Career Preparation, Career Beliefs, and Academic Achievement Motivation among High School Students in Meghalaya

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Abstract
This survey, conducted in the East Khasi Hills district of Meghalaya in North East India, explored the career preparation status, career belief patterns, and academic achievement motivation level of high school students in rural and urban areas. The sample comprised a total of 492 boys and girls. Standardised questionnaires and rating scales were used along with open-ended questions. The findings show that high school students in this region of Meghalaya obtained the lowest scores as per the norms of the scales used to assess these constructs. Possible underlying reasons for this level of performance are discussed and an attempt is made to articulate factors that could influence the career development of high school students in this region.

Keywords: academic achievement motivation, career beliefs, career preparation, high school, Meghalaya

Career counselling as an emerging service in India has grown over the recent past, but continues to remain in its infancy. While the government of Meghalaya considers Shillong (the capital of Meghalaya) as a fast emerging education hub for the entire North East region of India (Department of Education, n.d.), factors related to high school students’ engagement with further and higher education remain unexplored both in the rural and urban areas of the state. A review of the literature indicates that although some surveys and related research have been executed among young people from various states of the country, studies that examine the career preparation status, career belief patterns, and academic achievement motivation of high school students from the state of Meghalaya have not yet been conducted. This paper reports findings from a survey that examined these variables.

Background to Meghalaya
Meghalaya is located in North East India. Agriculture and industries, including coal mining, real estate, and tourism, are the most active sectors (NEDFi Databank, n.d.). The region is home to several indigenous groups who are recognised by the government of India as scheduled tribes (International Work Group for Indigenous Affairs, n.d.). The people of this state commonly follow the matrilineal form of society (Laloo, 2011). Society is organised into clans. Given the matrilineal nature of society, the last
female child is, traditionally, expected to look after the parents and hence will inherit the properties (Sangma, 2006). This practice may no longer be prominent among many urban families but is still practiced in the rural areas.

For this study, the East Khasi Hill District of Meghalaya has been selected. Shillong, which is the capital of the state, is located in this district. It is the centre for commerce and both local language and English education in the State. Since the survey tools were available only in English, this district was also preferred for the study because of the relatively higher English language proficiency among high school students here.

Educational Issues

Meghalaya has the highest drop-out rate at the middle, higher, and higher secondary levels among the states of the North East region despite starting off with the lowest drop-out rate at the primary level (Lyndem & Kumar De, 2004). Low interest in further education amongst both children and parents, along with an unfriendly school atmosphere and lack of infrastructure could be reasons contributing to these trends. In addition, engaging in family-related work such as farming and taking care of younger siblings instead of going to school is a common social practice in the rural areas.

Of particular relevance to this paper is the increasing level of unemployment in Shillong and the towns in the East Khasi Hills. We also observed the same demotivation in 2009-2010 during career counselling sessions with grade 9-10 students in several schools. Several students expressed their unwillingness to pursue higher studies since their own elder siblings, although highly educated, were currently unemployed. A similar finding is noted in a 1999-2000 survey by the National Sample Survey Organisation (Ministry of Labour and Employment, 2009-2010) which found a prevailing unemployment rate of 6.4% and 7.6% in the rural and urban areas of Meghalaya respectively. Furthermore, Sungoh (1989), in a study in the East Khasi Hills, found that students felt that the courses offered by institutions in Meghalaya were suitable only for government jobs. Hence migration is high, with students from Meghalaya leaving for cities elsewhere in India to pursue higher education and a career.

Social Issues

Other social issues in Meghalaya may be found relevant in understanding the background of the sample. Years of insurgency have led to concerns about security because of kidnapping and extortion. Ethnic tension is also simmering between illegal immigrants from neighbouring areas and local people. Large scale selling of drugs such as ganja, cocaine, and opium, and the smuggling of weapons, narcotics, and goods are also major problems in the state. Another issue is corruption and low infrastructure development in the state (Meghalaya, n.d.). Meghalaya has relatively poor road and communication networks.

Key Concepts and Identification of Variables

We identified the variables we wished to include in this study through a brief review of the literature and our field experiences in the form of career counselling. The following constructs emerged as being potentially important to better understand career development orientations in Meghalaya.

Career Preparation Status

The background provided in the earlier paragraphs points to the possibility that high school students in Meghalaya may not be adequately prepared with the skills necessary to make effective career decisions. Of interest to this study, therefore, is the construct of career preparation status. This construct describes the individual’s readiness to make career decisions (Arulmani, 2006a) and the degree of decidedness about
one’s career plan (Kleiman & Gati, 2004). It has consistently been noted that the state of readiness to make career decisions is an important predictor of the success of career guidance interventions (Arulmani & Nag-Arulmani, 2006). Gaining insights into the patterns of readiness for making important career decisions amongst high school students would be helpful for developing interventions that would help them with these decisions.

**Academic Achievement Motivation**

Also of interest for career guidance in Meghalaya is the construct of academic achievement motivation. It has been argued that the attitude of an individual towards academic tasks may influence his/her motivation to accomplish that task (Meece, Anderman & Anderman, 2005). As highlighted earlier, career choosers in Meghalaya, show an increasing disenchantment with higher or further education. Since this can have serious repercussions on career development, academic achievement motivation has been included in this survey.

**Career Beliefs**

Career beliefs are opinions and attitudes that one holds in relation to careers and career development that may influence career decisions (Krumboltz, 1994). Arulmani (2011) has shown that career beliefs play a significant role in career decision making particularly in collectivist cultures. As discussed already, social organisation in Meghalaya is strongly collectivistic. The possibility that social cognitions in the form of career beliefs play an important role in orientations to career development is strong. Hence career beliefs were selected as another variable to be examined in this survey.

The literature indicates that three factors could influence career preparation status, academic achievement motivation, and career belief patterns. These are gender, socioeconomic status, and rural versus urban locations. For example, studying the career orientations of Indian adolescents, Akhilesh (1991) found that differences in the career choice patterns of these adolescents were mediated by gender and SES. Arulmani, Van Laar, and Easton (2003) found that SES strongly influenced career development orientations amongst Indian high school students. Examining the phenomenon of rural-urban migration in India, Kalyanram, Gopalan, and Kartik (2014), point to the manner in which beliefs about a “better life” in the city influence rural young people’s orientation to their career development. Research from other countries also point to gender, socioeconomic status, and rural-versus-urban locations as having a strong influence. Studies of Canadian, Australian and other non-Indian high school students for example, indicate that there seem to be gender differences in career decisions and career maturity (Bardick, Bernes, & Magnusson, 2006), career goals (Gianakos, 2001), level of career maturity (Creed & Patton, 2003), educational aspiration and academic achievement (Elizabeth, 2000), with girls showing higher levels of maturity and educational aspiration than boys. Socioeconomic status (SES) also seems to have a relationship with achievement motivation with lower SES groups showing lower motivational levels (e.g., Borkowski & Thorpe, 1994).

Based on these indications we selected gender, socioeconomic status, and rural-versus-urban locations as the independent variables for this study and career preparation status, academic achievement motivation, and career belief patterns as the dependant variables.

**Method**

**Sampling**

The following steps were taken to draw a stratified random sample of rural and urban boys and girls in Class 10 from varied socioeconomic status backgrounds. An exhaustive list of schools in the East
Khasi Hills district was obtained from the office of the Inspector of Schools, Government of Meghalaya. The total number of schools was found to be 256. This was named as List One and taken to be indicative of the population of schools in the targeted region. Based on List One, a second list of schools was compiled using the following exclusion and inclusion criteria:

1. All government-aided schools were included, with a view to maintaining consistency related to curriculum and school atmosphere.
2. A school was excluded if the Standard 10 students had already received some form of formal career guidance.
3. Schools with less than 10 students in a class were not included.
4. Poorly managed schools were not included.

A total of 59 schools emerged as potentially eligible. This list was named as List Two and taken as the population (i.e., sampling frame) from which the sample for the study was drawn. Schools in this list were categorised as urban or rural based on their location. Since the exact number of students in each school was not available at the beginning of the study, the size of the population was calculated based on an assumed average of 40 students per school. Keeping the confidence interval of 2.82 and a confidence level of 95%, 30% of the population was calculated to compose the sample. This means that the researcher can be 95% sure that 28–32% of the population can adequately represent the opinions of the students. The derived final sample size, therefore, was calculated to be 406 and 392 individuals from urban and rural locations respectively (N = 798).

Stratified random sampling by the lottery method was used to select schools and shortlisted schools were contacted to obtain permission. The intention was to include all schools that were identified from the random sampling procedure. However, not all schools that were identified using random sampling wished to participate in the survey. In some cases, some schools cancelled their participation after having initially agreed. In order to avoid bias in selection, whenever a school was dropped, the school name was returned to the lottery box and another school name was randomly drawn. Only the protocols of the 82% of students who were present were included for analysis. This is mainly because of incomplete protocols.

The age of the high school students ranged from 13 years to 19 years with a mean age of 15.9 (SD = 1.35). Table 1 provides further details of the characteristics of the sample in terms of location (rural-urban), gender, age, and socioeconomic status.

Survey Tools

Socioeconomic Status Questionnaire. The Socioeconomic Status Questionnaire (SESQ) (Arulmani, 2006b) views socioeconomic status (SES) as a complex concept and departs from earlier definitions that were restricted to income levels. The SESQ obtains socioeconomic status information along multiple dimensions: parents' education, parents' occupation, material possessions, family income per month, type of housing, access to electricity and water, and reading material available in the home. Each of these categories is given a weighted score and summated to obtain a total SES score. The minimum obtainable score on the SESQ is 23 and the maximum is 240.

Psychometric properties. Standardised on an Indian sample of 6,530 males and females from 13 different rural and urban regions of India, the SESQ provides norms that allow the classification of SESQ scores into five SES levels: low, lower middle, middle, upper middle, and high SES. The test manual reports a positive, statistically significant correlation of .84 between external criterion estimates and respondents' SESQ scores. A three month test-retest reliability showed a reliability coefficient of .91.
Career Preparation Status Questionnaire (CPSQ). The CPSQ (Arulmani, 2006a) measures the student’s level of readiness to make career decisions. The CPSQ gathers information related to five categories: general orientation, self-understanding, understanding the world of work, career alternatives, and career preparation. The minimum obtainable score is 0 and maximum is 86.

Psychometric properties. Standardised on an Indian sample of 6,530 males and females from 13 different rural and urban regions of India, the CPSQ provides norms that allow classification of career preparation status into five levels: low, low average, average, high average, and high. A positive, statistically significant correlation of .84 between external criterion estimates and respondents’ CPSQ scores has been reported. The three month test-retest reliability yielded a reliability coefficient of .92.

Academic Achievement Motivation Test. The Academic Achievement Motivation Scale (AAM) has been designed to identify levels of motivation in relation to academic activities (Sharma, 2005). The minimum obtainable score is 0 and the maximum obtainable score is 38.

Psychometric properties. Standardised on an Indian sample of 100 males and females from schools in Patiala, India, the AAM Scale provides norms for the three levels of motivation: low, average, and high. Sharma (2005) has reported a positive, statistically significant correlation of .69 between external criterion estimates and respondents’ AAM scores. A three month test-retest reliability showed a reliability coefficient of .79 for boys and .80 for girls.

Career Belief Patterns Scale (CBPS). The CBPS (Arulmani, 2011) uses vignettes reflecting real life career development situations and aims at identifying the pattern of career beliefs across nine specific aspects: caste, control and self-direction, culture and norms, fatalism, gender, persistence, prestige and social status, proficiency, and self-worth. Separate forms are available for boys and girls. Response choices are structured on a seven-point scale with 1 anchored to the semantic label I would not agree with this at all and 7 anchored to the label I agree completely. Interim numbers from 2 to 6 are linked to semantic labels that reflect increasingly higher negativity in career beliefs. Therefore, higher scores on this scale reflect higher levels of negativity toward career development. The minimum obtainable score is 40 and maximum obtainable score is 280.

Psychometric properties. The Cronbach’s alpha coefficient was used to estimate the internal reliability of the sub-scales. The obtained values indicated that the internal consistency of the scales was above .6 for three scales and above .4 for the remaining scales. Intercorrelations between the scales were moderate, ranging between .20 and .55 and significant at the .01 level. The CBPS has a six-week test–retest reliability of .76. It has norms for interpreting the scores of Indian males and females in the age range of 13-to-22 years.

Findings

The high school students’ scores on the CPSQ, CBPS, and AAM Scale are shown in Table 2. As per the norms of the CPSQ, scores below 19 signify the lowest level of preparedness to effectively answer questions related to career choice. As indicated in Table 2, the mean score of 18.27 on the CPSQ points to the strong possibility that the high school students in Meghalaya are not sufficiently ready to make coherent career decisions. The norms for the CBPS place scores above 125 in the category of high negativity in career beliefs. The mean score of 129.96 on the CBPS indicates that these high school students had strongly negative thoughts about career preparation and career development. According to the norms of the AAM Scale,
The mean score of 23.14 on the AAM Scale indicates that these students' motivation for engaging with academics and higher education is low. In summary, as per the norms of the scales used in this survey, the high school students in Meghalaya show a low career preparation status, high negativity in career beliefs, and low academic motivation. Comparisons of subgroups revealed the following:

### Career Preparation Status

The Meghalaya high school students’ performance on the CPSQ was examined through a series of 2 X 2 analyses of variance conducted for location (urban, rural) and gender (male, female). On the CPSQ, the main effect of location was significant, \((F [1,488] = 6.354, p < .05)\) but the main effect of gender was not \((F [1, 488] = .231, ns)\). There was a significant interaction effect between location and gender \((F [1,488] = 3.946, p < .05)\). The career preparation status of rural students (although low going by the norms of the scale) was higher than that of urban students, and the gender differences in each location were distinct. In the rural areas, boys had significantly higher preparation scores than girls, and in the urban areas, it was the reverse. However, the magnitude of these differences was small because overall, the career preparation status of Meghalaya high school students was low (see Table 2).

### Career Belief Patterns

On the CBPS, the main effects of location \((F [1,488] = 6.718, p = .01)\) and gender \((F [1,488] = 4.946, p < .05)\) were significant, as was the interaction effect between location and gender \((F [1,488] = 5.147, p < .05)\). A review of the group means shows that the rural group was more negative in career beliefs than the urban group, and within each location the gender patterns were different. In rural areas the girls were more negative than the boys, and in urban areas the boys were more negative than the girls. However, the stark difference was in the girls' negativity depending on whether they lived in the rural area or urban. Whereas, such a stark difference was not seen for boys. Once again, the magnitude of all statistical differences among groups and subgroups was small because this sample showed high negativity in their career beliefs (refer to Table 2).

### Academic Achievement Motivation

On the AAM Scale the main effects of location \((F [1,488] = 36.522, p < .001)\) and gender \((F [1,488] = 9.230, p < .01)\) were significant, but no interaction effect between location and gender \((F [1,488] = .327, ns)\) was found. Higher achievement
Table 2

<table>
<thead>
<tr>
<th>Status of the High School Students from the East Khasi Hills region on the Dependant Variables by Location and Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPSQ Score (SD) % (SD) Interpretation as per norms</strong></td>
</tr>
<tr>
<td>Full Sample (N = 492)</td>
</tr>
<tr>
<td>18.27 (9.6)</td>
</tr>
<tr>
<td>21.24 (11.16)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Boys (N = 241)</td>
</tr>
<tr>
<td>18.40 (9.41)</td>
</tr>
<tr>
<td>21.39 (10.94)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Girls (N = 251)</td>
</tr>
<tr>
<td>18.14 (9.79)</td>
</tr>
<tr>
<td>21.09 (11.39)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Rural Sample (N = 201)</td>
</tr>
<tr>
<td>19.59 (8.97)</td>
</tr>
<tr>
<td>22.77 (10.42)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Urban Sample (N = 291)</td>
</tr>
<tr>
<td>17.36 (9.92)</td>
</tr>
<tr>
<td>20.18 (11.54)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Rural Males (107)</td>
</tr>
<tr>
<td>20.60 (8.91)</td>
</tr>
<tr>
<td>23.95 (10.36)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Rural Females (94)</td>
</tr>
<tr>
<td>18.44 (8.93)</td>
</tr>
<tr>
<td>21.43 (10.39)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Urban Males (134)</td>
</tr>
<tr>
<td>16.65 (9.45)</td>
</tr>
<tr>
<td>19.35 (10.99)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
<tr>
<td>Urban Females (157)</td>
</tr>
<tr>
<td>17.97 (10.30)</td>
</tr>
<tr>
<td>20.89 (11.97)</td>
</tr>
<tr>
<td>Low Preparation Status</td>
</tr>
</tbody>
</table>

Note. CPSQ = Career Preparation Status Questionnaire. Theoretical Range = 0 - 86. CBPS = Career Belief Patterns Scale. Theoretical Range = 40 - 280. High scores indicate high negativity. AAM = Academic Achievement Motivation Score. Theoretical Range = 0 - 38.
motivation was seen among urban high school students in Meghalaya, and irrespective of location, among girls. To reiterate, the magnitude of statistically significant differences among groups was very modest because this sample had low academic motivation.

Summary

This group of high school students from the East Khasi Hills region had low career preparation status, high negativity in career beliefs, and low academic motivation. Low magnitude statistically significant findings also indicated the following: The high school students in rural East Khasi Hills had significantly higher career preparation status, greater negativity of career beliefs, and lower achievement motivation than their urban counterparts. High school girls in urban areas of the East Khasi Hills region had significantly higher career preparation status and greater negativity of career beliefs than boys in urban areas. Both rural and urban residing high school girls had higher achievement motivation than boys in their region.

Discussion

Career Preparation Status

As discussed at the beginning of this paper, career preparation status reflects the individual’s readiness to make career decisions. The students in this study in the East Khasi Hills District of Meghalaya fall in the lowest category of career preparation status, as per the norms of the scale used. This has important implications, at one level for the development of career guidance programmes but at another, deeper level, for a better understanding of the processes that underlie career development in Meghalaya. The trend in this data that the career preparation status of rural students was higher than urban students is noteworthy. This data also indicates that gender differences in each location were distinct. Here again, rural boys had significantly higher preparation scores than girls. In the urban areas, girls’ preparation status was higher than that of boys. The data at hand is not sufficient to explain this finding. However, this finding could be of importance since it does not concur with expected trends. By and large, existing reports in the literature point to rural youth being at a disadvantage when compared to their urban counterparts and boys being more career-oriented than girls. The finding from this study is that rural boys and urban girls are better prepared for career development: a phenomenon that deserves further investigation particularly since this survey was conducted in a matrilineal society, where the rate of rural-urban migration is increasing.

Career Beliefs and Academic Achievement Motivation

Career beliefs and academic achievement are discussed together in this section since related trends are seen in the data. It is interesting to note that although the career preparation status of the rural group in this sample was higher than the urban group, the rural group’s career beliefs are more negative than the urban group. Further, in rural areas, the girls’ career beliefs were more negative than the boys. In urban areas, boys’ career beliefs were more negative than their female counterparts. Shifting to the theme of academic motivation, urban high school students in the East Khasi Hills region show higher scores on this scale. The possibility of a link between negativity in career beliefs and academic achievement motivation is worthy of further investigation, keeping the rural-urban divide in view. The desire of rural youth to migrate to cities is well known. However, career-success in an urban environment is largely dependent upon academic success. The lower scores seen in this data on academic motivation for rural youth, may be indicative of how daunting it may be for them to engage with academic tasks in order to find career-success in an urban environment. The data at hand is not sufficient to draw this
Conclusion

While considering the possibilities discussed above, the careers practitioner/researcher must keep in view the most salient finding of this survey: high school students from the East Khasi Hills region of Meghalaya fall in the lowest category of career preparedness, had high levels of negativity in career beliefs, and low levels of academic achievement motivation. Critical points that the careers professional, in Meghalaya, needs to keep in view are the following:

- Career guidance interventions are likely to be influenced by individuals’ negative career beliefs and poor academic motivation.
- Rural young people’s higher career preparation status must be recognised alongside their low academic achievement motivation. The practical implications of the relevance of career-success based on academic performance must be reconsidered. Career-success, without academic success as it is commonly understood, may be a career guidance objective for rural youth. It may be possible for example, for a young person to fruitfully pursue a career outside formal academic pathways.
- The differential impact of matrilinearity and collectivist social organisation on the career orientations of boys and girls must be considered.

We conclude by quoting some of the students in the survey.

One of them said, “Sometimes, I think studying is of no use, because I have elder brothers who have completed their degrees but are not working”. Another commented, “I can become successful, but my parents only know about farming. I do not like to become a farmer. I want to do better”.

These remarks point to importance of career practitioners going beyond merely providing urban-centric career information. It is vital that cultural elements and underlying career beliefs in the minds of these young people are considered.

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