

The Relationship between Self – Efficacy and GPA Grade Scores of Students

Mazlan Ismail^{1,*}, Fadhurul Hisham Aziz², Mohamed Fajil A. B.², Mohd Faiz Ismail², Ahmad Shah P. M.²

¹Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Negeri Sembilan, Malaysia

²Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Negeri Sembilan, Malaysia

Abstract The present study examines the relationship between self-efficacy of students and GPA grade scores. The data was collected from 60 students (39 males, 21 females), and all the participants were sports science semester 5 students and in the Coaching and Training Methodology course learning at the time of the study. Self- efficacy scale used in this study was adapted from the previous scale particularly to measure GPA grades scores of the students. Pearson correlation showed a positive significant relationship where students who higher in self – efficacy scores were higher in GPA grade scores. Findings in this study demonstrate that specific GPA grade scores self – efficacy scale is also good instrument to assess students particularly before sitting for final exams. However, the level of stress may influence students who predict lower than excellent scores. Future research may focus on the students' anxiety level prior to final exams and related with GPA grade scores.

Keywords Academic Performance, Examination, GPA grade, Self – efficacy

1. Introduction

University life is very challenging to every student academically [1]. Furthermore, having successful results is a dream for every student since university is the last institution before they face the working life. That is why there is a need for research particularly to identify important factors that is related with psychological and academic performance of the students [2, 3]. Previous researchers stated that in general, self – confidence in student behavior is how confidently student accept and react in most situations [4]. Self-esteem however, is the extent to which a student evaluates himself or herself. Additionally, [5] had demonstrated that self-efficacy refers to one's personal belief in their ability to complete a specific task. It is dependent on interpretation of their performance prior to actual task and sometimes they alter their environments and their self-beliefs based on the environment and their ability at the time [5]. So, those who have higher self – efficacy will help them to build feelings of tranquility in performing that particular task. In conclusion, the level of self- efficacy can be considered as predictors of the level of accomplishment in each student. Due to these influences, students with higher self – efficacy also will have better academic performance [6], and because belief significantly

affects determination [7].

Student's self – efficacy refers to a level of confidence in mastering of the subject and is considered a popular topic to be investigated by the researchers [2, 6]. More investigations have to be put into the relationship between self-efficacy and academic performances and correct research strategies have to be provided. In a study conducted by [8] indicated that the academic performances of undergraduate students with high, medium, and low GPA were influenced by the self-efficacy of the students. In fact, students academic self- efficacy to be the most influential factor on GPA [9]. Due to those results, students learning ability and their belief towards academic performance must be in line because different course will measure different performance. As what [10] stated that the students' predictions in general accomplishments and self – belief practically help in learning because they are implications made about one's capability to learn which is required for success in a new environment. So, since students have no idea in their capability to score the specific course, a personal sense of specific score of GPA grade is also important for motivating students and this requires further attention [2].

In the context of gender differences and the relationship between self- efficacy and academic performance, for example males and females students were perceived differently in self – efficacy and academic performance (GPA of the first semester) [11]. Interestingly, female students are higher in misjudging their capacities in subject irrespective of the fact that their performance is lower than

* Corresponding author:

mazlan.healthygeneration@gmail.com (Mazlan Ismail)

Published online at <http://journal.sapub.org/ijap>

Copyright © 2017 Scientific & Academic Publishing. All Rights Reserved

the males' students [12]. However, past researchers also stated that there was no significant difference between sexes in self – efficacy [13].

Many of the studies in the literature on self – efficacy and academic performances (GPA grade) are done in and outside of Malaysia. However, recent study had investigated the prediction of GPA grade scores (passing and failing) before sitting for final exams [2]. The data was collected from sports counseling course students from UiTM Seremban. The results showed that there was no significant difference between males and females students in self – efficacy scores. But, there was a positive relationship between passing and failing scores among the students. Fortunately, passing scores was higher than the failing scores. In this study, the researchers have developed the self – efficacy scale since there was no self-efficacy scale that particularly focuses on GPA grade scores. In this study, researchers used the hierarchical design scale recommended by previous studies [14, 15]. The Cronbach alpha was .73 and considered acceptable values [16]. However, there were no studies in literature that focuses on relationship between self – efficacy of the specific course and GPA grade score (academic performance). There is an important finding that researchers need to investigate particularly on sports science students' self- prediction regarding the ability to succeed on academic performance. It is inclined to reflect self – efficacy in the context of specific course area (Coaching and Training Methodology) for sports science students to apply in order to train athletes during practice sessions. Therefore, the objective of this study is to determine the relationship between self-efficacy and academic performance (GPA grade) among sports science students who are taking the Coaching and Training Methodology course.

2. Methodology

Sixty students (Male; 39, Female; 21) ages ranging from 20 to 23 years ($M=21.15$, $SD=.40$). All the participants were sports science semester 5 students and in the Coaching and Training Methodology course learning at the time of the study.

2.1. Instrumentation

For the present study, the self- efficacy scale was adapted from the self – efficacy GPA grade [2]. The students need to complete a week before final exam or after they received their assessments marks. Based on this scale, the measure was task – specific and hierarchically arranged to represent increasing levels of complexity [2, 14, 15]. The GPA grade self-efficacy assessments differs only for the individual item for example “I believe I can get 1.00 to 1.32 GPA or D out of 4.00 for this course” to “I believe I can get D or 1.00 to 1.32 out of 4.00 for this course, D+ or 1.33 to 1.66 GPA out of 4.00 GPA in this course” and so on”. Finally, the participants recorded the strength on a 100 point scale, from

0 (cannot do at all) 50 (moderately can do) and 100 (highly certain can do). The present study, Cronbach alpha was .75 and considered acceptable values [16].

GPA was taken from university records a month after final exam. GPA grades followed the standard examination procedure. The university marking system ranges from A to D. 1.00 to 1.99 GPA is the fail grade. 2.00 to 3.32 GPA represent satisfactory performance. Grades 3.33 to 4.00 represent an outstanding performance [2].

2.2. Procedure

The present study was conducted in Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Seremban Campus. Students were given course continuous assessments marks a week before the final exam. Students completed the Self – efficacy GPA grade scores scale after briefing by the researcher. Students took approximately 15 to 20 minutes to complete the survey. Coaching and Training Methodology course typically involves 12 topics on the understanding of coaching and from the various training methodologies including on how to calculate Index Overall Demand (IOD) by using online system. The continuous assessments include tests, assignment, and presentation.

3. Results

The relationship between self –efficacy and GPA grade scores of Coaching and Training Methodology course on male students ($M = 910.08$, $SD = 93.46$) and Female students ($M = 932.86$, $SD = 56.32$) was analyzed using Pearson product – moment correlation coefficient. The data was normally distributed in this study.

Table 1 showed that there was a strong positive correlation between two variables in self - efficacy male and female students and GPA grade scores $r = .67$, $n = 39$, $p < .01$ for male students and $r = .85$, $n = 21$, $p < .01$ for female students. These results suggested that there were strong, positive correlations between self – efficacy on male and female students and GPA grade scores. The present findings clearly indicated that those students who perceive higher in self-efficacy also perform in GPA grade scores.

Table 1. Pearson Correlation between Self – Efficacy and GPA Grade Scores In Male and Female Sports Science Students on Coaching and Training Methodology Course

N		
Male	.67**	39
female	.85**	21

Note: ** Correlation is significant at the 0.01 level (2 – tailed)

4. Conclusions

The results of the study showed that there was positive relationship between Coaching and Training Methodology

students in self – efficacy and GPA grade scores. As previous studies found significant difference and relationship between gender in self – efficacy and academic performance by using General Self – efficacy Scale and Academic Self – Efficacy Scale [11, 17].

The findings of this study may also support the statement made by Pajares where knowledge and accomplishments are often poor predictors of consequent accomplishments [5]. It was because the belief and abilities to succeed that student's hold is dependent on behavior of the students [5]. Other than supporting the hypothesis of the study, results from self-efficacy investigations generally shows that the judgements of capability are better predictors of related outcomes than are more generalized self- beliefs [18]. The findings in this study demonstrate that specific GPA grade scores self – efficacy is also good predictors other than more generalized performances. Nevertheless, findings support Bandura's argument that if the aim of a study is to increase prediction of academic performances or to help distinguish between self- efficacy and other expectancy belief, research questions should be formulated to measure self- efficacy as specifically as it is relevant and useful and also to enhancing the correspondence between self- efficacy and criterial variables [18].

The findings with positive relationship between self – efficacy and GPA grade scores still needs direct counseling especially for those who perceive lower than the excellent scores [2]. On the other hand, lecturers can also assist students to increase their academic self- efficacy through tasks they provide [19]. The results indicated that students who have higher GPA grade also have higher self – efficacy of themselves. However, the level of stress may influence students who predict lower than excellent score as supported by the previous study [20]. Future research may focus on the students' anxiety level prior to final exams and related with GPA grade scores [21].

ACKNOWLEDGEMENTS

The author would like to thank UiTM Cawangan Negeri Sembilan Malaysia and participants for the support and cooperation in completing this study.

REFERENCES

- [1] Khan, M. (2013). Academic self- efficacy, coping, and academic performance in college. *International Journal of Undergraduate Research and Creative Activities*, 5 (4), 1-11 doi:http://dx.doi.org/10.7710/2168-0620.1006.
- [2] Mazlan, I., & Hajar, J. (2016). Self – efficacy assessment to predict GPA grade scores of students. *International Journal of Science and Research*, 5 (3), 2319 – 7064.
- [3] Bandura, A. (1997). *Self-efficacy: The exercise of control*. Worth Publishers.
- [4] Heslin P. A., & Klehe, U. C. (2006). Self-Efficacy. In S. G. Rogelberg (Ed.), *Encyclopedia of Industrial/Organizational Psychology* (Vol. 2, pp. 705-708). Thousand Oaks: Sage.
- [5] Pajares, F. (1996). Self- efficacy beliefs in academic settings. *Review of Educational Research*, 66 (4), 543 – 578.
- [6] Chermers, M. M., Hu, L., & Garcia, B.F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, 93 (1), 55 – 64. doi: 10.1037//0022-0663.93.1.55.
- [7] Pajares (2002). *Overview of social cognitive theory and of self-efficacy*. Retrieved February, 1st, 2017, from <http://www.emory.edu/EDUCATION/mfp/eff.html>.
- [8] Gaylon, C.E., Blondin, C.A., Yaw, J.S., Nalls, M.L., William, R.L. (2012). Relationship of academic self – efficacy to class participation and exam performance. *Social Psychology of Education*, 15 (1), 23 – 249. doi: 10.1007/s11218-011-9175-x.
- [9] Robbins, S.B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130 (2), 261 – 288. doi: 10.1037/0033-2909.130.2.261.
- [10] Pajares, F., & Schunk, D.H. (2001). Self- belief and school success: self – efficacy, self – concept, and school achievement. In R. Riding & S. Rayner (Eds.), *Perception* (pp.239 – 266). London: Ablex Publishing. Retrieved August 2, 2016 from <http://des.emory.edu.mof/PajaresSchunk2001.html>.
- [11] Shkullaku, R. (2013). The relationship between self- efficacy and academic perofmance in the context of gender among Albanian students. *European Academic Research*, 1 (4), 467 – 478.
- [12] Zeldin, A, L & Pajares, F. (2000). Against the odds: self – efficacy belief of women in mathematical, scientific and technological careers. *American Educational Research Journal*, 37 (1), 215 – 246.
- [13] Tenaw, Y.A. (2013). Relationship between self- efficacy, academic achievement and gender in analytical chemistry at Debre Markos college of teacher education. *Arabian Journal Science Engineering*, 3 (1), 3 – 28.
- [14] Bandura, A. Guideline for creating self- efficacy scales (2006). In F. Pajares & T. Urdan (Eds), *Self– Efficacy Belief of Adolescent* (pp.307 – 337). Greenwich, CT: Information Age Publishing.
- [15] Feltz, D.L., Short, S.E., & Sullivan, P.J. (2008). Self – efficacy in sport; research and strategies for working with athletes, teams, and coaches. United States; Human Kinetics.
- [16] Pallant, J. SPSS survival manual. (2013). A step by step guide to data analysis using spss. Crows Nest, Australia: Allen & Unwin.
- [17] Akram, B., & Gazanfar, L. (2014). Self- efficacy and academic performance of the students of Gujrat university, Pakistan. *Academic Research International*, 5 (1), 283-280.
- [18] Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.

- [19] Choi, N. (2005). Self – efficacy and self – concept as predictors of college students' academic performance. *Psychology in the Schools*, 42 (2), 197 – 205. doi: 10.1002/pits.20048.
- [20] Friedlander, L.J., Reid, G.J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first year undergraduates. *Journal of College Student Development*, 48 (3), 259 – 274. doi: 10.1353/csd.2007.0024.
- [21] Barrows, J., Dunn, S., & Lloyd, C.A. (2013). Anxiety, self-efficacy, and college exam grade. *Universal. Journal of Educational Research*, 1 (3), 204 – 208. doi: 10.13189/ujer.2013.010310.