

MAIN FACTORS ASSOCIATED WITH COLLEGE MAJOR CHOICES OF THE UNDERGRADUATE STUDENTS IN BANGLADESH

With a population of 130 million, Bangladesh is one of the world's most highly populated countries (Japan Bank for International Cooperation [JBIC], 2002). Unlike any developing nations, Bangladesh has to depend on its human resources for progress and prosperity, as it has very limited natural resources. Thus, education is seen as an instrument for achieving social and economic goals (JBIC). However, many problems exist in the education sector of Bangladesh, one of which is equity in access, especially to higher education. Although primary and secondary education has improved a lot from the past, inequity in access to higher education continues to be a problem (JBIC). Moreover, previous studies (Baden, Green, Goetz, & Guhathakurta, 1994; Canadian International Development Agency [CIDA], 2001; JBIC; United Nations Educational, Scientific, & Cultural Organization [UNESCO], 2004) identified problems, such as lower enrollment rate of students, stereotyped choices of majors, and limited participation of females in higher education in Bangladesh. These studies (Baden et al.; CIDA; JBIC; UNESCO) have concluded that the educational and career decisions Bangladeshi students make regarding higher education, including decisions to pursue college education and to select their majors, impact their positions in the labor-force, as well as their socio-economic status later in their lives. Although many problems have been identified in higher education in Bangladesh, these studies (Baden et al.; CIDA; JBIC; UNESCO) fail to identify possible factors associated with the problems.

The present study examines some of the potential factors associated with or influencing Bangladeshi undergraduate students' selections of majors: *sources of information* as well as *influence* in selecting majors, *students' personal reasons* for selecting majors, *parents' educational attainments*, *preference between family and career roles*, and *perceptions about gender-appropriateness of majors*. The population for this study was the undergraduate students who have already declared their majors in four universities in Bangladesh: Independent University, Bangladesh (IUB), Dhaka University (DU), American International University-Bangladesh (AIUB), and International Islamic University (IIUC). IUB, DU, and AIUB are located in Dhaka and IIUC is in Chittagong. Both the units of analysis and the units of observation are the individual undergraduate students of these universities.

Quota sampling method was used for sampling, and so a quota matrix was constructed. Because one of the objectives of this study was to examine the relationships between gender and different perceptions of the respondents regarding their selections of majors, an equal number of male and female students across all majors had to be selected. Thus, the quota matrix was constructed with *gender* in the column and *major* in the row. The majors were listed for each of the four universities.

Two of the factors examined in this study are the *sources of information* as well as *influence* for students in selecting majors. Many Studies (Abouchdid & Nasser, 1999; Paglis, Green, & Bauer, 2006; Ryan, Adams, Gullotta, Weissberg, & Hampton, 1995; Sukovieff, 1989; Umbach & Wawrzynski, 2005) found that parents, teachers, peers, and mentors influence students in making educational decisions, including decisions regarding majors. In addition, use of media can be another factor influencing

individuals' decisions (Wood, 1994). Among the possible *sources of influence* and *sources of information*, the present study examines interpersonal sources (parents, peers, teacher, mentors, siblings, and relatives), as well as media sources (television, newspapers, and the World Wide Web) in order to determine their roles in the choices students make regarding their majors. The data reveal that the respondents perceived their fathers to have been the most often used *sources of information*. The respondents also reported that they to have communicated the most with their fathers in the process of selecting majors. Teachers, friends, and mothers were the next three popular *sources of information* for the respondents in selecting their majors. Among all the *interpersonal sources of information*, mentors or counselors were the least important *sources of information* as well as *influence* for the respondents in selecting majors. Female respondents perceived almost all the interpersonal sources to have been influential in selecting their majors. However, females reported that their mothers were the most influential sources among all the *interpersonal sources of influence* while they were selecting their majors.

Compared to the interpersonal sources, media sources were far less reported as *sources of information* and *influence* for selecting any major. However, among all the *media sources* newspapers were reported to be the most frequently used *sources of information* and influence in the process of selecting any major. The data also revealed that more male respondents used all the *media sources of information* for selecting majors than did their female counterparts did.

The present study also examines the importance of *personal reasons* such as students' own abilities, interests, and desires to face challenges or to succeed, availability of financial resources, higher paying jobs, and persuasion from others, for selecting majors. These reasons were identified by many previous studies. For instance, Abouchdid and Nasser (2000), Sukovieff (1989), Zhao and Wang (2004), Pike (2006), and Titus (2006) found that financial matters such as prospective fields of well paying jobs, or availability of financial aids influence students' selections of majors. Bandura (1995) and Usher and Pajares (2006) have also reported that the self-efficacy beliefs that students hold about their abilities and interests to perform academic tasks or to succeed in academic activities powerfully influence their academic performances including their choices of majors and careers. They also pointed out that self-efficacy beliefs can be formed by observing the actions of others, and by social persuasions that individuals receive from significant others (Bandura; Usher & Pajares). According to the findings of this study, among all the reasons provided (personal interests, desire for success/excellence and willingness to face challenges, availability of financial aids, well paying jobs, plans for any particular field of study, and advice from someone significant), the highest percentage of respondents reported their personal interests as having been very important in selecting majors, followed by: desires for success and challenge in the field of studies, and well-paying jobs.

Moreover, Zhao and Wang (2004) and Porter and Umbach (2006) found that the educational attainments of parents are associated with the educational attainments of the children. These studies pointed out that the educational attainments of parents, especially mothers, are more important for female students than for male students. These findings are consistent with those of the Japan Bank for International Cooperation's (JBIC) (2002)

report on the education sector in Bangladesh. According to the JBIC report, children with more educated parents in Bangladesh were more likely to achieve basic education competence in schools. More respondents in the present study had fathers who had attained at least graduate level education, than mothers who had done so. Later it was found that the higher the educational attainments of the parents, the more likely it was for the respondents to perceive their parents as being influential in the process of selecting majors.

Abouchedid and Nasser (2000) found that students' decisions regarding different fields of studies were related to their *preferences between career and family roles*. They also found that the preference students had between their career and family roles were associated with their gender. Female students preferred family roles to career roles and male students prefer career roles to family roles (Abouchedid & Nasser). Similarly, other researchers (Thomas, 1990; Wood, 1994; Stack, 2004) pointed out that the choices made by men and women were limited by the social expectations for them being masculine or feminine. Students' preferences between family and career roles while deciding their majors or career paths might be a result of the masculine and feminine expectations of the society (Abouchedid & Nasser). The present study examining the relationship between student's *gender and preference between career and family roles* in Bangladesh reveals that male respondents preferred career roles to family more than their female counterparts did. However, no relationship was found between respondent's gender and his/her preferences for family roles to career.

Anker (1997) noted that majority of male and female professionals work in jobs that they find appropriate for their gender. Moreover, Thomas (1990) indicated that the occupational segregation of men and women taking place after education is completed is related to the subject segregation taking place at schools. He also pointed out that there is a trend of few girls taking physical science subjects and few boys taking language studies or history. Thomas mentioned that the female students may have also perceived math, physics, and chemistry as more difficult subjects than language studies or history and so, more appropriate for males. Considering that such stereotyped views of gender-appropriateness of subjects might be associated with students' selections of majors, this study examines the perceptions of the Bangladeshi students about the *gender-appropriateness of different majors*. It is evident from the data that almost half of all the respondents believed that any major could be appropriate for both male and female students. However, subjects such as finance, management information system, marketing, business informatics, computer science, land and water resource management, computer science and engineering, and electronic engineering, were reported to be more appropriate more for males. On the other hand, sociology was reported to be more appropriate for females. These findings are thus consistent with those of Anker (1997) and Thomas (1990).

Examining all these factors (*sources of information and influence* in selecting majors, *students' personal reasons* for selecting majors, *parents' educational attainments*, *preference between family and career roles*, and *perceptions about gender-appropriateness of majors*) have been an effort to understand the problems associated with higher education in Bangladesh. However, the aim of this study was purely to explore and might not have been successful in an exhaustive examination of all the

factors. Thus, further studies are required to explore more and to come up with in-depth analysis of those factors, a necessary first step to bring equity and prosperity in higher education in Bangladesh.

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