



The Relationship between Self – efficacy and Academic Performance in the Context of Gender among Albanian Students

RUDINA SHKULLAKU
European University of Tirana
Tirana, Albania

Abstract:

This study explored gender differences in self-efficacy and academic performance among Albanian students from two major universities in Tirana, Albania. The data was collected from 180 students (102 females and 78 males) selected from first, second and third level studies. Both universities and participants were selected randomly. A questionnaire was used to measure self-efficacy and the grade point average GPA of the first semester to measure the academic performance of the participants. The data was analyzed using descriptive and inferential statistics. The Pearson correlation coefficient was used to see the relationship between self-efficacy and academic performance. T-test was used to compare male and female participants in self-efficacy and academic performance. The results of the study showed that there was a significant difference between males and females in self-efficacy. There was no difference between males and females in academic performance. Also, a significant relationship was found between the students' self-efficacy and academic performance. From the findings, it was recommended that different authorities as lecturer or counseling services at the universities have to improve students' self - efficacy and to support them to face academic requirements with high level of self-esteem.

Key words: gender, academic performance, self-efficacy, gender, Albania.

Introduction

Higher Education is one of the main factors that facilitate individuals to achieve success in obtaining a profession in order to face different life challenges. College life can be challenging and difficult for a new student, thus requiring a higher degree of student initiative, determination, and self-monitoring.

A huge amount of research has attempted to identify important factors to student success by assessing the relations among many psychological and academic variables. Few studies have used different methods to propose and test models that can be used to understand the relations among factors that influence student academic success. (Momanyi, Ogoma, Misigo 2010; Peterson, Milstein, Chen, and Nakazawa 2011; Schunk 1991)

According to Mbathia (2005) education supplies people with specific skills and therefore it enables them to perform their tasks effectively. The better the performance of an individual is, the more competitive and rewarded the individual will be. Many factors have impact on academic performance, as Owiti (2001) describes, attitude leads to achievement and abilities are needed for successful performance. Bandura (1997) confirmed that intellectual capability and motivation are significant factors on academic performance.

Bandura and Schunk (1981), Bandura (1986), Hackett and Betz (1989), came to the conclusion that self-efficacy influences the choice and commitment in a task, the energy spent in performing it, and the level of the performance. One important variable for the prediction of individual behavior is self-efficacy. Bandura (1997) points out that attitude and gender are influential to some extent for some people regardless of their mediating effects on self-efficacy beliefs.

According to Mbathia (2005) good academic performance influences not only students' choices in major higher school but also their admission to college/university. Pajares (2000) showed that from the seventh grade onwards, girls are inclined to underestimate their capacities in science regardless of the fact that their performance is poorer than that of the boys. Due to

this tendency which continues in high school, fewer female students study science at college level.

The purpose of this study is to assess self-efficacy levels for students at three levels, first, second and third, and to determine the relationship between self-efficacy and academic performance. The aims of this study were to define the relationship between self-efficacy and academic performance among university students, and also to explore the impact of gender on self-efficacy and the influence of gender on academic performance among university students. The research questions of this study were: Do male and female students in university differ in self-efficacy? Do male and female students in university differ in academic performance? Is there a relationship between self-efficacy and academic performance among university students?

Literature review

Bandura's Social Learning theory (1977, 1986) is the main theory this research is chiefly based on. This theory emphasizes the interaction between behavior and environment, focusing on behavior patterns the individual develops to deal with the environment instead of instinctual drives. Models of behavior can be developed through face to face experiences or through the monitoring of the responses of others. This theory claims that we learn the way we behave by adapting ourselves to readymade models. Consequently, the child is able to learn how to adapt himself to this new behavior by watching the others do it. As Bandura puts it (1986), self-efficacy refers to personal confidence in one's abilities for a successful accomplishment of a certain task. Self-efficacy beliefs are significant influential factors of whether individuals will be able to expend effort on a task and continue to cope with a difficulty. Individuals with a high level of self-efficacy attempt tasks and keep up trying even though tasks might be difficult, while individuals with a low level of self-efficacy most of the times end up giving up easily. As Bandura explains (1986), an individual's beliefs about his abilities make up his sense of self-efficacy.

The two fundamentals based on Bandura's theory are related to the fact that individuals make personal interpretations of their past achievements and failing experiences and consequently they set goals upon these interpretations. According to Bandura (1986), people tend to avoid situations they believe exceed their capacities, but they are willing to undertake and perform those tasks or activities they consider themselves to be capable of accomplishing successfully. The second fundament refers to the fact that students set individual goals that become their personal standards for assessing their performance.

According to Mento, Locke and Klein (1992), internal rewards for goal attainment, in other words the satisfaction you receive due to performing a successful task, can drive stronger influences on effort and achievement than external rewards such as grades or academic performance. As described by Bandura (1997), self-efficacy beliefs are different with different individuals, they vary under different circumstances, undergo transformations with time, and increase the academic achievements as determined by the following factors: mastery experience, vicarious experience, verbal persuasion, and physiological and emotional states. An individual's sense of self-efficacy is determined by a multitude of personal, social, and environmental factors. Under the social-cognitive perspective of Bandura (1997) and Pajares (1996) these factors can be altered not only to influence the individual's level of self-efficacy, but also his future performance.

Normative goal theory suggests that self-efficacy beliefs have a moderating effect on the performance goals. It is worth posing a question on the essence of self-efficacy and how it is related to the students' academic performance. According to Bandura (1997), an essential factor in a human activity is the belief in personal efficacy. As Bandura describes self-efficacy, it is argued that beliefs influence human functioning by motivational, decision-making, and affective processes. Based on Bandura (1977), the more an individual believes in his self-efficacy, the more willing he is, which in itself makes it possible for the individual to be fully accomplished.

A number of researches have been done for investigating and exploring the way self-efficacy influences different spheres;

psychosocial functioning in children (Holden, Moncher, Schinke, and Barker 1990), academic achievement and persistence (Multon, Brown, and Lent 1991), athletic performance (Moritz, Feltz, Fahrbach, and Mack 2000), performance at work (Sadri and Robertson 1993). The findings disclosed a significant impact of self-efficacy beliefs on the individual's performance and motivation. Individuals with high level of self-efficacy are inclined to perform activities in a successful way.

According to Bandura (1986) there is a major difference in the way individuals feel and act between those with low self-efficacy and those with a high level of self-efficacy. Individuals suspicious of their own abilities tend to avoid challenges and difficult tasks. As Bandura described (1989), people who doubt their abilities tend not to get engaged in difficult tasks. As stated above, individuals with a high level of self-efficacy cope with challenging situations in a more mature way, while not considering these as a threat.

According to the Social Cognitive theory, self-efficacy is one of the most important variables that influence the academic performance and achievement. Collins (1982) demonstrated in a clear way the importance of self-efficacy beliefs and skill application on academic performance. The study showed that people may perform poorly on tasks not necessarily because they lack the ability to succeed, but because they lack belief in their capabilities.

Different researches indicate that the way learners make use of the learning strategies increases their academic achievements (Hwang and Vrongistinos 2002; McKenzie, Gow, and Schweitzer 2004; Pressley, Borkowski, and Schneider 1987; Rollnick et al. 2008; Yip and Chung 2005). Bandura (1989) has also found that the perceived self-efficacy increases academic achievement in a direct and an indirect way, by influencing individuals' goals. Self-efficacy, together with the goals, influences academic performance. Individuals with a high level of self-efficacy assign higher goals to themselves and exercise more effort and willingness to have them accomplished. Locke and Latham (1990) defined that the more challenging the goals are, the more motivation they stimulate. A high level of

motivation and willingness bring about higher academic accomplishments.

Data and Methodology

Participants and Procedure

The present study was conducted in two Albanian Universities, the European University of Tirana and Tirana State University. Questionnaires were given to students in the classes on the specific days during which the researcher visited the settings. Data was collected during a time period of 14 days. All the participants were informed about the purpose of the study and their right to withdraw at any time without penalty. The participants signed an informed consent to take part in the study. The anonymous questionnaires were completed in class.

The study reached out to 210 students. The response rate was 85.7%. 14.8 % of the students did not accept to become part of the study. Therefore, the final sample for analysis consisted of 180 students, 78 men (43%) and 102 women (57%). The age of the participants ranged from 19 to 31 years with a mean age of 22 years ($SD = 2.25$). In terms of level of study, 60 participants were first level students, 60 were second level students and 60 were third level students.

Measures

The measures used in the study were: Self-Efficacy measured by the short form of the General Self-Efficacy Scale GSE-6, (Romppel et al. 2013). This self-report measures people's expectations that they can perform competently across a broad range of situations that are challenging and require effort and perseverance. The instrument consists of 10 items and the participants were asked to rate the degree to which each item applies to them on a scale ranging from “not at all true” (1) to “exactly true” (4). For the summary score the item scores are summed up. This scale was evaluated in an intercultural non-clinical sample and a sample of patients at risk for heart failure. This scale was based on a pre-existing survey: The General Self-Efficacy (GSE) Scale, originally developed by Jerusalem and Schwarzer in 1979, aims to assess this general attribute. In the most recent version it consists of 10 items and

has been adapted to several languages. The measure was translated into Albanian and translated back into English by certified translators proficient in both languages. Furthermore, prior to the actual study, a pilot study (ten participants) was conducted in order to make sure that the questionnaires were comprehensible to the participants. No problems were encountered during this procedure.

The data on academic performance was collected through GPA grade point average self-reported by the participants at the end of the first semester of the 2012- 2013 academic year. The grades were used as the measure of students' academic performance.

Data

All the data collected were analyzed using descriptive and inferential statistics. The descriptive statistics used were means, the inferential statistics used were t-test for independent samples and Pearson product moment correlation. Pearson correlations were performed to investigate the relationship between self –efficacy and academic performance.

Empirical Analysis

The first aim of this study was to explore the impact of gender on self-efficacy among universities students. To achieve this objective the participants responded to the items in the self-efficacy questionnaire. A t-test for independent samples was used to compare the mean of self-efficacy and performance. The result of the analysis showed there was a significance difference in $t(178) = 3.32$ $p < .05$. It was concluded that males and female in universities differ in self-efficacy. The mean of self-efficacy was for men $M = 3.06$ ($SD = .74$) and for women $M = 2.67$ ($SD = .89$). Self-efficacy average for the entire sample was moderate $M = 2.84$ ($SD = .81$).

The second aim set in this study was to find out the influence of gender on academic performance among universities students. To achieve this objective the academic performance of the participants was obtained through self-reports. The finding showed that there is no difference in academic performance between males and females. The mean for men was $M = 7.45$ ($SD = 1.40$) and for women $M = 7.75$

(SD=1.42). Academic performance average for the entire sample was $M=7.6$ (SD = 1.41). To compare these two mean scores in academic performance obtained by male and female participants, a t-test for independent samples was conducted. The result of the analysis indicated that there was no significant difference in academic performance, $t(178) = -1.40$, $p > .05$.

The final aim of this study was to investigate the relationship between self-efficacy and academic performance among universities students on the first, second and third levels. To achieve this objective the participants' scores on self-efficacy and on academic performance were correlated and the result is presented in table 1.

Table 1. Pearson Correlations between Self – Efficacy and Academic Performance

| <i>Variable</i> | <i>M (SD)</i> | <i>1</i> | <i>2</i> |
|------------------------|---------------|----------|----------|
| 1. Self-efficacy | 2.84 (. 81) | | 1 |
| 2.Academic performance | 7.62 (1.41) | .85** | |
| | 1 | | |

Levels of significance: * $p < .05$, ** $p < .01$

To define the relationship between self-efficacy and academic performance, a Pearson product moment correlation test was conducted. The result of the analysis showed that there was a significant relationship between self-efficacy and academic performance, $r (180) = .85$ $p < .05$. We can also say that the correlation appears to be solid.

Discussion

This study measured the levels of self-efficacy of the participants at the end of the first semester. Results showed there were gender differences in the levels of self-efficacy. Pintrich and De Groot (1990) documented that female students have lower self-efficacy compared to male students, in accordance with the results of this study where men reported higher levels of self-efficacy than women. Considering the fact that the Albanian society is relatively discriminatory, some sex

role stereotypes are very powerful, and as a consequence females' capacities are undermined by male capacities. These findings are in conformity with the self-efficacy theory, which states that an individual's attempt tasks in which he believes he is good at, are truly very likely to become successful. As Pajares (2000) concluded, the students who show higher self-efficacy are more successful with their academic performance, unlike the less successful students who are unwilling to consider tasks they consider as too difficult due to lack of belief and abilities for success.

Several studies (Cohn and Frederickson 2009, Langeland, Wahl, Kristoffersen, and Hanestad 2007, Steindhart and Dolbier 2009), concluded that self-efficacy becomes a significant concept in the universities studies.

Finally, the Pearson correlation coefficient presented a strong positive relationship between self-efficacy and academic performance. It is very essential for the universities to improve their self – efficacy, and by doing so, they can improve the academic performance of their students. Davidson, Feldman, and Margalit (2012) suggest educators and lecturers that they need to identify ways through which the self-efficacy of both male and female students can be improved to enhance academic performance. Gender differences in self-efficacy indicate that males had higher levels of self-efficacy in the chosen subjects. Students' self-efficacy beliefs were related significantly and positively to academic performance. The importance of self-efficacy and its influence on academic performance needs to be considered seriously by lecturers and other competent individuals interested in students' wellbeing.

In conclusion we can say that findings on a strong positive relationship between self-efficacy and academic performance suggested the need to direct counseling attention not only towards first year students dealing with adaptation issues but also to older students who are about to graduate. The absence of any significant gender differences in the academic performance demonstrates that Albanian students, both men and women, are not anymore influenced and stereotyped in their choice in the field that they prefer to study. Despite several limitations, the findings of the study provide a first step towards the identification of the relationship between self–

efficacy and academic performance among Albanian students. Future research might address the same issues, but with improved measures and a larger representative population of Albanian students.

BIBLIOGRAPHY

Bandura, A. 1997. *Self-efficacy: The exercise of control*. New York: Freeman.

Bandura, A., and D. H. Schunk. 1981. "Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation." *Journal of Personality and Social Psychology* 41: 586-598.

Bandura, A. 1986. *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. 1989. "Regulation of cognitive processes through perceived self-efficacy." *Developmental Psychology* 23 (5): 729-735.

Cohn, M.A., B.L. Fredrickson, S.L. Brown, J.A. Mikels, and A.M. Conway. 2009. "Happiness unpacked: Positive emotions increase life satisfaction by building resilience." *Emotion* 9: 361–368.

Collins, J. L. 1982. "Self-efficacy and ability in achievement behavior." Paper presented at the Annual Meeting of the American Educational Research Association, New York.

Davidson. O, D, Feldman, M. Margalit. 2012. "A focused intervention for 1-st year college students: promoting hope, Sense of coherence and Self – Efficacy." *Journal of Psychology* 146 (3): 333-352

Dolbier, L. CH., S. Sh. Jaggars, and A. M. Steinhardt. 2009. "Stress related growth: pre-intervention correlates and change following a resilience intervention." Retrieved from [https://www.edb.utexas.edu/steinhardt/Files/Dolbier.Jaggars.Steinhardt\(2009\).pdf](https://www.edb.utexas.edu/steinhardt/Files/Dolbier.Jaggars.Steinhardt(2009).pdf).

Hackett, G., and N. E. Betz. 1989. "An exploration of the mathematics self-efficacy/ mathematics performance correspondence." *Journal for Research in Mathematics Education* 20: 261-273.

Holden, G.W., M.S. Moncher, S.P. Schinke, and K.M. Barker. 1990. "Self-efficacy of children and adolescents: A meta-analysis." *Psychological Reports* 66: 1044-1046.

Hwang, Y. S., and K. Vrongistinos. 2002. "Elementary in-service teachers' learning strategies related to their academic achievements." *Journal of Instructional Psychology* 29(3): 147-154.

Langeland, E, A.K. Wahl , K. Kristoffersen , and B.R. Hanestad . 2007. "Promoting coping: salutogenesis among people with mental health problems." *Issues Ment Health Nurs.* 28(3): 275-95. Bergen University College, Faculty of Health and Social Sciences, Bergen, Norway.

Locke, A. E., and P. G. Latham. 1990. *A theory of goal setting and task performance*. Michigan: Prentice Hall.

Owiti, D. S. O. 2001. *Gender difference in attitudes toward Mathematics: A case of secondary schoolstudents in Eldoret Municipality, Uasin Gishu District, Kenya*. Unpublished M.Phil. Thesis, Moi University, Eldoret, Kenya.

Mbathia, M. 2005. "Cream for Law and Medicine." *The Standard*. Nairobi: The Standard Ltd.

McKenzie, K., K. Gow, and R. Schweitzer. 2004. "Exploring first-year academic achievement through structural equation modeling." *Higher Education Research and Development* 23(1): 95-112.

Mento, A. J., E. A. Locke, and H. J. Klein. 1992. "Relationship of goal level to valence and instrumentality." *Journal of Applied Psychology* 77: 395-405.

Momanyi M.J., O.Sh. Ogoma, and L.B Misigo. 2010. "Gender Differences in Self-Efficacy and Academic Performance in Science Subjects among Secondary School Students in Lugari District, Kenya." *Educational Journal of Behavioural Science* 1(1): 62—77.

Moritz, S. E., D. L. Feltz, K. R. Fährbach, and D. E. Mack. 2000. "The relation of self-efficacy measures to sport performance: A meta-analytic review." *Research Quarterly for Exercise and Sport* 71: 280 – 294.

Multon, K. D., S. D. Brown, and R. W. Lent. 1991. "Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation." *Journal of Counseling Psychology* 38: 30-38.

Pajares, F. 2000. “Against the odds: Self-efficacy beliefs of women in mathematical, scientific, and technological careers.” *American Educational Research Journal* 37: 215-246.

Peterson, CH. J, T. Milstein, W.Y. Chen, and M. Nakazawa. 2011. “Self-Efficacy in Intercultural Communication: The Development and Validation of a Sojourners’ Scale.” *Journal of International and Intercultural Communication* 4(4): 290-309.

Pintrich, P. R., and E. V. DeGroot. 1990. “Motivational and self-regulated learning components of classroom academic performance.” *Journal of Educational Psychology* 82: 33-40.

Pressley, M., J. G. Borkowski, and W. Schneider. 1987. “Cognitive strategies: Good strategy users coordinate metacognition and knowledge.” *Annals of Child Development* 4: 89-129.

Rollnick, M., B. Davidowitz, M. Keane, A. Bapoo, and L. Magadla. 2008. “Students’ learning-approach profiles in relation to their university experience and success.” *Teaching in Higher Education* 13(1): 29-42.

Rommel, M., C. Herrmann-Lingen, R. Wachter, F. Edelmann, H.D. Dungen, B. Pieske, and G. Grande. 2013. “A short form of the General Self-Efficacy Scale (GSE-6): Development, psychometric properties and validity in an intercultural non-clinical sample and a sample of patients at risk for heart failure.” *GMS Psychosoc* 10:Doc01.

Sadri, G., and T.I. Robertson. 1993. “Self-efficacy and Work-related Behaviour: A Review and Meta-analysis.” *Applied Psychology* 42(2): 139–152.

Schunk, H.D. 1991. “Self – efficacy and academic motivation.” *Educational Psychologist* 26 (3&4): 207 – 23.1.

Yip, M. C. W., and O. L. L. Chung. 2005. “Relationship of study strategies and academic performance in different learning phases of higher education in Hong Kong.” *Educational Research and Evaluation* 11(1): 61-70.