Self-efficacy, motivation and their relationship to academic performance of Bangladesh College Students

By Mohammed S. Chowdhury and A.M. Shahabuddin

Abstract

This study was designed to examine how self-efficacy, motivation and academic performance interact among students enrolled in an introductory marketing course in a private university of Bangladesh. Data were collected through self-administered questionnaire from the students. Empirical results reveal that there are statistically positive correlations between self-efficacy and performance ($r = .289$), self-efficacy and intrinsic motivation ($r = .490$), self-efficacy and extrinsic motivation ($r = .297$), intrinsic motivation and performance ($r = .327$), and extrinsic motivation and performance ($r = .251$). Consistent with our expectations, students high in self-efficacy and motivation performed better than those low in self-efficacy and motivation. Implications and recommendations for further studies based on findings are discussed.

Introduction- Purpose of the Study

Although there have been studies on students' self-efficacy, motivation and their relationship to academic performance of the students in many countries such as Australia (Fuller, 1999), China (Rao, Moely and Sachs, 2000), Japan (Yamauchi et al, 1999), and Arabia (Almegta, 1997), we are unaware of any published research on the effects of these in predicting academic achievement of students in Bangladesh, which is a void in the literature that this paper attempts to fill. The purpose of this paper is, therefore, to examine how self-efficacy, motivation and students’ academic performance interact among students of an introductory marketing course in a university in Bangladesh.

What is self-efficacy?

Self-efficacy refers to the abilities of the students for success in a given task (Bandura, 1997). It is a student’s “I can” or “I can not” belief. Self-efficacy reflects how confident students are about performing a specific task. Self-efficacy beliefs affect behaviours of a student through how he or she feels, thinks, motivates himself/herself, and acts. Self-efficacy influences what activities students select, how much effort they put forth, how persistent they are in the face of difficulties, and the difficulties of the goals they set. Bandura (1977) posits a mechanism of changing, continuing and generalizing behaviour in the basis of self-efficacy of individuals. Self-efficacy is a key element of Bandura’s social learning theory and plays a role of
connecting goals, performance and motivation.

Motivation, on the other hand, is an inner drive that directs a student’s behaviour toward the fulfillment of a goal (i.e., academic success). Motivation is a goal-directed behaviour and indicates the willingness of the students to exert high levels of effort toward achieving goals. Motivation influences how and why people learn as well as their performance (Pintrich & Schunk, 1996).

Historically, teachers, trainers and academicians in any learning organization throughout the world have used self-efficacy beliefs of the students and motivation as techniques to encourage the tasks and duties of learning. Although self-efficacy has been found to be a significant factor in predicting academic achievement by enhancing motivation to achieve (e.g., Pietsch et al, 2003; Bandura, 1997; Schunk, 1991; Schunk & Zimmerman, 1994), still students’ self-efficacy and motivation have been of great practical concern to the academic institutions and of great theoretical concern to researchers, educators, and practitioners. Little is known about whether academic performance of students in the context of Bangladesh is based on their self-efficacy and motivation. The self-efficacy of the students alone will not insure success if the motivation is lacking. Achievement outcomes are considered to be the function of two characteristics, “efficacy” and “will.” McCombs and Marzano, 1990). This study, therefore, investigates the relationships among the self-efficacy, motivation, and academic performance of marketing students in a university in Bangladesh.

THEORY AND HYPOTHESES

A. Self-efficacy

“Self-efficacy refers to beliefs in one’s capabilities to mobilize the motivation, cognitive resources and courses of action needed to meet given situational demands” (Wood and Bandura, 1989, p: 408). Bandura (1997) provides extensive evidence and documentation that self-efficacy is a key factor in bringing about significant outcomes in the lives of people. Numerous studies (e.g., Marie, K 2006; Lent, Brown & Larkin, 1987) show that self-efficacy may be a good predictor of performance. It is believed that if people think that they are not able to do some particular thing, they may not even try to do it, thereby affecting a person’s choices, behaviour, motivation, perseverance, and facilitative thought patterns (Mager, 1992). Self-efficacy beliefs apply to a wide range of situations and are good predictors of performance and behaviour (Bandura, 1978, Gist & Mitchell, 1992). The relation between self-efficacy, motivation, and performance is best summed up by Bandura (1997, p.61).

“The evidence is relatively consistent in showing that efficacy beliefs contribute significantly to the level of motivation and performance. They predict not only the behavioural changes accompanying different environmental influences but also differences in behaviour between individuals receiving the same environmental
influence, and even variation within the same individual in the tasks performed and those shunned or attempted but failed."

Belief in the self appears to influence goals for which one strives. This relationship is consistent with that reported by Locke and Latham (1990) and Zimmerman et al (1992). Self-efficacy beliefs also determine how much effort people will spend on a task and how long they will persist with it. Numerous studies (e.g. Bandura and Schunk, 1981; Brown & Inouyne, 1978; Schunk, 1981; Weinberg, Gould & Jackson, 1979) have revealed that people with strong self-efficacy beliefs exert greater efforts to master a challenge while those with weak self-efficacy beliefs are likely to reduce their efforts or even quit. Opacic (2003) reports that self-efficacy is a significant predictor of students’ clinical performance.

Motivation: All of these self-mechanisms interact to motivate people. Self-efficacy is activated to enhance motivation when feedback is present with goals (Bandura, 1982). Bandura’s self-efficacy theory (1986) suggests that an individual’s behaviour; environment and cognitive factors (i.e., outcome expectations and self-efficacy) are all highly interrelated. Self-efficacy beliefs contribute to motivation in several ways: they determine the goals people set for themselves; how much effort they expend; how long they persevere in the face of the difficulties; and their resilience to failures (Bandura, 1994).

Mitchell (1982) defines work motivation as the direction, intensity, and persistence of work related behaviours desired by the organization or its representative. One potential source of drive to perform is the incentive value (extrinsic motivation) of the performance. People will perform a specific task when its result is likely to result in some outcome they desire (Rotter et al, 1972; Overmier and Lawry, 1979). The distinction between intrinsic and extrinsic motivation is an acknowledgement of the role of the value of a behaviour in the determination of whether or not the behaviour is performed (Deci and Ryan, 1985). Intrinsic motivation is the tendency to engage tasks because one finds them interesting, challenging, involving and satisfying.

It is well documented in the literature that motivation plays an important role in influencing students’ academic achievement. Several researchers (Pintrich, 2000: Pintrich & Schunk, 1996: Garcia, 1995, Bandura, 1986) found that students use different motivational strategies in different learning situations. In general, students are found to value both intrinsic and extrinsic rewards. An intrinsically motivated student might say things such as “The course materials really challenge me.” An extrinsically motivated student, on the other hand, might say things such as “My main concern is to get a good grade in this course.” Based upon a vast amount of literature in the field, we contend that to the extent such rewards (intrinsic and extrinsic) are important to students and likely to result in some outcome they desire, they engage themselves in learning so that such
rewards can be achieved. When a college student is not motivated in a particular class, he or she loses a common outcome to attend the class and this results in frequent absences and plummeting grades (Brewer and Burgess, 2005)

Based on the above literature review, self-efficacy seems to be associated with motivation, which in turn, boosts the academic performance of the students. Therefore, we suggest that motivation in learning reflects a means for activating the ability of students’ academic achievement—a key aspect of self-efficacy. Our goal was to examine the effects of self-efficacy and motivation on the academic performance of students of a university in Bangladesh.

Hypotheses:
On the basis of preceding discussions, the following hypotheses are proposed.

H1: The greater the self-efficacy perceived to exist among students, (a) the greater will be the students’ intrinsic motivation, and (b) the greater will be the students’ performance.

H2: The greater the extrinsic and intrinsic motivation of a student, the greater will be his/her academic performance.

METHOD

Respondents and procedures
Data were collected from marketing students of a private university located in Bangladesh. One of the researchers distributed the questionnaires to students. Each participant in the survey was informed that the participation was voluntary but encouraged, and that because responses would be returned directly to the researchers, no one other than researchers would know it. All respondents were asked to return the questionnaire directly to the researcher(s). A total of 125 usable responses were obtained for an overall response rate of 92.4%. The students came from the same cultural group. They all have completed a college degree (Associate). Students’ final course grades were collected at the end of the year. A grade of A was coded as 4.0, A- as 3.75, B+ as 3.5, B as 3.0, B- as 2.76, C+ as 2.3, C as 2.0, C- as 1.75, D+ as 1.3, D as 1.0 and D-as .75

Measures:
Self-efficacy: Drawing on the review of literature and on available measures of variables such as self-efficacy, we used a six-item questionnaire adapted from motivated learning strategies for learning questionnaires (MSLQ) of Pintrich and DeGroot (1990) on a scale of 1 to 7 anchored on from “not true at all” to “very true”. These items assessed the confidence of the students in completing the learning materials as well as the ability to do well in the examinations. One item, for example, is "I am confident that I can learn the basic concepts taught in this unit." The alpha coefficient was .85
Motivation:

Drawing on available measures of motivation, we used six-item intrinsic and six-item extrinsic motivation questionnaires adapted from MSLQ on a scale of 1 to 7 anchored from “not true at all” to “very true”. Cronbach’s alpha for intrinsic motivation was .81. One intrinsic item is: “In a unit like this, I prefer course materials that really challenge me so that I can learn new things.” For extrinsic motivation, Cronbach’s alpha was .82. One extrinsic item is “The most important thing for me at this moment is improving my marks overall, so my main concern in this unit is to get a good mark.”

Results:

Table 1: Descriptive statistics of scales and students’ performance and Pearson correlation among the variables.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Self-effi</th>
<th>Intrinsic</th>
<th>Extrinsic</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-effi</td>
<td>23.14</td>
<td>4.41</td>
<td>1</td>
<td>.490**</td>
<td>.297**</td>
<td>.289**</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>31.95</td>
<td>5.32</td>
<td>.490**</td>
<td>1</td>
<td>.441**</td>
<td>.317**</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>30.05</td>
<td>5.49</td>
<td>.297**</td>
<td>.441**</td>
<td>1</td>
<td>.251**</td>
</tr>
<tr>
<td>Grade</td>
<td>3.39</td>
<td>.397</td>
<td>.289**</td>
<td>.327**</td>
<td>.251**</td>
<td>1</td>
</tr>
</tbody>
</table>

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

According to the findings, self-efficacy is found to be significantly correlated to students’ motivation (both intrinsic and extrinsic) and performance (grade). As expected, both intrinsic and extrinsic motivations are positively correlated to academic achievement. Finally, regression analysis was performed to clarify the influence of the variables and students’ achievement. As Table 2 shows, significant effect was observed for all variables and students’ performance.

Table 2:

Regression results for relationships between self-efficacy, extrinsic, intrinsic motivation and students’ performance:

<table>
<thead>
<tr>
<th>Students’ Performance (Grade)</th>
<th>B</th>
<th>T</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>.156</td>
<td>1.606</td>
<td>.111</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>.199</td>
<td>1.927</td>
<td>.056</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.117</td>
<td>1.240</td>
<td>.217</td>
</tr>
</tbody>
</table>

Discussion:

The objective of this study was to explore and examine the relationship between students’ self-efficacy and motivation, between self-efficacy and their academic performance, and between motivation and their academic achievement. Self-efficacy provides a useful framework for examining the relationship between students’
motivation and their performance in the job. All of the three variables (self-efficacy, intrinsic and extrinsic motivation) under the study proved to be significant statistically. The results show that students’ academic achievement is affected by motivation and self-efficacy. Self-efficacy is strongly related to intrinsic and extrinsic motivation. This result is supported by numerous studies (e.g., Schunk 1991; Andrew 1998; and Pajares, 2002) On the whole; this study reveals that the students who attain the highest level of academic performance are those who are simultaneously high in self-efficacy and in intrinsic and extrinsic motivation as well.

Implications & Recommendations:
The present study indicates that the academic environment in Bangladesh should encourage self-efficacy and motivation among students as predictors of academic success. Especially, academic advisors may find out self-efficacy and motivation beliefs of students by way of questionnaires applicable to the educational environment of the country. This information may help them in motivating these students and increasing their academic success.

Further studies should be done to determine whether the results of this study are representative. In the current study we used surveys to measure students’ self-efficacy and motivation. Since students may have answered the questions with socially desirable responses, perhaps interviews with students would have allowed for more contextual and thus more honest responses (Mattern, R, 2005). Moreover, the study focused on students’ GPA in their first year of study. Feedback from the teachers or the teachers’ instructional strategies might have influenced the higher GPA. These and other issues need to be studied further. Finally, further study is needed to look into the connections between self-efficacy and academic performance in more difficult and complex academic domains in this country (Bangladesh) such as computer, economics, mathematics and science courses.

The aim of teaching must transcend the development of academic competence. The schools in Bangladesh must have the added responsibility of preparing individuals capable of pursuing their hopes and ambitions on their own. Students who develop strong self-efficacy are well equipped to educate themselves when they rely on their own initiatives (Bandura, A, 1986, p417)

References


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Contents

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