

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

Draft Report
for discussion at the
National Consultation on Career Psychology (NCCP)
6th and 7th January 2006
Whitefield, Bangalore, India

PART 2

Authors:

Gideon Arulmani and Sonali Nag-Arulmani

An initiative of The Promise Foundation in partnership with Sir. Ratan Tata Trust.



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).



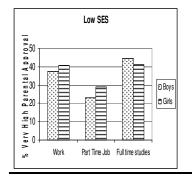
4.2. Gender differences in orientations to career paths

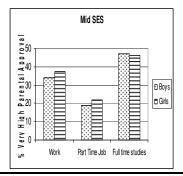
Girls and Boys, at first glance, appear to have very similar orientations to the three career paths of Work Immediately, Part Time job with studies and Full Time Studies. Details of their interest ratings on the Career Path Orientation Scale (CPOS) are given in Tables 33 and 34, Appendix 4. Around 20% 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.

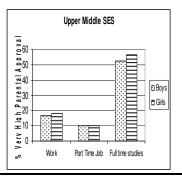
The trends in gender preferences for career path options were further studied within each SES group (for details see Table 35, Appendix 4). In the low SES group, boys and girls seem to be almost equally divided in their interest for the diametrically opposite options of Full Time Studies and Work Immediately. 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.

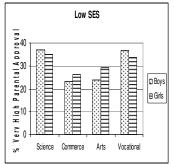
Several patterns of gender differences emerge when subject preferences are examined in the context of SES (see Table 38). Two of these patterns will be highlighted here.

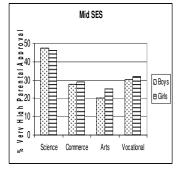
In the low SES group, 'high interest' among both girls and boys seem to be evenly spread across the four subject combinations, with some predominance of interest for the Vocational option. This is clearly not the case with the upper middle SES group. Interest is highest for the Science option for both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

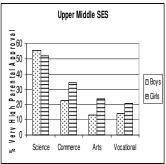
Arts is once again a casualty of reduced interest across all SES groups, but most so in the upper SES group with as high as 62% boys and the somewhat lower, but still significant numbers of girls (45%) rating a clear 'low interest' for this option.

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. Bov. 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, 15 years, 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 subsection 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 his or her 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*.

-=-=-=



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.

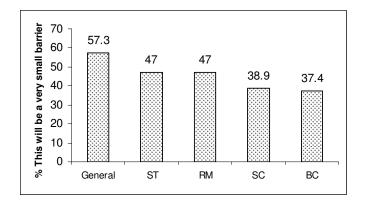
Three barrier themes of Family Situation, Personal Capacity and Community Perception were studied further to understand the nature of barrier perceptions in each of the caste groups (Tables 45 and 46).

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.

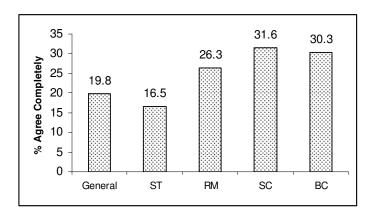
A similar trend is also seen on the *Fatalism* sub-scale. The General group records lower scores in this scale in comparison to the SC, BC and RM groups. This could indicate a higher degree of defeatist and pessimistic attitudes to career preparation amongst the SC, BC and RM groups. As an illustration, 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. Girl, 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, 17 years, 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.

-=-=-=



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.



5.46 5.6 (1.27)5.4 Mean Score (SD) 5.2 4.86 5 (1.69)4.65 4.8 (1.73)4.6 4.4 4.2 Readiness Lack of info. Inconsistent Info. **Decision Making Difficulties**

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

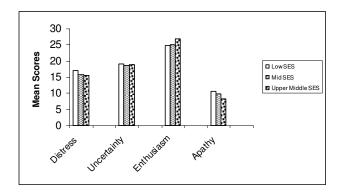
As shown in Figure 19 the feeling theme that attracts the highest score is Enthusiasm (Mean: 25.83; SD: 6.13).

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.

90 80 - 77.7

70 - 70 - 72

63.3

63.3

63.7

10 Opportunities Absent

Composition of the Career Alternatives

Self Understanding Understanding the World of Work Alternatives

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.

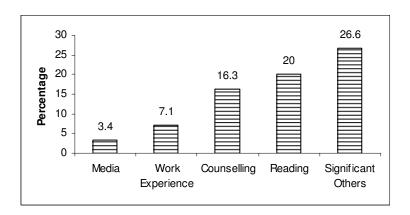


Figure 12: Type of opportunities available for career preparation



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 focusing 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

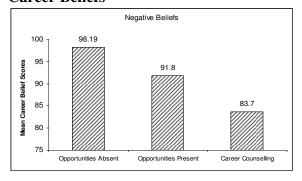
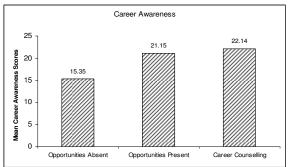


Figure 14: Opportunities and Career Awareness





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

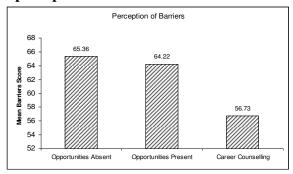
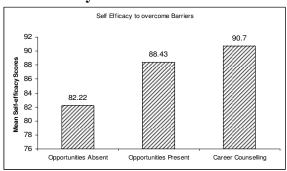


Figure 16: Opportunities and self-efficacy to overcome barriers

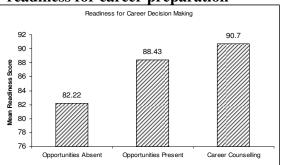


Figures 15 and 16 above indicate that *perception of barriers* to career development is lower in situations where opportunities for career preparation have been possible. Similarly, participants who have had such opportunities show higher *self-efficacy* to overcome barriers. Where career counselling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

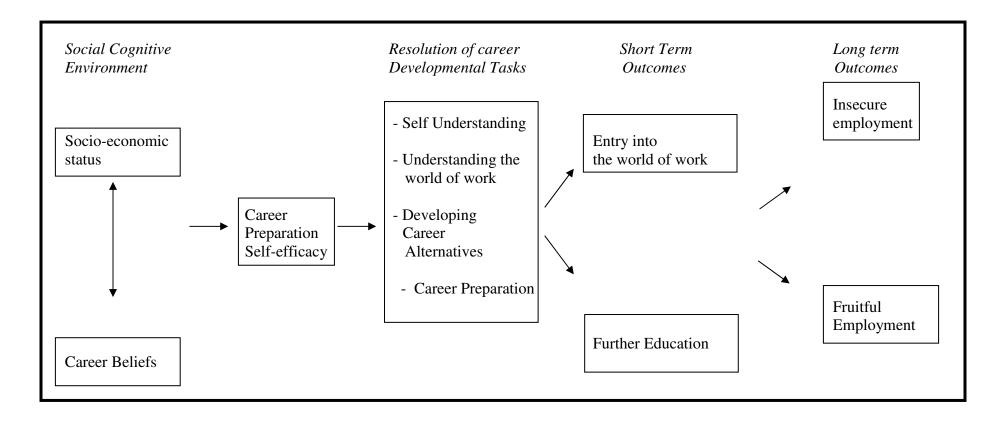
At the end of high school Swamy would be confronted with the career developmental task of seeking immediate employment or going on for further education. Swamy is likely to have developed a higher self-efficacy for pursuing further education and it is most likely that he will persist along this path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

=-=-=-



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 Premii

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.

-=-=-=-



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:

A 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 participation 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-Sadigeen:

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*.

-=-=-



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).

-==-=-



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 imme	ediately if j	iob 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	1	15.2	16.4	36.4
approval ^d	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 jo	ob and stu	dy 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	1	17.2	22.5	32.4
approval ^d	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)
	studies ful	l time (Full Time Stu		
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	1	6.4	5.8	2.3
approval ^d	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 (World	k Immediately)		3 1 \
	- 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	dies)		
	- 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 So	cores				
	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 Situatio	n and Career F	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 Capac	city 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 (Cont'd)

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				1.000
approval				

^{**} 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

			Science			Arts			Commerce			Vocational	
	Rating	Low	Middle	Upper	Low	Middle	Upper	Low	Middle	Upper	Low SES	Middle	Upper
		SES	SES	Middle	SES	SES	Middle	SES	SES	Middle		SES	Middle
				SES			SES			SES			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	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
efficacy b	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	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
approval ^d	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,

 $^{4 = \}text{high support}$, 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.	Subject Option	Low SES	Middle SES	Upper Middle
No.		group	group	SES group
		(N = 1316)	(N = 1233)	(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	1	29.7	28.3	35.5	26.8	21.8	31.0	30.5	38.9	23.9	17.1
Accountant	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	1	14.7	17.4	17.7	14.1	8.3	19.1	21.0	10.3	14.4	18.8
Scientist	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	1	23.8	38.0	40.8	30.9	20.4	36.8	51.0	23.0	19.6	33.3
Scientist	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.

WORCC-IRS- Draft Report



Table 24: Correlations* between Mean Interest ratings on 28 Careers and five Personal Interest Themes

Prestige	Occupation	Personal Interest Theme						
Rank		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)		
	Private aided (1126)	9.99 (8.34)	321.87	.000
	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)		
Std. 12 a (1254)	15.32 (12.26)	36.96	.000
Vocational – 2 nd 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 (Cont'd)

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	
	medium	27.8	25.5	22.54
	high	30.5	37.7	
Analytical-	low	30.3	38.9	
Logical	medium	29.3	25.5	30.65
	high	40.4	35.6	-
Spatial	low	41.5	29.2	
	medium	25.6	27.5	69.46
	high	32.9	43.4	-
Personal	low	36.9	31.1	
	medium	36.7	38.1	16.75
	high	26.3	30.9	-
Physical -	low	34.0	46.7	
Mechanical	medium	22.6	23.3	84.27
	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

	Means (SD)				
Interest	Boys	Girls			
Theme	(2036)	(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*

	Mean (SD)						
Gender	Linguistic	Analytical-	Spatial	Personal	Physical-		
D (706)	16.25 (4.00)		16.06 (4.97)	17.62 (4.62)	Mechanical		
Boys (796)	16.33 (4.09)	16.08 (4.94)	16.06 (4.87)	17.03 (4.02)	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)		
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)		
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)		
	Boys (796) Girls (520) Boys (598) Girls (635) Boys (642)	Boys (796) 16.35 (4.09) Girls (520) 17.04 (4.03) Boys (598) 15.98 (3.93) Girls (635) 16.09 (4.18) Boys (642) 13.89 (4.26)	Boys (796) 16.35 (4.09) 16.08 (4.94) Girls (520) 17.04 (4.03) 16.86 (5.14) Boys (598) 15.98 (3.93) 15.98 (4.71) Girls (635) 16.09 (4.18) 15.19 (5.18) Boys (642) 13.89 (4.26) 15.79 (5.04)	Gender Linguistic Analytical-Logical Spatial Boys (796) 16.35 (4.09) 16.08 (4.94) 16.06 (4.87) Girls (520) 17.04 (4.03) 16.86 (5.14) 17.43 (4.99) Boys (598) 15.98 (3.93) 15.98 (4.71) 16.29 (4.81) Girls (635) 16.09 (4.18) 15.19 (5.18) 17.12 (4.91) Boys (642) 13.89 (4.26) 15.79 (5.04) 14.79 (5.06)	Gender Linguistic Analytical-Logical Spatial Personal Boys (796) 16.35 (4.09) 16.08 (4.94) 16.06 (4.87) 17.63 (4.62) Girls (520) 17.04 (4.03) 16.86 (5.14) 17.43 (4.99) 18.24 (4.76) Boys (598) 15.98 (3.93) 15.98 (4.71) 16.29 (4.81) 17.17 (4.59) Girls (635) 16.09 (4.18) 15.19 (5.18) 17.12 (4.91) 17.45 (4.88) Boys (642) 13.89 (4.26) 15.79 (5.04) 14.79 (5.06) 15.97 (4.89)		

^{*} 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 %)

		Inter	·est a	Parent A	Approval ^b
Career Path	Rating	Boys (N = 2036)	Girls (N = 1763)	Boys (N = 2036)	Girls (N = 1763)
	1	23.2	22.2	23.5	21.4
Work	2	13.1	12.6	12.0	11.3
Immediately	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
	1	25.1	25.7	24.8	23.0
Part Time job	2	19.1	19.2	18.8	19.2
and studies	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
	1	8.7	7.6	5.6	3.9
Full Time	2	8.9	8.3	7.6	7.8
Studies	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

	Interd	est	Parental Approval		
Career Path	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 %)

		Low	SES	Middle	e SES	Upper M	iddle SES
Career Path	Rating ^a	Boys (N = 797)	Girls (N = 519)	Boys (N = 597)	Girls (N = 636)	Boys (N = 642)	Girls (N =608)
	1	15.7	15.6	17.9	14.0	37.4	36.3
Work	2	9.9	9.4	13.1	10.8	17.0	17.3
Immediately	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
	1	18.2	17.3	25.5	25.8	33.5	32.7
Part Time job	2	17.7	15.0	18.1	16.4	21.8	25.7
and studies	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
	1	9.5	6.9	7.0	7.7	9.2	8.1
Full Time Studies	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 %)

		Inter	est ^a		Approval ^b
Career Path	Rating	Boys (N = 2036)	Girls (N = 1763)	Boys (N = 2036)	Girls (N = 1763)
	1	24.2	26.5	13.9	12.1
Science	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
	1	48.3	38.9	33.1	24.1
Arts	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
	1	38.2	31.4	25.8	18.1
Commerce	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
	1	22.9	19.9	20.2	15.0
Vocational	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

	Inter	est	Parental Approval		
Subject Option	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 S	ES	Middle	e SES	Upper I SE	
	S	Boys (N = 797)	Girls (N = 519)	Boys (N = 597)	Girls (N = 636)	Boys (N = 642)	Girls (N =608)
	1	25.5	26.2	26.6	25.8	20.4	27.5
Science	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
	1	38.9	27.9	46.4	42.1	61.7	44.7
Arts	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
	1	37.5	30.1	34.8	31.8	42.1	32.2
Commerce	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
	1	14.9	14.1	18.4	18.6	36.9	26.3
Vocational	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	Boys (in %)	Girls (in %)	Chi Squares*
	Level			
Perception of Career	low	31.1	37.2	
Barrier	medium	36.3	32.8	15.812
- Consolidated Score	high	32.6	29.9	P > .001
Family Situation	low	35.5	37.1	3.566
Sub-scale	medium	34.1	31.3	not significant
	high	30.4	31.7	
Personal Capacity	low	36.1	41.1	14.477
Sub-scale	medium	34.1	34.1	p = .001
	high	29.7	24.8	_

Table 41: Descriptive Summaries of boys and girls on perception of career barriers

	Mear	ns (SD)
Career Belief Themes	Boys	Girls
	(2036)	(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

	Means	(SD)
Career Barrier Theme	Boys	Girls
	(2036)	(1763)
Career Belief Pattern	99.19 (28.61)	92.16 (29.81)
- Consolidated Score		
Self Worth	6.07 (3.54)	5.67 (3.48)
Sub-scale		
Fatalistic thinking	15.23 (5.39)	15.27 (5.65)
Sub-scale		
Proficiencies	19.88 (8.94)	18.35 (9.04)
Sub-scale		
Persistence	9.67 (4.36)	9.23 (4.29)
Sub-scale		

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 (Cont'd)

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)
Cons	olidated score on pe	, ,			1 1	(= (= (= (= (= (= (= (= (= (=
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%
Fami	ily Situation as a bar	rier to career	r preparatio	on		
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%
Perso	onal Capacity as a be	arrier to care	er preparat	ion		
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%
Com	munity Perception a	s a barrier to	career prej	paration		
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.	Level of	General	ST	SC	BC	RM		
No.	Negativity	group (N = 1220)	group (N = 279)	group (N = 393)	group (N = 657)	group (N = 266)		
Cons	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%		
Profi	ciency beliefs about	career prepa	ration					
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%		
Cont	rol and Self directio	n beliefs abou	it career pr	eparation				
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%		
Fatal	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.	Career Belief Theme	General	ST group	SC group	BC group	RM group
No.	(Max Score)	group				
1.	Career Belief Pattern	91.89	91.48 (27.84)	104.15 (28.68)	105.67 (28.59)	99.92 (27.06)
	Consolidated Score (224)	(28.75)				
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 (Cont'd)

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

	Mean	F Ratio	Significance					
Class Level	(SD)	(2, 3796)	level					
Readiness for career decision ma	Readiness for career decision making (Max score = 90)							
Std. 10	5.51 (1.27)	2.22	Not					
Std. 12 ^a	5.41 (1.25)		significant					
Vocational – 2 nd yr.	5.44 (1.29)							
Lack of information for the care	er decision maki	ng process (Max	score = 108)					
Std. 10	4.90 (1.6)							
Std. 12	4.80 (1.74)	1.54	Not					
Vocational – 2 nd yr.	4.83 (1.78)		significant					
Inconsistent information for care	eer decision mak	ing (Max score =	90)					
Std. 10	4.74 (1.72)							
Std. 12	4.57 (1.79)	6.40	.002					
Vocational – 2 nd 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

G 1 1 m	Mean	F Ratio	Significance			
School Type	(SD)	(2,3796)	level			
Readiness for career decision making (Max score = 90)						
Government Schools	5.60 (1.29)					
Private Aided Schools	5.63 (1.24)	64.05	.000			
Private Unaided Schools	5.10 (1.19)					
Lack of information for the care	er decision makii	ng process (Max	c score = 108)			
Government Schools	4.88 (1.71)					
Private Aided Schools	5.08 (1.63)	23.79	.000			
Private Unaided Schools	4.59 (1.68)					
Inconsistent information for care	Inconsistent information for career decision making (Max score = 90)					
Government Schools	4.74 (1.77)					
Private Aided Schools	4.86 (1.71)	35.60	.000			
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)	-1
low SES	5.64 (1.29)		
middle SES	5.62 (1.23)	67.56	.000
upper middle SES	5.13 (1.21)		
Lack of information for the c	areer decision makii	ng process (Max	score = 108)
low SES	5.07 (1.65)		
middle SES	4.97 (1.66)	38.83	.000
upper middle SES	4.52 (1.72)		
Inconsistent information for	career decision mak	ing (Max score =	= 90)
low SES	5.10 (1.72)		
middle SES	4.65 (1.71)	59.19	.000
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	Level of Difficulty	Gender (in %)		Chi Sqaure (df = 2)	Significance level
making theme		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	low	14.1	16.6	16.072	.000
information	medium	77.1	71.6		
	significant	8.8	11.9		
Inconsistent	low	16.3	21.4	18.031	.000
information	medium	76.0	70.2	1	
	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	Level of Difficulty	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		Chi Sqaure (df = 2)	Significance level
making theme		Boys	Girls	_ (
Readiness for co	areer decision n	naking (Max so	core = 90)	l	
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	low	4.0	4.4	.499	Not significant
SES	medium	89.7	88.5		
	significant	6.2	7.1		
Lack of informa	ition for the ca	reer decision n	naking process	$(Max\ score = 10)$	08)
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	low	21.3	20.6	.115	Not significant
SES	medium	71.7	72.4		
	significant	7.0	7.1		
Inconsistent inf	ormation for c	areer decision	making (Max s	core = 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	7	
Upper middle	low	25.5	25.5	.156	Not significant
SES	medium	68.7	69.2	7	
	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	F Ratio	Significance		
	(SD)	(2, 3796)	level		
Enthusiasm related to career preparation (Max. score: 35)					
low SES	24.70 (6.19)				
middle SES	25.20 (6.36)	20.38	.000		
upper middle SES	27.20 (5.74)				
Distress related to career prepar	ration (Max. Sc	ore: 35)			
low SES	16.94 (6.63)				
middle SES	15.65 (6.53)	6.50	.002		
upper middle SES	15.44 (6.86)				
Uncertainty related to career preparation (Max. Score: 35)					
low SES	19.02 (6.26)		not		
middle SES	18.68 (5.90)	.315	significant		
upper middle SES	18.95 (6.23)				
Apathy related to career preparation (Max. Score: 21)					
Low SES	10.70 (4.20)				
middle SES	9.89 (4.12)	46.01	.000		
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
uncinc		Boys	Girls		l
Enthusiasm	low	39.1	31.4	9.753	.008
	medium	30.3	36.5		
	significant	30.6	32.1	1	
Distress	low	35.0	31.8	4.897	not significant
	medium	37.5	35.2		
	significant	27.4	33.0	7	
Uncertainty	low	83.3	79.4	6.430	not significant
	medium	9.9	14.4	1	
	significant	6.8	6.2	7	
Apathy	low	36.1	36.3	.328	not significant
	medium	32.3	31.0	7	
	significant	31.5	32.7	1	

-=-=-=



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 &	Shimoga
	English)	_
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

