“The Effect of Risk Taking Behavior in Gender and Educational Level (Secondary and Higher Secondary)”

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Abstract: - The objective of the present study was to investigate the risk taking behavior in gender and educational level (secondary and higher secondary). There were 800 students as a sample of the present study. The respondents were equally divided into two groups male 400 and female 400. Each group was also divided into secondary and higher secondary student. They were purposively selected from Puran Tahirpur high school, Mohongonj High School and Mohongonj Degree College. Demographic and personal information sheet, Bengali version of risk taking behavior scale was used for data collection. The obtained data were analyzed through t-test. Results showed that the effect of gender was statistically significant in risk-taking behavior and male students have higher score of risk-taking behavior in comparison to their female counterpart. The result also showed that the effect of educational level was statistically significant in risk-taking behavior and higher secondary student have higher score than secondary student.

Key Words: Risk taking behavior, Secondary Student, Higher Secondary Student, Respondents.

I. INTRODUCTION

Education plays a fundamental role in human, social and economic development. Sweden has a specific objective to improve access to quality education with a focus on learning outcomes, strengthened national public education systems, equality and inclusive education. The focus lies on strengthening capacity for quality education and promoting equal rights to education and learning.

The development of the individual’s ability to adjust, control and modify the situation as per their life-struggle is called education. Education is one of the primary agents of transformation towards development. It is an important avenue for upgrading the economic and social status of marginalized communities in the society. In fact, Education is not only for economic development of tribes but also for inner strength of the tribal communities which helps them in meeting the new challenges of life. [1] Risk is the possibility of losing something of value. Values (such as physical health, social status, emotional well-being, or financial wealth) can be gained or lost when taking risk resulting from a given action or inaction, foreseen or unforeseen (planned or not planned). Risk can also be defined as the intentional interaction with uncertainty. Uncertainty is a potential, unpredictable, and uncontrollable outcome; risk is a consequence of action taken in spite of uncertainty. Risk perception is the subjective judgment people make about the severity and probability of a risk, and may vary person to person. Any human endeavour carries some risk, but some are much riskier than others Risk-taking behavior is a certain acts of consciously controlled behavior may produce positive or negative response which may be in different forms: social, moral, economic, health, profession, and psycho-social well-being of oneself or others etc. The Risk-taking behavior is described as a behavior which has no precision about its results. Education in Bangladesh is overseen by the Bangladesh's Ministry of Education. Ministry of Primary and Mass Education are responsible for implementing policy for education and state-funded schools at a local level. In Bangladesh, all citizens must undertake twelve years of compulsory education which consists of eight years at primary school level and six years at high school level. Primary and secondary education is financed by the state and free of charge in public schools.

Education system

The main education system is divided into three levels:

- Primary Level (Class 1–5)
- Secondary Level (6–10) or (9–12 at some schools)
- Tertiary Level

Primary education

The overall responsibility of management of primary education lies with the Ministry of Primary and Mass Education (MOPME), set up as a Ministry in 1992. While MOPME is involved in formulation of policies, the responsibility of implementation rests with the Directorate of Primary Education (DPE) headed by a Director General. The Directorate of Primary Education (DPE) and its subordinate offices in the district and upazila are solely responsible for management and supervision of primary education.

Secondary education [2]

The secondary level of education is controlled by the eight General Education boards:
• Barisal Education Board for Barisal Division
• Chittagong Education Board for Chittagong Division
• Comilla Education Board for Comilla Division
• Dhaka Education Board for Dhaka Division
• Dinajpur Education Board for Rangpur Division
• Jessore Education Board for Khulna Division
• Mymensingh Education Board for Mymensingh Division
• Rajshahi Education Board for Rajshahi Division
• Sylhet Education Board for Sylhet Division

Eight region-based Boards of Intermediate and Secondary Education (BISE) are responsible for conducting the two public examinations:

• Secondary School Certificate (SSC) (10th grade)
• Higher Secondary School Certificate (HSC) (12th grade)

At the school level, in the case of non-government secondary schools, School Management Committees (SMC), and at the intermediate college level, in the case of non-government colleges, Governing Bodies (GB), formed as per government directives, are responsible for mobilizing resources, approving budgets, controlling expenditures, and appointing and disciplining staff. While teachers of non-government secondary schools are recruited by concerned SMCs observing relevant government rules, teachers of government secondary schools are recruited centrally by the DSHE through a competitive examination.

Tertiary education

At the tertiary level, universities are regulated by the University Grants Commission. The colleges providing tertiary education are under the National University. Each of the medical colleges is affiliated with a public university. Universities in Bangladesh are autonomous bodies administered by statutory bodies such as Syndicate, Senate, Academic Council, etc. in accordance with provisions laid down in their respective acts. [4, 5]

Education expenditure as percentage of GDP

Public expenditure on education lies on the fringes of 2 percent of GDP with a minimum of 0.94 percent in 1980 and a maximum of 2.2 percent in 2007. [6]

Qualitative dimension

The Education system lacks a sound Human Resource Development and deployment system [7] and this has demoralised the primary education sector personnel, including teachers, and contributes to poor performance. Poverty is a big threat to primary education. In Bangladesh, the population is very high. The number of seats available in colleges is less than the number of students who want to enroll, and the number of seats available in universities is also less than the number of students who passed higher secondary level and want to join in a university. Besides, the cost of education is increasing day by day; as a result many students are unable to afford it.

One study found a 15.5% primary school teacher absence rate. [8]

Gender disparity

In Bangladesh, gender discrimination in education occurs amongst the rural households but is non-existent amongst rich households. [9, 10] There is great difference in the success rates of boys, as compared to girls in Bangladesh. However, in recent years some progress has been made in trying to fix this problem. [11]

School attendance

The low performance in primary education is also matter of concern. School drop-out rates and grade repetition rates are high. [12] Poor school attendance and low contact time in school are factors contributing to low level of learning achievement.

Religion and education

Madrasah education in Bangladesh is heavily influenced by religion. [13]

Literacy rate

Bangladesh has one of the lowest literacy rates in Asia, estimated at 66.5% for males and 63.1% for females in 2014. Recently the literacy rate of Bangladesh has improved as it stands at 71% as of 2015 due to the modernization of schools and education funds. [14,15]

II. LITRATURE REVIEW

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Topic</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Özbay et al.</td>
<td>2016</td>
<td>These results indicated a positive relationship between academic risk-taking and academic achievement level. For example, the tendency of students to take academic risks positively and strongly predicts their success in science.</td>
<td>[17]</td>
</tr>
<tr>
<td>Özkan Et al.</td>
<td>2009</td>
<td>It can be said that it is necessary to examine how tendencies to academic risk-taking change during middle school levels (grades 5-8). From an academic success perspective, there may be a significant relationship between academic risk-taking and problem solving ability.</td>
<td>[18]</td>
</tr>
<tr>
<td>Byrnes et al.</td>
<td>1999</td>
<td>Concluded that certain topics (e.g., intellectual Risk-taking and physical Skills) produced larger gender differences than others (e.g., smoking).</td>
<td>[19]</td>
</tr>
<tr>
<td>Mishra, &amp; Arsiya.</td>
<td>2014</td>
<td>Founded in the study that both type of respondents having high risk capacity or low risk capacity take their decision similarly in their decision making styles and it was cleared</td>
<td>[20]</td>
</tr>
</tbody>
</table>
In their study found that the academic Risk-taking level of gifted students are positively high and there was a highly valuable, positive relation between academic Risk-taking levels and problem solving skills of gifted students.

Akça, B. 2017
Academic risk-taking and attitude to science have been investigated in a small number of studies. One study found that students who have high anxiety levels on science courses have a lower tendency to take academic risks.

Tay, B., Örkan, D. & Tay, B. A. 2009
Some studies conducted with gifted middle school students have found a significant positive correlation at a high level between gifted students' attitudes to academic risk taking and their problem solving competence.

Akdağ, E. M., Köksal, M. S. & Ertekin, P. 2017
Found no significant differences between gifted students and their peers in terms of the academic risk-taking tendency. There is a statistically significant and negative relationship between the tendency of gifted students towards academic risk-taking and their achievement in science.

Nimbalkar, C. 2017
Found that (1) the boys are more risk-taker than girls. (2) Boys and girls are equal in mentoring Risk-taking. (3) Girls are better in ethical Risk-taking than boys and (4) boys are more physical risk-taker than girls.

Çakır & Yaman. 2015
Found in a moderately positive relationship between the tendency towards academic risk-taking and achievement in science.

Sünkür, İlhan, Kinay & Kiliç. 2013
Meaningful and positive relationship between students' positive perfectionism traits and their tendency towards academic risk-taking.

Saxena & Puri. 2013
Found in their study that Risk-taking is not correlated significantly to the personality and the sensation seeking.

Abdullah & Osman. 2010
Besides, it is possible to see that female students' tendencies to take academic risks are higher than that of male students.

Harris et al. 2006
Found that women perceived negatively about likelihood and had lesser expectation of enjoyment incompletely mediated their lower propensity toward risky choices in gambling, recreation, and health domains. A perception of severity of potential output was a partial mediator in the gambling and health aspects. Their propensity towards taking social risks shows equally on gender variable.

Pawlawaski, Atwal, & Dunbar. 2008
Founded in their study that human are competent optimizers on catching a bus and crossing a busy road. Human are compromising their arrival time at a bus stop so that they can minimizing their waiting time. Another part is, a single male pursue more risk strategy than single females by reducing waiting time much finer. Males are also more likely than female’s during crossing the busy roads when it is risky to do so.

III. METHOD AND PROCEDURE
Target Population:
In this study target population was Puran Tahirpur High School, Mohonjonj High School and Mohongonj Degree College students of Rajshahi.

Sample:
The sample of the present study consisted of 800 respondents of Puran Tahirpur High School and Mohongonj Degree College students of Rajshahi District. The age range of the respondents was 12-23 years. Respondents were divided into male and female (N=400) based on gender. They were also divided between Secondary and Higher Secondary (N=400).

Table. The distribution of respondents according to their gender and Educational Level.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Level</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Secondary</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Total sample 800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Criteria of Sample Selection
The present study used a sample characteristically divided into gender and Educational Level. Criteria of Sample Selection are as follows
Gender
In this study, we observe total 400 male and 400 female students.

Measurement Tools:
In this study, the following instruments were used to collect data.
1. Demographic and Personal Information Sheet
2. Risk Taking Questionnaire

Demographic and Personal Information Sheet:
A Demographic and Personal Information Sheet was used to collect personal and demographic information of the respondents such as:

Scoring:
The questionnaire for measuring the risk taking behavior consists of 31 items. Each question will have three options to answer: "Yes" "May be" and "No". For each item, one of the answer option will have asterisks (*Yes/No) sign. If the subjects select the asterisks option he will get one (1) point but for non-asterisks items he will get zero (0) for that particular question. Subject will get half (.5) a point for the may be option. As such the total marks would represent the degree of risk taking behavior. The total score of the scale ranges from 0 to 31 with higher score indicative of risk taker and thereby, moderate risk taker ranges from 15-16. Higher score than the moderate risk taking score determine higher risk taker and lower score than the moderate risk taker will determine the low risk taker.

Procedure:
For collecting data the written permission of the authority was obtained and the permission of administering this questionnaire was also obtained from Mr. Nahid Hasan. The data was collected purposively from Puran Tahirpur High School, Mohongonj High School and Mohongonj Degree Collage students as a function of Gender and Socio-economic status. Data were collected 800 students from Puran Tahirpur High School, Mohongonj High School and Mohongonj Degree Collage students (400 male and 400 female). To analyses the collected data Mean, Standard deviation, t-test were used. The results of the present study are illustrated below in the table.

Design of the study:
2x3 factorial design was used in present study. Hence, the independent variables of this study were Gender (Male and Female) and Educational Level (Secondary & Higher Secondary) on risk-taking behavior. These independent variables were used to measure the difference in mean of risk taking behavior. Thus here dependent variable was risk taking behavior.

Statistical Analysis:
For analyzing the data t-test has been used in the present study. Data entry and all necessary analysis were done using SPSS program (20.0 versions) for window package.

IV. RESULTS AND INTERPRETATION
The aim of the present study was to investigate risk-taking behavior in Puran Tahirpur High School, Mohongonj High School and Mohongonj Degree Collage students as a function of Gender and Socio-economic status. Data were collected 800 students from Puran Tahirpur High School, Mohongonj High School and Mohongonj Degree Collage students (400 male and 400 female). To analyses the collected data Mean, Standard deviation, t-test were used. The results of the present study are illustrated below in the table.

Table 1: Showing mean and SD of risk-taking behavior scores according to Gender and Educational Level of the Respondents.

<table>
<thead>
<tr>
<th>Sources of variables</th>
<th>Category of Respondents</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>400</td>
<td>19.300</td>
<td>2.749</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>400</td>
<td>17.287</td>
<td>2.323</td>
</tr>
<tr>
<td>Educational Level</td>
<td>Secondary</td>
<td>400</td>
<td>17.313</td>
<td>2.608</td>
</tr>
<tr>
<td></td>
<td>Higher Secondary</td>
<td>400</td>
<td>19.275</td>
<td>2.501</td>
</tr>
</tbody>
</table>

Table 2: t-test for the mean differences between male and female in risk-taking behavior.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>400</td>
<td>19.300</td>
<td>2.749</td>
<td>78</td>
<td>3.536</td>
<td>0.001</td>
</tr>
<tr>
<td>Female</td>
<td>400</td>
<td>17.287</td>
<td>2.323</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to this result, there have a significant mean differences between Male and Female students (t = 3.536, df = 78, p<0.05 and table value of t is 2.00) in risk-taking behavior. The result shows that Male students (Mean = 19.300) have higher mean score in risk taking behavior than Female students (Mean= 17.287). So, we can say that the mean differences in male and female students of gender are significant.
According to this result, there have a significant mean differences between Secondary and Higher secondary students (t= 3.435, df= 78, p<0.05 and table value of t is 2.00) in risk-taking behavior. The result shows that Middle class students (Mean = 17.313) have higher mean score in risk taking behavior than Lower class students (Mean= 19.275). So, we can say that the mean differences in Secondary and Higher secondary students of RTB are significant.

V. DISCUSSION

Fundamentally, risk affects individual behavior and plays a crucial role in almost every important economic decision and numerous other non-economic decisions. Person's risk preferences will affect several aspects of his/her daily life. It can influence everything from what kind of career one chooses to one's propensity to drink alcohol or take drugs. Being more inclined to take risk is, in particular contexts, found to be associated with greater personal and corporate success.

The main objective of the study is to explore the differences in risk taking behavior of secondary & higher secondary students as a function of gender and Educational Level. Some specific objectives were-

1. To study whether there are any effects of gender on risk taking behavior.
2. To study whether there are any differences of risk taking behavior in Educational Level (Secondary & Higher secondary).

Hypotheses of the study is

1. There will be no significant difference between tribal students of Government and Private secondary students in their Risk-taking behavior.
2. There will be no significant difference between tribal students of standard XI and standard XII students in their Risk-taking behavior.
3. There will be no significant difference between Tribal Higher Secondary boys and girls student in their Risk-taking behavior.

For the present study, 800 respondents were selected. Among them 400 were male and 400 were female and also divided between secondary and higher secondary student (N=400 for each group) on the basis of educational level. They were selected purposively from Puran Tahirpur high school, Mohongonj High School and Mohongonj degree college.

First objective was “To study whether there are any differences of gender on risk taking behavior.” Form t-table (table-2) the result showed that male students (Mean= 19.300), female students (Mean= 17.287) and t=3.536 (df= 78, p<0.05). The table value of t is 2.00 which is smaller than calculated by table value of t makes differences from calculated value. So the result showed that male students (Mean= 19.287) have higher mean score in risk-taking behavior than that of female students (Mean= 17.287). From this result it was found that there have significant mean difference between male and female students (t=3.536, df= 78, p<0.05) in risk taking behavior. So we can say that calculated value significantly differ from table value of t. This result provided empirical conformation to the first objective.

Risk-taking behaviors have negative consequences on adolescent and young adult's health. The aim of this study was to identify the subgroups of college students on the basis of
risk-taking behaviors and to assess the role of demographic characteristics, religious beliefs, and parental support on membership of specific subgroup.

The cross-sectional study took place in Tabriz (northwest of Iran) in April and May of 2011. The randomly selected sample consisted of 1,837 college students. A survey questionnaire was used to collect data. Latent class analysis was performed to achieve the study's objectives. Four latent classes were identified: (a) low risk, (b) cigarette and hookah smoker, (c) sexual and drinking risk-takers (for males)/sexual risk takers (for females), and (d) high risk. Notably, 13.3% of the males and 4.3% of the females were in the high-risk class. The results identified evidence of protective influence of familial support and religiosity on risky behaviors. A fair number of college students, males in particular, were identified as high-risk-takers. Design and implementation of preventive interventions for this segment of the population are necessary. Higher level of familial support and religiosity may serve as preventive factors in risk-taking behaviors.

VI. CONCLUSION

The sample of the present study consisted of 800 respondents in Puran Tahirpur High School, Mohongonj High School and Mohongonj Degree Collage students of secondary and higher secondary areas of Rajshahi District. The respondents were divided into male and female (N=400, for each group) based on gender. They were also divided between secondary and higher secondary class group (N=400 for each group) on the basis of Educational Level. They were selected purposively from Puran Tahirpur High School and Mohongonj Degree Collage. Risk-taking behavior is the dependent variable in our study and needs to be operationalized into a factor that can be empirically measured. There is a significant difference in risk-taking behavior between male and female students. And also educational level of students are secondary and higher secondary. People who are less willing to take risk are often described as risk averse and have a concave utility function. People who are more willing to take risk are often describing as risk seeking and have a convex utility function.

Limitations of the study:

Although the present study tried to maintain a sound methodology and analysis of collected data, nevertheless it is not free from certain limitations.

The data of Puran Tahirpur High School and Mohongonj Degree Collage students in this study were collected only from Rajshahi, Bangladesh but if it was collected covering different educational institutions’ students from different regions of Bangladesh by taking a relatively large sample size, the sample would be more representative and the results of this study would become more accurate. Moreover, the significant findings of the study could not be emphatically generalized without substantial empirical researches on risk taking behavior of Puran Tahirpur High School and Mohongonj Degree Collage students of Bangladesh with reference to relevant variables. However, it is worthwhile to suggest further in-depth research in this area on a large and representative sample including students of Puran Tahirpur High School, Mohongonj High School and Mohongonj Degree Collage. Caution should be taken in order to generalize this result as the sample of the study is not representative enough to picture the whole situation. They are not subject to extreme poverty, illiteracy, marginalization experienced by many severely disadvantaged families in Bangladesh. The administered questionnaire is too large to fill up with concentration at a time. That’s why respondents may inattentively answer the questionnaire.

REFERENCES


