreement (7 points). In contrast, 8.9% of the middle SES group gave this response while just 5.9% of the upper middle group rated this item at the highest level of agreement.

The lower SES groups seem to experience difficulties in believing that they can take control and attempt to direct their lives toward future goals. On the other hand, this feeling of helplessness and lack of control seems to decrease at higher SES levels.

6.4. SES and perception of career beliefs: Excerpts from narratives

Career beliefs were elicited through narratives on the theme: *'What do people in your area commonly believe about career planning?'* Table 15 below provides excerpts from some of these narratives.

Table 15: Narratives of participants from different SES groups on the theme:
What do people in your area commonly believe about career planning?

- Only rich people get job and succeed.
  Boy, Class 10, 15years, low SES, Vasco, Goa,

- All who study will not get jobs.
  Boy, Class 10, 16 years, low SES, Shimoga.

- I believe that the path to success is through science and engineering. Vocational courses are low in value. They are meant for those from poor families who cannot afford high education.
  Boy, Class 10, 16 years, upper middle SES, Bangalore.

- The main target for work is to become a wealthy person. I will achieve this by becoming a computer engineer because I am interested in computers.
  Boy, Class 12, 18 years, upper middle SES, Margao, Goa.

- In my family we believe the best careers are in business. I have seen a lot of my relatives take up the same and they all have been successful. My father will give me the capital to start and I will start my own business after I finish college.
  Girl, Class 10, 14 years, upper middle SES, Bangalore.

- Girls should not do professional courses. Any type of career is for rich men only.
  Girl, 2nd year diploma, 19 years, middle SES, Guwahati,

- In my native village people are less educated, very few people are educated. Most of the low earners earn about Rs 1000 per month. So there is a belief that there is no need for better job. In their mind their job is very good.
  Girl, 2nd year diploma, 19 years, middle SES, Guwahati,

- People go for higher studies thinking that they get good job, but fate plays bigger role than education. General knowledge is enough to get a job
  Boy, 2nd year diploma, 17years, low SES, Bhadravati.

- Brahmins' occupation – priest. Low caste people – gutter cleaning or to work in municipality. Rich people – doing big business
  Boy, 2nd year diploma, 17 years, upper middle SES, Bhadravati.

- Education given to girls is to the responsibilities as a housewife. Man should completely manage the financial problem of the family. All the girls should be supported to take up home science.
  Boy, Class 12, 17 years, upper middle SES, Ukhrul.

- Some parents believe it is better to support boys rather than girls because girls may marry other boys from other castes or tribes.
  Boy, Class 12, 17 years, upper middle SES, Ukhrul.

- People think that the main responsibility of a girl is to be a mother. So it is believed that girls waste time by going to school.
  Girl, Class 10, 15 years, middle SES, Srinagar,

- Girls should not go out for a job, then men will have to sit at home.
  Boy, Class 10, 16 years, middle SES, Dhule.

- It is always said that to differentiate between a girl and a boy is a crime in India but it is still there. But it is changing – girls say, 'We will do the work and study'. The older generation still says, 'Girls should look after the kitchen and children'.
  Girl, Class 10, 14 years, middle SES, Dhule.

6.5. Salient trends

Negativity in career beliefs

- Negativity in beliefs about career preparation seems to be stronger amongst lower SES groups.
- The upper middle SES groups seem to be most positive about planning for the future through career development when compared with other SES groups.

Fatalistic thinking

- Their life situation and experiences seem to predispose the lower SES groups to take a more pessimistic view of the future and of career development. As SES increases these fatalistic beliefs seem to diminish and are replaced by more positive and hopeful orientations.

Control and self-direction

- SES seems to contribute significantly to feelings of control over life situations that the young person experiences. The upper middle SES group expresses the highest level of control and self-direction in relation to those from less privileged backgrounds.

7. Consolidation of key findings

This chapter has brought to bear three variables on socio-economic status, namely, *career path orientations*, perceptions of *career barriers* and social cognitions in the form of *career beliefs*. The interactions of these variables with SES throw some light on how privilege and disadvantage could impact career development trajectories.

7.1. Orientations to career paths

Young people from disadvantaged backgrounds seem to be more strongly oriented toward finding work as soon as possible. Those from more privileged homes on the other hand strongly prefer to go on for full time further education and prepare for the world of work. An important finding under this theme is the participants' perception of parental approval for the three different career paths. At the low SES level, while approval is the highest for full time study, the difference in parental approval for the other two paths is *not* markedly different. On the other hand as SES increases, parental approval for full time study increases, pushing approval for the other two options to markedly lower levels. The spread in parental approval becomes most stark in the upper middle groups. Here, parental approval for full time study is significantly higher than for the other two career paths. In fact this difference is so marked that it is likely that working full time or finding a part time job would be looked down upon at this SES level. It seems therefore that young people from more privileged backgrounds grow up in an environment where going on for full time study is expected, approved and supported. On the other hand disadvantaged young people seem to grow up in an environment where family support is more generalised. While full time study is not discredited (even sought after), economic

necessities seem to push the young person more strongly toward working full time or at least taking part time work, after Std. 10 and 12.

7.2. Barriers and beliefs

The lower SES group seems to perceive a higher level of barriers to their career development. As expected, *financial difficulties* are expressed as the most significant barrier. What is important however is the finding that young people from lower SES homes are expected to bear a significantly higher level of *family responsibilities* the higher SES groups are shielded from these responsibilities. Further, lower SES young people seem to perceive that their own *personal capacities* are such that they would have difficulties with career success. Similar sentiments are echoed in the career beliefs held by the different SES groups. A fatalistic outlook combined with a lower orientation to self-direction place the lower SES at a position of disadvantage for career preparation through formal education and qualification.

7.3. Expression of self-efficacy

It is particularly interesting to note the variations in self-efficacy across SES groups. Describing the lower SES groups as having low self efficacy for career preparation is not accurate. It is true that their self-efficacy for career development through full time study is somewhat lower than the self-efficacy expressed by the middle and upper middle groups. However the low SES group's self-efficacy for career development by working full time is high.

Perception of barriers and the nature of career beliefs seem to vary characteristically across SES groups. The manner in which these variables combine, seem to influence self-efficacy for certain kinds of career development trajectories. This could be one of the reasons SES groups differ in their orientations to career preparation.

7.4. Parental approval and attribution of prestige: Is there a subtext?

A final point for consideration is the nature and content of parental approval and the impact of prestige on career path orientations, with particular reference to the middle and upper middle groups. Parental approval moves the young in the family in a certain direction. In the upper middle class environment parental approval is strongest for full time further education. By itself, this could be indicative of the high quality of support that the young person receives to be adequately prepared for the world of work. However when taken together with prestige, parental approval could have other overtones. This is a point that will be discussed more thoroughly in the next chapter. However it is important to keep in mind that privilege could bring with it, the burden of making career choices that are socially acceptable – pushing the personhood of the individual to the background.

8. Privilege and Disadvantage: Implications and discussion points

8.1. Career development discontinuities: The accumulation of disadvantage

There is an intuitive awareness among many academics and practitioners that in comparison to other SES levels, the lower SES groups seem to be most vulnerable to discontinuities in their career development. This chapter has attempted to tease out the psychological strands that characterize these vulnerabilities.

Young people from poor homes are required to make career plans, while simultaneously grappling with poverty, unstable family structures and financial constraints. At a practical level families in poverty may have realistic concerns about their ability to pay for their children's further education. The task of meeting physical needs may be of greater importance to socio-economically disadvantaged individuals than seeking out information and making career plans. Survival needs in the present maybe so pressing that planning for what could come to fruition only sometime in the future may not be consistent with the reality perceptions of the young person from a poor home.

The strong predisposition of the disadvantaged to begin searching for work *before* acquiring work skills implies that they will only occupy an unskilled status in the world of work. This has far reaching ramifications on the continuity of their career development. Research into the effects of premature entry into the world of work on later employment has indicated that the poorly educated are at highest risk for unemployment in their later lives (Ekstrom, Freeberg and Rock, 1987). Others have found that those who left school at the minimum age to get work, were likely to spend most of their lives in part-time, unskilled jobs or on social welfare (Banks, 1992). In the absence of social welfare in India, unemployment is an ever present reality.

8.2. Career development discontinuities: When privilege turns to disadvantage

This chapter has consistently highlighted the psychological factors that underlie the difficulties of the disadvantaged. This does not mean that those from more privileged backgrounds are not at risk for career development discontinuities. The middle and upper middle SES groups in this study present a picture that is typical across cultures. This SES level offers a comfortable life style, with enough left over to give the children in the family a start in their lives. Middle class families have usually been able to accumulate sufficient resources to offer their children a foundation upon which they could build their lives. However these resources are not sufficient to preclude the necessity of children from these families having to become independent earners. In the absence of surpluses therefore, the middle class family's primary concern is the utilisation of existing resources in a manner that would yield the highest benefit. Making effective career choices and developing a career plan that would optimally use the family savings is therefore an important concern for families at this SES level. Furthermore, the middle classes have tasted the fruits of prosperity and have also equipped themselves with the wherewithal to rise to higher levels of prosperity. The middle classes in almost all cultures are simultaneously confronted by the threat of slipping back to lower levels of social standing and the real possibility of rising up to higher levels along the status

continuum. Indeed it is this group that has everything to lose and everything to gain. Career success is one of the most important mechanisms available to these families to ensure that they keep moving higher up along the SES continuum.

Driven as they are by high aspirations and the desire to reach higher pinnacles of success, the middle classes are at high risk to choosing careers based on what the career offers rather than grounding career choice on the personhood of the career chooser. The findings on parental approval at one level indicate the kind of support that young people receive from their parents and families. At another level this could also be indicative of the kind of pressure these young people experience to 'get into the right college', and 'make socially acceptable choices'. Counsellors are repeatedly presented with young people from the middle classes who were forced to choose careers that were popular and 'in demand', but who later discovered that their real interests and talents lay elsewhere. Of course this is not always the case. Yet, the number of young people who do express dissatisfaction with career choices is alarmingly high. In such situations a person from a privileged background could enter the world of work from a position of disadvantage. The point we make at the conclusion of this chapter is that career counselling needs are present, albeit in different forms, irrespective of whether the individual is from a background of disadvantage or privilege.

9. Relevance of career counselling

In reality the importance of career planning is independent of socio-economic status. Career counselling is relevant and necessary for *all social classes*. The crucial point to be noted particularly in the Indian ethos is that counselling needs *vary* significantly across social groups. A single, standardised intervention cannot adequately address career development needs over a wide range of groups. While the themes and targets of counselling are perhaps similar, the methods of implementation need to be finely tuned to the special requirements that emerge within different socio-economic status groups. For example, career counselling that attempts to facilitate livelihood planning for the socio-economically disadvantaged would need to take serious note of the fatalistic overtones and the negative career beliefs that seem to characterise the young person's view of future. Of course this is not always the case. Yet, interventions for livelihood empowerment often do not account for the career beliefs of the disadvantaged young. In similar manner career counselling would need to address the single minded search of middle and upper middle groups to find success through 'good' careers.

A relevant career counselling programme would address the question of transition from school in a person-centered manner. For some this may mean college education for others it may mean vocational education. Effective counselling would enhance the individual's employability by preparing him or her to enter the world of work from a position of strength rather than disadvantage. Most importantly, a career counselling programme that takes privilege and disadvantage into account would be equipped to empower young people to maximise their talents regardless of their backgrounds.

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Chapter 6

Pride and Prejudice

1. Chapter Focus

Two clear post-school career preparation pathways emerge from within the Indian educational system. One of these paths is based on a system of degrees obtained through college / university education. The other is based on diplomas and certificates awarded through Polytechnics and Industrial Training Institutes. This chapter presents WORCC-IRS findings pertaining to the impact of occupational stereotypes on the young person's preparation for further education through these systems of study. The following themes are examined:

- Occupational prestige.
- Orientations to subject choices. This is further broken up into: Science, Arts and Commerce and the Vocational subject combinations.

As in Chapter 5, socio-economic status will continue to be the backdrop against which young people's orientations to educational and career choices will be presented in this chapter.

2. Methods of analysis

2.1. Questionnaires

- The Career and Occupational Prestige Scale – COPS (Arulmani, 2000).
- The Subject Choice Orientation Scale – SCOS (Arulmani 2004).

2.2. Narratives

Participants were encouraged to describe their subject choices and preferences.

2.3. Focus Group discussions

Discussions were held in small groups in the Chennai and Bangalore locations on issues linked with subject choices and occupational orientations.

2.4. Data analysis

Descriptive analyses, including frequency and percentage analysis, were used to understand the data from the two Scales. A thematic analysis of the narratives and the focus group discussions was conducted to understand perceptions of the participants' on the key issues to be presented in this chapter. Exemplars of themes from the narratives and discussions will also be presented in the following sections.

3. Clarification of terms

3.1. Occupational prestige

Social and cultural forces grade occupations on a hierarchy of *prestige*. The respectability attributed to an occupation plays a powerful role in shaping interest directed toward that occupation. Children begin to recognise prestige linked differences among jobs and thereby learn to include or eliminate occupational alternatives.

Career barriers, Career beliefs, Career path, Interests, Self-efficacy and Parental Approval are other terms used in this chapter, and readers are referred to Chapter 5 (Section 2) for a description of these terms.

4. Occupational Prestige

The Career and Occupational Prestige Scale – COPS (Arulmani, 2000) was used to examine the prestige that participants attributed to different occupations and the corresponding Interest, Self-efficacy and perception of Parental Approval. The scale comprises a list of 28 occupations. Participants are required to indicate their choices on a 5 point scale, where 1 indicates the lowest value and 5 indicates the highest value.

4.1. Occupational Prestige Hierarchy:

The impact of prestige on career preferences has been documented in both the Indian and the international literature. WORCC-IRS attempted to gain insights into the manner in which Indian young people rank the relative prestige levels of occupations. Table 16 below presents the 28 occupations in descending order of prestige ranking with corresponding indications of Interest, Self-Efficacy and Parent Approval.

Table 16: Prestige hierarchy of occupations with mean ratings of prestige, interest, self efficacy and parental approval

Occupation	Prestige Rank	Prestige	Interest	Self-efficacy	Parent Approval
Scientist	1	3.72	3.28	3.15	3.64
Computer Scientist	2	3.68	3.48	3.34	3.67
Engineering	3	3.68	3.51	3.41	3.75
Doctor	4	3.58	3.18	3.09	3.62
Teacher	5	3.30	2.92	3.01	3.29
Lawyer	6	3.18	2.53	2.56	3.12
Police Inspector	7	3.11	2.83	2.81	2.97
Bio Technologist	8	3.09	2.76	2.68	3.09
Financial Manager	9	3.09	2.82	2.77	3.06
Chartered Accountant	10	3.06	2.65	2.66	3.04
Journalist	11	2.91	2.45	2.51	2.79
Architect	12	2.89	2.63	2.61	2.86
Social Worker	13	2.87	2.69	2.70	2.75
Psychologist	14	2.86	2.60	2.58	2.77
Agricultural Scientist	15	2.78	2.50	2.47	2.72
Hotel Manager	16	2.75	2.58	2.60	2.69
Economist	17	2.74	2.36	2.40	2.67
Ayurved	18	2.69	2.40	2.39	2.65
Public Relations Officer	19	2.59	2.31	2.34	2.50
Secretary	20	2.55	2.23	2.36	2.59
Accounts Clerk	21	2.46	2.13	2.25	2.48
Library Scientist	22	2.34	2.01	2.16	2.37
Artisan	23	2.28	2.08	2.13	2.21
Chef	24	2.25	1.99	2.05	2.16
Cook	25	2.17	2.02	2.16	2.17
Farmer	26	2.09	1.82	1.96	1.98
Shop Keeper	27	2.07	1.83	1.96	2.00
Carpenter	28	1.88	1.63	1.75	1.84

Note: *1 = very low prestige, 2 = somewhat low prestige, 3 = average prestige, 4 = high prestige, 5 = very high prestige.*

The data shows that *Scientist* tops the list, attracting the *highest* level of prestige. Interestingly, *Computer Scientist* comes a close second across the *entire* sample (all SES groups, gender and regional variations included). As expected, Doctor and Engineer are also at the top of the list. It is important to note that occupations receiving the *lowest* prestige ratings are those belonging to the blue collar and vocational category.

4.2. A binding force

Prestige seems to be a binding force across these other areas. Even a cursory look at Table 16 will show the close linkages between drop in occupation prestige ratings and a drop in interest, self efficacy and parental approval ratings. To study these associations further a correlational analysis across the four variables was also conducted. A strong, positive and significant correlation was seen between Prestige, Interest, Self-efficacy and Parental Approval. All correlations are in the region of 0.9 (Table 17, Appendix 4).

Departures from this trend are however seen on a few careers. The ratings for Lawyer, Police Inspector, Bio Technologist, Financial Manager and Chartered Accountant for example, show some variations in ratings. These careers have been rated with high prestige but are rated at somewhat lower levels of Interest, Self-Efficacy and Parental Approval. One interpretation of this variation in rating could be the lack of adequate information about these careers. The relationship between knowledge about careers and career choice is an interesting issue for careers counselling services and will be discussed in greater detail in Chapter 7 (Sections 5 and 7.1).

4.3. Socio-economic status and occupational prestige

SES does not seem to influence participants' attribution of prestige to occupations. When occupational prestige was classified separately by SES an almost identical occupational hierarchy emerged across the low, middle and upper middle groups.

The impact of SES however is seen when questions of dignity and social status are raised. For example, during focus groups discussions, the middle and upper middle SES almost unanimously felt that occupations such as Farmer and Carpenter were of low status and required 'no formal training' or 'qualifications'. These participants felt that they would not be respected if they opted for 'such careers'. Similar sentiments were not as frequent and all pervasive among the low SES group.

4.4. Socioeconomic status and occupational prestige: Excerpts from narratives

Table 18 below gives excerpts from the narratives and focus group discussions to illustrate the ways in which prestige perceptions influence career orientations.

Table 18: Prestige perceptions and career choices

- "The career should be hereditary. Carpenter's son should be carpenter."
  Girl, Class. 10, 15 years, upper middle SES, Bangalore.

- I want to became an astronaut, because I love to explore mysteries of outer space. Such a career will give a high status in the world society.
  Boy, *Class. 10, 14 years, upper middle SES, Vasco, Goa. .*

- My dream to become a computer engineer because there will be more demand and status in the society will be more.
  Girl, Class 10, 15years, upper middle Vasco, Goa.

- People commonly say, poor people's children are never clever. So they should do the simple jobs that don't have high status or prestige. So there is low status for some jobs. If rich people became carpenters or plumbers, then the status of these jobs will go up.
  Boy, 2nd year diploma, 18 years, middle SES, middle SES, Chennai

- I am studying in this technical diploma course. I know that I will get a job soon after I finish. But it will be a lower pay than engineers. I also puts me lower in the social scale. Technicians are less important than engineers.
  Boy, 2nd year diploma, 18 years, middle SES, middle SES, Chennai.

4.5. Salient Trends

- The data suggests the existence of an occupational prestige hierarchy, where science oriented professional careers emerge as the most prestigious.
- Computer Science emerges second highest on the prestige ladder cutting across age, gender, SES and region.
- Blue collar professions are attributed with the lowest level of prestige.
- Middle and upper middle SES groups view the 'low prestige careers' as requiring 'no formal training'.

5. Orientation to subject choices

The earlier analysis of occupational prestige is followed up in this section with an examination of participant's orientations to available *subject combinations* in India. The four commonly available choices that WORCC-IRS focussed on was science, arts, commerce and the vocational courses.

5.1. Orientation to subject choices: Excerpts from narratives.

This section begins with excerpts from student's narratives that reflect their orientation to the three different subject choices under discussion. Table 19 below has excerpts from participant's narratives on career beliefs as well as career paths that reflect the ways in which different subject choices are perceived.

Table 19: Statements about subject choices

Common beliefs in my community:

- Take up business if you are not good at studies. Study commerce.
  Boy, Class 10, 15 yrs, upper middle SES, Bangalore
- Hardworking student is a science student.
  Boy, Class 10, 15 yrs, upper middle SES, Bangalore
- Only dull children take commerce.
  Girl, Class 10, 14 yrs, middle SES, Vasco
- Students who are not intelligent must study arts.
  Boy, Class 10, 15 yrs, upper middle SES, Srinagar, Kashmir.
- One should not do graduation Arts. Rather go for a job.
  Boy, Class 12, 16 yrs, upper middle SES, Dhule, Maharashtra
- Take up arts subjects after class10. It will benefit us in speaking English.
  Boy, Class 12, 18 years, middle SES, Ukhrul, Manipur

Table 19: Statements about subject choices (Cont'd)

My career path:

- "The career I would take after 10th is science which would help me in becoming a doctor or scientist. I don' know the benefits (of these careers) yet."
  Boy, Class 10, 15 yrs, upper middle SES, Bangalore.

- "I will take up Arts as I can be a lawyer, teacher, journalist etc."
  Girl, Class 12, 16 yrs, middle SES, Margaon.

- "Like to take up commerce after 10th and want to become bank cashier."
  Boy, Class 10, 15 yrs, middle SES, Shimoga.

- "I am Poor in Maths & Science, therefore parents asking me to take Commerce."
  Boy, Class 10, 16 yrs, upper middle SES, Dehradoon.

- "I want to open a (beauty) parlour after my PUC education."
  Girl, Class 10, 16 yrs, low SES, Bangalore

- I would like to finish higher secondary in Science. And then go for technical training (vocational courses) because I feel that I can do better in this and I am sure I can be a success in my life.
  Girl, Class 10, 16 yrs, middle SES, Guwahati.

- "My dream is to became a chef but I will have to lose many years for that. I will have to complete my 10th than do a diploma course than finish my training in some five star hotel then for few years as a cook and than I will be called a chef."
  Boy, Class 12, 17 yrs, middle SES, Cuncolim.

- "After completing my OM course I will do MBA because I completed my H.S in commerce stream. I will go for business line because now days we find scarcity of govt jobs. After MBA I will do own business in Computers."
  Girl, 2nd year diploma in Office Management, 18 yrs, middle SES, Guwahati

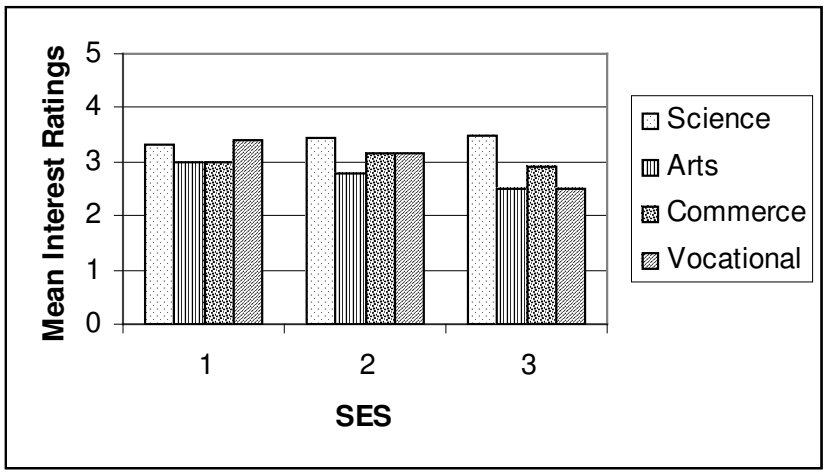
- "My aim is to become a computer engineer. I will take maths. To achieve this goal I must get above 450 Marks in S.S.L.C. and above 1050 marks in + 12 Exam. To achieve this I must work now it."
  Boy, Class 10. 16 yrs, middle SES, Nagercoil, Tamil Nadu.

5.2. Orientation to subject choices: Trends across SES groups

The Subject Choice Orientation Scale – SCOS (Arulmani, 2004) was used to examine participants' Interest, Self-efficacy, Prestige attribution and perception of Parental Approval to different subject options. Participants are required to indicate their choices on a 5 point scale, where 1 indicates the lowest value and 5 indicates the highest value. A percentage analysis of the participant's ratings on each the dimensions was conducted, for each SES group. The percentages and Mean rating of each SES group on the 4 subject options are reported in Tables 20 and 21, in Appendix 4.

Figure 2 below presents the data from this scale analysed by SES level. The participants' interest for Science, Arts, Commerce and Vocational courses is given.

Figure 2: Participants' levels of interest for science, arts, commerce and vocational courses analysed by SES



1 = Low SES; 2 = Middle SES; 3 = Upper middle SES

Two important contrasts in the data are particularly noteworthy. Continuing with the trends seen with occupational choices in the earlier sections, differences are evident in choices for science and vocational courses. The second contrast is in the patterns of interest, prestige and parental approval seen among the low SES group as against the upper middle SES group. These themes will now be discussed.

5.3. Science and vocational courses: A contrast

Around half of all participants in all the SES groups have rated the Science option as 'quite interested' or 'very interested' (52% of the low, 53% of the middle and 58% of the upper-middle SES groups). In contrast, the rating of interest for the vocational courses is quite different. While 53% of the low SES group is 'quite' or 'very interested', 32% of the upper middle have rated a firm 'low interest' for vocational courses. But around 25% of the upper middle groups have given a 'quite' or 'very interested' rating for this subject option.

The pattern of interest of the low SES group appears to be somewhat similar for both the Science option as well as the Vocational option (see Means in Table 21 Appendix 4). In contrast the Mean rating of the upper middle for the science option is in the 'quite interested' range while for the vocational courses is in the 'somewhat interested' range.

The patterns of prestige attributions also are dissimilar across the SES groups. While almost two thirds of upper SES group (71%) rates science to be 'high to very high prestige' option, 42% rate the vocational option as 'very low or low prestige'. Among the low SES group both science and vocational courses get similar Mean ratings (Table

21) with a rating of 'high to very high prestige' being given by close to half of the participants (51% and 49% respectively).

The Parental Approval variable shows similarly sharp contrasts. The upper middle group perceives low Parental Approval for vocational courses with as high as 41% rating 'low' to 'somewhat low' support for this option. Approval for Science courses is however significantly higher with around 54% rating 'very high support' from parents. The Mean Parental Approval ratings for the Science option is in the 'high support' range. For the Vocational option on the other hand, it is in the 'somewhat low to average support range'. In contrast, support from parents in the low SES group *does not show such acute variations*. In both subject options the Mean Parent Approval ratings are in the average to high support range.

5.4. Arts and Commerce

Interest in the *Commerce* subjects is low but fairly even across the three SES groups. Similar scores are noted across all three groups for Self-efficacy, Prestige and Parental Approval.

Arts trails the list, attracting the lowest level of Interest across all three SES groups. Here again, the highest contrasts are seen within the upper middle group. The lowest level of Prestige is attributed to the Arts by the upper middle group (Mean: 2.84; SD: 1.31) in comparison to the other groups. Similarly perception of Parental Approval for the Arts is the lowest for the upper middle group (Mean: 2.83; SD: 1.46).

5.5. Attitudes of young people pursuing vocational courses

Deeply insightful information emerged through a series of focus group discussions that were held with a group of young people within this sample who were already in vocational courses (ITIs and polytechnics). Some of them indicated that they initially had misgivings about vocational courses and took them up because they had no other option. But once they entered the course, their opinions about the ways in which the course would help them in their future seems to have changed for the positive. While the majority of the individuals within this group were from low SES backgrounds, this positive attitude extended also to the small number of students from the middle and upper middle SES groups as well. Excerpts from narratives and points of view expressed during focussed group discussions by participants' already studying in ITIs or Polytechnics are presented in Table 22.

Table 22: Statements from participants in vocational courses

- I did well in my studies but could not get into any college because of financial problems. My parents put me into this polytechnic as a last resort. I was very depressed. But slowly my ideas changed. I realised that through this course I can actually find a job easily. It is also a very interesting course. Through your report please tell teachers not to discourage children from taking up polytechnic courses.
  Boy, , 2nd year Mechanical Engineering diploma, 19 yrs, low SES, Chennai.
- I joined this diploma course even though I wanted to go to college. It was because my family had no other option. I thought I would drop out. But I am still in this course after 2 years! I like it so much now. I am learning electronics. I can get a job. This course will help me become independent
  Girl, 2nd year Electronics Engineering diploma, 18 years, low SES, Chennai
- "After 10th, go for technical training. Then you can complete the studies in short duration and can start working."
  Girl, 2nd year diploma, 17 years, middle SES, Bhadravathi
- "I want to be grade 1 stenographer because I am continuing my study in modern management in Girls Polytechnic. I will do hard work and appear in grade exams held by the govt."
  Girl, 2nd year Office Management diploma, 19 years, middle SES, Guwahati
- "I want to go for research or want to go abroad. But not sure of competing with citizens of other nations."
  Boy, 2nd year Electrical Engineering diploma, 17 years, upper middle SES, Bhadravathi
- "Because we get job very quickly I can look after my family happily."
  Boy, 2nd year Metallurgical Engineering diploma, 17 years, low SES, Bhadravathi
- "I want to become an independent girl in my performance and also I believe myself for doing something."
  Girl, 2nd year ITI, 19 years, low SES, Guwahati.

5.6. Salient Trends

Interest

- The Sciences top the list attracting the highest interest scores across all SES groups.
- The lower SES groups place an equally high interest on vocational courses and science courses.
- Sharp contrasts are seen between the upper middle group's preferences for science vs. vocational courses, with a significantly lower interest being directed toward vocational training.
- Interest in commerce courses is fairly even across all SES groups.
- All SES groups have placed arts subjects at the lowest level of interest.

Self-efficacy

- The low SES group shows high self-efficacy for vocational courses.
- The upper middle SES group shows significantly lower self-efficacy for vocational courses in comparison to their self-efficacy scores for science courses.

Prestige

- For the middle SES groups the prestige hierarchy for subject choices is science, followed by commerce, vocational courses and arts.
- For the low SES groups the hierarchy is science with vocational courses coming a close second. This is followed by commerce, with arts coming last.
- For the high-income groups the prestige hierarchy is science, followed by commerce. Arts comes next and vocational courses are placed at the lowest level of prestige.

Parental Approval

- Parental approval is strongly linked with certain options mainly in the upper middle group. Parental approval is markedly lower for arts and vocational courses and is very high for science courses.
- For the low and middle SES groups, parental approval is much less acutely different across subject options.

6. Consolidation of key findings

6.1. Occupational prestige and subject choices

The prestige hierarchy noted within this sample is likely to be present in all cultures. The interesting point that emerged was with regard to the *sort* of careers that were categorised as having high and low prestige. Occupations that received the lowest prestige ratings were those belonging to the vocational category, while the Science oriented careers were given the highest ratings.

The influence of occupational prestige on *subject choice* preferences seems to have a characteristic pattern across SES groups. The findings suggest that it is the upper middle group that is strongly affected by perceptions of prestige and social status. It is true that participants from lower SES group do place blue collar professions at a lower level of prestige. However their choice of courses and subject options does not seem to be affected by the perceived prestige levels of these occupations. This is indicated by the equally high importance that the low SES group places on Science and Vocational courses. In contrast, the upper middle group's subject choices seem to align with prestige perceptions. This group places a significantly higher value on the Sciences, a moderate value on Commerce and correspondingly low values on the Arts and Vocational courses.

7. Pride and Prejudice: Implications and discussion points

7.1. A matrix of interwoven linkages

'Pride and Prejudice' seem to have a definite bearing on the manner in which occupations are perceived. Analysis of occupational prestige revealed the presence of a hierarchy of career preferences that seems to be consistent across the entire sample. This was an expected finding. Of particular significance is the finding that strong relationships exist between the other variables examined along with Prestige. The data shows that Interest,

Self-efficacy and Parental Approval increase or decrease with the Prestige rankings of a given occupation. High prestige occupations draw correspondingly high scores for Interest, Self-efficacy and Parental Approval, while these variables attract correspondingly lower values for low prestige occupations. It is against the backdrop of this tightly interwoven fabric of relationships that career orientations seem to be expressed in the Indian context.

7.2. Degree vs. diploma

The pre-occupation with obtaining a college degree seems be a largely middle – upper middle class one. It was also observed that a large percentage of this group linked no specific career goals to going to college other than 'I must have a degree'. The impact of prestige was such that a large number of middle and upper middle participants intended to pursue college education, even if this did not lead to direct employment. This was a more commonly prevalent trend in the smaller towns represented in the study.

Particularly striking is the change in attitudes seen amongst participants who had already taken up the vocational training option. While most of them had initial reservations these opinions changed once they entered the course. A number of these young people showed strongly positive attitudes toward the course, as well as toward vocational careers. Participants believed that the vocational courses prepared them well both with skills and sufficient theoretical knowledge. The course seemed to imbue them with confidence for employment in the future.

7.3. Occupationalism

Other Indian studies (e.g. Akhilesh, 1991; Thomas, 1997; Desai & Whiteside, 2000) have also found that prestige factors have a strong impact on career decision-making. First of all, it seems that careers that are accorded lower prestige are also accorded lower *dignity*. One consequence is that individuals are judged on the basis of their occupational membership. An engineer may be treated more respectfully than a carpenter regardless of character or competence. John Krumboltz, a well known Career Psychologist, refers to this 'discrimination on the basis of membership in an occupation', as occupationalism (Krumboltz, 2004). One consequence of occupationalism is that young people aspiring to win the respect of their peers and parents may choose to enter a particular occupation, not because they would enjoy the work, but because they want to be deemed worthy of respect by virtue of their future occupational membership.

7.4. Qualification, Role and Remuneration

Career roles that are supervisory or managerial are accorded more dignity than skill and production oriented roles. It is believed that degree based training leads to managerial roles while diploma courses lead to occupations involving actual production. Perhaps this is one of the reasons why the middle and upper middle SES groups place degrees at a higher level of preference than diplomas.

Such attitudes also seem to prevail in the minds of *employers*. A direct outcome of such an approach to labour is that vocationally oriented occupations are not as highly paid as those based on college education. With large numbers preferring degree courses, a significant lacuna is created in the vocational area. One recent report indicates that a mere 5% of Indian students actually opt for vocational courses, while the number targeted by the government was 25% (National Council for Education, Research and Training, 2001). The fact that the largest numbers of jobs are available in the vocational area does not seem to significantly influence the career choice process.

8. Relevance of career counselling

Students often approach career planning with biases. 'Degree is better than diploma', or 'Arts is not for the intelligent', are examples of career beliefs that reflect such biases. More often than not, it is such misconceptions that drive career choice rather than well thought out plans. An important component of career counselling would be to address such ideas and beliefs.

It is important that a career counselling programme helps delink degrees and diplomas from prestige attributes. It is also essential that the value of all courses of study is highlighted. An effective career counselling programme would build an awareness of the characteristics and the final outcome of the various career paths available within the Indian system.

A tentative conclusion from the trends seen in this survey suggests that occupational prestige is not as deeply embedded in the livelihood planning of youth in poverty as in the youth from the more socio-economically advantaged homes. The issue of prestige thus gains greater importance in the career counselling programmes for the middle and upper middle class homes.

It is vital to note however that it is *not* the objective of career counselling to 'convince' young people that they ought to take up a degree or study the arts or go for vocational training. Instead a fundamental concern of career counselling would be to help the young make choices based on personal satisfaction, liberating themselves from the shackles of occupational pride and prejudice.

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Chapter 7

Labour market vs. Educational leadership:

Is there a dynamic tension?

1. Chapter Focus

Career choice is often influenced strongly by labour market cycles and the question of finding a good fit between self and occupation is often left unanswered. Entry into the world of work may in effect be reduced to a response to the short term interests of employers. The possibility of career development being a mechanism for learning, personal growth and potential realisation could diminish in importance.

This chapter presents WORCC-IRS findings in relation to career counselling being a bridge between the world of education and the world of work. The analysis will focus on the following specific issues:

- Interest profiles seen across the sample.
- Regional variations in interest profiles and career preferences.
- Interactions between personal interests and career preferences.
- Interactions between personal interests and knowledge about the world of work.
- Congruence (or the lack of it) between personal interests and career preferences.
- Educational leadership in preparing the young person to enter the world of work.

2. Methods of analysis

2.1. Questionnaires

- The Personal Interest Profile – PIP (Arulmani 2000, 2004).
- The Career and Occupational Prestige Scale – COPS (Arulmani, 2000).
- The Career and Occupation Awareness Indicator – COAI (Arulmani, 2001).

2.2. Narratives

Participants were encouraged to write narratives about their aspirations and dreams.

2.3. Focus Group discussions

Discussions were held in small groups in the Chennai and Bangalore locations to draw out participants' orientations to the world of work.

2.4. Data analysis

Statistical analysis for this chapter used the following methods:

- Descriptive analyses, including frequency and percentage analysis.
- Inferential analyses. A series of one way analysis of variance (anova). Post hoc comparisons using the Tukey's HSD were used to further analyse the significance of difference between SES groups at the 0.05 level.

All data is presented in Appendix 4.

A thematic analysis of the narratives, focus group discussions and interviews was also conducted. Exemplars of themes from the narratives and discussions will also be presented in the following sections.

3. Clarification of terms

3.1. Personal Interest

Analysis of interests in earlier chapters was with reference to specific careers, and was referred to as *career* interests (chapter 5, section 2.2). Personal interest in this chapter refers to the psychological construct, which describes an important aspect of a person's personality. Personal interests are patterns of likes, dislikes and indifferences around specific themes and directed toward certain kinds of *activities* rather than specific careers. In this sense personal interests are distinct from career interests. Ideally, personal interests ought to be linked to career interests. This chapter refers to five personal interest themes as follows:

- *Linguistic theme*: refers to the person's interest in using words attractively and effectively to communicate either in the written or spoken form.
- *Analytical-Logical theme*: refers to the attraction that activities such as analysis, reasoning, planning and calculating have for a person.
- *Spatial theme*: is linked to the person's interest in design, working with colours and shapes, drawing and sketching.
- *Interpersonal theme*: refers to an interest in understanding people and human behaviour.
- *Physical-Mechanical theme*: refers to an interest in working with machines and physically demanding activities.

These personal interest themes are loosely based on the Theory of Multiple Intelligences (Gardner 1983).

3.3. Career Awareness

This term refers to the knowledge a person has about the world of work. It includes accurate information about the eligibility to enter a certain occupation and knowledge about the duties and roles of a specific career.

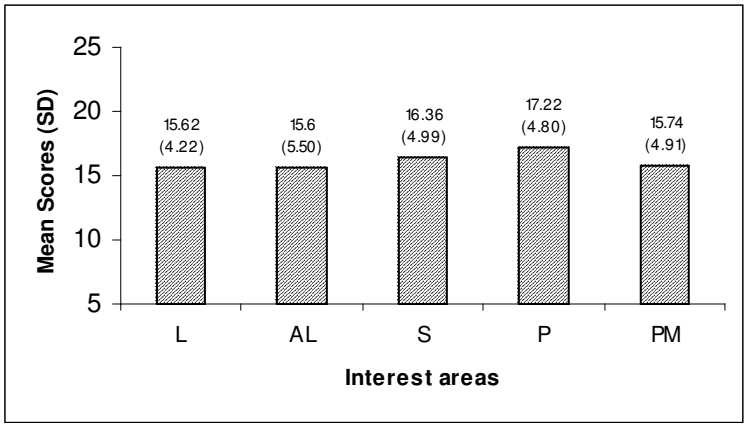
4. Personal Interest Profiles

The Personal Interest Profile – PIP (Arulmani 2000, 2004) was used to examine participants' personal interests. This is a scale that is not focused on specific careers. It considers participants' interests for activities related to the five interest themes described above (section 3.1). The scale comprises 25 items with 5 items loading on each of the 5 themes. Items are anchored to a 5 point scale, where 1 indicates low interest and 5 the highest interest. Accordingly each interest theme can have a minimum score of 5 and a maximum score of 25. Higher scores indicate higher levels of interest.

4.1. Personal ***Interest profiles across the sample***

The interest levels for all the five personal interest themes – Linguistic, Analytical-Logical, Spatial, Interpersonal and Physical- Mechanical, are approximately similar amongst the participants. Figure 3 below depicts the personal interest mean scores obtained by the sample across the five interest themes.

Figure 3: Mean interest scores (SD) for five interest themes, for the entire sample



L = Linguistic; AL = Analytical-Logical; S = Spatial; P = Interpersonal; PM = Physical Mechanical

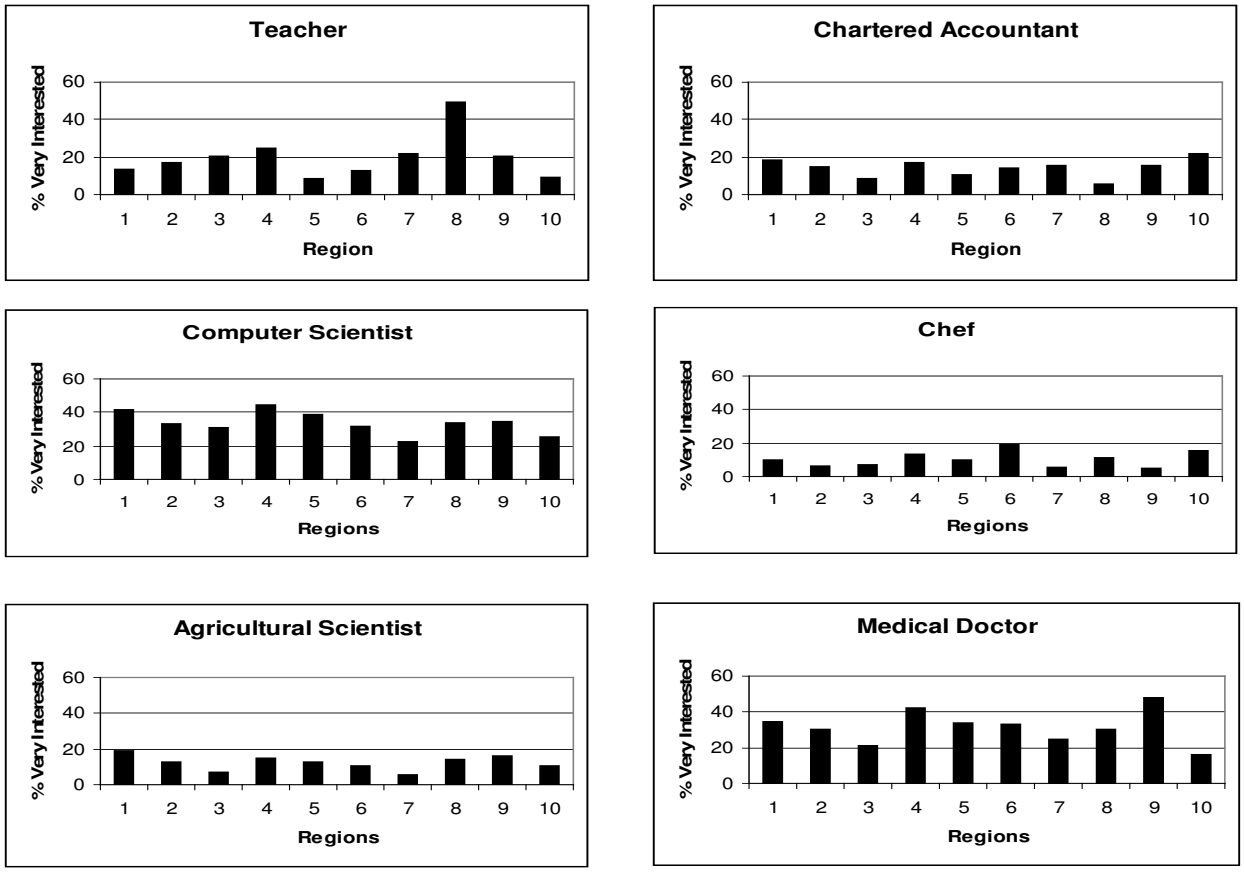
In other words, this sample does not show a particularly high or low interest for any one particular personal interest theme. This is the expected trend where we expect to see a clear spread of interest across a cross-section of young people. Importantly, this trend of a well spread out range of interests is also consistent across socio-economic status levels.

4.2. Variations in Career Preferences across regions

Data about *career* interest ratings obtained from the Career and Occupational Prestige Scale (COPS, Table 16, Chapter 6) was used to examine career preferences across 10 WORCC-IRS regions. Interesting variations were observed with participants rating certain careers as 'very interested' in certain regions. Six such careers with the most striking variations were examined more closely. Detailed information pertaining to the level of interest for these six careers is provided in Table 23 (Appendix 4). The series of figures below capture these variations in career preference across regions.

Figure 4: Variations in preferences for six careers across regions

1 = Shimoga; 2 = Bangalore; 3 = Dehradoon; 4 = Chennai; 5 = Ukrul; 6 = Goa; 7 = Delhi; 8 = Rampur; 9 = Srinagar; 10 = Guwahati



As indicated by the figures above, careers receive varying levels of interest ratings in the different regions of the study. *Teaching* for example attracts a markedly higher level of interest in Rampur, with close to 50% of the participants rating this occupation as 'very interested'. In contrast, only 9% of the Guwahati participants rate teaching at the same level. Instead, 22% of young people in Guwahati and 17.2% in Chennai rate *Chartered Accountancy* as 'very interested' while only 6% of Rampur participants feel the same way. *Computer Scientist* obtains a high rating across the entire sample with minor regional variations. An interesting regional influence is seen on *Chef*. Goan young people seem to go against the trend with 19% of them rating as 'very interested' for this career. In most of the other regions significantly lower numbers have given a positive rating. Shimoga gives the highest rating for Agricultural Scientist, with almost 20% of the young people in this region rating it as 'very interested'. Medical Doctor gets a high rating across all regions, but some areas indicate a particularly strong interest. Almost 50% of young people in the Srinagar sample and 43% of the Chennai sample place the highest interest on a career in medicine. Young people in the Guwahati sample however go against this trend with just 16% of them indicating high interest for this career area. Region-specific factors seem to influence career interests. Identification of the specific reasons underlying regional variations in career interests would require a deeper analysis

of the data. However, it is possible that being a Chef in Goa is more attractive given the strong tourism industry in this region. Similarly Agricultural Science may be more attractive in Shimoga given the culture of large scale farming prevailing in this region. The education sector is perhaps the largest employer around Rampur, especially with the recent drive for increased primary schools in this hill district.

The point to be noted is that attitudes and values prevailing within a region along with the type of job availability, could shape and influence career interests.

Regional variations are also seen in the nature of courses and study programmes available in certain regions. Some of the participants indicated for example that they often chose a certain course of study merely because 'that is what is available' in the region. The issue of access to training opportunities requires urgent attention.

4.3. Personal Interests and Career Preferences

Interest profiles are designed on the hypothesis that certain kinds of occupations cluster around certain interest themes. Of course it is not likely that any one occupation would be exclusively related to a single interest theme. However it can be hypothesised with a reasonable amount of confidence that a given occupation would draw significantly from a certain interest area.

The association between *career* interest ratings on 28 different careers with *personal* ratings was further examined. Table 24 (Appendix 4) gives a summary of the associations. A statistically significant but small association was the predominant trend (correlations ranged between 0.1 and 0.3). This could indicate that the 'fit' between participants' personal interests and career preferences is not very strong. In other words, the *activities* that participants are interested in do not quite match the activities that their preferred careers would offer.

4.4. Salient trends

- The whole range of personal interests is seen across the sample.
- Regional variation is seen in preference for specific careers.
- The relationship between personal interests and career preferences is significant but weak.

5. Career interests and Career Awareness

The Career and Occupation Awareness Indicator – COAI (Arulmani, 2001) was used to assess participants' knowledge about 28 occupations. These are the same occupations for which the participants' career preferences were assessed (discussed in Section 4.3). The COAI requires the participants to:

a) Describe the career briefly and
b) Describe the qualifications needed to enter the career.

The quality of responses is scored from 0 to 3, where 0 indicates 'unable to describe the career' and 3 indicates 'good description of the career'. The consolidated score from the COAI provides a measure of the participant's career awareness. The maximum consolidated score a participant can obtain on this measure is 84. Individual scores on specific careers in the COAI indicate career awareness for that specific career.

The findings from this assessment are particularly revealing.

5.1. Knowledge and awareness of careers

The Mean consolidated career awareness score obtained by this sample is 13.21 (SD: 10.88). Given that the maximum score obtainable is 84, this is an exceptionally low Mean consolidated score, indicating a surprisingly low knowledge about the careers on the list.

The data was analysed further to look for patterns of knowledge for specific careers. It was expected that high career awareness would be demonstrated for careers which had high preference among the participants. To study this hypothesis the six careers with the highest interest ratings were selected, namely, Scientist, Computer Scientist, Engineer, Doctor, Teacher and Lawyer. Table 25 excerpts definitions given by a cross-section of participants for these careers.

Table 25: Participants' definitions for six 'high interest' careers: A sample

Scientist
• People who finds out secrets in the world. *Girl, Class 10, 14 years, low SES, Bangalore.*
• Person who invent, who study deeply on a particular object. *Girl, Class 12, 17 years, upper middle SES, Cuncolim, Goa.*
• People who physics very well. *Boy, Class 12, 17 years, upper middle SES, Bangalore.*
Computer Scientist
• Computer scientist who make study on computer to research more information. *Boy, Class 12, 18 years, upper middle SES, Cuncolim, Goa.*
• You can do after B.Com. Don't know what they do. *Girl, Class 10, 14 years, low SES, Bangalore*
• One who works in the biggest multinational companies and earns a big salary. *Girl, Class 10, 14 years, upper middle SES, Bangalore.*

Table 25: Definitions for six 'high interest' careers (Cont'd)

Engineer   • Engineer is a professional course in which one can succeed in anything.   *Girl, Class 12, 17 years, upper middle SES, Cuncolim, Goa.*   • One who plans houses.   *Girl, Class 10, 14 years, low SES, Bangalore.*   • Expert in applied science specially in machines   *Boy, Class 10, 15 years, middle SES, Guwahati.*   • Engineer is the best career option because from engineering you can study anything else.   *Boy, Class 10, 15 years, middle SES, Guwahati.*
Medical Doctor   • Saviour of citizens' health.   *Girl, Class 10, 14 years, low SES, Bangalore.*   • This profession is very noble.   *Boy, Class 12, 18 years, low SES, Ganderbal-Srinagar, Kashmir.*   • Manufacturing medical items.   *Girl, Class 10, 14 years, upper middle , Bangalore.*   • This is most respectable profession. You can cure any illness and so people give you a high status and respect in society. To become a doctor you can study science or arts then study MD.   *Boy, Class 10, 16 years, low SES, Chennai.*
Teacher   • Who shapes future citizens.   *Girl, Class 10, 14 years, low SES, Bangalore.*   • Gives moral education to students.   *Boy, Diploma Electrical Engineering, 17yrs, middle SES, Bhadravati, Karnataka*   • Teacher: a respectable occupation.   *Boy, Class 10, 16 years, low SES, Srinagar, Kashmir*
Lawyer   • Who argues for justice and injustice in the court.   *Boy, Diploma Electrical Engineering, 17yrs, middle SES, Bhadravati, Karnataka*   • Do social service by punishing the offenders.   *Girl, Class 10, 15 years, low SES, Dhule, Maharashtra*   • One who argue.   *Girl, Class 10, 14 years, low SES, Bangalore*

These descriptions by students reveal varying levels of awareness about these careers. On the whole it seems that participants' knowledge of careers in which they show keen interest is at best general, broad and sweeping; and strongly influenced by prevailing prestige perceptions about these careers.

As indicated in Table 26 below, awareness for Computer Scientist and Engineer is extremely low. Scientist and Medical doctor is also low. There is some awareness about Lawyer and Teacher.

Table 26: Descriptive Summaries of Career Awareness Scores for six 'high interest' careers

Career	Mean Score (SD) *Max obtainable score = 3*
Scientist	0.64 (0.76)
Computer Scientist	0.31 (0.60)
Engineer	0.35 (0.60)
Medical Doctor	0.84 (0.87)
Teacher	1.09 (0.89)
Lawyer	0.97 (0.83)

Note*: Score of 0 -1 = low awareness, 1-2 = some awareness, 2 -3 = high awareness*

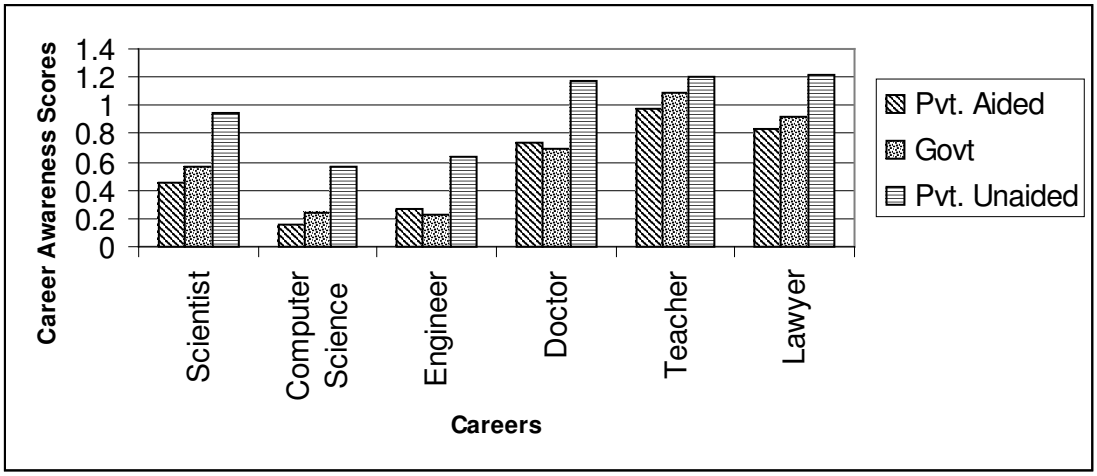
The data strongly suggests that although participants express high interest in a particular career, their knowledge about that career (e.g. qualifications required, knowledge about what people actually do in these careers, job responsibilities etc.), is extremely low. Interest in the career does not seem to guarantee increased awareness about the career. Computer Science is a particular case in point. This career has consistently been rated as most prestigious and most interesting by this sample. Yet, the awareness of what this career is about is the *lowest*.

These findings also have direct implications for how career choices are being made. The data suggests that career choices are being made against the background of extremely low career awareness and later chapters will look at this issue in more detail. In the next three sub-sections, an attempt will be made to identify the groups with the lowest career awareness.

5.2. School type and Career Awareness

The consolidated career awareness scores of participants in Government, Private Aided and Private Unaided schools were analysed. While career awareness was exceptionally low across all school types, significant differences are present between Government, Private Aided and Private Unaided schools (Table 27, Appendix 4). The lowest scores were in the Private Aided schools and the highest scores in the Private Unaided schools. Figure 5 below shows the difference across school types in specific career awareness for six 'high interest' careers.

Figure 5: Mean Career Awareness ratings for six 'high interest' careers, across Government, Private Aided and Private Unaided schools.



Note*: Score of 0 -1 = low awareness, 1-2 = some awareness, 2 -3 = high awareness*

Private Aided and Government schools lag behind the Private Unaided schools on career awareness in all six career areas.

5.3. School Board and Career Awareness

A similar trend of exceptionally low career awareness, including the 'high interest' careers is seen when the data is analysed across School Boards. Only institutions affiliated to the State Board and the CBSE have been analysed. State Board institutions were significantly lower than the CBSE schools (Table 28, Appendix 4). The ICSE Board was not entered in this analysis since the number of participants is low (212). However with the numbers available, the ICSE schools get a Mean Score of 20.89 (SD 11.28) and career awareness trends are similar to the CBSE schools.

It is important to note that the maximum obtainable score on this scale at 84 and the obtained scores range between the 10 to 25 points. This indicates a level of career awareness across all school boards to be exceptionally low.

5.4. Class level and Career Awareness

It is expected that as the young person advances from Secondary to Higher secondary levels of education, he or she would gain wider exposure to the world of work. Should this be true, it may be expected that career awareness would also increase. The data was examined by sorting it according to class type namely, Class 10, Class 12 and the 2nd year Vocational group.

Students in class 10 and the 2nd year in the Vocational group are at a similar level of career awareness, with the Class 12 participants being significantly higher in the career awareness scores (Table 29, Appendix 4). However it must be noted that against the

maximum obtainable score of 84 on this measure, the scores obtained even by Class 12 participants is very low.

5.5. Salient trends

- Knowledge about careers is extremely low across the entire sample irrespective of educational level, school type or school board.
- Interest in a career does not seem to be based on adequate knowledge about that career.
- Students in private unaided schools seem to have higher career awareness when compared with their counterparts in government and private aided schools.
- Participants in schools following the CBSE Board demonstrate higher career awareness than those in State Board schools.
- Participants in Class 12 show a higher level of career awareness than those in Class 10 and the 2nd year in vocational courses.

6. Consolidation of key findings

6.1. Personal interests vs. career preferences

It was noted first of all that personal interests across five different interest themes were spread more or less evenly across the sample. No one interest area was significantly stronger or weaker than the others.

It is expected that personal interests would reflect in career preferences. In other words, it is expected that a person who indicates a high interest for Linguistic type of activities would also be interested in a career such as Journalism, while someone with a high Spatial interest would show preference for the work activities of an Architect, an Artisan and so on. While these relationships between personal interest and career preference are present within the sample, they are at best feeble. It seems possible that factors other than personal interests influence career preferences.

A further indication of the apparently tenuous connection between personal interest and career preference emerges from an analysis of the data across regions. Prevailing customs, attitudes toward occupations, job availability, course availability and such factors seem to influence career preferences in specific regions. The tourism culture of Goa for example, pushes the interest for a career as a Chef to a higher level. Agriculture receives a high rating in Shimoga which is a land of large scale farming. Influences such as these are examples of how *locally* emerging influences and opportunities shape attitudes and orientations to career preferences, perhaps bypassing personal interests.

6.2. Preparation to enter the world of work

Learning about oneself, one's interests and talents and learning about the world of work are important components of preparing to make career choices. Awareness about personal interests and talents along with knowledge about the world of work are in effect the building blocks of making informed career choices. WORCC-IRS reveals that the young person at the verge of making important career decisions is equipped with little information about careers that are manifestly of 'high interest'. More importantly, the kind of *activities* that the young person is interested in does not seem to reflect in his or her career preferences. Varieties of other forces seem to push individuals toward or away from career opportunities, and the young person seems to have little self-awareness of how personal interests get marginalised in the process. This places the young people at risk to entering a career that may not be in line with personal interests.

It is alarming to note that career awareness is extremely low amongst this sample. Young people show strong interests for careers they know very little about. A strident case in point is Computer Science, which has received the *highest* ratings of interest and prestige across the entire sample, irrespective of age, gender, region or SES. Yet, participants' knowledge of what this career is really all about, or even accurate information about career paths leading to this career, is the *lowest*. Similar trends of low career awareness were noted for all the other careers examined. Minimal increments in career awareness are seen at the Class 12 level and amongst those in Private Unaided schools. But on the whole knowledge about the world of work is disturbingly low.

It seems therefore that the young people in this sample, at the very threshold of making critical career development commitments, are doing so with low knowledge about self and about the world of work. In effect career choices are being made even when the young person in unprepared to make these decisions.

7. Labour Market vs. Educational leadership: Implications and discussion points

7.1. Uninformed choices: Implications for higher education and the labour market

This chapter has discussed two important points that have emerged from the WORCC-IRS data. First of all, the data indicates that the linkages between personal interests and career preferences are at best tenuous. Secondly, knowledge and awareness of careers amongst young people seems to be extremely low.

Young people in this study are at the point of making decisions about further education that points them toward certain career paths. Inaccurate decisions at this point have implications for the rest of the individual's career progress. Going by participants' responses it seems strongly likely that career choices are being made against the backdrop of poor self-knowledge and low career awareness. Educational leadership at the school and higher secondary level in preparing students for the transition from one

level of education into another is weak and young people are at high risk for making uninformed career choices.

Poorly informed choices made at the high school and higher secondary level could have a cascading effect seen in the short run on the outcomes of higher education. The perhaps even more serious impact of ineffective career choices would be seen in the quality of the nation's workforce. The consequences of entering a certain course of study could belatedly dawn upon the young person *after* he or she has entered the course. In some cases this may lead to dropping out of further education. In other situations the family may be able to afford an expensive alternation in the young person's career preparation and the individual may begin a new course all over again. In families where resources are limited, course completion could be reduced to assiduously 'completing what one has started'. It is true that such situations are not always the case. Yet, the numbers of young people who do express dissatisfaction with career choices is increasing to alarmingly high levels. It is often said that an important function of further education is to prepare the young person for the labour market by equipping the individual with knowledge and skills. A vital point that is often missed is that knowledge and skills for a set of occupational tasks that are not in some way linked with the individual's interests would be sterile, bereft of motivation or a sense of meaning and purpose.

7.2. Uneven workforce development

The WORCC-IRS seems to indicate that in the absence of strong educational leadership, career preferences are strongly influenced by the trends and cycles of the labour market. For example, the demand for vocationally trained, skilled workers has grown in geometric proportions in the Indian context. In an attempt to provide a wider range of career options for the young career aspirant, the Government in its various National Policies on Education has introduced the option of vocational education. The objective of this scheme was to sharpen the employability of an individual, reduce mismatch between demand and supply of skilled manpower and provide employment oriented alternatives for those who pursue higher education without particular interest or direction. Assessments of this effort (e.g. Desai & Whiteside, 2000) have revealed that the number of individuals opting for vocational training is few and the majority of those who did take this option were from lower income groups. An opposite trend is noted with regard to other career areas. For example the prestige-linked preoccupations of the Indian family has created an unrealistically heightened demand for courses such as engineering and medicine. Chapters 5 and 6 have discussed this point in greater detail. These opposing trends result in an uneven development of the workforce, with large numbers of qualified professionals available for certain careers and not enough in other areas.

It is essential that governments scientifically monitor manpower requirements and plan decades ahead to meet emerging needs. This requires close interactions between the educational system and manpower planners so that courses and training programmes are structured in advance, to meet emerging needs. In purely economic terms, gaps in this planning could lead to manpower mismatches. From the point of view of personal growth and development, the preponderance of certain kinds of courses at the expense of other avenues for training could restrict the flowering of the great variety of talents

present within every individual. However as we have seen, social and cultural forces could thwart the best thought out plans for career development. This is an ever-present reality in India.

7.3. Boom, bust and suitability

In the absence of services that enhance skills for career preparation, career choices could be linked with occupations that are sometimes merely artefacts of economic cycles. In response to the present boom in the computer science industry large numbers of students have developed an interest in this career. The WORCC-IRS data indicates that in some areas, more than half of the sample shows the highest interest in computer science. It is a fact that the computer industry offers a wide range of occupational possibilities. But young people's interest in this field does not seem to be matched by accurate knowledge about the occupations within this area. Interest instead seems to be strongly influenced by the much publicised trappings of working in a large information technology firm. For example, jobs emerging from the information technology enabled services (ITES) such as those offered by the Business Process Outsourcing (BPO) sector are commonly misunderstood by large numbers to be a career in the computer science sector. Meanwhile, there are the increasingly discordant reports of the frustration, disillusionment and psychological discomfort experienced by ill-informed young people who have entered this sector. This evidence points to the strong likelihood that those who experience the highest levels of discomfort seem to be the least suited for a 'BPO job'.

The same principle holds good for all other career areas. An individual has the highest chances of finding success through a career for which he or she has the strongest personal interest and aptitude. Not everyone's personal interests and aptitudes would match the requirements of careers emerging from a boom sector. In a context where educational leadership is strong, the young person would be prepared to make the transition to further education and livelihood training that is congruent with his or her personality. When such leadership is weak or absent, the young person could fall a victim to the short-term human resource requirements emerging from the labour market.

7.4. Education for skill literacy

The longest lag periods between qualifying for a career and actually entering a career seem to be closely linked to the nature of the career aspirant's career preparation. The longest lag periods are associated with the *lack of skill literacy* in the career aspirant. 'Skill' in this sense is not limited the dexterity with which a person handles equipment and tools. Skill literacy is the fluency that a person develops for the practice and application of the theoretical concepts that comprise a body of knowledge. Even a highly theoretical field of study requires a set of skills with which to actually interact with the constructs of that field. A historian for example requires skills for referencing and research, just as a mechanical engineer needs to be skilled at understanding how machines work or a psychologist needs skills to listen with empathy.

A student who has moved from one degree course to a higher one without the actual development of skills, is an unattractive prospect in the employment market place. The difficulties with job acquisition that this person experiences is not always because there are no opportunities. Quite often it is because such a person is *inadequately prepared* for the market place. On the other hand someone who presents herself with even just a bachelor's degree *along with* evidence for skills to *apply* and *practice* the subject in which she has specialised, is likely to experience a shorter lag between her qualifying and obtaining a job. This is because she has developed a higher level of skill literacy for the subject that she has studied.

Most commonly, our university courses enhance students' knowledge of a subject, but fail to enhance their literacy for the skills that are necessary for the application of this knowledge. Presumably, 'professional' degree courses are so named because they are designed to equip the student with skills for a career. In reality however, a large number of professional degrees continue to remain theoretical and do not enhance the student's skill literacy. The student is therefore required to go on for higher and higher levels of specialisation, incurring increasing expenses. Non-professional degrees are further removed from the realities of the world of work and contribute even less to the enhancement of skill literacy. Poor quality education can only result in a labour force that is populated by poorly trained, poorly skilled young people whose skills do not match their qualifications.

The most urgent need presented by the world of work is for *skilled* manpower. Quite often the onus for work skills training falls on the world of work. Indian employers often express their frustration with the employability of fresh graduates and most are resigned to the reality that the training requirements of fresh recruits are not limited merely to orientating them to a given work environment. In reality, training must begin from the basics. If the need for skilled manpower is to be effectively met by the systems that educate young people for employment, significant changes in curricular structure are called for. On the background of the apparent failure of vocational courses to evoke adequate interest among large numbers of students, the development of courses that blend the curricular objectives of degree programmes with diploma courses could offer an effective solution. The idea of skill literacy offers a valuable touchstone that could guide the redesigning of existing curricula.

7.5. Educational systems and labour market forces: Is a dynamic partnership possible?

The obvious answer to this question is an unequivocal 'yes'. The reality however seems to be quite different. At the high school and higher secondary stage, educational systems seem to be failing at the level of facilitating *informed* career choices. This failure seems to continue into higher education, with *poorly skilled* young people entering the labour market in spite of years of study. While these drawbacks are well known, it is the more recent trend of educational systems coming under the control of labour market forces that is alarming. On the one hand it is commendable that universities are designing and mooting 'job-oriented courses'. On the other hand, subjects that are not immediately job

oriented seem to be accorded an increasingly low priority. The pure sciences for example and subjects in the humanities receive decreasing support and in many cases, departments are in danger of being closed down.

While it is true that India is at last beginning to show sustained economic growth it must be remembered that education is not the handmaiden of the labour market. The purpose of education is not merely to prepare a qualified work force. Instead, the purpose of education is to facilitate individual's development as a person and as a responsible and contributing member of the society of which he or she is a part.

7.6. Life long learning

Around the world, workers and young workers-to-be, face a new horizon. Contemporary society is described to be post-industrial and career and work have taken on new meanings. Education-work-retirement has been the traditional approach to the unfolding of a significant portion of an individual's life. The future world of work is no longer likely to offer jobs that could be pursued for the entire span of an individual's working life. The worker of the future is likely to be required to make several job shifts over one life time. This could be the result of skills becoming rapidly redundant or because the new world of work offers ever increasing opportunities for greater self-fulfilment. Career success is going to be dependent on the constant updating of knowledge and skills. Within this context, learning must perforce be redefined. Careers in the future world of work require broad learning foundations that leave the option open for ongoing learning and skill development. Two suggestions made by career psychologists are of particular relevance to the Indian situation. First of all, it is essential that educational systems reduce their focus on curricula that lead to closed specialisation paths (Tractenberg, Streumer Jan, & Van Zolingen, 2002). In other words training courses with long periods of gestation leading ultimately to just one career possibility are likely to decrease in their relevance. Educational foundations that offer the flexibility for career change over the course of one's life are the need of the hour. This requires a closing of the gap between knowledge transmission and skill acquisition. Embedding work-related experiences in the school curriculum for example could contribute to the closing of this gap (Nijhof, 1998). At the second level, employers also will need to devise strategies and methodologies that could contribute to the ongoing knowledge and skill development of their work force. A work environment where on going learning becomes an essential aspect of career development is expected to be the work ethic of the future (Nijhof, 1998).

If life long learning is to be possible, it is essential that mindsets also change to accept this reality. Social-cognitive environments that do not allow the worker to remain a learner could prove to be barriers to career success in the emerging post-industrial world of work.

8. The relevance of career counselling

Trends in the labour market are a powerful influence on career development. The career counsellor is required to be aware of manpower requirements and labour market trends. However, effective counselling is not chained to economic cycles. It is the personhood of the career chooser that lies at the heart of career counselling. Facilitating self-understanding, matching this information with the world of work and helping the young person make a career discovery is the real task before the sensitive counsellor.
An individual possesses talents for more than one career. If this is not acknowledged, the large numbers of career aspirants (the majority perhaps) whose interest and aptitude profiles do not match prevailing demands from the labour market, may not find their place in the sun. Instead they may be impelled to choose careers that are popular – forsaking careers for which they might have a higher suitability. Being equipped with the methodology to strike this essential balance is the hallmark of effective career counselling.

Career counselling could in effect be the *bridge* between education and the labour market.

A well planned career counselling programme for the high school and higher secondary level could contribute significantly enhancing knowledge about self and the world of work and thereby help the young person prepare effectively for the world of work. Towards this end, a fully functioning career counselling programme within an educational institution for example, could systematically create opportunities for work shadowing, internships and work experience. Further, an important target for career counselling is to enhance the individual's awareness of manpower requirements and indicators from the labour market. Career counselling could help the career aspirant learn to examine the labour market, assess the short- and long-term consequences of particular types of occupational choices and make informed career choices. Within this context, it is essential that a high priority is given to the development of accurate and comprehensive information on education and training opportunities and on the labour market.

Another linked, though distinctly separate issue is to do with unemployment. Interventions targeting unemployment have largely focused on those who are *already* unemployed. These interventions mainly take an economic approach and address the problem in a cross-sectional manner. Very few attempts have been directed toward the *prevention* of unemployment. Cross-sectional and 'curative' approaches would at best alleviate the problems of those who are currently unemployed. Career counselling that begins early in the individual's life could contribute to preventing unemployment by teaching skills with which to navigate through the ups and downs of labour market cycles.

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Chapter 8

Contexts and Circumstances:

Gender and Career Choices

1. Chapter Focus

This chapter examines the interaction between contexts and circumstances, and young people's career orientations. WORCC-IRS data pertaining to the impact of family (particularly parental support and approval) on personal interests, orientations to career paths and subject preferences will be presented. Data related to social-cognitive environments with specific reference to perception of career barriers and prevailing career beliefs will also be discussed. With the view to exploring these diverse constructs in a meaningful manner, the data will be analysed with reference to two specific variables, namely gender and caste. This chapter will discuss issues around gender and chapter 9 will be consider aspects related to caste.

2. Methods of analysis

2.1. Questionnaires

- The Career Interest Profile – PIP (Arulmani 2000, 2004).
- The Subject Choice Orientation Scale – SCOS (Arulmani, 2004).
- The Career Path Orientation Scale – CPOS (Arulmani, 2004).
- Career Belief Patterns Scale – CBPS (Arulmani, 2004).
- Perception of Career Barriers Scale – PCBS (Arulmani, 2004).

2.2. Narratives

Participants were encouraged to write narratives about their aspirations and dreams, the barriers they were experiencing or expected to experience in the near future and the common ways in which people around them thought about careers and work.

2.3. Data analysis

Statistical analysis for this chapter used the following methods:

- Descriptive analyses, including frequency and percentage analysis.
- Non-parametric tests (Chi squares).

All data is presented in Appendix 4.
A thematic analysis of the narratives will also be presented. Exemplars of themes found in the texts are presented in the following sections.

3. Clarification of terms

3.1. Career Paths:

Three career paths after school are discussed:

- Working Immediately
- Part Time job with study (Part Time)
- Full Time Studies.

Further details are available in chapter 5.

3.2. Subject Options:

Four subject options / courses available after school are discussed:

- Science
- Arts
- Commerce
- Vocational courses.

Further details are available in chapter 5.

Other terms used are: Career Barriers, Career Beliefs (see chapter 5) and Personal Interests (see chapter 7).

4. Gender, Personal Interest, Career Paths and Subject Choices

4.1. Gender differences in personal interest profiles

The participants' performance on the Personal Interest Profile (PIP) shows interesting differences between genders (details in Tables 30 and 31, Appendix 4). The findings are best understood by grouping the personal interest themes into two board clusters of personal interest themes. One is the *Linguistic-Spatial- Interpersonal* interest cluster referring to the language-design-people type of activities. The second is the *Analytical-logical-Physical- mechanical* interest cluster referring to analytical and physical exertion type of activities. In the Linguistic-Spatial-Personal cluster more girls than boys have rated interest as 'high'. Significantly more boys than girls show 'low' interest for activities linked with these interest themes. A contrary trend is seen with the Analytical-logical-Physical-mechanical cluster. Here more boys than girls have 'high interest' ratings and significantly more girls than boys have a 'low interest' rating. These gender differences in personal interests continue across SES groups (Table 32, Appendix 4).

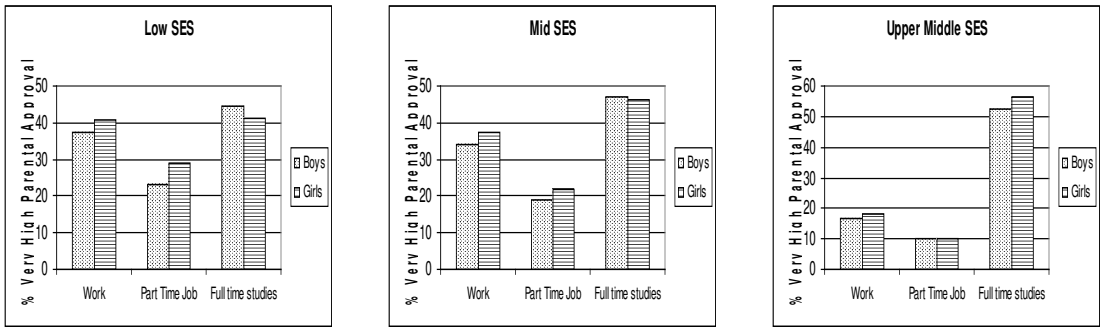
4.2. Gender differences in orientations to career paths

Girls and Boys, at first glance, appear to have very similar orientations to the three career paths of Work Immediately, Part Time job with studies and Full Time Studies. Details of their interest ratings on the Career Path Orientation Scale (CPOS) are given in Tables 33 and 34, Appendix 4. Around 20% of both boys and girls rated the option of Work Immediately as 'very interested' but another 25% of both boys and girls have rated this as a 'low interest' option. A similar spilt in interest is seen among both girls and boys for the Part Time career path. While around 20% of both girls and boys have a 'very interested' rating on this option, another 25% of both sexes rated it as 'low interest'. It is in the Full Time Studies option that some differences in gender emerge. While 39% of Boys have rated this as 'very interested', 44% of girls have given the same rating. More girls than boys seem to be firmly interested in a full time study option after Std. 10 and 12. The overall trend of a preference for Full Time Studies however is not seen uniformly across all participants. A small and similar number of girls and boys (around 8%) have rated Full Time Studies as a 'low interest' career option.

The trends in gender preferences for career path options were further studied within each SES group (for details see Table 35, Appendix 4). In the low SES group, boys and girls seem to be almost equally divided in their interest for the diametrically opposite options of Full Time Studies and Work Immediately. Meanwhile, among the middle and upper middle groups there is a dramatic drop in numbers of boys and girls interested in the part time and work immediately options. Recalling the salient trends from chapter 5, both privilege and disadvantage seem to have their uniquely strong influence on choices, irrespective of gender.

The CPOS also asked for participant's ratings of perceived Parental Approval for each of the three career paths. On an average, "very high support' from parents was perceived by both girls and boys to be first for Full Time Studies, followed by Work Immediately and lower for Part Time studies (Tables 33, 34). Figure 6 below, shows the gender differences in Parental Approval across the three SES groups for the three career paths. Again, Parent Approval for Full Time Studies is the highest for both girls and boys across all SES groups. However, Parental Approval amongst the upper middle group seems to be high *almost exclusively* for the Full Time Studies option, with ratings for other options being markedly lower. In contrast, the differences in Parental Approval in the low SES group for all three career paths is not as marked and is more evenly spread out across Work Immediately, Part Time and Full Time Studies.

Figure 6: Gender differences in Parental Approval across SES groups for three different career paths



Interesting variations are seen across gender as well. To highlight one such variation, the perceived parental approval in the low SES groups is presented. Within the low SES group, approximately the same numbers of girls seem to perceive high Parental Approval for diametrically opposed career paths, namely, Full Time Studies and Work Immediately. In contrast, a larger percentage of boys perceive Parental Approval for Full Time Study than for Work Immediately.

4.3. Gender differences in orientations to subject choices

The Subject Choice Orientation Scale (SCOS) was used to examine participants' preferences for subject choices across four possibilities namely, Science, Commerce, Arts and Vocational courses.

Consolidated scores reveal differences between boys and girls in subject preferences. As indicated in Tables 36 and 37 gender differences run across all subject options. More boys (around 35 %) rate Science at the 'very interested' level than girls (around 31%). However a higher percentage of girls rate all other subject options (Arts, Commerce and Vocational) at the 'very interested' level.

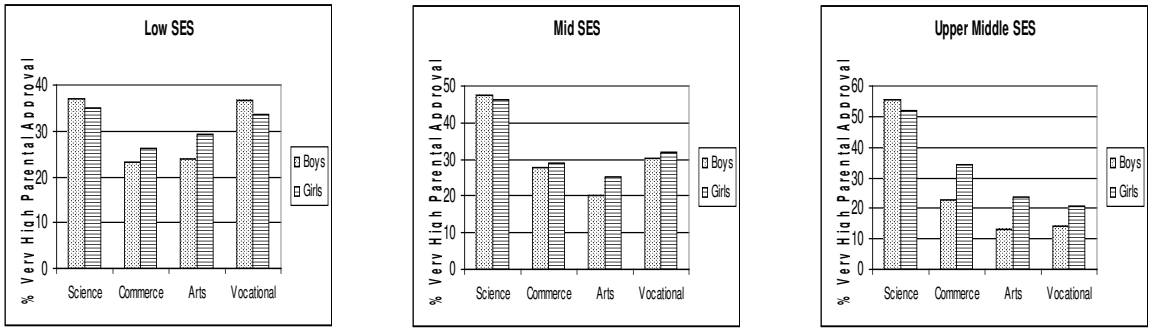
Several patterns of gender differences emerge when subject preferences are examined in the context of SES (see Table 38). Two of these patterns will be highlighted here.

In the low SES group, 'high interest' among both girls and boys seem to be evenly spread across the four subject combinations, with some predominance of interest for the Vocational option. This is clearly not the case with the upper middle SES group. Interest is highest for the Science option for both the sexes and interest for the other subject options is markedly lower.

Arts is once again a casualty of reduced interest across all SES groups, but most so in the upper SES group with as high as 62% boys and the somewhat lower, but still significant numbers of girls (45%) rating a clear 'low interest' for this option.

An examination of participants' perception of Parental Approval once again provides important pointers to the nature of influences on career choices across SES groups. Figure 7 below, shows the gender differences in Parental Approval across the three SES groups for the four subject options.

Figure 7: Gender differences in Parental Approval across SES groups for four different subject options



The overall trend is one where a greater percentage of boys perceive 'very high' Parental Approval for the Sciences than the girls. Here again, Parent Approval for both girls and boys in the low SES group, is more evenly spread across all subject options. A much starker picture is seen in the upper middle group. The percentage of parents in this group almost exclusively supporting Science is much greater than for the other three subject options. Most importantly, a greater percentage of boys in the upper middle group perceive Parental Approval to be at the 'very high' level for Science, than in the other SES groups. While the highest percentage of girls indicate 'very high' Parental Approval for the Sciences, the numbers remain lower than for boys giving the same rating. Unlike in the Sciences, a larger percentage of upper middle SES girls indicate 'very high' Parental Approval for Commerce, Arts and Vocational courses (in that order), when compared to boys. The percentage of upper middle SES boys giving similar Parental Approval ratings for the other subject options is substantially lower.

The interplay between gender, interest and parental approval is best captured in the narratives in the next section.

4.4. Gender, career paths and subject preferences: Excerpts from narratives.

Participants' orientations to career paths and subject preferences were elicited through narratives written on the theme: *'What are you dreaming of becoming and how will you achieve this dream?'* Table 39 below provides excerpts from some of these narratives with emphasis on gender differences in participants' orientations.

Table 39: Excerpts from Girls' and Boys' narratives on
'What are you dreaming of becoming and how will you achieve this dream?'

- I want to become a police. This is my mother's dream. She could not achieve this. So she wants me to make her dream true. I will save money by doing domestic work and continue studies.
  Girl, Class 10, 14 years, Low SES, Bangalore, Karnataka.
- My idea is to become an F1 racer. My parents don't want me to do this. But I will do this by joining Army. And taking part in Desert Storm Rally. That way I will please both by parents and me.
  Boy, Class 10, 14 years, middle SES, Dehradoon, Uttaranchal.
- I dream of joining the Indian Economic Service. Because I am impressed with this job. I know it is tough but I will work hard.
  Girl, Class 12, 18 years, upper middle SES, Ukhrul, Manipur.
- I want to become High School teacher. My father and mother are coolies. We do not have any job. Therefore, I am dreaming of this.
  Boy, Class 10, 15 years, low SES, Shimoga, Karnataka.
- My dreams are to become a beautician and I have worked on it already and done a course in beautician. I dream of becoming beautician to save humanity and bring fame to people. Will work very hard to achieve my goal.
  Girl, Class 12, 17 years, middle SES, Cuncholim, Goa.
- I wish to become a Management Consultant. *Why:* Easy money. *How*: 11&12th in International School in India. BS in USA after writing SAT 1 & SAT II. MBA in Harvard. Specialisation in management consultancy. Join a consultancy firm like McKinsey.
  Boy, Class 10, 16 years, upper middle SES, Bangalore, Karnataka.

Table 39: continued

- Painter, because I like nature and colours. But I will take up Engineering as my father told me and my aim is Engineer. I will do as my father told me. I have to work hard.
  Girl, Class 10, 16 years, upper middle SES, Guwahati, Assam.
- I am dreaming of becoming an Ayurvedic doctor or medical doctor. Seeing one unforgettable incident I decided to work for becoming a good doctor, through which I can save poor people's life.
  Girl, Class 10, 16 years, middle SES, Guwahati, Assam.
- I am dreaming of becoming an electronic engineer. I am mainly attracted to this stream because of amazing electronic machines and robots. I don't expect anything more than social welfare, a good job with a handsome salary. This will be possible through my intense interest in this stream.
  Boy, Class 10, 15 years, upper middle SES, Guwahati, Assam.
- I want to join IIT, because it is a gainful job with lot of prestige and name in the society. I will achieve it by joining coaching classes in Kota (Rajasthan).
  Boy, Class 10, 15 years, upper middle SES, Vasco, Goa
- I want to became an Airhostess as along with the job I can do further studies with my own money.
  Girl, Class 10, 15years, Vasco, Goa.
- I want to become a Police officer because I want to realise the dream of my father of seeing me in uniform. We are four sisters I want to give 'something' to my parents as a 'son' might have given. People should not sympathise with them for not having a son.
  Girl, Class 12, 17 years, middle SES, Rampur, Himachal Pradesh.

4.5. Salient Trends

- Gender differences are present in personal interest profiles. More boys than girls find analytical-logical and physical-mechanical activities interesting. More girls than boys find linguistic, spatial and personal activities more interesting. These trends are consistent present irrespective of socio-economic status.
- Girls show a stronger orientation to taking up full time studies than boys. However, girls in the low SES group perceive parental approval to be strong both for studying full time as well as finding work immediately after high school. A larger percentage of boys perceive higher parental approval for taking up full time studies than for working immediately.
- Parental approval is the highest for full time studies after Std. 10 and 12 for both girls and boys, across all SES groups. Parents in higher SES groups are however almost exclusively supportive of the full time studies option, while parents from lower SES groups are more spread out in their support to working immediately and full time studies. Part time study as a career path option after Std. 10 or 12 for both girls and boys, gets the lowest levels of approval from parents across all SES groups.
- More boys than girls rate the sciences at the highest level of interest. There is a broader spread of interests across the commerce, arts and vocational courses amongst girls. This trend persists across SES groups. A significantly large number of boys in the upper middle group clearly perceive that their parents would expect them to take up science courses. On the other hand, girls' perceive parental approval to be spread out more evenly across other subjects as well.

5. Gender, Career Barriers and Career Beliefs

5.1 Gender and Career Barriers

The Perception of Career Barriers Scale (PCBS) was used to examine gender differences in perception of barriers to career preparation. Tables 40 and 41 (Appendix 4) gives details of the interesting differences seen between genders on this scale. Significantly more boys perceive high level of barriers to career preparation than girls do. Two career barrier themes are discussed further here, namely, Personal Capacity and Family Situation.

Significantly more boys than girls have rated questions on their personal capacity as a 'significant barrier' to career preparation. While around 30% of boys have a high barrier perception linked to their personal capacity, around 25% of girls have a similar perception. The implications of this finding will be discussed further in the later sections of this chapter.

In the area of Family Situation gender differences disappear, with similar percentages of both boys and girls rating perception of career barriers in the low, middle and high range. Importantly, 30% of boys and 32% of girl say that their family situation is a significant barrier to career preparation. The nuances of what these barriers may be are best captured in the participants' narratives in the next section.

5.2. Gender and perception of Career Barriers: Excerpts from narratives.

Participants' perceptions of career barriers were elicited through narratives written on the theme: *'What are the barriers you may face as you plan for your career?'* Table 42 below provides excerpts from some of these narratives with emphasis on gender differences in participants' perceptions.

Table 42: Girls' and Boys' narratives on
'What are the barriers you may face as you plan for your career?'

- Girls have no much freedom. When we don't do well once, our parents loose confidence in us. My parents don't think I have the ability to achieve my dream. They are probably going to try convincing me to do something else.
  Girl, Class 10, 15 years, Low SES, Bangalore, Karnataka.

- While reading, I am disturbed because of TV. When I am reading, they send me to bring groceries.
  Boy, Class 10, 14 years, Low SES, Bangalore. Karnataka.

- My father tells that I should not read but I like to read. My father says that even if I study and start working, I will be going to some other house. He also says even if you are qualified, you have to cook. Whenever I sit to study, and open my book they call me to fill up water and to cook.
  Girl, Class 10, 16 years, low SES, Bangalore. Karnataka.

- As a boy I have to earn well. But my poor performance in studies is a barrier. There are no good colleges or training institutions near by. I cannot do full time study as I have to work while I study. I am poor in English and have no knowledge about my career development.
  Boy, Class 10, 16 years, middle SES, Dehradoon, Uttaranchal.

Table 42: continued

- Girls are sent out to work and boys are allowed to study. Then after SSLC, girls are forced to marry and sent out. How can we develop a career?
  Girl, Class 10, low SES, Bangalore, Karnataka.

- I have to go to someone's house to wash vessels. Hence I reach school late. HM scolds us if I am late. So, I don't feel like going to school. Because of traffic jam, I reach home late. At home they scold me and tell me not to go to school. Boys tease in school. Family members feel that people will feel that I am bad, and no one will marry me. So they ask me to stop going to school.
  Girl, Class 10, 16 years, low SES, Bangalore, Karnataka.

- There are no problems in high school. But while doing IAS there will be many problems. We might need lot of money. We can manage Rs. 10,000, but to arrange 3,00,000 and more is very difficult
  Girl, Class 10, 15 years, middle SES, Bangalore, Karnataka.

- The force of marriage is my biggest barrier. This gives me emotional problems.
  Girl, Class 10, 15 years, middle SES, Guwahati, Assam.

- As a girl I cannot go to far places for study. I am also getting very low marks. My family has big financial problems. So there are many barriers for my career development.
  Girl, Class 10, 16 years, low SES Shimoga, Karnataka.

- Girls have less freedom to make career choices. I have argument with my relatives who try to change my mind. Some make fun of my career wish.
  Girl, Class 10, 15 years, middle SES, Guwahati, Assam..

- Improper guidance is the main barrier. I have much confusion over favourable options and how to reach them. It is same problem for boys and girls. But girls have more barriers.
  Boy, Class 10, 15 years, middle SES, Guwahati, Assam.

- We live in a village. I am one of three sisters. There are so many problems because of this. My being a girl is a barrier.
  Girl, Class 12, 16 years, low SES, Rampur, Himachal Pradesh.

5.3. Gender and Career Beliefs

The Career Belief Patterns Scale (CBPS) was used to examine gender differences in social cognitions. The CBPS assesses social cognitions as expressed in the form of career beliefs. Higher CBPS scores indicate higher negativity in career beliefs. This sub-section will discuss the consolidated CBPS scores as well as the trends seen on the four CBPS sub-scales namely Self-worth, Fatalistic thinking, Proficiencies and Persistence.

As indicated in Table 43 girls record a *lower* negativity in their career beliefs than boys. Analysis of the CBPS sub scales revealed similar trends between genders. Girls showed lower difficulties with *self-worth* and *fatalistic thinking* than boys. They seem to place a higher value on acquiring suitable *proficiencies* and qualifications before entering the world of work than boys. Girls seem to have less negative beliefs about *persisting toward* career goals in the face of barriers and difficulties.

The responses of boys and girls to three statements from the CBPS are presented below. The response patterns provide apt illustrations of the gender differences, especially the significantly more positive manner in which girls view their career development:

Statement: *Boys are better at earning a living and girls are better at taking care of the family. So career preparation is mainly for boys.*

34% of the boys rated this statement as 'do not agree at all'. In contrast, as high as 62% of girls responded to this statement with the 'do not agree at all' rating.

Statement: *Girls can study to a certain level and stop. Their first responsibility is to the family.*

While 35.4% of the boys rated this statement as 'do not agree at all', 50% of girls gave a similar rating.

Statement: *Girls will have more difficulties with career development than boys.*

27.8 % of the boys rated this statement as 'do not agree at all'. In contrast, 35.8% of girls rated this statement at the same level.

5.4. Gender and Community held Career Beliefs: Excerpts from narratives

Career beliefs about gender and career development are available from the participants' narratives on the theme: *'What do people in your area commonly believe about career planning?'* Table 44 below provides excerpts from some of these narratives.

Table 44: Girls and Boys responses to the question:
'What do people commonly believe about career planning?'

- Study does not lead to prosperity. All who study will not get jobs. This is even more true for girls.
  Boy, Class 10, 16 years, Low SES, Shimoga, Karnataka.
- Girls cannot escape house hold duties, even if they are educated.
  Girl, Class 10, 16 years, Low SES, Shimoga. Karnataka.
- Girls cannot go for defence and boys cannot manage family.
  Boy, Class 10, 15yrs, middle SES, Vasco, Goa
- Girls should not become waiters. Only women should become Gynaecologist.
  Girl, Class 10, 15 years, middle SES, Vasco, Goa.
- My father tells that I should not read - but I like to read. My father says that even if I study and start working, I will be going to some other house. He also says even if you are qualified, you have to cook. Whenever I sit to study, and open my book they call me to fill up water and to cook.
  Girl, Class 10, 16 years, low SES, Bangalore.

Table 44: continued

- What will girls get after studying? Therefore they should not study. Due to girls going for jobs, boys are not getting jobs. Boys can do better than girls.
  Boy, Class 10, 15 years, middle SES, Vasco, Goa.

- Boys have most difficulties with getting a good job. If you are rich only you can have a good future.
  Boy, Class 12, 16 years, low SES, Vasco, Goa.

- Boys cannot become nurses and girls cannot join merchant navy.
  Girl, Class 10, 15 years, middle SES, Vasco, Goa.

- They say Hard Work + Patience = Success. But they also say, is no need for girls to do post graduation. But I will work hard and do post graduation.
  Girl, Class 10, 16 years, middle SES, Guwahati, Assam.

- Job is not for girls and girls should work at home.
  Boy, Class 10, 15 years, middle SES, Vasco, Goa.

- As men are getting problem to get a job women should not try for it.
  Boy, Class 12, 16 years, middle SES, Dhule, Maharashtra

- Girls become deviant when she goes to the city. Girls should not study because they will get married.
  Boy, Class 10, 15 years, middle SES, Rampur, Himachal Pradesh.

- Girls should do house hold work and should not go for modelling.
  Girl, Class 10, 14 years, middle SES, Rampur, Himachal Pradesh.

- It is wrong to send girls out for studies and girls should quit job as she is others property.
  Girl, Class 12, 17 years, middle SES, Rampur, Himachal Pradesh.

5.5. Salient Trends

- There are gender differences in perception of career barriers. In general, more boys perceive high levels of barriers to career preparation than girls do.

- More boys than girls perceive personal capacity to be a barrier to their career preparation. Similar numbers of boys and girls perceive their family situation to be a barrier to career preparation.

- Community beliefs of gender and careers are ever present and bluntly stereotyping in expectations.

- Girls across SES levels show consistently more positive career beliefs in comparison with boys.

6. Contexts and circumstances: Implications and discussion points

6.1. Gender and career development: Role commitment and role participation

Differential gender-role socialization – a process that has shaped and moulded behaviour across civilisations, has a significant effect on career development. Culture has and continues to have a significant influence on what is expected of boys and girls in terms of their occupational roles. Correspondingly individuals within a culture tend to absorb these requirements and internalise these gender based occupational roles. As a result certain careers have grown to become gender-linked. The influence of gender typing is so strong that career choice compromise may occur with greater ease in relation to personal interests, and even the prestige of the occupation. Compromises based on sex type preferences are however the least likely to occur (Gottfredson, 1981). As a result, greater numbers of males and females prefer careers that have traditionally been identified with their respective genders. Similar indications are seen in the WORCC-IRS data and the participants' narratives. For example, nurse and airhostess are almost exclusively associated with girls while engineer is more frequently associated with boys. A few careers (e.g. physician, lawyer) have tended to remain gender neutral.

An important finding from the WORCC-IRS data is with regard to parental support for education, as against their approval for taking up a job without formal qualifications. It is clear that the higher SES groups in this sample lay an almost exclusive emphasis on further education for boys and girls. Seeking employment before education is an option that is almost not considered by this section of the sample. The lower SES groups however lay a more or less even value on education vs. finding employment. Most interestingly, it is seen that parental support is somewhat stronger for boys pursuing further studies than it is for the girls in the family. In the low SES environment, girls taking up household responsibilities and even finding employment outside the home – at the expense of education, seem to be given a higher priority when compared with boys.

The picture is quite different as SES increases. Parents in this section of the sample seem to be firm and definite about what they want their sons to study. A large number of boys in the upper middle groups indicate that parental approval is strongest for the *sciences*. Markedly lower support is in evidence for other subject combinations such as the humanities, commerce or vocational courses. In contrast, higher SES parents seem to show much more equanimity in subject choice preferences for their daughters. While science would be 'preferred', the other options do not seem to be frowned upon.

WORCC-IRS data also shows that boys tend to have a higher perception of barriers to career preparation. This is something that is seen across the SES groups. Coupled with this is the finding that many more boys have a limited range of interest themes with which they would enthusiastically engage. A large percentage of boys' interests seem to be limited to the analytical-logical and the physical mechanical type of activities. More importantly, more boys seem to reject a opening themselves to a wider range of interest themes to include the linguistic, spatial and personal areas.

Analysis of girls' response to career choice and planning is particularly fascinating. The overwhelming impression from their responses to the different scales as well the content of their narratives, is that girls face career choices with greater enthusiasm, motivation and eagerness. Their career beliefs are more positive and their confidence to overcome barriers is high. Girls are not as rigid as boys in their subject preferences and are more open to career development possibilities through subjects other than science.

There is perhaps an undertone to these findings that would bear further discussion. At the most fundamental level, the question of whether it is the male or the female who should 'go out' to work has been culturally defined. Traditionally the female role has been defined to be that of a 'homemaker' while the role of 'bread winner' has been allocated to the male. That boys should work and girls should take care of the home has also emerged with fairly regular consistency in the WORCC-IRS data and some of the narratives reported above. The nature of role commitment is bluntly clear within the lower SES environment: *the girl's first responsibility is to the family and the home, while boys are free to seek employment*. The important point to be discussed is whether the girl in the higher SES environment experiences the same reality albeit in a more subtle and camouflaged manner: *it is important that girls get an education, but family is more important than career.*

In this sense do role commitment and role participation remain almost automatic, with girls and boys following culturally defined pathways in a routine and mechanical manner? Social expectations requiring the making of a career choice and pursuing independent earning seem to be higher for boys. For girls on the other hand career seems to be secondary to responsibilities associated with marriage and raising a family. An important implication to be noted is that given prevailing attitudes toward work, male dominated careers are held in higher value and esteem and are therefore better paid. Socialisation-based differences between male and female could result in Indian women underutilising their career talents and being underrepresented in a number of higher paying and higher status fields.

7. The relevance of career counselling

Gender has emerged as an important issue to be addressed during career counselling in almost all parts of the world. WORCC-IRS confirms that career counselling in India must be sensitive to the context and circumstances within which girls and boys make career choices.

It is important however that gender sensitive counselling services are not reduced to merely encouraging girls to follow in the footsteps of their male counterparts. A sensitive counselling programme would account for cultural factors while simultaneously creating a firm foundation upon which women could fully actualise their careers.

WORCC-IRS throws up a hitherto unaddressed but urgent counselling issue. This study indicates that large numbers of boys under the pressures of gender stereotyping and rigid

parental approval of suitable career paths, are reporting feelings of personal capacity being a barrier to career preparation and career development. A special mention must be made of the boys from upper middle SES where the narrow band of choices that would win parental approval is a subtle and ever present career preparation burden. Career counselling needs to address these issues.

Further it is vital that the career counsellor examines personal attitudes to gender and career. It is not unusual to hear counsellors say to female clients, 'these are not careers for girls', or 'look for a flexible career because you will have a family to look after'. It is also not unusual to find career counsellors who replicate the rigid approval systems of the larger community in the range of career options they offer to the young boy who come in for career counselling. The counsellor must attempt to rise above the influences of gender role stereotyping if counselling is to be truly *gender-neutral*.

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Chapter 9

Contexts and Circumstances:

Caste and Career development

1. Chapter Focus

This chapter continues the examination of the interaction between contexts and circumstances, and young people's career orientations. We now shift focus to the uniquely Indian issue of caste – an age old system originally intended to be a method for the division of labour, but which deteriorated into a watertight system of occupational role allocation prohibiting occupational mobility. The roots of caste run deep into the Indian psyche and have become intertwined with personal and occupational identity. WORCC-IRS attempted to glean information about caste and career development. Data pertaining to the social-cognitive environments that characterise the interaction between caste and career will be presented and discussed. Specifically, participants' perception of career barriers and prevailing career beliefs will be discussed.

2. Methods of analysis

2.1. Questionnaires

- Career Belief Patterns Scale – CBPS (Arulmani, 2004. Details in Chapter 5).
- Perception of Career Barriers Scale – PCBS (Arulmani, 2004. Details in Chapter 5).

2.2. Narratives

Participants were encouraged to write narratives about their aspirations and dreams, the barriers they were experiencing or expected to experience in the near future and the common ways in which people around them thought about careers and work.

2.3. Data analysis

Statistical analysis for this chapter used the following methods:

- Descriptive analyses, including frequency and percentage analysis.
- Inferential analyses. A series of one way analysis of variance (anova). Post hoc comparisons using the Tukey's HSD were used to further analyse the significance of difference between SES groups at the 0.05 level.

All data is presented in Appendix 4.

A thematic analysis of the narratives will also be presented. Exemplars of themes found in the texts are presented in the following sections.

3. Clarification of terms

3.1. Caste

This chapter refers to 5 caste groups as follows:

- General Caste (referring primarily to upper castes)
- Scheduled Castes: SC
- Scheduled Tribes: ST
- Backward Classes: BC
- Religious Minorities: RM

The identification and classification of Backward Classes is based on data drawn from the National Commission of Backward Classes (Government of India) state-wise list (2005). The identification and classification of Scheduled Caste and Tribes was based on Part I-Rules and Orders under the Constitution, (Vol. II-Sec J). Under General Caste, all groups such as Brahmins, Baniya, Vaishya, Mudhaliya, Chettiyar, etc have been included.

Further details of the rationale for this classification are provided in chapter 4.

Note: As many as 25% of the WORCC-IRS sample did not indicate their caste. Of those whose caste details are available, 32% are in the General category, 10% in the Scheduled Caste category, 17% in the backward classes category, and 7% each in the Scheduled Tribes and Religious Minority category.

Other terms used are: Career Barriers, Career Beliefs (see chapter 5) and Personal Interests (see chapter 7).

4. Caste, Career Barriers and career preparation

4.1. Caste and perception of Career Barriers

The Perception of Career Barriers Scale – PCBS (details of this scale have been presented in Chapter 5) was used to examine differences between castes in their perception of barriers to career preparation. High scores indicate greater negativity with regard to career preparation.

The General caste group records the lowest career barriers score. The SC and BC groups have similar scores and these scores are substantially higher than the General caste group. The ST and RM groups fall in the middle between the lower barrier perception of the General group and the much higher barrier perception of the SC and BC groups. A further look at numbers of participants who perceive *significant* barriers to career development is quite revealing. While around 28% of the General group has significant barriers, the numbers with a similar high level of barrier perception in the SC and BC groups increases substantially. Almost half of the SC group (46%) and a somewhat

lower BC group (42%) have significant barriers. The ST and RM groups fall in between with around one third (31% and 36%) scoring in the significant career barrier range. Further details of the pattern of scores are available in Tables 45 and 46.

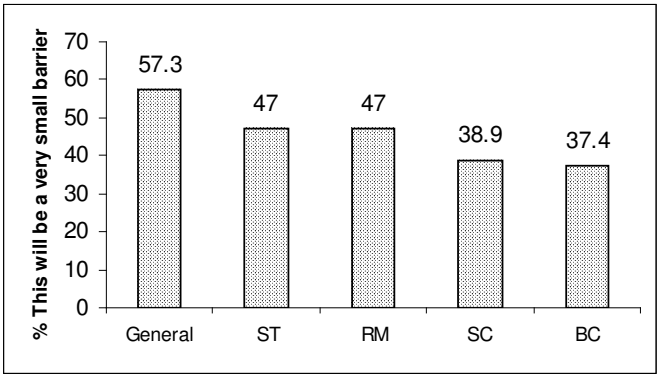
Three barrier themes of Family Situation, Personal Capacity and Community Perception were studied further to understand the nature of barrier perceptions in each of the caste groups (Tables 45 and 46).

In the area of *Family Situation* as a barrier to career preparation, the issues addressed include family responsibilities, financial difficulties and family attitudes. Once again the SC and BC groups cluster together and show the highest barrier perception on this theme. The RM and ST groups have the next highest scores in barrier perception. The General caste group expresses the lowest barrier score for this theme. For as high as 43% of the SC and 40% of the BC group, family responsibilities, financial difficulties and family attitudes are a significant barrier. A smaller, yet substantial number (around one third) of General, ST and RM groups also experience family situation as a barrier to career preparation.

Personal Capacity is perceived as a significant barrier by one fourth or more of the participants in all the caste groups. Within this theme, difficulties with *academic performance* are identified as the most significant barrier. Large numbers of young people within this group indicate that their poor performance in studies, and low marks in examinations will be a significant barrier to their career development. Again the largest numbers who perceive personal capacity issues as a significant barrier are from the SC and BC groups (38% and 34% respectively).

Examination of *Community Perception*, as a barrier to career development reveals that the General, ST and RM groups perceive this to be a smaller barrier in comparison with the SC and BC groups. To illustrate, Figure 8 below presents the percentage of students in each caste group who responded with 'This will be a very small barrier', to the item: *Difficulties in preparing for a career because of my caste*.

Figure 8: Percentage of students responding with 'This will be a very small barrier' to the item*: Difficulties in preparing for a career because of my caste.*



More than half of the participants belonging to the General group and around half of those in the ST and RM groups perceive caste to be a 'very small' barrier to their career development. Amongst the SC and BC groups however, caste is perceived to be a medium-to-significant barrier by more than 60% of the participants.

The overall trends indicate that the SC and BC groups tend to perceive a lower number of barriers to career preparation in comparison with the General castes group. Additionally, the SC and BC groups perceive these barriers to be at a lower level of impact on career development than the General castes group. The trends for the ST and RM are not clear from this data, and additional comments are reserved till further analysis of the data has been carried out.

Finally, it is important to note that there is a very close association between perception of barriers to career development and the socioeconomic status of the participant, within each caste group. It is our thesis that while SES will have an overpowering impact on barrier perception, some specific caste-group related trends will remain. Further statistical analysis on the WORCC-IRS data will require equivalent numbers of participants in each caste group. The all-pervading social cognitions about caste documented through the WORCC-IRS are meanwhile further elaborated in the narratives reported in the next section.

4.2. Caste and perception of Career Barriers: Excerpts from narratives

Participants' perceptions of career barriers were elicited through their narratives on the theme: *'What are the barriers you may face as you plan for your career?'* Table 47 below provides excerpts from some of these narratives.

Table 47: Caste groups' narratives on
'What are the barriers you may face as you plan for your career'

- However hard I try, my caste will be the biggest barrier to my career development.
  Girl, Class 10, 16 years, middle SES, Caste: BC, Guwahati.
- I have no difficulties with my career development. I only have to work hard and have some luck.
  Boy, Class 10, 15 years, upper middle SES, Caste: General, Guwahati.
- Problems due to corruption. Posts reserved for SC people are high and for others are limited.
  Boy, Class 10, 15 years, middle SES, Caste: General, Dehra Doon.
- Main is caste problem. There are reservations for BC, but it is not easy to get good jobs. This is because I cannot take good degree because of financial problems. Also lack of information.
  Boy, Class 10, 16 years, Middle SES, Caste: BC, Margao, Goa.
- Barriers are there. But I can overcome them. I must be careful about which career I choose. The safest bet is engineering.
  Boy, Class 10, 16 years, upper middle SES, Caste: General, Bangalore.

Table 47: Continued

- Girls cannot work with boys. They can do well at jobs like fashion designing which boys cannot do. Also, I feel Muslim girls cannot become leaders.
  Boy, Class 10, 15 years, middle SES, caste not indicated, Vacso, Goa.

- Money, admission in good college and religion will become a obstacle.
  Boy, Class 10, 15yrs, middle SES, Caste: RM, Vasco, Goa

- Caste discrimination is there. Teachers say we come from low level family and cannot study well. Also in Bangalore city, traffic jam is a problem! We cannot go to school or come home in time.
  Girl, Class 10, 15 years, low SES, Caste: BC, Bangalore.

- Till now I thought there were no problems. But now I think my religion can become a barrier to college admissions.
  Boy, Class 10, 16 years, middle SES, Caste: RM, Bangalore.

- My father is a drunkard. There are frequent quarrels at home. Because of financial problem, my mother is forcing me to drop out of school. Also because of my low caste I have to face many comments from others.
  Girl, Class 10, 15 years, low SES, Caste: BC, Bangalore.

- As I belong to a low caste I cannot become a Doctor or an Eng. To become progressive you have to be high caste.
  Boy, Class 10, 15 years, upper middle SES, Caste: BC, Dhule, Maharashtra.

- Caste is a barrier. Since I am not an SC, I get no chances.
  Boy, Class 10, 16 years, upper middle SES, Caste: General, Dehradoon.

- People from SC have better chances. They don't have to work as hard as us as there are many reservations. Even with low marks, you can get into a good course.
  Girl, Class 10, 15 years, middle SES, Caste: General, Dehradoon.

- Money may be a slight problem. But my family has made some saving for my studies. I do not have many barriers to face.
  Boy, Class 10, 15 years, upper middle SES, Caste: General: Bangalore.

4.3. Salient Trends

- The General Caste group on the one hand and the SC and BC groups on the other, fall into two clearly definable clusters.
- The General Caste group reports a lower perception of barriers to their career development than the SC and BC groups.
- Family situation, especially financial problems, emerges as a significant barrier for one fourth or more of the participants in all caste groups. Among the SC and BC participants these numbers rise to more than 40%.
- Around one fourth in the General Caste group and one third in the SC and BC groups report personal capacity, especially difficulties with academics and examinations as a significant barrier.
- The SC and BC groups seem to be sharply aware of their caste status and report this to be a barrier to their career development.

5. Caste, Career Beliefs and career preparation

5.1. Caste and Career Beliefs

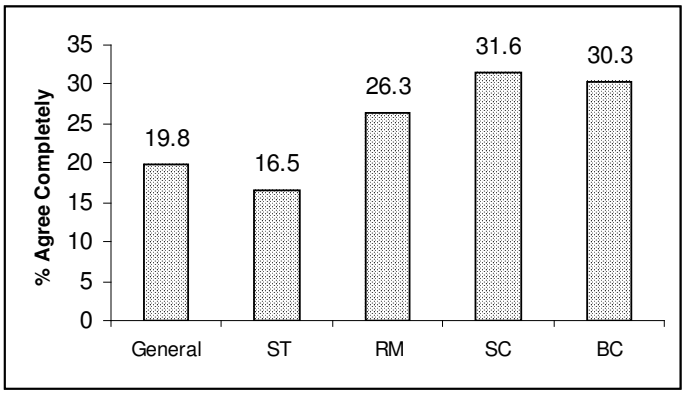
The Career Belief Patterns Scale – CBPS (details of this scale have been presented in Chapter 5), was used to examine differences in career beliefs across caste groups. Higher scores on this scale point to higher levels of negativity in career beliefs. This section will discuss the consolidated CBPS score and the CBPS sub-scales related to Proficiency beliefs, Control and self direction beliefs and Fatalistic beliefs (Tables 48 and 49). Two statements from the CBPS will be used to illustrate the trends seen in the CBPS sub-scales.

The consolidated CBPS scores of the SC and BC groups are substantially higher than the General and ST groups, suggesting a higher negativity in the career beliefs among the SC and BC groups. Similarly, trends on the Proficiency beliefs Control and self direction beliefs and Fatalistic beliefs show higher negativity in the SC and BC groups, while General and ST groups record lower scores on the scale. The RM group is somewhat similar to the SC and BC on the overall negativity in career beliefs, particularly the Control and self direction belief themes. Beliefs of the RM group on the roles of proficiency for career preparation and fatalistic beliefs about career development is lower in negativity than the SC and BC groups, but remains somewhat higher than the ST and General groups. The scores of the General group on the *Proficiency* sub scale indicate that this group is more positive in its beliefs about the relationship between acquiring qualifications and career success. The SC and BC groups show a higher degree of scepticism regarding further education and training.

There is also an indication that the General group has feelings of greater *Control* over life situations and is likely to be more strongly oriented toward *Self-Direction* than the SC and BC groups. This indicates that the General group experiences lower feelings of helplessness in the face of obstacles to career development and is more likely to create opportunities for personal development.

A similar trend is also seen on the *Fatalism* sub-scale. The General group records lower scores in this scale in comparison to the SC, BC and RM groups. This could indicate a higher degree of defeatist and pessimistic attitudes to career preparation amongst the SC, BC and RM groups. As an illustration, Figure 9 below presents the percentage of students in each caste group who responded with 'Agree Completely', to the item: *Life situations are such that one cannot choose a career. We can only take what we get and do the best with that.*

Figure 9: Percentage of students responding with 'Agree completely' to the item:
Life ***situations are such that one cannot choose a career. We can only take what we get and do the best with that.***



The differences seen across caste groups to this item, point to the possibility that the career beliefs of the SC and BC groups could be more fatalistic in their content.

The overall trends indicate that General group tends to be less cynical and takes a more positive approach to career planning and preparation, in comparison to the SC, BC, RM groups. The trends for the ST are not clear from this data, and additional comments are reserved till further analysis of the data has been carried out.

5.2. Caste and Community held Career Beliefs: Excerpts from narratives

Participants' narratives on the theme: *'What do people in your area commonly believe about career planning?'* captures some of the community held careers beliefs along caste lines. The narratives also capture the common beliefs about career preparation and career development within the participant's communities. Table 50 below provides excerpts from some of these narratives.

Table 50: Caste groups' narratives on:
What do people commonly believe about career planning?'

- By choosing a low caste career, high position is impossible.
  Boy, Class 12, 17 years, middle SES, Caste: ST, Ukhrul, Manipur
- Girls need not think of a job as their work is household work. But if they study it is good because, higher the qualification higher will be the dowry and boy from the same caste.
  Girl, Polytechnic- Metallurgy engineering, 17 years, middle SES, Caste: BC, Bhadravathi, Karnataka
- Only Low caste people become Police Constable.
  Boy, Class 12, 17 years, middle SES, Caste: General, Cuncolim, Goa.
- Only high caste girls will teach not lower caste girls.
  Boy, Class 10, 16 years, middle SES, Caste: BC, Dhule, Maharashtra

Table 50: continued

- Life depends on luck. Luck is more important than education. But low castes need more luck.
  Boy, Class 12, 17 years, low SES, Caste: BC, Cuncolim, Goa.

- What is in my fate… that will happen.
  Boy, Class 10, 15 years, low SES, Caste: BC, Shimoga, Karnataka

- I believe you must be educated, come from the right caste and also have minister support and money back up to get good job.
  Boy, ITI, 24 years, middle SES, Caste: General, Margao, Goa.

- You will not succeed if you are not of a higher caste.
  Girl, Class 10, 15 years, upper middle SES, Caste: General, Bangalore.

- Now a days who affords money can get a job. Nothing else matters.
  Girl, Class 10, 15 years, middle SES, Caste: ST, Guwahati.

- Only intelligent children and people who have enough money can join medicine.
  G*irl, Class 10, 14 years, low SES, Caste: RM, Vasco, Goa.*

- Those who study are lazy, they study because they don't want to do work.
  Girl, Class 12, 17 years, low SES, Caste: General, Delhi

- Boys should study more than girls, when girls go to college they get spoiled.
  Girl, Class 10, 15 years, low SES, Caste: SC, Rampur

- Girls are not the responsibility for the family they can also lead a good successful life. Everyone should decide what type of career will get them success.
  Girl, Class 12, 17years, upper middle SES, Caste: General, Goa.

- The UPSC examinations and IAS are only for Brahmins.
  Girl, Class 10, 14 years, middle SES, Caste: General, Dehradoon.

- Some say that for a 'Tangkhul' holding a high rank in a particular job is no use because other tribes , castes will get jealous and may kill him/her.
  Boy, Class 12, 17 years, middle SES, Caste: ST, Ukhrul, Manipur

5.3. Salient Trends

- The General Caste group on the one hand and the SC and BC groups on the other, fall into clearly definable clusters.
- The General Caste group seems to have more positive career beliefs in relation to career preparation and planning. The SC and BC groups on the other hand, show higher degrees of scepticism and seem to be more cynical.
- The General Caste group seems to have greater confidence in the belief that acquiring relevant proficiencies and qualifications would lead to better career prospects than the SC and BC groups.
- The SC and BC groups seem to experience a greater level of helplessness when faced with barriers to career development. The General group shows stronger

orientations toward creating opportunities for themselves and facing up to difficulties and problems.

- Fatalistic attitudes seem to be stronger amongst the SC and BC groups and young people from these groups show a greater tendency to pass responsibility on to 'other factors'. The General Caste group is markedly less fatalistic.

6. Contexts and circumstances: Implications and discussion points

6.1. Caste and career development:

In the last one hundred years, powerful reformist movements have attempted to break the barriers of caste. These attempts have succeeded in providing at the formal and legal levels, equal opportunities to all castes. Post independent India has seen the emergence of a variety of reservations, scholarship schemes, employment opportunities and so on, that are intended to act as support systems for those from lower castes. Today, a 'low' caste person is free to study and try to become whatever he or she chooses to become. However at a more insidious, informal level, attitudes toward caste that remain entrenched in the Indian psyche have a significant impact on mindsets toward work and career. While a person from a 'lower caste' may be able to break through the material disadvantages inflicted by caste, cultural forces may continue to influence mind sets and beliefs. As observed by Ilaiah (1994), today a low caste person could acquire wealth and become prosperous. This person however would remain outside the 'class' of higher caste groups. Ancient practices uphold deeply embedded beliefs, which strongly influence attitudes toward work.

An important finding from the WORCC-IRS is the differences between the General and the SC and BC caste groups in the social-cognitive realm. As described above, attitudes of cynicism and negative career beliefs were higher in the SC and BC groups. Of particular relevance is the finding related to fatalistic thinking. It seems likely that a significant proportion of young people in the SC and BC groups have lower orientation to exercising control over the trajectory of their lives. Their responses reflect helplessness in the face of barriers to career development with a tendency to view the future in terms of the deprivations they experienced in their present situation. Motivation to engage with career development tasks and fight against the odds seems to be interwoven with the barrier perceptions, beliefs and caste position. The General castes seem to be insulated by their higher caste status and show a stronger orientation to creating opportunities for themselves.

This argument is not intended to downplay the significant barriers that 'lower' castes *continue* to face. However it is important to highlight the point that that the influence of caste runs deep and the mindsets engendered by social discrimination seem to have an impact at the behavioural levels as well. Negative mindsets could be one real barrier preventing 'low caste' students from aiming toward careers for which they do have a talent. Attitudes prevalent in the community at large seem to abet the perpetuation of this vicious cycle and allow the career development of 'lower' caste groups to remain stunted.

7. The relevance of career counselling

Reformist movements beginning with the efforts of Mahatma Gandhi have led to the creation of a variety of supports for those who are discriminated against. It must be repeated that at the formal and legal levels, numerous provisions have been made to clear the path for the upward mobility of lower castes. Earlier caste laws that prohibited movement across occupational boundaries are today not in evidence – particularly in urban environments. Reservations, special scholarships and government sponsored employment schemes are some examples of affirmative action that do provide a means for equity and pathways to circumvent these socio-cultural barriers. While these provisions exist, large numbers of young people from the lower castes do not seem to have optimally benefited from them. The importance of psychologically empowering the socio-culturally disadvantaged to consciously use these supports to break through barriers therefore becomes sharply evident. Career counselling services do need to link students from 'lower' castes with these support structures. However counselling must go beyond opportunity awareness and address the invisible but immensely powerful influence that caste has on the mindsets of Indian young people as a whole. An effective counselling intervention would help the young career aspirant break the *psychological* stranglehold of caste and rise above its influence.

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Chapter 10

Career Counselling:

Matchmaking or something more?

1. Chapter Focus

Questions and discussion points pertaining to career counselling in the Indian context have been presented at the end of all previous chapters. The objectives of the present chapter are to present WORCC-IRS findings in relation to certain additional career counselling needs expressed by the young people in this study. The following specific themes would be focused upon:

- Career decision making difficulties.
- Feelings and emotions associated to making career choices.
- Opportunities for developing career planning skills and the availability of career counselling services.

2. Methods of analysis

2.1. Questionnaires

- Career Decision Making Difficulties Scale – CDDQ (Gati and Osipow, 2000).
- The Career Thoughts and Emotions Scale – CTES (Arulmani, 2004).
- Career Preparation Narratives Profile - CPNP (Arulmani 2000, 2004).

2.2. Narratives

Participants were encouraged to write narratives about their experience of counselling and the nature of services available in their regions.

2.3. Data analysis

Statistical analysis for this chapter used the following methods:

- Descriptive analyses, including frequency and percentage analysis.
- Inferential analyses. A series of one way analysis of variance (anova). Post hoc comparisons using the Tukey's HSD was used to further analyse the significance of difference between SES groups at the 0.05 level.

All data is presented in Appendix 4

A thematic analysis of the narratives was conducted. Exemplars of themes found in the texts will be presented in the following sections.

3. Clarification of terms

3.1. Career decision making:

Decision making is linked to the process of making a choice to accept or follow a certain course of action. Most often, the need to make a decision may arise when the individual is faced with a number of possibilities. Decisions are however not only linked to multiple- choice situations. Decisions are also required when the person has to choose whether to follow *or* not follow, accept *or* reject a particular course of action. Career choice is in effect a rational process of decision making. In some cases the process maybe short circuited by a variety of overriding social, cultural and economic factors. In other situations the young person may experience difficulties in making decisions because of a lack of readiness, inadequate information about self or the world of work, dysfunctional beliefs or *most importantly*, conflicts with aspects of his or her social-cognitive environment.

Other terms used in this chapter are: Career Barriers, Career Beliefs and Personal Interests. These terms are described in chapters 5 and 6. One section of analysis presented in this chapter is based on the caste groupings of the participants. Details about Caste are provided in chapters 4 and 9.

4. Career Decision Making Difficulties

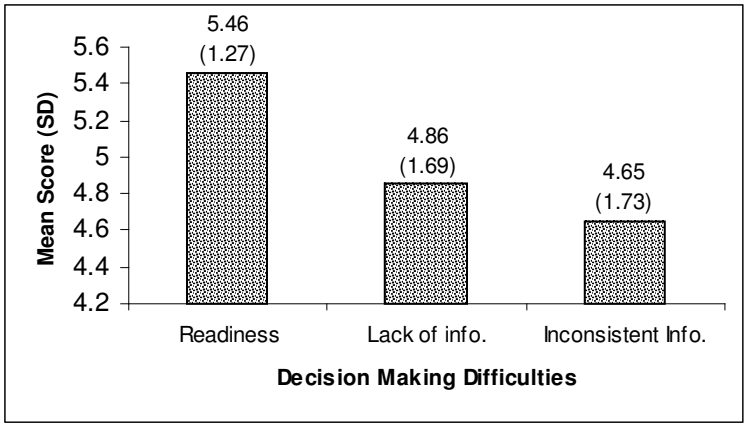
4.1. Instrument used:

The Career Decision Making Difficulties Scale – CDDQ (Gati et al, 2003) was used to examine the difficulties that participants experience in making career decisions. This is a 34-item scale comprising a list of statements concerning the career decision making process. Respondents are required to rate the degree to which each statement applies to them, on a 9 point scale where 1 indicates 'Does not describe me' and 9 indicates 'Describes me well'. A consolidated score across all items provides a global index of decision making difficulty. The 34 items are organised around three sub themes that provide information about, decision making difficulties in relation to a) readiness for career decision making, b) lack of information about the career decision making process and c) inconsistent information. Higher scores indicate greater difficulties with career decision-making.

4.2. Overall level of decision making difficulty

The participants in the WORCC-IRS show an average level of career decision making difficulties (Mean: 4.98; SD 1.31). Figure 10 below is a visual representation of the relative levels of difficulties with the three career decision making themes of readiness, lack of information about the career decision making process and inconsistent information.

Figure 10: Mean (SD) scores on the sub scales of the Career Decision Making Difficulties Questionnaire.



Note: Decision making scores of 1-3 = low, 3-6 = average and 6-9 = significant difficulty

Average to significant levels of difficulties seem to be located around the *Readiness* theme, closely followed with average difficulties because of lack of information and inconsistent information. In other words, the most significant decision making difficulties for many of the participants seem to be in relation to being prepared with skills and information for making career decisions and for dealing with inconsistent information.

This is an unexpected finding. At this stage in the career development process, when the participants are required to make commitments to career paths within the next few months it is expected that greater clarity for career decision making is present. To understand the findings better the career decision making difficulty levels of participants from different class levels and different school types were examined.

Participants in Std. 10, 12 and Vocational groups all experience difficulties at the average to significant levels on all three areas of decision making (Table 51). There are no differences in the level of difficulty experienced in the three groups on the readiness and lack of information themes. The difficulty with readiness and lack of information persists across all classes, even though the progressively greater demands on career decision making in the older class levels should ideally have meant a decreasing difficulties score by Std. 12 and 2nd year Vocational level. The trends are somewhat different on the Inconsistent Information theme. Participants in Class 10 experience significantly more decision making difficulties because of Inconsistent Information than those in Std. 12 and Vocational groups. One interpretation of this difference is the possibility that entry into a course with a narrow band of subject options (the science, arts, commerce and vocational streams) reduces the search for accurate and consistent information for the higher secondary students. Those in Std. 10 however are still at a very open ended decision making stage. Inconsistent information could be particularly more challenging for them.

Some differences in career decision making difficulties were found across the three different *school types* - Government, Private Aided and Private Unaided (Table 52). On an average, many participants in all school types have reported medium to significant

levels of difficulties on all three decision making themes. Students in the Private Unaided schools however seem to show significantly lower levels of decision making difficulties when compared to the other two school types. Perhaps activities within the private unaided schools (albeit diffused and incidental) seem to foster some degree of career decision making by providing access to career information. However, it is unclear whether the lower decision making difficulties seen in the Private Unaided schools is a function of a better school-based programme or greater family resources (many of these children belong to upper middle SES homes). Between the Private Aided and Government schools, the key difference is in the level of information available to students. Lack of information is most acute in the Private Aided schools, with the Government schools having significantly better access to information. It must be doubly reiterated however that whatever the differences between schools, provision of services that can promote career decision making in all school types leave much to be desired.

4.3. Career decision making difficulty and SES

Readiness for career decision making, inconsistent information and lack of information are seen as areas of difficulty across all SES groups as well. The levels of difficulties seem to however differ across the SES groups (Table 53). Both the low and middle SES groups seem to experience a significantly higher level of career decision making difficulty than the upper middle SES groups. Resources available to the upper middle SES group seem to reduce perceived difficulties with the career decision making process. While both the low and middle SES groups are similar in perceived difficulties due to lack of information, the low SES group shows substantially more difficulties due to unreliable and inconsistent information.

4.4. Career decision making difficulty and gender

Gender differences in decision making are seen in the WORCC-IRS (Tables 54 - 56). As high as 98% boys and 96% girls report moderate to significant levels of difficulty with readiness to make career decision making task. Generally, among those who experience moderate levels of difficulty there are more boys than girls. But among the 10% who report severe decision making difficulties, girls slightly outnumber boys. Gender differences however are best understood against the background of SES level.

There are no gender differences in the level of perceived difficulty with readiness, lack of information and inconsistent information in the upper middle SES group. Irrespective of gender, difficulties with lack of information are experienced in somewhat equal level also in the low SES group. However in difficulties with readiness and inconsistent information, both low and middle SES groups have more boys than girls showing moderate difficulty and more girls than boys reporting significant difficulties. The gender difference is at its most stark in the low SES group where almost two thirds more girls report significant difficulties with readiness for career decision making.

One interpretation of these results is linked to the narratives from chapter 8. Girls from lower SES groups consistently indicate conflicts between house hold responsibilities and working outside the home. Career decision making in such a context, not unexpectedly, can be experienced as a significant difficulty.

4.5. Salient Trends

- Difficulty with career decision making is in the medium to significant level even though making commitments to further education and to career paths is imminent for young people in this age group.

- The most significant difficulty seems to be associated with the absence of clear and consistent information and uncertainty with skills to make careers related commitments.

- Both secondary and higher secondary students show significant difficulties with readiness and lack of information for making career decisions. In addition, students in Std. 10 have significantly more difficulties due to the wider range of inconsistent information they have to deal with.

- In general none of the school types provide services that reduce career decision making difficulties. In a few cases, a more supportive environment for career decision making is available in Private UnaAided Schools. The least supportive environment is in the Private Aided schools, with Government schools falling in between.

- All SES groups experience difficulties with readiness and lack of information. Resources available to upper middle SES groups however help ameliorate the difficulties to some extent. But for the low SES group the difficulties are substantially compounded due to the perception that the little information that does become available is unreliable and inconsistent.

- More boys than girls show moderate difficulty and more girls than boys report significant difficulties. This is particularly so in the low and middle SES groups. In the upper middle SES groups gender differences are not evident with both girls and boys expressing similar levels of difficulty.

5. Feelings and Emotions associated with career preparation

5.1. Instrument used:

The Career Thoughts and Emotions Scale – CTES (Arulmani, 2004), was used to examine the feelings and emotions that participants experience when faced with career preparation tasks. This is a 25-item scale comprising a list of feeling words. Respondents are required to rate the degree to which they experience the listed feelings when they think about their career and the future. The items are anchored to a 7 point scale where 1 indicates 'I don't experience this feeling at all' and 7 indicates 'I experience this feeling very much'. The 25 items are organised around four emotion themes, namely, *Distress* (e.g. Fear, Worry, Helplessness), *Uncertainty* (e.g. Confusion, Doubt, Hesitation), *Enthusiasm* (e.g. Curiosity, Excitement, and Confidence), *Apathy* (Boredom, Unconcerned, Don't care).

5.2. Overall indications of feelings associated with career preparation

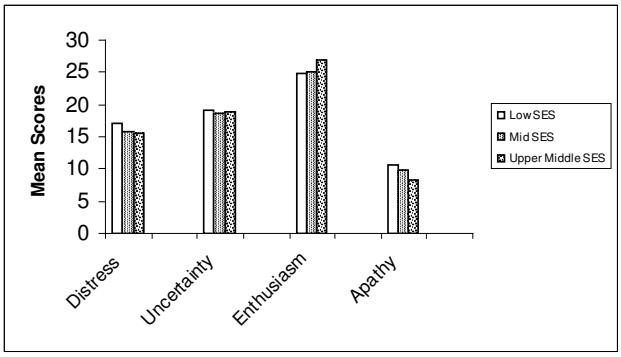
As shown in Figure 19 the feeling theme that attracts the highest score is Enthusiasm (Mean: 25.83; SD: 6.13).

Young people in the sample seem to look at career planning with curiosity and excitement. The experience of the other emotion themes of distress and feelings of apathy also occur in the average to significant range. Further analysis of these trends was conducted in the context of SES and gender.

5.3. SES and feelings associated with career preparation

There are variations in the patterns of feelings reported by the different SES groups (Table 57). While all groups are reasonably high on feelings of enthusiasm, the highest reports of enthusiasm come from the upper middle SES group. The highest levels of distress and feelings of apathy are reported from the low SES group. Uncertainty is not a predominant feeling in all three groups and there are no SES differences in the reporting of this feeling theme. The trends in the reporting different feelings linked with career preparation are captured in Figure 19, below.

Figure 19: Mean scores on four feeling themes in relation to career preparation, across three SES groups



5.4. Gender and feelings associated with career preparation

Gender differences have been captured mainly on the positive emotion of Enthusiasm (Table 58 and 59). Girls have reported much higher feelings of Enthusiasm over career preparation tasks than boys. In the area of negative emotions (Distress, Uncertainly, Apathy) there are no significant differences between the genders. Around one third of both boys *and* girls report being significantly distressed, and apathetic about career preparation.

5.5. Salient Trends

- The strongest feeling theme associated with career preparation is the positive emotion of enthusiasm.

- Negative feelings of uncertainty are not predominantly associated with career preparation, irrespective of SES and gender. Instead, the main negative feeling themes associated with career preparation are the emotions of distress and apathy.

- The low SES group experiences higher levels of distress and apathy. The upper middle SES group reports the highest enthusiasm for career preparation.

- Girls report higher levels of enthusiasm about career preparation tasks. There are no gender differences in reporting the negative emotions of distress, apathy and uncertainty.

- As many as one third of both girls and boys report significant distress and feelings of apathy about career preparation.

6. Opportunities for career preparation

6.1. Instrument used

The Career Preparation Narratives Profile – CPNP (Arulmani 2000, 2004), was used. This is a semi structured narrative schedule designed to elicit information about the quality of supports available to the young person for career preparation. The questionnaire comprises three sections, namely, Opportunities, Role models and Encouragement. Each section addresses four core career preparation tasks as follows:

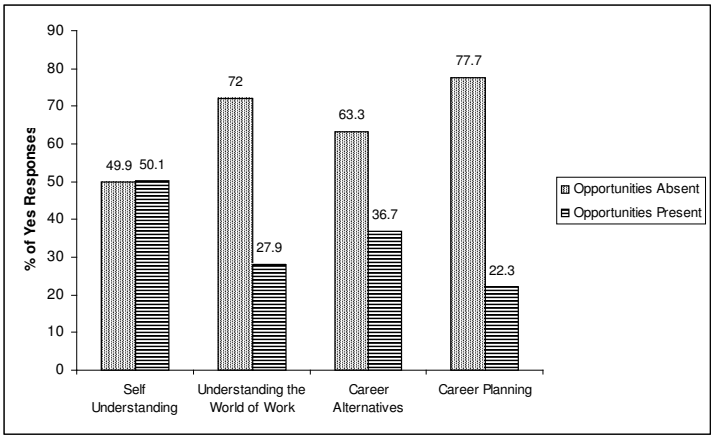
- Understanding personal interests and talents.
- Understanding the world of work.
- Developing Career Alternatives.
- Making Career Plans.

This section discusses information gleaned regarding *Opportunities* available to participants for career preparation. Participants' responses were in narrative form. The content of these responses were examined and coded into salient themes.

6.2. Availability of opportunities for career preparation

Participants' narratives about the opportunities available to them for career preparation were revealing. Figure 11 below indicates the availability of opportunities for career preparation.

Figure 11: Availability of opportunities for career preparation
% of "yes" responses

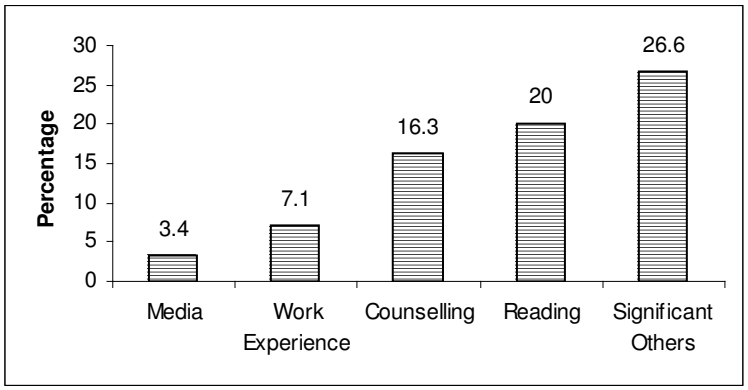


A large proportion of students across the entire sample have had little or no opportunities to understand the world of work, consider career options for themselves or make systematic career plans. Almost equal numbers of participants in the WORCC-IRS sample have reported having had opportunities explore their talents and learn about themselves

6.3. Type of opportunities available for career preparation

The responses of participants who had had opportunities for career preparation were examined. Most participants wrote about the role that informal discussion and incidental exposure to an event, programme or person has had on their career preparation. The five most often recurring opportunities from the narratives are presented below in Figure 12.

Figure12: Type of opportunities available for career preparation



The largest percentage of students reported that *significant others* in their lives helped them with their career preparation in some way. This included parents, relatives, teachers, siblings and friends. The type of support received was mainly in the form of being told about 'what I am good at' or about 'good career options'.

Participants also gained some insights into career preparation by *reading* newspapers, magazines and books.

Career counselling as a form of support was reported by a few students. Closer examination of these responses revealed that this support was mainly in the form of career information. Most often this form of support was rendered informally by 'significant others'. Systematic counselling from a skilled / trained counsellor was reported by very few of the participants.

Students from lower income groups who where holding down part time jobs reported *work experience* to be a source of information about jobs and occupations.

A small number reported *television* programmes to have given them some insight into career preparation.

The content of opportunities experienced by the sample was examined. Most of the support received was in the form of *career information*. Very rarely did participants go through a systematic programme focussing on self-understanding, understanding the world of work, developing career alternatives and making a career plan. In the few instances that this was reported, it was almost exclusively by the upper middle SES groups.

6.4. Do opportunities make a difference?

The importance of opportunities for career preparation was examined by looking into participants' scores on the various other scales that were used for this survey. In most cases having opportunities seems to have a corresponding relationship with the variables that were examined. It is particularly noteworthy that when career counselling was available, there are significant variations in social cognitions, career awareness and experience of decision making difficulties. Figures 13 to 18 present these differences in greater detail.

Figure 13: Opportunities and Career Beliefs

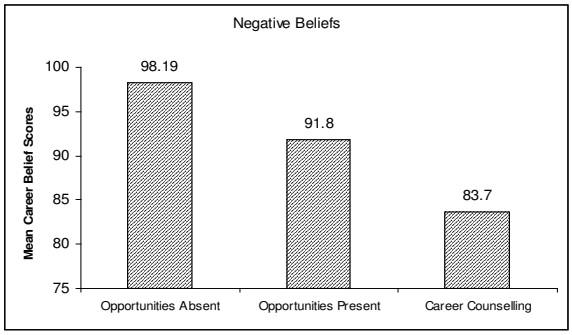
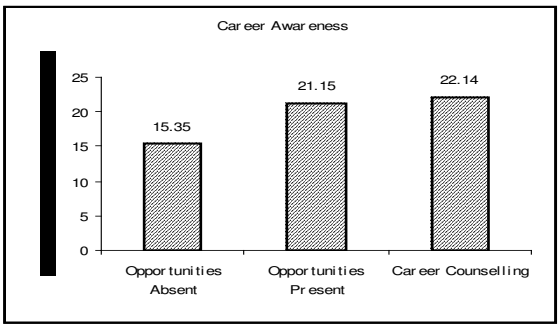


Figure 14: Opportunities and Career Awareness



As indicated by Figures 13 and 14 above, *career beliefs* scores are lower when opportunities for career preparation have been available. Likewise, *career awareness* is higher when access to career preparation opportunities has been present. Negative career beliefs are markedly lower and career awareness higher when career counselling has been available.

Figure 15: Opportunities and perception of barriers

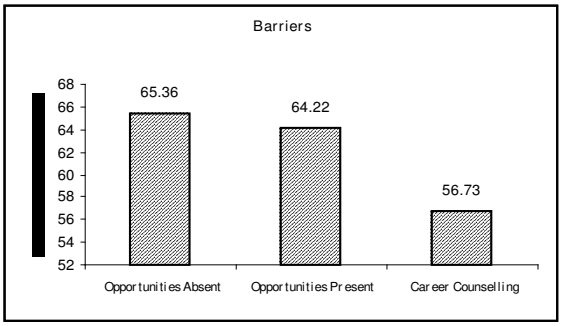
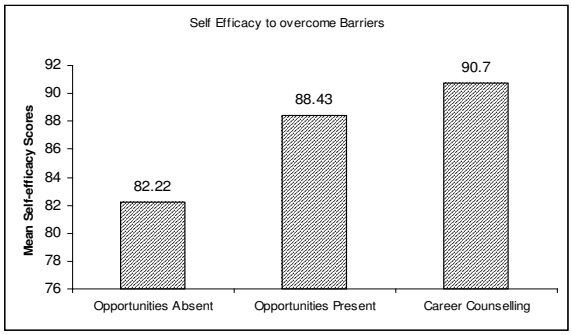


Figure 16: Opportunities and self-efficacy to overcome barriers



Figures 15 and 16 above indicate that *perception of barriers* to career development is lower in situations where opportunities for career preparation have been possible. Similarly, participants who have had such opportunities show higher *self-efficacy* to overcome barriers. Where career counselling has been available, the perception of barriers is even lower and self-efficacy correspondingly higher.

Figure 17: Opportunities and Career decision making difficulties

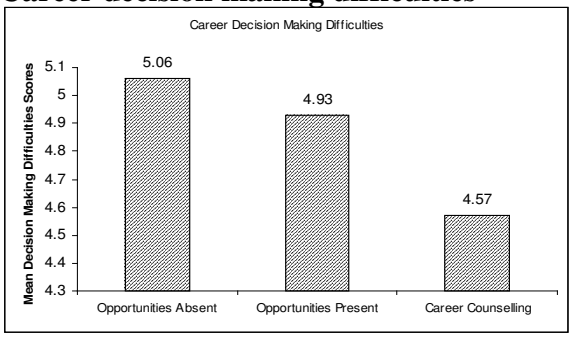
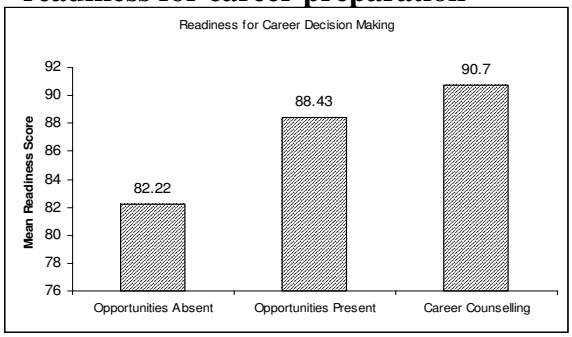


Figure 18: Opportunities and readiness for career preparation



Similar trends are seen in Figures 17 and 18 above. The presence of opportunities for career preparation and career counselling correspond with lower *decision making difficulty* scores and higher *readiness* scores.

These trends suggest that the availability of opportunities for career preparation such as those described earlier in this chapter, could be helpful. It also seems that when career counselling is available, these beneficial effects are even higher.

It must be highlighted of course that causal relationships between opportunities, career counselling and corresponding variations in the variables described cannot be postulated from this data.

6.5. Salient Trends

- Opportunities to acquire skills for career preparation are not available to most young people irrespective of school type, SES and gender.

- Significant others such as family members, friends and teachers seem to be the main source of support available to the young person for career preparation.

- Systematic career counselling services are available only very rarely.

- In situations where opportunities for career preparation are available, negativity in career beliefs' perception of career barriers and career decision making difficulties are lower. Likewise, career awareness, self-efficacy to overcome barriers and readiness to make career decisions seem to be higher.

- While a variety of informal and incidental opportunities make a difference to career preparation, focussed career counselling makes an even greater difference.

7. Matchmaking or something more?: Implications and key points for discussion

Earlier chapters have concluded with descriptions of the role and relevance of career counselling with specific reference to the chapter theme. The present chapter has attempted to consider three specific factors closely associated with the experience of having to make career choices, namely, career decision making, feelings and emotions associated with career preparation and opportunities available for career preparation.

A recurring theme in this study is the question of *readiness*. Participants' responses across the entire sample point to the strong likelihood that their level of readiness to make career decisions does not match the urgency and magnitude of the task at hand.

It also seems that career counselling services that could enhance readiness for career decision making, are not accessible to a large section of the sample. Supports, when available, are largely from family, friends and teachers. The availability of the services of someone who is skilled in career counselling is more the rarity than the norm.

Yet, the 'system' requires the young person in class 10 to make commitments to one of four career paths, namely, science, commerce, arts or vocational courses. Similarly students in the post-secondary stage are required to make life-defining choices about further education. Given their low level of readiness and the absence of support to

facilitate these decisions, it is highly likely that the young person is at risk to making ineffective career choices.

This situation does not seem to have dimmed the curiosity and excitement about careers! Large proportions of the participants look to their futures with enthusiasm. However the 'system' seems unconcerned about creating well formulated supports that could channel this enthusiasm toward effective career choices. This has ensured that feelings of distress and apathy lurk just below the surface.

This chapter has discussed the beneficial impact that supports, for career preparation could have. The possibility is strong that career counselling could reduce negativity in career beliefs, mitigate the perception of barriers as insurmountable, increase career awareness, sharpen skills for career decision making and ultimately enhance self-efficacy for career preparation.

Career counselling in India needs to go far beyond merely matching the individual to jobs available. WORC-IRS has helped to identify salient trends in the career preparation process and has pointed us to groups of young people who are most at-risk for difficulties with career preparation. The positive support of focussed and sensitive career counselling for opportunity awareness, livelihood planning and conflict with family and community on young people's future pathways are themes that have emerged repeatedly in the different chapters. The context and circumstances of each individual uniquely defines what career counselling can do for the young person.

But is India prepared to take this challenge? There is an urgent need for a model for career counselling – a model that has been derived from systematic research and interpreted within an ecologically relevant theoretical framework. It is also essential that this model is a dynamic one and constantly remains pertinent to labour market trends. Efforts to develop such a model could keep the following indicators in mind. Firstly an effective model would provide a clear indication of the nature of the impact of psychological, socio-cultural, socio-economic and educational factors on career development behaviour. This framework would guide the development of psychometric devices and the standardisation of intervention techniques, including a system for categorising and updating careers information. An effective intervention would necessarily be able to accommodate the demands imposed by age, language, cultural difference, socio-economic status, special needs and similar variations. Secondly such a model would provide a framework for delivering career counselling services. Finally an effective model of career counselling would describe the parameters for the systematic training of individuals who provide career counselling services.

The following concluding chapter attempts to address some of these issues.

Chapter 11

Career Counselling:

A Model for India

1. Chapter Focus

The earlier chapters examined WORCC-IRS data in the light of some of the essential elements associated with career development and career choice behaviour. One of the most important themes that have consistently emerged over these discussions is the pressing and urgent need for a systematic approach to career counselling that is theory driven and based on research findings from the Indian context.

The current chapter will draw from these earlier discussions as well as some of our earlier research (Arulmani and Nag-Arulmani, 2004) to present ideas that could lay the rudiments of a foundation on which a model for career counselling in India could be developed. In addition, this chapter will focus specifically on whether career counselling is a *role or a profession* and the issues of *capacity building* in the Indian context. It is highlighted that the observations in this chapter are only a preliminary attempt at formulating guidelines for career counselling. We invite and urge social science researchers to further investigate these ideas and examine their validity.

2. Observations for consideration

According to theory, career development ought to keep time with the normative forces of maturation. Normative career development is expected to result from the maturing of career interests and aptitudes, the matching of this personal profile with suitable careers and then preparation for entry into one of these careers. In reality however a number of non-normative factors influence the career preparation process. Career development occurs within a social and cultural context. If counselling is to be relevant and accurate, it is essential that we acknowledge and account for the contextual factors that influence the process of career preparation. The previous chapters have discussed WORCC-IRS data in the light of some of these non-normative factors. The salient findings from these observations are now presented in the form of propositions that could contribute to urgently needed systematic research in the field of Career Psychology in India and to a career counselling model for India.

2.1. Significant others

Career preparation in India is not driven by purely individualistic motivations, and the community often plays a significant role in the career decision-making process. An observation that has emerged from WORCC-IRS is that *significant others* in the career aspirant's life play a vital role in his or her career development behaviour. Career preparation in the Indian context is deeply embedded within the community processes of which the career aspirant is a part, with parental influence having a defining impact.

2.2. Socio-economic status

Discussions and WORCC-IRS data throughout this report have repeatedly highlighted the possibility that socio-economic status differentiates between communities' orientation to career preparation and planning. WORCC-IRS indicates that SES groups differ significantly in their orientation to career preparation and planning.

2.3. Career beliefs

Social cognitive variables in the form of career beliefs influence the career decision-making process. Some of these career beliefs are *common* across communities and SES groups. The attribution of *prestige* to occupational categories seems to be consistent across SES groups. Careers seem to be placed on a hierarchy of prestige across SES groups. Science based subjects are attributed with the highest level of prestige, with commerce and the humanities coming next. Another belief theme common across SES groups is with regard to *gender* and career choices. Individuals as well as their parents seem to be committed to the career belief that the role of breadwinner is largely associated with the male, while the female's primary role is that of homemaker.

While some career beliefs seem to be common across communities our observations also indicated that other career beliefs differentiate *between* SES groups. It seems possible that the career preparation behaviour of lower and higher SES groups could be differentiated along the categories of Proficiency, Control and self-direction, Persistence and Fatalistic Beliefs. Beliefs held by lower SES groups seem to reflect lower levels of self-direction and a tendency to give up easily in the face of barriers to career development. They tend to place a lower emphasis on acquiring work skills and a strong tendency to enter the world of work as unskilled labourers. The beliefs held by the middle and upper middle SES groups on the other hand reflect relatively higher levels of motivation to prepare for a career.

2.4. Social cognitive environments and career choices

The *social-cognitive environment* that the career aspirant is a part of seems to influence career preparation and planning. Career developmental theories indicate that career development is a process that progresses in steps and stages, with each stage being characterised by a set of career developmental tasks. The emergence of career developmental tasks is described to keep pace with the individual's personal maturation. WORCC-IRS data suggests that the community (significant others) transmits career beliefs to career aspirants within the community. Based on these observations it is

suggested that community influences create a *career decision-making environment* that is typically characterised by the presence of certain career beliefs. These belief structures mediate the emergence of career developmental tasks and career interests.

At the end of high school the most fundamental career developmental task before the Indian young person is to choose between two career paths, namely further education for the acquisition of work skills proficiencies (through college or vocational education) or seeking employment immediately. According to current career developmental theory this important career developmental task ought to be resolved by the manifestation of the individual's interests and aptitudes. In reality, career beliefs seem to mediate this resolution. For example, an individual may demonstrate a high interest for careers linked to the humanities. It is most probable that this interest is overshadowed by prevailing beliefs that push this person away from personal interests toward science based courses and careers which are believed to be more prestigious. Another career aspirant from a middle class family may show a high aptitude for practically oriented careers and training through vocational courses. Here again the firmly held belief that vocational courses do not lead to 'respectable' jobs makes it more likely that this person would aspire to a college degree. In another situation, a young person from a lower SES group may show a high interest in further education. This interest may not have the opportunity to bloom within a context of career beliefs that lay a higher emphasis on immediate earning. These observations indicate that any attempt at understanding the factors that influence the resolution of career developmental tasks would be incomplete without taking into account the career beliefs prevailing in the social-cognitive environment. Developmental factors such as the maturing and manifestation of personal interests and aptitudes are pushed to the background.

2.5. Self efficacy beliefs

It is at this point that the notion of self-efficacy becomes interesting and sharply relevant. Self-efficacy acquires meaning within the context of a specific set of tasks. The young person from a lower SES background has grown up in an environment where career beliefs emphasising early earning have been dominant, while beliefs linked to career preparation have not been as prominent. On the other hand the young person from a higher SES background has grown up in an environment where further education is believed to contribute to career development. Career beliefs and SES work together to create an environment of differing career developmental tasks. Let us look specifically at two such tasks – finding employment and seeking further education. While the lower SES environment presents the young person predominantly with tasks related to seeking and finding employment, the higher SES environment predominantly presents the career development task of preparing for a career through further education. WORCC-IRS data indicates that self-efficacy for the task of seeking employment seems to be higher for lower SES groups while career preparation self-efficacy seems more well developed at higher SES levels. Career beliefs therefore seem to create an environment wherein the sources of self-efficacy operate differently across SES groups.

3. The Career Preparation Process Model

3.1. A summary of the model:

Based on the observations made above we present, the Career Preparation Process Model (CPPM). The CPPM suggests first of all that career preparation is a process that occurs within a particular social-cognitive environment. Within this environment, socio-economic status variables and career beliefs interact with each other and have a unique influence on the sources of self-efficacy. These factors in turn influence the manner in which choice and volition are exercised and career developmental tasks resolved. Some groups imbibe career beliefs and are exposed to sources of self-efficacy that predispose them toward immediate, unskilled (possibly unplanned) entry into the world of work. The career beliefs and the sources of self-efficacy that other groups are exposed to, move them toward further education. The dynamics of this process of career preparation has the final outcome of insecure or fruitful employment in the future, according to how personal potentials and career satisfaction are actualised. Figure 20 overleaf presents a schematic illustration of this model of the career preparation process.

3.2. Illustrations of the model

Ram – a boy from a low SES home

Ram is a boy, living in extremely difficult social and economic circumstances, who is doing poorly in his studies and whose parents are illiterate and unemployed. The career beliefs prevailing in this environment are likely to place a low value on career preparation, self-direction and persisting toward career goals. The Career Preparation Process Model postulates that this environment could impact Ram's self-efficacy in the following manner:

The role models that Ram is exposed to could reflect failure experiences, with bitter and defeatist attitudes (e.g. his father's earnings after a day of extremely strenuous physical labour could be a mere Rs. 80). Ram could experience a high degree of pressure to begin contributing to the family income at the earliest (e.g. "What you have studied so far is good enough; now go out and get a job"). It is possible that significant others in his environment express scepticism toward career preparation activities (e.g. "Look at that college graduate, he doesn't even have a job."). His own poor academic performance could create negative emotions toward education (e.g. "In any case I'm failing in my exams; I'm no good in my studies.").

Overall, Ram's environment places constraints on the success experiences that he could have with career preparation. At the end of high school Ram would be confronted with the career developmental task of seeking employment or going on for further education. The Career Preparation Process Model postulates that by this time Ram's social learning experiences have been such that his thinking patterns tend to be more negative and sceptical about the value of spending time to prepare for a career. Ram might have learned to believe for example, that "undergoing further education to enhance work skills

is a waste of time", or "studying further is only for rich folk". It maybe recalled that students' narratives reported in earlier chapters, do reflect such beliefs.

The model goes on to postulate that this combination of socio-economic factors and social-cognitive factors, would have led to the development of a higher self-efficacy for seeking immediate employment than for career preparation activities. As a result it is likely that Ram has a greater predisposition to enter the world of work as an unskilled labourer.

Swamy – a boy from a middle class home

Swamy is a boy who is doing reasonably well in his studies and whose parents are educated and hold secure government jobs. This family is likely to believe that certain careers are valuable and prestigious and that these careers must be sought after. Career preparation is likely to be associated with strenuous efforts to enter courses that lead to these careers. According to the Career Preparation Process model this environment could impact Swamy's self-efficacy in the following manner:

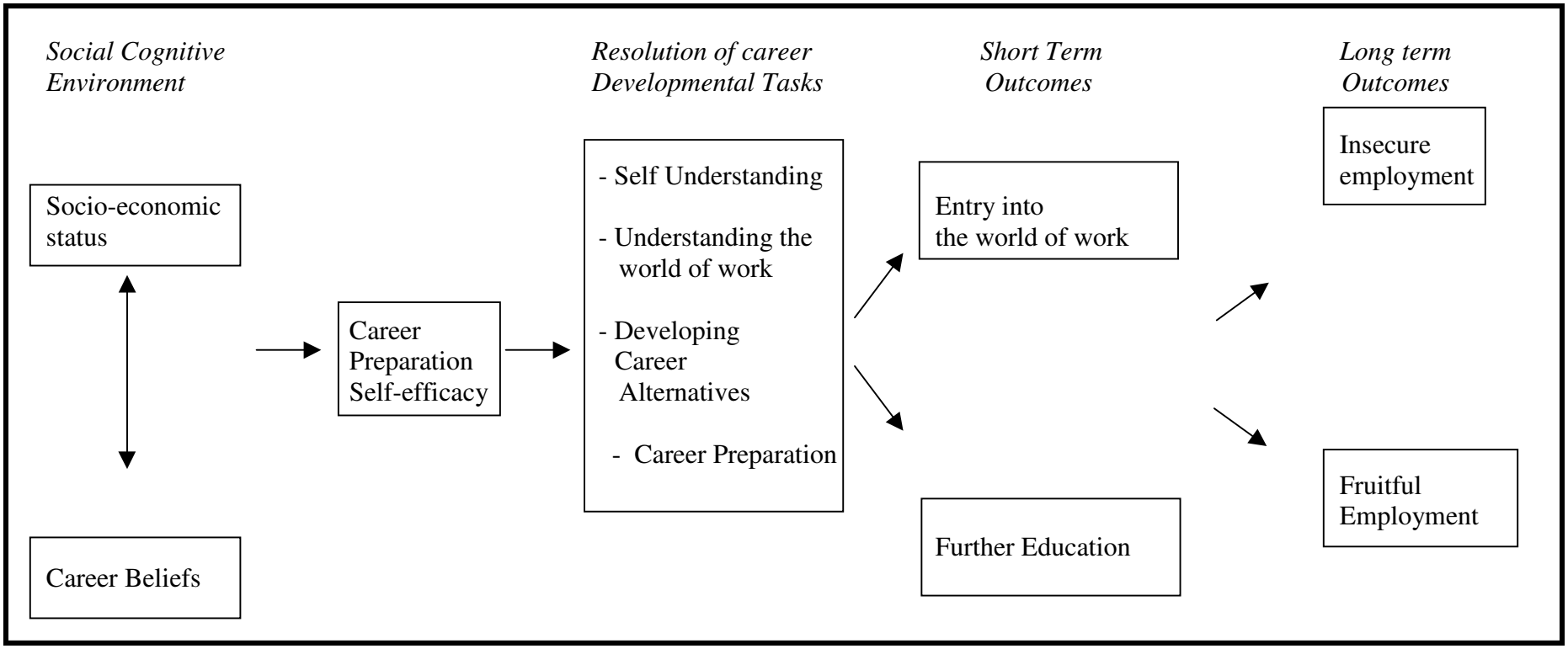
The role models that Swamy is exposed to could reflect success experiences as a result of career preparation. Swamy would be strongly encouraged to apply the utmost effort toward preparing for high prestige careers (e.g. "If you become a doctor, you will be highly respected"). His socio-economic environment could be such that it offers numerous opportunities for success experiences related to preparing for a high prestige career.

At the end of high school Swamy would be confronted with the career developmental task of seeking immediate employment or going on for further education. Swamy is likely to have developed a higher self-efficacy for pursuing further education and it is most likely that he will persist along this path toward the chosen (high prestige) career.

The crucial question now is with regard to *outcomes*. It must be noted that the social-cognitive environments that both Ram and Swamy have grown up in have not accommodated their personal interests and wishes and talents. If Swamy possesses the interests and the aptitudes for the chosen career it is likely that he will do well at this career and experience satisfaction with his career. If this were not the case, Swamy would enter a career for which he does not have the suitability and it is likely that his employment status would be insecure. Ram on the other hand enters the world of work from a position of disadvantage, as an unskilled labourer. This in turn places him on a career development trajectory toward uncertain employment. It is likely that he could become a victim of a low skill – low income – low prosperity cycle.

In summary, the Career Preparation Process Model views career development as a process that moves along with the individual's physical, cognitive and social maturation. The model highlights however that social cognitive factors and social learning experiences concurrently influence this process. It is into this tapestry of development that counselling for the effective elaboration of career progress must be woven.

Figure 20: The Career Preparation Process Model



4. Principles for career counselling

The following discussion will attempt to apply the Career Preparation Process model to career counselling. We will draw from the observations and propositions made above along with descriptions of counselling objectives made at the end of preceding chapters to outline some of the key principles for career counselling.

4.1. Principle 1: Normative aspects of career development

Effective career counselling addresses both the *normative* aspects of career development as well as the *non-normative* influences on the process of career preparation. Exploration is the key career developmental task before the young person during this phase of development. Career exploration at this stage has two points of focus.

Exploration related to oneself

The career aspirant would benefit significantly from activities that systematically and scientifically provide insights into *personal interests* and *aptitudes*. Standardised interest inventories and aptitude tests are mechanisms that can help enhance the young person's self-understanding.

Exploration related to the world of work

Career decisions are often limited to careers that the young person has heard about. Activities that provide opportunities to learn about new careers, understand career paths and eligibility criteria for entry into courses, highlighting the differences between degrees and diplomas, exposure to the functioning of the world of work, work ethics and life long career development are all integral aspects of career counselling. These inputs are essential to enhancing career maturation and helping the young person deal effectively with the developmental task of career exploration.

4.2. Principle 2: Non-normative influences on career development

As we have seen the normative unfolding of personal interests and aptitudes is often confounded by the operation of a variety of non-normative factors.

Influence of the community and significant others

An effective career counseling intervention needs to acknowledge the impact of significant others (parents and the larger community) on the career decision-making process. It is essential that counsellors working in the Indian ethos are sensitive to the role that the community and the family could play in the career decision-making process of a young person. Including the family and the community in the career counselling process may have a more effective outcome than focussing on the individual alone.

Gender sensitivity

Gender sensitive career counselling is an important necessity in the Indian context. This need not mean that career counselling ought to exhort young girls to emulate their male counterparts. A sensitive intervention would draw community and cultural factors into the counselling process, while simultaneously widening the young female career aspirant's career horizon.

Labour market trends vs. personhood

Trends in the labour market are a powerful influence on career development. An important target for career counselling is to enhance the individual's awareness of manpower requirements and indicators from the labour market. However the truly effective career counselling programme is one that is not driven merely by economic trends and labour market cycles. While these are essential factors in any systematic career counselling process, it is vital that the personhood of the career chooser is firmly kept at the heart of career counselling. An individual possesses talents for more than one career. If this is not acknowledged, the large numbers of career aspirants (the majority perhaps) whose interest and aptitude profiles do not match prevailing demands from the labour market, may not find their place in the sun. Instead they may be impelled to choose careers that are popular – forsaking careers for which they might have a higher suitability. Being equipped with the methodology to strike this essential balance is the hallmark of effective career counselling.

4.3. Principle 2: Beyond match making

Career counselling goes beyond the identification of careers for which a young person may be suitable. Effective career counselling facilitates *career preparation*. Career preparation has three important facets

Skills for decision-making and taking personal responsibility

Career choices comprise a series of decisions. Facilitating effective decision-making is perhaps the cornerstone of effective career counselling. The recipients of career counselling in India are young people who are a part of a cultural and educational system that does not directly nurture independent decision-making. As a result a common expectation that young career aspirants who come in for counselling have, is for the counsellor to provide the solutions to career decision-making questions. An effective counselling programme does not provide neat career choice prescriptions, instead it helps the person discover career paths and take personal responsibility for these decisions.

Skill literacy

Career preparation is often equated with strenuous efforts at getting ready to face school / college examinations and compete in entrance examinations. Career preparation goes beyond developing the proficiency for successful completion of examinations. Skill literacy is an essential ingredient of career preparation. Effective careers interventions could help young people create opportunities to enhance their skill literacy.

Volunteering, internship programmes, work shadowing, work experience are all effective methods of promoting skill literacy. The idea of developing a career plan that incorporates both academic training and skill literacy is often quite a new one to the young career chooser in India. The ideal career plan would incorporate both forms of qualifications. For example, a student who is enrolled for a bachelor's degree in psychology could enhance skill literacy by taking up a diploma in career counselling. Similarly a student who is pursuing a vocational course in commercial practice, could enhance career prospects by planning for a degree in commerce. These 'extras' could be planned for in the form of evening courses, vacation time courses or even after the first level of study is completed. The onus is on the young person to blend skills with theoretical knowledge. The career counsellor can help develop a career plan that incorporates both elements.

The Career Development Bridge

The lower SES groups' predisposition to enter the world of work as unskilled labourers is an important factor to be noted by the career counsellor. Entry into the world of work with some work skills places the low SES young person on a career development trajectory that has better future prospects than if he or she were an unskilled labourer. Short, skills based courses could be planned as the young person's 'first step' into the world of work. Courses such as these act as a career development bridge based on which further plans could be made. In other words, a career development bridge could provide a lower SES young person with a mechanism to delay the need to seek employment in order to meet pressing economic and financial needs.

4.4. Principle 3: Tailored to suit the needs of the client.

In the few situations where career guidance services are available in India, they almost exclusively focus on giving students information about various careers. In fact careers guidance has become almost synonymous with career information delivery. Not all individuals may benefit from standard, information-oriented careers education classes. While it may not be practically possible to develop special interventions for every individual, it is necessary that certain guidelines be followed while interventions are developed or implemented.

Special needs

Career counselling for individuals with disabilities is an area that remains poorly addressed. Being prepared to meet these needs implies that the counsellor must be flexible in the application of counselling techniques (particularly the use of psychological tests). Skill literacy and the career development bridge assume a different meaning in the special needs context. Helping the special needs career aspirant develop pre-vocational skills is one important aspect of career counselling. For example, a career aspirant with learning disability would significantly benefit from skills training that help her circumvent difficulties with reading and writing (e.g. advanced use of a word processor, use of visual organisers like mind maps and flow charts to reduce text, proof reading strategies). Recruitment outcomes are known to be more positive when job applicants

with special needs are able to demonstrate skills related to actual production (e.g. filing, cutting, drawing, marking, drilling, typing, craft making). Employment survival for those with special needs is also known to be closely linked to self management skills (e.g. attendance, punctuality, reliability, honesty, ability to get along with others, ability to delay need gratification, awareness of work safety). A further career development input that we have found to be useful is to prepare the special needs career aspirant for failure experiences – innoculation against failure. The insensitivity of employers and co-workers, the lack of mastery over work skills and other factors make it quite likely that the first attempts to enter and survive in the world of work may result in failure experiences. Being prepared, would insulate the special needs career aspirant against the emotional fallout of such failures and allow her to try again.

Social class and economic status

Individuals from all social classes would benefit from planning and preparing for a career. However counselling targets need to be sensitive to the effects of socio-economic status. Counselling a boy to become a neurosurgeon without accounting for the yawning chasm of poverty before him, would be ineffective if not downright cruel. Career counselling for the less privileged needs to take their pressing economic difficulties into account while simultaneously providing them with mechanisms for a gradual widening of career horizons. With the more privileged, the counsellor may need to be skilled in the ability to cut through cynicism and highlight the relevance of career planning. Counselling techniques that balance the effects of social pressures, with identifying career options in which the young person is most likely to excel, would be critical to the success of career counselling for middle class groups.

Influences of caste

A variety of supports, both by the government and social service organisations, are routinely developed and offered with the intention to help young persons from 'low' caste homes build their lives. From the career counselling point of view, interventions that merely give the career chooser information regarding reservations, financial assistance and other programmes is not be sufficient. It is vital that the subtle but powerful influence of caste is addressed. Counselling in this context would need to offer the 'lower caste' career aspirant methods whereby he or she could rise above caste defined mindsets and move toward effective career development. Most importantly 'others' would confront the 'lower caste' career aspirant with negative attitudes and discrimination. Effective counselling would prepare this vulnerable young person to deal with such forces of discrimination.

Principle 4: Address career beliefs

It is critical that career counsellors are aware that strongly held beliefs (particularly when they could extend to an entire community) could play a significant role in limiting or nurturing the expression of the career aspirant's aptitudes and interests. Career beliefs could vary from one community to another. The impact of career counselling may be maximised when techniques that address underlying cognitions about career development

are incorporated into the counselling process. Effective career counselling would require the skills to elicit and address career beliefs. Facilitating insight into the impact of career beliefs on career planning, addressing conflicts between family / community and the individual's career beliefs are further examples of counselling targets that could be relevant in the Indian context. Negative career beliefs regarding the relevance of work skills proficiency, self direction and persistence seem to place the lower SES groups on a trajectory toward unstable employment in the future. Career beliefs that cause the middle and higher SES groups to be unidimensional and restricted in setting career goals can also have negative outcomes. Addressing these habitual ways of thinking would enhance the effectiveness of counselling interventions.

Dealing with the effects of prestige

Career beliefs linked to the prestige attributes of a career significantly influence career preparation. This is true particularly with middle and higher SES level groups. An important implication for counselling is that careers interventions need to enhance students' awareness of the influence of prestige on their career choices. An effective programme would focus on helping a young career chooser look beyond the prestige attributes of a career.

5. Conclusion

At the conclusion of this report, let us listen once again to the voices of the young people. Indeed it is their dreams and aspirations that lie at the heart of career counselling.

- My dream to become a doctor to help poor people. I will achieve this by working hard daily and saving money every day for my career studies.
  Girl, Class 10, 15 years, middle SES, General Caste, Dehradoon.

- I want to become a Journalist because to disclose the secrets of such people who are like a stopper in our country's development.
  Boy, Class 10, 15 years, middle SES, General Caste, Vasco, Goa.

- I want to become like Rohan who has joined Army, because when I saw him in his uniform, I felt proud that one day I will be like him.
  Boy, Class 10, 15 years, low SES, SC, Dehradoon.

- Parents give trouble to child like mother wants the child to become a doctor and father engineer, but the Child wants to become a journalist. Everybody gives emphasis on their own opinion, so the child does not do anything.
  Boy, Class 10, 15 years, middle SES, General Caste, Vasco, Goa.

- I love Chemistry, physics. I just want to be with that, play, find answers to questions that bother me. Try to unfold the mysteries and truths of universe. I will be myself happy and satisfied.
  Girl, Class 10, 15 years, middle SES, General Caste, Bangalore.

- I always dream of becoming the most popular person in the whole world. Each and every person must know me. But I want to achieve this with full honesty
  Girl, Class 10, 15 years, low SES, ST, Guwahati.

- I want to earn a place of identity in the society. I want to do good to all. I want to get a good job, because I have to keep everyone happy. I want to make my parents proud of me and educate my younger siblings so that they also make us proud.
  Girl, Class 12, 16 years, low SES, General Caste, Rampur.

- My idea about my career is that I want to go very, very deep in science especially biology.
  So I want to prove Charles Darwin was wrong, that he gave theory of evolution, which was against Islam. I achieve it by hard work.
  Boy, Class 10, 15 years, low SES, RM, Srinigar,

- There are many social wrongs in my state. I want to eradicate these social evils. I can do this by becoming a KAS officer. I will work hard for this.
  Boy, Class 10, 15 years, low SES, RM, Srinigar,

- Everyone wants to become a doctor. But I will become a specialist in making medicines. This is more important than the doctor for those who are sick.
  Girl, Class 10, 15 years, low SES, ST, Dhule

- I will become a farmer. People laugh when I say this. But it is my family occupation. My father and his father have all been farmers. I too will be a farmer but a scientific one.
  Boy, Class 10, 15 years, low SES, ST, Dhule,

- I want to devote all my life to teach illiterate or dependent people. I will open a school and give education to poor children.
  Girl, Class 12, 16 years, low SES, General Caste, Rampur

- I will be a perfect woman as well as a perfect architect. Because first I am a girl and after an architect. I will achieve this and face all problems of life.
  Girl, Vocational Course, 18 years, low SES, General Caste, Guwahati.

- I don't want to be a just a human being who is born, grows and dies without leaving any mark of her living. My dream is to do something useful and important. I only have myself for this. My strength and my intelligence. I will hard and do it.
  Girl, Class 10, 15 years, low SES, General Caste, Nagercoil.

The poignant words of a young tribal girl from Dhule, reflecting perhaps the dreams and aspiration of young people anywhere in the world, gives career counselling its meaning and purpose.

I want to learn to fly and enjoy the beautiful sky.
Girl, Class 10, 15 years, low SES, ST, Dhule,

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APPENDICES

Appendix 1: Advisory Committee

Given the wide scope of the study and the multiple disciplines that it would draw from, advisors represented a variety of disciplines including psychology, psychiatry, education, statistics, anthropology and sociology. Research Partners were drawn from different regions, to allow access to samples in different parts of the country. The following scholars offered their time and valuable expertise to guide and support the WORCC-IRS.

- ***Prof. T S Saraswathi:*** Specialist in adolescence and cross cultural psychology, formerly with M S University Baroda.
- ***Prof. Mohan Isaac:*** Formerly Head, Dept. of Psychiatry, NIMHANS, Bangalore. Presently Associate Chair of Population Mental Health at the School of Psychiatry and Clinical Neurosciences of The University of Western Australia.
- ***Dr. Glenn Christo:*** Former Director of Planning, Manipal Academy of Higher Education. Presently Vice Chancellor of the newly formed Martin Luther University, Megalaya.
- ***Dr. Sandra Albert:*** Medical Doctor, interested in youth and adolescence.
- ***Dr. Karopady:*** Head, Statistics and Research wing of the Azim Premji Foundation, Bangalore.
- ***Prof Nagadevara:*** Professor of Quantitative Methods and Information Systems, Indian Institute of Management, Bangalore.
- ***Dr. R.V. Joshi:*** Reader, earlier Vice Principal, Chowgule College, Goa. Presently, Dean Educational Studies, International Academy for Creative Teaching (IACT), Bangalore.
- ***Dr. A.R. Vasavi:*** Anthropologist and Fellow at the National Institute for Advanced Studies, Bangalore.

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Appendix 2: Research Partners

WORCC-IRS was executed by a team of Research Partners located in different parts of the country, who worked tireless to interact with young people and complete the survey. Their participation was entirely voluntary. It is their commitment and dedication to this project that has resulted in the compilation of the high quality data base, upon which this report rests. Given below is a brief introduction to these remarkable people.

Mr. Sachin Kumar:

Is a college lecturer specialised in Geography. In addition to being an excellent teacher, Mr. Sachin Kumar has been involved in youth welfare activities for the last few years. He also offers consultancy services to the District Institute of Education and Training and to NGOs in the area of counselling and life skills development. Sachin has conducted the WORCC-IRS in the district of *Rampur, Himachal Pradesh*.

Dr. S.K. Kulshreshta:

Is the retired head of the Dept. of Zoology, DAV College Dehradoon. He has been trained in some of the basic skills of counselling and is presently the Director of Epiphany an NGO involved in offering life skills education. He will was the WORCC-IRS Research partner in *Dehradoon*, *Uttaranchal.*

Ms. Sunita Ajoy:

A Counselling Psychologist, Ms. Sunita Ajoy is based in Chennai. She has many years of experience as a school counsellor and presently works as a consultant to The Promise Foundation. Sunita worked on the WORCC-IRS for *Chennai, Tamil Nadu.*

Dr. M.V. Baride:

Is a lecturer teaching Geology at the Jai Hind College, in Dhule. He also holds the post of Vice Principal and is the Head of Department. He along with a team of others has held counselling workshops for many hundreds of students in his region. Dr. Baride collected WORCC-IRS information from *Dhule.*

Mr. Tilroy Fernandes:

Is lecturer in commerce and management, with bachelor's degrees in education and a post graduate diploma in career counselling. He is a master resource person for the career guidance cell in Directorate of Education in Goa and has conducted workshops for students, teachers and heads of institutions. Mr. Fernandes was the WORCC-IRS representative in *South Goa.*

Dr. Eugene Franco:

Is a lecturer in commerce and management with a post graduate degree in the field. He teaches at the St. Xavier's College in Palayamkotai. An accomplished and powerful orator, he has been involved in youth welfare and student counselling. Dr. Eugene Franco worked on WORCC-IRS in *Nagercoil, Tamil Nadu*.

Ms. Sarabjot Kaur Sekhon:

Holds a master's degree in Sociology. Ms. Sarabjot worked with students in the Union Territory of *Chandhigarh*.

Prof. T.S. Ramakumar:

An senior and experienced educator, Prof. Ramakumar has worked as a principal at different levels including high school, pre-university and first grade college. An avid youth worker, he presently pursuing a master's degree in Counselling. He was the WORCC-IRS Research Partner in *Shimoga, Karnataka.*

Mr. Shah Jahan Ali Ahmed:

Holds an M.Phil in Education and is presently working towards a doctoral degree in Teacher Education. His particpation in the project is under the supervision of Prof. Nilima Bhogoboti. Dr. Bhogoboti is the head of the Dept. of Education, and a specialist in the area of counselling based in the University of Guwahati. Shah Jahan worked with students in *Guwahati, Assam.*

Ms. Sonan Shishak:

Is a teacher and keenly interested in the difficulties faced by the youth of Manipur. She is being supported by a network of principals in Ukhrul. She collected WORCC-IRS data from the *Ukhrul District of Manipur.*

Mr. Tanweer-Ul-Sadiqeen:

Holds the position of Field Advisor at the State Institute of Education, Srinagar. He is an experienced teacher and teacher educator. He has held numerous workshops related to education. He worked with students *in Srinagar, Jammu and Kashmir.*

Mr. Mohan Das:

Is presently pursuing a doctoral degree in Sociology from the Bangalore University. An experienced career counsellor, Mr. Mohan Das works as the head of the careers services for Government. schools at The Promise Foundation. He reaches more than 2000 students every year through career counselling workshops. He collected information from the lower income groups in two cities: *Bangalore and Shimoga, Karnataka*.

Ms. Srirupa Dastidar

Holds a master's degree in counselling interacted with students from higher income groups in Bangalore as a member of The Promise Foundation's core team.

Mr. Hanut Robert:

Holds a master's degree in Social Work and presently works at The Promise Foundation. He has experience with field surveys in Tamil, especially with the adolescent age group. He assisted in collecting information from students in *Chennai, Tamil Nadu.*

Ms. Vanita Dubey:

Is an experienced member of The Promise Foundation core team. She assisted in collecting WORCC-IRS data from Bangalore.

Ms. Sudha Mydur:

Is the Projects Manager at The Promise Foundation. She supervised and assisted in data collection in Bangalore.

Ms. Kavita Sarin:

Holds a master's degree in Social Work and is experienced in working with young people with special needs. She collected WORCC-IRS information from students in *New Delhi.*

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Appendix 3: Identification of Indian research on Career Psychology

A comprehensive review of the literature was undertaken with two objectives. The first was to develop an overview of Indian research in the field. The second was to identify Research Partners who would be interested to join the core team to conduct the Survey.

The following sources were reviewed to identify Indian research in the field:

- Indian Educational Abstracts from the year 1998 to 2003.
- The Fourth Survey of Research in Education (Volumes 1 and 2).
- A review of Indian doctoral theses from the year 1979 to 2004.
- Relevant Indian Journals including the following:
-
  - Indian Journal of Applied Psychology
  - Indian Journal of Clinical Psychology
  - Indian Journal of Psychometry and Education
  - Indian Journal of Social Work

- Data Bases available through the National Social Science Documentation Centre (NASSDOC).
- Data Bases available through the Indian Council of Social Science Research (ICSSR).
- Data Bases available through the National Council for Education, Research and Training (NCERT).
- Key books that have been published in the area were reviewed (Eg: Bhatnagar and Gupta 1999; Mohan 1999, Verma and Saraswathi, 2002).

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Appendix 4: Data Tables

Tables for Chapter 5: Privilege and Disadvantage

Table 7: Ratings of participants in the 3 SES groups on interest, self efficacy, prestige and parental approval for the Work Immediately career path option

Area	Rating	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N = 1250)
Start work immediately if job is available				
Interest [a]	1	15.7	15.9	36.9
	2	9.7	11.9	17.1
	3	15.5	20.9	18.4
	4	13.1	15.8	11.6
	5	45.8	35.1	15.9
Self efficacy [b]	1	11.9	13.8	25.7
	2	12.1	13.0	20.4
	3	21.9	26.0	27.0
	4	23.4	21.2	14.2
	5	30.5	25.6	12.6
Prestige [c]	1	12.2	14.2	26.5
	2	23.2	18.2	20.6
	3	26.5	26.9	28.2
	4	22.0	22.5	16.8
	5	16.0	17.4	7.8
Parental approval [d]	1	15.2	16.4	36.4
	2	10.9	10.6	13.4
	3	13.6	14.9	15.3
	4	21.5	22.1	17.3
	5	38.6	35.6	17.5

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested. [b] 1 = very low confidence, 2 = somewhat low confidence, 3 – confident, 4 = quite confident, 5 = very confident. [c] 1 = very low prestige, 2 = somewhat low prestige, 3 – average prestige, 4 = high prestige, 5 = very high prestige. [d] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 8: Ratings of participants in the 3 SES groups on interest, self efficacy, prestige and parental approval for the Part Time career path option

Area	Rating	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N = 1250)
Find part time job and study side by side (Part Time)				
Interest [a]	1	17.9	25.6	33.1
	2	16.6	17.2	23.7
	3	21.2	21.0	17.8
	4	18.0	15.2	13.4
	5	25.9	20.4	11.6
Self efficacy [b]	1	16.3	17.8	22.4
	2	17.2	20.9	22.6
	3	25.9	26.6	27.8
	4	18.8	17.8	16.2
	5	21.5	16.4	10.7
Prestige [c]	1	13.8	14.3	16.5
	2	21.7	25.0	24.3
	3	26.3	25.5	33.6
	4	20.9	21.2	16.4
	5	16.9	13.5	9.0
Parental approval [d]	1	17.2	22.5	32.4
	2	17.5	18.7	20.8
	3	18.0	18.6	20.3
	4	21.4	19.2	16.2
	5	25.5	20.4	10.0

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested. [b] 1 = very low confidence, 2 = somewhat low confidence, 3 – confident, 4 = quite confident, 5 = very confident. [c] 1 = very low prestige, 2 = somewhat low prestige, 3 – average prestige, 4 = high prestige, 5 = very high prestige. [d] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 9: Ratings of participants in the 3 SES groups on interest, self efficacy, prestige and parental approval for the Full Time Studies career path option

Area	Rating	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N = 1250)
Take up further studies full time (Full Time Studies)				
Interest [a]	1	8.5	7.4	8.6
	2	6.8	10.3	8.8
	3	17.6	19.7	18.3
	4	21.5	22.4	24.8
	5	44.8	39.4	38.9
Self efficacy [b]	1	5.8	6.2	5.4
	2	9.6	9.7	8.7
	3	20.2	24.9	22.6
	4	23.2	22.5	26.4
	5	40.6	35.8	36.4
Prestige [c]	1	5.9	5.2	3.1
	2	10.6	10.6	6.7
	3	20.6	20.4	15.5
	4	28.9	31.3	37.1
	5	33.4	31.7	37.0
Parental approval [d]	1	6.4	5.8	2.3
	2	9.4	8.0	5.6
	3	14.4	12.7	11.5
	4	25.9	26.1	25.8
	5	43.2	46.6	54.2

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested. [b] 1 = very low confidence, 2 = somewhat low confidence, 3 – confident, 4 = quite confident, 5 = very confident. [c] 1 = very low prestige, 2 = somewhat low prestige, 3 – average prestige, 4 = high prestige, 5 = very high prestige. [d] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 10: Mean ratings (SD) of the 3 SES groups on interest, self -efficacy, prestige ratings and perceived parental approval for three career paths

Srl. No.	Career Path Option	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N = 1250)
1.	*Start work immediately if job is available (Work Immediately)*			
	- Interest [a]	3.63 (1.52)	3.41 (1.48)	2.53 (1.48)
	- Self-efficacy [b]	3.48 (1.36)	3.30 (1.36)	2.68 (1.34)
	- Prestige rating [c]	3.06 (1.26)	3.09 (1.31)	2.59 (1.26)
	- Perceived Parental Approval [d]	3.56 (1.48)	3.49 (1.48)	2.66 (1.53)
2.	*Find part time job and study side by side (Part Time)*			
	- Interest	3.16 (1.45)	2.86 (1.48)	2.46 (1.38)
	- Self-efficacy	3.11 (1.38)	2.92 (1.34)	2.70 (1.29)
	- Prestige rating	3.04 (1.30)	2.93 (1.27)	2.76 (1.18)
	- Perceived Parental Approval	3.19 (1.45)	2.96 (1.47)	2.50 (1.35)
3.	*Take up further studies full time (Full Time Studies)*			
	- Interest	3.85 (1.32)	3.74 (1.31)	3.74 (1.32)
	- Self-efficacy	3.81 (1.26)	3.70 (1.26)	3.78 (1.21)
	- Prestige rating	3.72 (1.23)	3.71 (1.21)	3.96 (1.08)
	- Perceived Parental Approval	3.88 (1.28)	3.98 (1.24)	4.22 1.07)

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested. [b] 1 = very low confidence, 2 = somewhat low confidence, 3 – confident, 4 = quite confident, 5 = very confident. [c] 1 = very low prestige, 2 = somewhat low prestige, 3 – average prestige, 4 = high prestige, 5 = very high prestige. [d] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 11: Narratives of participants from different SES groups on the theme:
'Which career path are you going to take? What are its benefits?'
Presented in the body of the text in Chapter 5

Table 12: Mean ratings (SD) with F Ratios, on perception of barriers to career preparation and expression of self -efficacy of the 3 SES groups

Srl. No.	Area (Max Score)	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N = 1250)	F Ratio (2, 3796)	Significance level
1.	*Consolidated Scores*					
	Perception of barriers (168)	71.38 (15.91)	67.26 (16.42)	57.87 (16.22)	233.13	.000
	Expression of Self-efficacy (168)	78.62 (19.48)	78.58 (20.31)	84.76 (20.44)	39.43	.000
2.	*Family Situation and Career Preparation*					
	Perception of barriers (50)	31.54 (7.31)	29.75 (7.98)	24.90 (8.69)	234.73	.000
	Expression of Self-efficacy (50)	32.57 (8.64)	32.41 (8.83)	34.94 (9.44)	31.39	.000
3.	*Personal Capacity and Career Preparation*					
	Perception of barriers (35)	20.92 (5.43)	20.23 (5.43)	18.80 (5.44)	50.62	.000
	Expression of Self-efficacy (35)	22.87 (6.36)	22.95 (6.27)	24.00 (6.17)	12.64	.000

Note: Post hoc tests based on Tukey's HSD was run for each One Way ANOVA reported above. The trends are as follows:

- There is no significant difference in Mean rating between the lower and middle SES group, but both are significantly lower than the upper middle SES groups for all the above areas of study.

Table 13: Narratives of participants from different SES groups on the theme: ***'What kind of barriers will you face when you plan your career?'***

Presented in the body of the text in Chapter 5

Table 14: Mean ratings (SD) with F Ratios on career belief patterns of the 3 SES groups

Srl. No.	Area (Max Score)	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N =1250)	F Ratio (2, 3796)	Significance level
1.	Career Belief Pattern Consolidated Score (224)	105.46 (28.85)	96.87 (29.57)	84.98 (25.87)	170.87	.000
2.	Fatalistic Beliefs (28)	17.11 (5.24)	15.62 (5.37)	12.92 (5.07)	59.69	.000
3.	Control and Self Direction Beliefs (56)	26.22 (9.30)	24.94 (9.23)	22.37 (8.61)	21.34	.000

Note: Post hoc tests based on Tukey's HSD was run for each One Way ANOVA reported above. The trends are as follows:

- The Mean rating of the low SES group is significantly higher than the middle SES group as well as the upper middle SES groups for all the above areas of study.
- The Mean rating of the middle SES group is significantly higher than the upper middle SES group for all the above areas of study.

Table 15: Narratives of participants from different SES groups on the theme: *'What do people in your area commonly believe about career planning?*

Presented in the body of the text in Chapter 5

Appendix 4: Data Tables

Tables for Chapter 6: Pride and Prejudice

Table 16: Prestige hierarchy of occupations with mean ratings of prestige, interest, self efficacy and parental approval

Presented in the body of the text in Chapter 6

Table 17: Correlations between mean ratings on prestige with interest, self efficacy and parental approval for 28 careers
(N = 3799)

	Prestige	Interest	Confidence	Parent approval
Prestige	1.000	.978 **	.976 **	.995 **
Interest		1.000	.995 **	.975 **
Confidence			1.000	.976 **
Parent approval				1.000

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

Table 18: Prestige perceptions and career choices
Table 19: Statements about subject choices

Presented in the body of the text in Chapter 6

Table 20: Ratings of participants in the 3 SES groups on interest, self efficacy, prestige and parental approval for four subject options

	Rating	Science			Arts			Commerce			Vocational		
		Low SES	Middle SES	Upper Middle SES	Low SES	Middle SES	Upper Middle SES	Low SES	Middle SES	Upper Middle SES	Low SES	Middle SES	Upper Middle SES
Interest [a]	1	17.6	16.4	17.4	23.1	26.8	35.6	20.1	18.1	24.9	14.6	18.5	31.8
	2	11.6	10.9	9.9	14.8	18.7	15.6	15.9	14.0	16.6	11.5	15.7	20.3
	3	17.0	19.1	13.6	18.6	18.4	20.2	19.1	23.3	18.7	18.5	18.6	19.9
	4	19.9	15.2	18.2	14.3	15.2	13.0	19.6	20.7	19.1	15.5	17.5	11.5
	5	31.7	37.4	39.7	26.9	20.0	14.7	22.4	23.1	19.7	37.5	28.0	14.3
Self efficacy [b]	1	15.1	15.1	15.4	19.3	22.4	28.6	18.8	16.4	19.4	11.9	16.1	27.3
	2	15.7	13.9	10.6	18.7	20.2	17.6	17.8	15.7	17.0	13.4	13.9	17.9
	3	20.7	19.4	18.6	20.6	24.3	24.3	22.3	26.2	24.5	20.6	25.1	26.2
	4	21.3	21.1	24.2	17.9	16.7	15.1	18.9	21.9	21.4	21.4	19.4	11.9
	5	25.2	29.6	30.0	21.3	15.5	13.4	19.4	19.0	16.8	30.2	23.8	14.5
Prestige [c]	1	13.1	10.2	7.4	17.9	19.5	20.6	15.6	12.9	10.6	11.5	14.2	22.2
	2	14.0	8.8	5.9	17.7	16.0	15.9	15.7	11.8	11.4	14.1	16.3	18.3
	3	19.8	18.7	14.6	23.7	26.9	29.0	24.9	28.0	26.6	23.1	22.4	28.8
	4	24.7	24.7	29.3	19.1	21.9	22.2	23.6	26.7	31.2	23.6	22.9	16.5
	5	26.3	36.6	41.6	19.3	14.8	11.3	17.4	19.6	19.2	25.5	22.5	12.0
Parental approval [d]	1	13.3	9.8	7.7	20.6	20.4	25.5	18.1	13.9	12.8	12.8	14.6	26.2
	2	12.1	8.1	4.9	16.1	18.8	16.3	13.1	10.5	11.1	12.7	14.7	15.4
	3	16.5	14.6	11.0	18.8	21.2	22.2	18.8	20.8	22.8	17.9	19.8	23.5
	4	19.8	19.7	21.6	16.1	20.1	16.9	22.7	25.5	23.9	18.5	18.2	15.2
	5	36.2	46.8	53.8	26.1	22.7	18.2	24.5	28.5	28.4	35.7	31.0	17.4

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested. [b] 1 = very low confidence, 2 = somewhat low confidence, 3 – confident, 4 = quite confident, 5 = very confident. [c] 1 = very low prestige, 2 = somewhat low prestige, 3 – average prestige, 4 = high prestige, 5 = very high prestige. [d] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 21: Mean ratings (SD) of the 3 SES groups on interest, self -efficacy, prestige ratings and perceived parental approval for four subject options

Srl. No.	Subject Option	Low SES group (N = 1316)	Middle SES group (N = 1233)	Upper Middle SES group (N = 1250)
1.	*Science*			
	- Interest [a]	3.30 (1.55)	3.43 (1.52)	3.49 (1.56)
	- Self-efficacy [b]	3.19 (1.46)	3.33 (1.45)	3.39 (1.46)
	- Prestige rating [c]	3.31 (1.44)	3.66 (1.37)	3.88 (1.28)
	- Perceived Parental Approval[d]	3.47 91.51)	3.83 (1.40)	4.06 (1.31)
2.	*Arts*			
	- Interest	3.00 (1.58)	2.80 (1.50)	2.53 (1.47)
	- Self-efficacy	2.96 (1.48)	2.80 (1.39)	2.64 (1.40)
	- Prestige rating	2.97 (1.43)	2.94 (1.35)	2.84 (1.31)
	- Perceived Parental Approval	3.04 (1.55)	3.07 (1.46)	2.83 (1.46)
3.	*Commerce*			
	- Interest	3.00 (1.52)	3.14 (1.43)	2.89 (1.49)
	- Self-efficacy	2.94 (1.46)	3.09 (1.36)	2.96 (1.38)
	- Prestige rating	3.03 (1.40)	3.26 (1.30)	3.34 (1.26)
	- Perceived Parental Approval	3.14 (1.52)	3.42 (1.40)	3.41 (1.38)
4.	*Vocational*			
	- Interest	3.42 (1.55)	3.16 (1.53)	2.50 (1.45)
	- Self-efficacy	3.37 (1.46)	3.16 (1.44)	2.62 (1.42)
	- Prestige rating	3.30 (1.41)	3.18 (1.41)	2.71 (1.35)
	- Perceived Parental Approval	3.44 (1.51)	3.31 (1.49)	2.76 (1.48)

Note: [a] 1 = low interest, 2 = somewhat interested, 3 = interested, 4 = quite interested, 5 = very interested. [b] 1 = very low confidence, 2 = somewhat low confidence, 3 = confident, 4 = quite confident, 5 = very confident. [c] 1 = very low prestige, 2 = somewhat low prestige, 3 = average prestige, 4 = high prestige, 5 = very high prestige. [d] 1 = low support, 2 = somewhat low support, 3 = average support, 4 = high support, 5 = very high support.

Table 22: Statements from participants in vocational courses

Presented in the body of the text in Chapter 6

Appendix 4: Data Tables

Tables for Chapter 7: Labour market vs. Educational leadership:

Table 23: Interest ratings of participants in 10 regions for 6 Careers (in %)

	Rating [a]	Shimoga	Bangalore	DehraDoon	Chennai	Ukrul	Goa	Delhi	Rampur	Srinagar	Guwahati
Teacher	1	19.4	36.1	24.5	21.6	42.6	28.9	32.4	5.2	15.8	22.2
	2	14.0	16.4	15.1	15.0	22.2	17.0	13.1	7.9	14.4	24.8
	3	15.9	18.7	22.9	20.6	21.3	21.7	16.7	15.9	30.6	28.2
	4	18.5	11.3	16.3	17.5	5.6	17.3	15.5	21.4	17.2	13.7
	5	31.4	17.1	20.2	24.7	8.3	13.0	21.9	49.6	20.6	9.4
Chartered Accountant	1	29.7	28.3	35.5	26.8	21.8	31.0	30.5	38.9	23.9	17.1
	2	12.9	16.0	19.5	16.6	22.2	13.4	16.2	22.6	19.6	17.9
	3	22.0	17.6	22.9	20.8	26.9	18.4	20.5	19.8	19.6	28.2
	4	16.3	22.2	10.5	17.5	17.6	18.8	16.2	11.7	18.7	13.7
	5	18.1	14.6	8.7	17.2	10.6	14.4	15.5	6.0	15.3	22.2
Computer Scientist	1	14.7	17.4	17.7	14.1	8.3	19.1	21.0	10.3	14.4	18.8
	2	6.6	10.5	11.1	7.5	9.3	8.7	12.9	9.1	7.7	10.3
	3	10.9	15.6	16.7	13.6	19.0	17.0	18.1	25.0	19.1	23.9
	4	25.3	22.8	20.8	20.0	24.5	20.2	24.5	21.0	22.0	20.5
	5	41.8	33.4	31.1	44.2	38.9	32.1	22.6	34.1	34.9	25.6
Chef	1	50.4	56.8	55.5	45.1	43.5	40.2	58.1	50.4	77.5	39.3
	2	15.6	15.6	13.8	14.3	18.5	15.2	16.0	14.7	6.7	19.7
	3	13.6	12.7	11.8	17.0	20.8	15.9	12.6	12.7	6.2	17.1
	4	9.0	7.9	7.8	10.0	6.5	9.7	6.0	10.3	1.4	6.8
	5	9.7	6.1	6.8	13.2	10.2	15.5	6.0	11.1	4.8	15.4
Agricultural Scientist	1	23.8	38.0	40.8	30.9	20.4	36.8	51.0	23.0	19.6	33.3
	2	14.5	18.3	21.0	15.4	25.0	16.2	19.8	15.5	13.9	17.9
	3	20.4	17.3	16.1	23.3	25.0	15.9	12.1	22.2	23.9	23.9
	4	20.4	12.7	9.5	15.2	16.2	17.0	9.5	25.0	22.5	12.0
	5	19.2	12.6	7.0	14.5	12.5	10.8	5.7	13.9	16.3	11.1
Medical Doctor	1	19.2	23.2	28.0	20.8	12.5	28.5	30.7	15.1	10.5	23.1
	2	9.3	12.2	12.8	7.5	13.9	8.7	14.3	11.5	5.7	17.1
	3	16.5	16.4	17.1	11.6	21.8	13.4	15.2	22.6	16.7	25.6
	4	18.1	16.7	16.7	16.3	16.7	13.4	13.1	18.3	14.4	16.2
	5	34.9	30.5	21.2	42.4	33.8	32.9	25.0	30.2	48.3	16.2

Note: [a] 1 = low interest, 2 = somewhat interested, 3 = interested, 4 = quite interested, 5 = very interested.

Table 24: Correlations* between Mean Interest ratings on 28 Careers and five Personal Interest Themes

Prestige Rank	Occupation	Personal Interest Theme				
		Linguistic	Analytical-Logical	Spatial	Interpersonal	Physical Mechanical
1	Scientist	.248	.335	.196	.159	.318
2	Computer Scientist	.247	.300	.224	.190	.318
3	Engineering	.174	.320	.166	.131	.328
4	Doctor	.246	.224	.198	.188	.225
5	Teacher	.385	.156	.198	.249	.165
6	Lawyer	.284	.142	.184	.232	.139
7	Police Inspector	.271	.143	.173	.244	.246
8	Bio Technologist	.173	.263	.184	.140	.264
9	Financial Manager	.239	.233	.237	.194	.210
10	Chartered Accountant	.172	.237	.164	.119	.168
11	Journalist	.273	.123	.228	.224	.155
12	Architect	.189	.232	.307	.177	.241
13	Social Worker	.331	.225	.253	.363	.259
14	Psychologist	.227	.197	.208	.243	.174
15	Agricultural Scientist	.284	.254	.226	.231	.342
16	Hotel Manager	.185	.116	.233	.186	.187
17	Economist	.277	.238	.200	.225	.220
18	Ayurved	.288	.215	.263	.258	.275
19	Public Relations Officer	.290	.201	.230	.240	.240
20	Secretary	.277	.166	.202	.207	.211
21	Accounts Clerk	.241	.232	.180	.157	.223
22	Library Scientist	.310	.219	.228	.235	.227
23	Artisan	.238	.203	.317	.212	.266
24	Chef	.176	.129	.208	.169	.201
25	Cook	.155	.092	.206	.157	.189
26	Farmer	.223	.203	.181	.213	.302
27	Shop Keeper	.188	.140	.154	.136	.188
28	Carpenter	.190	.170	.181	.144	.224

Note: ** all correlations are significant at the 0.000 level.*

Table 25: Participants' definitions for six 'high interest' careers: A sample
Table 26: Descriptive Summaries of Career Awareness Scores for six 'high interest' careers

Presented in the body of the text in Chapter 7

Table 27: Descriptive Summaries with F Ratios on the career awareness of the 3 school types

Srl. No.	Type (N)	Mean (SD)	F Ratio (2,3796)	Significance level
	Government (1607)	11.09 (9.77)	321.87	.000
	Private aided (1126)	9.99 (8.34)		
	Private unaided (1066)	19.81 (11.99)		

Note: Post hoc tests based on Tukey's HSD shows the Mean scores of the private unaided schools is significantly higher than the private aided and government schools. The Mean scores of the private aided schools is significantly lowers than not only the private unaided schools but also the government schools.

Table 28: Descriptive Summaries and t tests on the career awareness of 2 school boards

School Board	Mean (SD)	T Test (df = 3585)	Significance level
CBSE (999)	19.70 (12.83)	- 26.383	.000
State (2588)	10.09 (8.32)		

Note: *ICSE is not reported here since the N is very small (212). With a Mean Score of 20.89 (SD 11.28) the trends are similar to the CBSE schools.*

Table 29: Descriptive Summaries and F Ratios on the career awareness of 3 class types

Class Level	Mean (SD)	F Ratio (2, 3796)	Significance level
Std. 10 (2028)	12.35 (10.11)	36.96	.000
Std. 12 [a] (1254)	15.32 (12.26)		
Vocational – 2nd yr. (517)	11.5 (9.42)		

Note: [a] includes both Std. 12 in Schools and the 2nd yr in pre-degree college courses

Post hoc tests based on Tukey's HSD shows the Mean scores of the Std. 12 is significantly higher than the Std. 10 and Vocational group. There is no significant difference in the Mean scores of the Std. 10 and the Vocational group.

Appendix 4: Data Tables

Tables for Chapter 8: Contexts and Circumstances: *Gender and Career Choices*

Table 30: Ratings of boys and girls on the 5 personal interest themes

Interest Theme	Interest Level	Boys (in %)	Girls (in %)	Chi Squares*
Linguistic	low	41.7	36.8	22.54
	medium	27.8	25.5	
	high	30.5	37.7	
Analytical-Logical	low	30.3	38.9	30.65
	medium	29.3	25.5	
	high	40.4	35.6	
Spatial	low	41.5	29.2	69.46
	medium	25.6	27.5	
	high	32.9	43.4	
Personal	low	36.9	31.1	16.75
	medium	36.7	38.1	
	high	26.3	30.9	
Physical - Mechanical	low	34.0	46.7	84.27
	medium	22.6	23.3	
	high	43.4	30.0	

Note: *all chi squares significant at the .001 level.*

Table31: Descriptive Summaries of boys and girls on the 5 personal interest themes

Interest Theme	Means (SD)	
	Boys (2036)	**Girls (1763)**
Linguistic	15.30 (4.22)	15.99 (4.18)
Analytical - Logical	15.96 (4.91)	15.18 (5.18)
Spatial	15.73 (4.95)	17.10 (4.94)
Personal	16.97 (4.75)	17.52 (4.84)
Physical - Mechanical	16.48 (4.75)	14.88 (4.97)

Table 32: Descriptive Summaries
of boys and girls in the 3 SES groups on the 5 personal interest themes*

SES level	Gender	Mean (SD)				
		Linguistic	**Analytical-Logical**	**Spatial**	**Personal**	**Physical-Mechanical**
Low	Boys (796)	16.35 (4.09)	16.08 (4.94)	16.06 (4.87)	17.63 (4.62)	17.15 (4.79)
	Girls (520)	17.04 (4.03)	16.86 (5.14)	17.43 (4.99)	18.24 (4.76)	15.73 (5.01)
Middle	Boys (598)	15.98 (3.93)	15.98 (4.71)	16.29 (4.81)	17.17 (4.59)	16.54 (4.63)
	Girls (635)	16.09 (4.18)	15.19 (5.18)	17.12 (4.91)	17.45 (4.88)	15.35 (4.92)
Upper middle	Boys (642)	13.89 (4.26)	15.79 (5.04)	14.79 (5.06)	15.97 (4.89)	15.60 (4.68)
	Girls (608)	15.01 (4.08)	14.61 (5.15)	16.82 (4.97)	16.98 (4.82)	13.67 (4.76)

* Note: A series of 2 X 5 Chi Squares show that all, but one gender difference reported above is significant at the .01 level. There is no significant gender difference between girls and boys in the middle SES group on the Personal interest theme.

Table 33: Ratings of boys and girls on interest and parent approval for 3 career paths (in %)

Career Path	Rating	Interest [a]		Parent Approval [b]	
		Boys (N = 2036)	Girls (N = 1763)	Boys (N = 2036)	Girls (N = 1763)
Work Immediately	1	23.2	22.2	23.5	21.4
	2	13.1	12.6	12.0	11.3
	3	18.6	17.8	14.5	14.7
	4	12.3	14.9	19.9	20.8
	5	32.7	32.3	30.0	31.5
Part Time job and studies	1	25.1	25.7	24.8	23.0
	2	19.1	19.2	18.8	19.2
	3	20.3	19.7	20.7	16.9
	4	15.4	15.9	17.4	20.8
	5	19.7	19.1	18.0	19.7
Full Time Studies	1	8.7	7.6	5.6	3.9
	2	8.9	8.3	7.6	7.8
	3	18.4	18.7	12.9	12.8
	4	24.9	20.6	25.6	26.4
	5	38.7	44.0	47.7	48.2

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested.
[b] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 34: Means (SD) of boys and girls on the 3 career paths

Career Path	Interest		Parental Approval	
	Boys (2036)	Girls (1763)	Boys (2036)	Girls (1763)
Work Immediately	3.18 (1.57)	3.22 (1.59)	3.20 (1.56)	3.29 (1.54)
Part Time	2.84 (1.47)	2.82 (1.47)	2.85 (1.44)	2.94 (1.46)
Full Time Studies	3.74 (1.31)	3.82 (1.32)	4.01 (1.22)	4.04 (1.19)

Table 35: Ratings of boys and girls in the 3 SES groups on interest for 3 career paths (in %)

Career Path	Rating [a]	Low SES		Middle SES		Upper Middle SES	
		Boys (N = 797)	Girls (N = 519)	Boys (N = 597)	Girls (N = 636)	Boys (N = 642)	Girls (N =608)
Work Immediately	1	15.7	15.6	17.9	14.0	37.4	36.3
	2	9.9	9.4	13.1	10.8	17.0	17.3
	3	16.7	13.7	19.9	21.9	19.6	17.1
	4	13.0	13.1	13.6	17.9	10.1	13.2
	5	44.4	48.0	35.3	34.9	15.7	16.1
Part Time job and studies	1	18.2	17.3	25.5	25.8	33.5	32.7
	2	17.7	15.0	18.1	16.4	21.8	25.7
	3	21.8	20.2	21.1	20.9	17.6	18.1
	4	16.9	19.7	15.1	15.4	13.7	13.2
	5	25.0	27.4	19.9	20.9	13.1	10.0
Full Time Studies	1	9.5	6.9	7.0	7.7	9.2	8.1
	2	6.5	7.3	10.4	10.2	10.4	7.1
	3	17.4	17.9	19.8	19.7	18.4	18.3
	4	23.2	18.9	25.5	19.5	26.3	23.2
	5	42.8	48.0	36.9	41.8	35.2	42.8

Note: [a] 1 = low interest, 2 = somewhat interested, 3 = interested, 4 = quite interested, 5 = very interested.

Table 36: Ratings of boys and girls on interest and parent approval for 4 subject choices (in %)

Career Path	Rating	Interest [a]		Parent Approval [b]	
		Boys (N = 2036)	Girls (N = 1763)	Boys (N = 2036)	Girls (N = 1763)
Science	1	24.2	26.5	13.9	12.1
	2	10.4	10.9	9.1	9.0
	3	14.3	13.7	14.1	13.4
	4	15.2	16.4	20.1	22.9
	5	34.5	30.5	41.4	40.6
Arts	1	48.3	38.9	33.1	24.1
	2	15.0	14.7	17.4	16.3
	3	12.7	13.2	19.1	19.5
	4	8.3	11.5	14.1	17.6
	5	14.2	19.5	14.7	20.1
Commerce	1	38.2	31.4	25.8	18.1
	2	14.5	15.7	13.2	14.0
	3	14.0	15.5	19.6	19.1
	4	11.5	14.0	17.9	19.9
	5	19.7	20.6	21.5	26.1
Vocational	1	22.9	19.9	20.2	15.0
	2	16.1	15.3	14.1	14.3
	3	19.3	18.7	20.4	20.3
	4	14.2	15.5	15.6	19.3
	5	25.7	28.0	27.9	28.5

Note: [a] 1 = low interest, 2 = somewhat interested, 3 – interested, 4 = quite interested, 5 = very interested.
[b] 1 = low support, 2 = somewhat low support, 3 – average support, 4 = high support, 5 = very high support.

Table 37: Means (SD) of boys and girls on 4 subject options

Subject Option	Interest		Parental Approval	
	Boys (2036)	Girls (1763)	Boys (2036)	Girls (1763)
Science	3.21 (1.63)	3.07 (1.65)	3.62 (1.49)	3.65 (1.48)
Arts	2.20 (1.49)	2.51 (1.60)	2.55 (1.47)	2.87 (1.51)
Commerce	2.54 (1.59)	2.68 (1.59)	2.89 (1.54)	3.14 (1.53)
Vocational	2.98 (1.55)	3.08 (1.57)	3.11 (1.54)	3.24 (1.50)

Table 38: Ratings of boys and girls in the 3 SES groups on interest for 4 subject options (in %)

Career Path	Rating [a]	Low SES		Middle SES		Upper Middle SES	
		Boys (N = 797)	Girls (N = 519)	Boys (N = 597)	Girls (N = 636)	Boys (N = 642)	Girls (N =608)
Science	1	25.5	26.2	26.6	25.8	20.4	27.5
	2	13.0	13.5	10.4	10.1	7.2	9.7
	3	15.4	15.2	14.6	13.5	12.6	12.5
	4	15.8	16.6	13.9	15.9	15.7	16.8
	5	28.4	25.8	33.0	32.2	43.5	32.6
Arts	1	38.9	27.9	46.4	42.1	61.7	44.7
	2	15.1	13.3	16.2	12.6	13.7	18.3
	3	14.2	14.5	13.1	13.2	10.4	12.0
	4	8.9	13.1	8.7	10.2	7.2	11.3
	5	21.0	28.7	14.1	19.0	5.9	12.2
Commerce	1	37.5	30.1	34.8	31.8	42.1	32.2
	2	14.6	17.0	14.1	15.6	15.0	14.6
	3	13.6	14.8	15.1	18.1	13.7	13.3
	4	11.2	13.1	11.6	11.5	12.0	17.4
	5	20.3	21.6	22.6	20.3	16.2	20.1
Vocational	1	14.9	14.1	18.4	18.6	36.9	26.3
	2	11.8	11.0	16.8	14.6	20.9	19.7
	3	18.4	18.5	20.4	16.8	19.2	20.7
	4	15.6	15.4	16.8	18.2	10.3	12.8
	5	37.3	37.8	26.3	29.6	10.9	17.9

Note: [a] 1 = low interest, 2 = somewhat interested, 3 = interested, 4 = quite interested, 5 = very interested.

Table 39: Excerpts from Girls' and Boys' narratives on
'What are you dreaming of becoming and how will you achieve this dream?'

Presented in the body of the text in Chapter 8

Table 40: Ratings of boys and girls on perception of barriers to career preparation among boys and girls

Barrier Theme	Interest Level	Boys (in %)	Girls (in %)	Chi Squares*
Perception of Career Barrier - Consolidated Score	low	31.1	37.2	15.812 P > .001
	medium	36.3	32.8	
	high	32.6	29.9	
Family Situation Sub-scale	low	35.5	37.1	3.566 not significant
	medium	34.1	31.3	
	high	30.4	31.7	
Personal Capacity Sub-scale	low	36.1	41.1	14.477 p = .001
	medium	34.1	34.1	
	high	29.7	24.8	

Table 41: Descriptive Summaries of boys and girls on perception of career barriers

Career Belief Themes	Means (SD)	
	Boys (2036)	**Girls (1763)**
Perception of Career Barrier - Consolidated Score	66.48 (16.85)	64.58 (17.40)
Family Situation Sub-scale	28.98 (8.27)	28.54 (8.69)
Personal Capacity Sub-scale	20.35 (5.46)	19.65 (5.52)

Table 42: Girls' and Boys' narratives on *'What are the barriers you may face as you plan for your career?'*

Presented in the body of the text in Chapter 8

Table 43: Descriptive Summaries of boys and girls on career beliefs

Career Barrier Theme	Means (SD)	
	Boys (2036)	**Girls (1763)**
Career Belief Pattern - Consolidated Score	99.19 (28.61)	92.16 (29.81)
Self Worth Sub-scale	6.07 (3.54)	5.67 (3.48)
Fatalistic thinking Sub-scale	15.23 (5.39)	15.27 (5.65)
Proficiencies Sub-scale	19.88 (8.94)	18.35 (9.04)
Persistence Sub-scale	9.67 (4.36)	9.23 (4.29)

Table 44: Girls and Boys responses to the question:
'What do people commonly believe about career planning?'

Presented in the body of the text in Chapter 8

Appendix 4: Data Tables

Tables for Chapter 9: Contexts and Circumstances: Caste and Career Choices

Table 45: Levels of Career Barriers perception of the 5 Caste groups

Srl. No.	Level of Barrier scores	General group (N = 1220)	ST group (N = 279)	SC group (N = 393)	BC group (N = 657)	RM group (N = 266)
Consolidated score on perception of barrier to career preparation						
1.	Low	36.9%	28.7%	23.2%	24.0%	33.5%
2.	Medium	35.2%	40.1%	30.8%	34.1%	30.8%
3.	Significant	28.0%	31.2%	46.1%	41.9%	35.7%
Family Situation as a barrier to career preparation						
1.	Low	38.0%	30.5%	25.7%	25.9%	35.3%
2.	Medium	32.4%	36.9%	31.3%	33.8%	32.3%
3.	Significant	29.6%	32.6%	43.0%	40.3%	32.3%
Personal Capacity as a barrier to career preparation						
1.	Low	37.7%	39.4%	32.6%	33.8%	41.4%
2.	Medium	37.0%	36.2%	39.5%	32.8%	30.8%
3.	Significant	25.2%	24.2%	37.9%	33.9%	27.8%
Community Perception as a barrier to career preparation						
1.	Low	43.9%	29.7%	26.5%	29.1%	34.6%
2.	Medium	29.3%	37.6%	26.0%	27.5%	26.3%
3.	Significant	26.8%	32.6%	47.6%	43.4%	39.1%

Table 46: Descriptive Summaries of the 5 Caste groups on 3 specific barrier themes to career preparation

Srl. No.	Barrier Theme (Max Score)	General group	ST group	SC group	BC group	RM group
1	Consolidated Score (168)	78.74 (19.05)	82.51 (16.84	87.54 (20.04)	85.27 (19.26)	81.53 (19.20)
2	Family Situation as a barrier (50)	28.27 (8.56)	30.07 (7.02)	31.41 (7.97)	30.99 (7.75)	29.33 (7.79)
3	Personal Capacity as a barrier (35)	19.87(5.33)	19.89 (4.94)	21.24 (5.74)	20.87 (5.71)	19.94 (5.71)
4	Community Perception as a barrier (35)	15.98 (5.69)	17.49 (5.19)	19.14 (6.26)	18.42 (6.23)	17.75 (6.14)

Table 47: Caste groups' narratives on
'What are the barriers you may face as you plan for your career'

Presented in the body of the text in Chapter 9

Table 48: Levels of Negativity in Career Beliefs of the 5 Caste groups

Srl. No.	Level of Negativity	General group (N = 1220)	ST group (N = 279)	SC group (N = 393)	BC group (N = 657)	RM group (N = 266)
Consolidated score on career beliefs pattern scale						
1.	Low	39.1%	38.7%	22.1%	21.2%	28.6%
2.	Medium	32.5 %	32.3%	33.6%	31.7%	32.7%
3.	Significant	28.4%	39.0%	44.3%	47.2%	38.7%
Proficiency beliefs about career preparation						
1.	Low	45.8%	35.8%	30.3%	28.8%	34.2%
2.	Medium	29.2%	33.7%	32.3%	32.1%	34.2%
3.	Significant	25.0%	30.5%	37.4%	39.1%	31.6%
Control and Self direction beliefs about career preparation						
1.	Low	37.5%	38.7%	28.8%	28.5%	31.6%
2.	Medium	33.6%	37.6%	36.1%	34.2%	33.5%
3.	Significant	28.9%	23.7%	55.1%	37.3%	35.0%
Fatalistic beliefs about career preparation						
1.	Low	44.8%	49.1%	33.7%	21.0%	33.5%
2.	Medium	29.6%	31.2%	35.6%	33.6%	33.1%
3.	Significant	25.7%	19.7%	40.7%	45.4%	33.5%

Table 49: Descriptive Summaries on career belief patterns of the 5 caste groups

Srl. No.	Career Belief Theme (Max Score)	General group	ST group	SC group	BC group	RM group
1.	Career Belief Pattern Consolidated Score (224)	91.89 (28.75)	91.48 (27.84)	104.15 (28.68)	105.67 (28.59)	99.92 (27.06)
2.	Proficiency Beliefs (56)	17.82 (8.62)	19.26 (8.76)	22.16 (9.51)	(21.26 (9.36)	19.58 (8.48)
3.	Control and Self Direction Beliefs (56)	24.01 (9.61)	23.48 (8.89)	25.88 (8.75)	26.28 (9.25)	25.36 (8.81)
4.	Fatalistic Beliefs (28)	14.46 (5.49)	14.15 (5.02)	17.29 (5.08)	17.51 (5.08)	16.17 (5.33)

Table 50: Caste groups' narratives on:
What do people commonly believe about career planning?'

Presented in the body of the text in Chapter 9

Appendix 4: Data Tables

Tables for Chapter 10: *Career Counselling: Matchmaking or something more?*

Table 51: Descriptive Summaries and F Ratios on 3 themes of career decision making of 3 class levels

Class Level	Mean (SD)	F Ratio (2, 3796)	Significance level
Readiness for career decision making (Max score = 90)			
Std. 10	5.51 (1.27)	2.22	Not significant
Std. 12 [a]	5.41 (1.25)		
Vocational – 2nd yr.	5.44 (1.29)		
Lack of information for the career decision making process (Max score = 108)			
Std. 10	4.90 (1.6)	1.54	Not significant
Std. 12	4.80 (1.74)		
Vocational – 2nd yr.	4.83 (1.78)		
Inconsistent information for career decision making (Max score = 90)			
Std. 10	4.74 (1.72)	6.40	.002
Std. 12	4.57 (1.79)		
Vocational – 2nd yr.	4.48 (1.66)		

Note: [a] Std. 12 includes both higher secondary Schools and the 2nd yr in pre-degree college courses

On the Inconsistent information scale, the post hoc Tukey's tests shows that the Means of the Std. 10 are significantly higher than the Std. 12 and Vocational groups. There is no significant difference in means between the Std. 12 and Vocational groups.

Table 52: Descriptive Summaries with F Ratios on 3 themes of career decision making of 3 school types

School Type	Mean (SD)	F Ratio (2, 3796)	Significance level
Readiness for career decision making (Max score = 90)			
Government Schools	5.60 (1.29)	64.05	.000
Private Aided Schools	5.63 (1.24)		
Private Unaided Schools	5.10 (1.19)		
Lack of information for the career decision making process (Max score = 108)			
Government Schools	4.88 (1.71)	23.79	.000
Private Aided Schools	5.08 (1.63)		
Private Unaided Schools	4.59 (1.68)		
Inconsistent information for career decision making (Max score = 90)			
Government Schools	4.74 (1.77)	35.60	.000
Private Aided Schools	4.86 (1.71)		
Private Unaided Schools	4.28 (1.65)		

Note:

Post hoc Tukey's shows significant differences between the Private Unaided schools and the other two school types on the Readiness scale. Students in the Pvt. Unaided schools show significantly lower difficulties on the Readiness scale when compared to the Government and Pvt. Aided schools. There are no significant differences between the Government and Pvt. Aided schools,

A similar trend continues with the Inconsistent Information scale. Students in the Pvt. Unaided schools show significantly lower difficulties due to inconsistent information when compared to the Government and Pvt. Aided schools. There are no significant differences between the Government and Pvt. Aided schools,

On the Lack of information scale the private unaided group show significantly lower difficulties when compared to the Government and Pvt. Aided schools. There are however significant differences between the Government and Pvt. Aided schools, with participants in the private aided schools being significantly higher in difficulties due to lack of information when compared to those in the government schools

Table 53: Descriptive Summaries with F Ratios on 3 themes of career decision making of 3 SES groups

School Type	Mean (SD)	F Ratio (2, 3796)	Significance level
Readiness for career decision making (Max score = 90)			
low SES	5.64 (1.29)	67.56	.000
middle SES	5.62 (1.23)		
upper middle SES	5.13 (1.21)		
Lack of information for the career decision making process (Max score = 108)			
low SES	5.07 (1.65)	38.83	.000
middle SES	4.97 (1.66)		
upper middle SES	4.52 (1.72)		
Inconsistent information for career decision making (Max score = 90)			
low SES	5.10 (1.72)	59.19	.000
middle SES	4.65 (1.71)		
upper middle SES	4.27 (1.69)		

Note: Post hoc tests based on Tukey's HSD was run for each One Way ANOVA reported above. The trends are as follows:

On the Readiness scale, the upper middle SES group shows significantly lower difficulties on the Readiness scale when compared to the low and middle SES groups. There are no significant differences between the low and middle SES groups.

A similar trend continues with the Lack of information scale. The upper middle SES groups show significantly lower difficulties due to lack of information when compared to the low and middle SES groups. There are no significant differences between the low and middle SES groups.

On the Inconsistent information scale the upper middle SES group continues to show significantly lower difficulties when compared to the low and middle SES groups. There are however significant differences between the low and middle SES groups, with participants in the low SES group being significantly higher in difficulties due to inconsistent information when compared to those in the middle SES groups.

Table 54: Descriptive Summaries on 3 themes of career decision making of boys and girls

Career Decision making themes	**Boys**	**Girls**
Readiness	5.45 (1.20)	5.48 (1.34)
Lack of Information	4.87 (1.63)	4.84 (1.76)
Inconsistent Information	4.75 (1.66)	4.54 (1.81)

Table 55: Career decision making difficulty of boys and girls

Career decision making theme	**Level of Difficulty**	**Gender** (in %)		**Chi Sqaure (df = 2)**	**Significance level**
		Boys	**Girls**		
Readiness	low [a]	2.6	3.3	12.586	.002
	medium [b]	86.9	82.8		
	significant [c]	10.5	13.9		
Lack of information	low	14.1	16.6	16.072	.000
	medium	77.1	71.6		
	significant	8.8	11.9		
Inconsistent information	low	16.3	21.4	18.031	.000
	medium	76.0	70.2		
	significant	7.7	8.3		

Note: [a] = ratings of 1 – 3, [b] = ratings of 4 - 6, [c] = ratings of 7 - 9

Table 56: Career decision making difficulty of boys and girls in the 3 SES groups

Career decision making theme	Level of Difficulty	Gender (in %)		Chi Sqaure (df = 2)	Significance level
		Boys	Girls		
Readiness for career decision making (Max score = 90)					
low SES	low [a]	2.5	2.5	10.89	.004
	medium [b]	85.1	78.4		
	significant [c]	12.4	19.1		
middle SES	low	1.0	2.8	9.34	.009
	medium	86.4	81.0		
	significant	12.6	16.2		
upper middle SES	low	4.0	4.4	.499	Not significant
	medium	89.7	88.5		
	significant	6.2	7.1		
Lack of information for the career decision making process (Max score = 108)					
low SES	low	11.7	12.5	3.55	Not significant
	medium	77.8	73.7		
	significant	10.5	13.7		
middle SES	low	9.7	16.0	27.58	.000
	medium	81.9	69.1		
	significant	8.4	14.9		
upper middle SES	low	21.3	20.6	.115	Not significant
	medium	71.7	72.4		
	significant	7.0	7.1		
Inconsistent information for career decision making (Max score = 90)					
Low SES	low	11.5	14.7	6.31	.043
	medium	78.8	72.8		
	significant	9.6	12.5		
Middle SES	low	12.8	23.1	23.66	.000
	medium	80.0	69.1		
	significant	7.2	7.8		
Upper middle SES	low	25.5	25.5	.156	Not significant
	medium	68.7	69.2		
	significant	5.8	5.3		

Note: [a] = ratings of 1 – 3, [b] = ratings of 4 - 6, [c] = ratings of 7 - 9

Table 57: Descriptive Summaries with F Ratios of 3 SES groups on 4 feeling themes related to career preparation

SES Group	Mean (SD)	F Ratio (2, 3796)	Significance level
Enthusiasm related to career preparation (Max. score: 35)			
low SES	24.70 (6.19)	20.38	.000
middle SES	25.20 (6.36)		
upper middle SES	27.20 (5.74)		
Distress related to career preparation (Max. Score: 35)			
low SES	16.94 (6.63)	6.50	.002
middle SES	15.65 (6.53)		
upper middle SES	15.44 (6.86)		
Uncertainty related to career preparation (Max. Score: 35)			
low SES	19.02 (6.26)	.315	not significant
middle SES	18.68 (5.90)		
upper middle SES	18.95 (6.23)		
Apathy related to career preparation (Max. Score: 21)			
Low SES	10.70 (4.20)	46.01	.000
middle SES	9.89 (4.12)		
upper middle SES	8.23 (4.16)		

Note: Post hoc tests based on Tukey's HSD was run for each One Way ANOVA reported above. The trends are as follows:

- The upper middle SES group shows significantly higher levels of enthusiasm when compared to both the low and middle SES groups. There is no significant difference in level of distress between the low and middle SES groups.
- The low SES group shows significantly higher levels of distress when compared to both the middle and upper middle SES groups. There is no significant difference in level of distress between the middle and upper middle SES groups.
- The upper middle SES group shows significantly lower levels of apathy when compared to both the low and middle SES groups. Between the low and middle SES groups also there are significant differences, with the low SES group showing the significantly higher level of apathy.

Table 58: Descriptive Summaries of boys and girls on 4 feeling themes related to career preparation

Feeling themes (Max. Score)	**Boys**	**Girls**
Enthusiasm (35)	25.47 (6.23)	26.17 (6.03)
Distress (35)	15.51 (6.52)	16.37 (6.15)
Uncertainty (35)	18.67 (6.16)	19.16 (6.03)
Apathy (21)	9.43 (4.24)	9.42 (4.36)

Table 59: Feeling themes related to career preparation of boys and girls

Feeling theme	**Level of feeling**	**Gender** (in %)		**Chi Sqaure (df = 2)**	**Significance level**
		Boys	**Girls**		
Enthusiasm	low	39.1	31.4	9.753	.008
	medium	30.3	36.5		
	significant	30.6	32.1		
Distress	low	35.0	31.8	4.897	not significant
	medium	37.5	35.2		
	significant	27.4	33.0		
Uncertainty	low	83.3	79.4	6.430	not significant
	medium	9.9	14.4		
	significant	6.8	6.2		
Apathy	low	36.1	36.3	.328	not significant
	medium	32.3	31.0		
	significant	31.5	32.7		

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Appendix 5: Participating Schools

School Name	Place
1. Government P U College	Shimoga
2. Kasturba Higher Secondary School and PU College	Shimoga
3. Government P U College (High School)	Shimoga
4. D. V. S Polytechnic	Shimoga
5. VISSJ Government Polytechnic	Shimoga
6. National PU College & High School section (Kannada & English)	Shimoga
7. Corporation High Schools (Girls)	Bangalore
8. Government High School & P U College (Old fort)	Bangalore
9. Bapuji Residential High School	Bangalore
10. Resurection High School	Bangalore
11. Government ITI College	Bangalore
12. Sri Kumaran Children's Home (CBSE, ICSE & SSLC)	Bangalore
13. Frank Anthony Public School	Bangalore
14. Bethany High School & ISC College	Bangalore
15. Army Public School	Bangalore
16. Carman Residential and Day School	Dehradun
17. D A V Public School	Dehradun
18. Scholar's Home	Dehradun
19. Asha Ram Vedic Inter College	Dehradun
20. The Heritage School	Dehradun
21. Brooklyn School	Dehradun
22. Government Girls Inter College & High School	Dehradun
23. CNI Girls Inter College	Dehradun
24. SGNP Boys Inter College	Dehradun
25. Corporation High School	Chennai
26. Karnataka Sangha Higher Secondary School	Chennai
27. Chinmaya Vidyalaya	Chennai
28. Chengal Varaya Naicker Polytechnic College	Chennai
29. Union Christian Matriculation Higher Secondary School	Chennai
30. Corporation Boys/Girls Higher Secondary School	Chennai
31. Dharmambal Polytechnic for Women	Chennai
32. CPT Polytechnic	Chennai
33. KTL Excel High School	Ukhrul, Manipur
34. Ukhrul Public School	Ukhrul, Manipur
35. Alice Christian Higher Secondary School & College	Ukhrul, Manipur
36. Sacred Heart Higher Secondary School & College	Ukhrul, Manipur
37. Little Angels English School	Ukhrul, Manipur
38. Government High School, Ambaulim,	Goa
39. Government High School	Goa
40. Government Multipurpose High School, Margao	Goa
41. Government Industrial Training Institute	Goa
42. Kendriya Vidhyalaya No. 1	Goa
43. Cuncolin United Higher Secondary School	Goa
44. Rosary High School	Goa
45. Government High School, Vidhyanagar	Goa
46. Government XeLDEM High School	Goa
47. Vidya Vikas Academy (ICSE)	Goa
48. Government Multipurpose Higher Secondary School	Goa
49. Government Boys Secondary School (Hauz Rani)	New Delhi

School Name	Place
50. Raja Ram Mohan Rai Sarvodaya Kanya Vidyalaya	New Delhi
51. Vidya Niketan Senior Secondary School	New Delhi
52. Ishani Government S K V	New Delhi
53. Sanskriti School, Chanakya Puri	New Delhi
54. Government Boys Secondary School	New Delhi
55. Government Girls Higher Secondary Schools	Rampur, Himachal Pradesh
56. Rajakiya Kanya Varisht Madyamic Pata Shala	Rampur, Himachal Pradesh
57. Padhay Government Senior Secondary School	Rampur, Himachal Pradesh
58. Sun Shine Public School	Rampur, Himachal Pradesh
59. DAV Public School	Rampur, Himachal Pradesh
60. Government Boys Higher Secondary School & College	Srinagar
61. Minto Circle High School	Srinagar
62. Government Polytechnic for Woman	Srinagar
63. SP Higher Secondary	Srinagar
64. K G Government Polytechnic	Srinagar
65. Kendriya Vidhayalaya	Guwahati
66. Assam Engineering Institute	Guwahati
67. K C Das Commerce College	Guwahati
68. Girls Polytechnic	Guwahati
69. Lalit Chandra Bharati College	Guwahati
70. Pragajyotish College for Arts, Science and Commerce	Guwahati
71. Dispur Government Higher Secondary School	Guwahati
72. Jalakbani Girls High School	Guwahati
73. New GHY Refinery High School	Guwahati
74. Gopal Boro Government High Secondary School	Guwahati
75. GHY High School	Guwahati
76. Jaihind Senior College	Dhule
77. Government Polytechnic	Dhule
78. SSVPBSD Polytechnic	Dhule
79. St. Joseph's Higher Secondary School & Convent	Nagarcoil
80. Adarsh Vidya Kendra	Nagarcoil
81. SLBGHSS	Nagarcoil
82. Carmel Higher Secondary School & College	Nagarcoil
83. GPT Polytechnic	Nagarcoil
84. Government ITI College	Nagarcoil
85. Lawrence Technical Training Institute	Nagarcoil
86. Government High School	Chandigarh

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