



Effectiveness of Academic and Life Skills Instruction on the Freshmen Academic Achievement

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ABSTRACT

The purpose of this study was to examine the effectiveness of instruction of academic and life skills on the freshmen academic achievement. The research procedure was semi-experimental with pre-test and post-test design with a control group. The statistical sample included 170 freshmen were randomly selected and assigned in experimental and control groups. The instruments were Life skills inventory, average grade first term, and demographic questions. The experimental group attended in 10 weekly sessions (35 hours) of academic and life skills training. The results showed that the students who had received academic and life skills training gained significantly higher scores in life skills and academic achievement than those with no training. Also, not significant different between male and female students in the score of life skills and academic achievement observed. It seems that assessing and meeting student's life skills and academic achievement needs, especially in the first year of their study is very essential.

Key words: academic skills, life skills, freshmen, academic achievement

INTRODUCTION

Students are going through a transitional phase from adolescence to adulthood. Over these academic years, they try hard to adapt with university life and overcome challenges. Students also want to become financially and emotionally independent from their families and take on new social values and responsibilities [1]. They typically view their enrollment in college as an opportunity to acquire the knowledge and skills that are necessary to succeed in the workplace and to advance their general knowledge and life skills [2]. University students have to manage their time and also look for sources in order to accomplish their assignments; a challenging job to handle, in particular, for first year students. Failure in such condition would lead to poor chances of academic success. Also, students admitted to higher education institutions are expected to finish their courses of study in a given period of time and successfully graduate. A considerable number of these students, however, fail to complete their studies for different reasons. Such terrible trend consequently downgrades the efficiency of higher education system and eventually leads to squandering of national wealth and resources [3].

Decreasing numbers of traditional age students and demographic shifts in the entering student population has led to an increase in the number of students who are unprepared for college-level work [4] and they were unprepared for the experiences of college as they did not have adequate schooling or training [5]. On the other hand, according to numerous educational experts, most of the students admitted to university are not sufficiently prepared for academic studies and a prosperous graduation. Furthermore, the entrance of first year students at younger ages together with a significant demographic shift in their population has recently brought about a large graduated workforce that is not sufficiently prepared for the job market. A few studies suggest that some other students actually are prepared for university, but they either might be unaware of the facilities available (such as library, laboratory, consulting services, etc.) or they simply don't make use of them [6]. Another factor adding up to the issue is immediate entrance of high school pupils from a familiar teacher- directed environment to a higher level where they encounter a student- directed environment [7].

Every semester, a considerable number of students do poorly in their studies for different reasons, which concern their families as well as the entire education system; because such trend would eventually downgrade the efficiency of academic institutions and lead to squandering of national wealth and resources. Therefore, it should be of high priority to devise and implement plans that improve educational conditions and help students do much better in their studies. Researchers have shown students who never go through educational failure are

less likely to feel nervous; they better grasp the main idea of each lesson, better process information, and more frequently employ self-assessment strategies. Most students find university years very stressful and experience a tough situation, since young adults get involved with new freedoms, works related to growth and progress, focusing on interpersonal communication and academic interests. Due to some certain circumstances, they are probably more vulnerable to hardships and troubles, which can compromise their mental health [8].

Success for the first year student is more than merely gaining sufficient academic credit to progress to the next year of study, but also involves educational and personal development [9]. In fact, first year students face some certain social issues and undergo a lot of pressure from studies. Negligence in settling the problem, on the one hand, and too much stress gripping students, on the other hand, obviously leads to a situation in which they show more intensely vulnerable to various tensions, compared with other segments of society [10]. The problem of retaining students has been, and will continue to be, of concern to all stakeholders in higher education. Numerous studies have identified factors contributing to first year retention that have both academic and social implications [11, 12, 13 and 14]. Past research also suggests that the first six weeks of college are the most critical for retaining first semester students as they face new academic experiences [15].

Students who enter college unprepared for academic work may not have the coping skills necessary to compensate for the pressure and anxiety that they feel when being challenged. Life Skills are those competencies that assist people in functioning well in the environments in which they live. World Health Organization defines Life Skills, as abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life [16]. Life skills, from this perspective, are essentially those abilities which help to promote mental well-being and competence in young people as they face the realities of life. Secondly, to enable children to learn and practice skills, life skills education is based on a child-centred and activity oriented methodology. And finally, life skill education is based on the philosophy that young people should be empowered to take more responsibility for their actions [17 and 18]. Life skills include individual and social skills, which adolescents should learn about and ultimately be able to treat themselves and other people of the whole society in an appropriate manner effectively and safely [19]. Based on the previous research done, self-esteem, interpersonal skills, good communication, goal setting, decision making, problem solving and recognizing personal values are among the contributing factors that help students promote their mental health and prevent behavioral abnormalities or mental disorders. Lack of such skills, however, would make students get away with stressful troubles through ineffective and maladaptive behaviors [8].

According to experts, curriculum courses offered during the first year can remarkably influence the student progress over the next years and motivate them carry on towards graduation [12]. In addition, researchers have indicated that students who never go through educational failure are less likely to feel nervous; they better grasp the main idea of each lesson, better process information, and more frequently employ self-assessment strategies [20]. According to Tinto & Goodsell (p.8) "...the first year is a period during which programs can have the greatest impact on subsequent student development and persistence" [21]. Success for the first year student is more than merely gaining sufficient academic credit to progress to the next year of study, but also involves educational and personal development [22 and 9]. Also, the problem of retaining students has been, and will continue to be, of concern to all stakeholders in higher education, and it seems appropriate that colleges and universities continue to design and create programs that support under prepared, at risk students. Thus, the primary purposes of this study were to examine the effectiveness of teaching academic study and life skills on freshmen academic achievement and life skills. The present research article will draw on the question of whether teaching academic study skills as well as life skills can positively affect the progress and achievement of new coming students to university.

MATERIALS AND METHODS

This research was conducted using empirical method, which in turn employed the model "pretest-post-test, with experimental and control groups" 170 newcomer students in the first semester of the academic year 2010 were selected. The sample size was determined at confidence interval (CI) of 95%. Power of the statistical testing was $P_1=5\%$, 80% and $P_2=27\%$ (following the steps in tutorial). Samples were randomly chosen and stratified through a multistage procedure. Sampling process first began with randomly selecting three fields of study from each two faculties at Hormozgan University. Then, a total of 170 students willing to participate were chosen. Having been partially stratified, subjects were placed into two groups of experimental (83) and control (87). The stratification variables were gender, age and field of study.

In general, the examination consisted of three stages: *administering pretest*, *applying experimental variables*, and *administering post-test*. The experimental variable was defined as teaching academic study and life skills including introduction to the related educational program, principles of reading and learning methods, note-taking techniques, memory recollection at exams, cognitive self-conscious acquisition, anger management skills, stress coping strategies, decision making and problem solving, communication skills, creative and critical thinking. Throughout the examination process, all the members of the experimental group were first trained in sessions of 90 to 120 minutes for 9 weeks, and finally, post-test was administered for both experimental and control groups.

Life skills questionnaire was arranged by Yusefi based on length scale and according to several aspects of life skills recommended by the World Health Organization(WHO) including: Decision-making and problem-solving abilities; Creative thinking ability; Critical thinking ability; Interpersonal relationships and effective communication abilities; Cognitive self-conscious ability; Empathy skills; Emotions and anger management; Stress coping ability [23].

In order to evaluate and obtain face validity, the questionnaire was submitted to six university professors and informed researchers. Next, in order to obtain reliability, questionnaires were distributed among 40 students and Cronbach's Alpha Coefficient was measured, result of which was 0.85 for total items of the questionnaire. The highest reliability coefficient was 0.91 for effective communication subscale, and the lowest level was 0.76 for stress coping ability. Data from the present study were gathered and analyzed using the Statistical Package of the Social Sciences (SPSS16).

RESULTS

Preliminary analyses were conducted to determine whether there were any differences between the two groups on Life skills. All of students who participated in the study, Life skills questionnaire was administrated. One Way Analysis of Variance ANOVA was utilized to find whether the selected groups were almost homogenous. To do this, their scores in pretest of were used. The ANOVA analysis did not show any significant effect for the test. The result shows, F ratio (0.51) doesn't exceed the F critical value (2.65) on the .05 level of the significance. This implies that there is no significant difference two groups were almost homogenous.

To examine the effect of the independent variables, t-test and analysis of covariance was used in order to examine the signification of difference between experimental and control groups in terms of academic achievement and life skills.

Table 1. Comparison of experimental and control groups in terms of performance and educational progress

	Groups	M	SD	DF	T value
First semester	Experimental	16.85	2.63	168	4.28***
	control	15.05	2.92		
Second semester	Experimental	16.74	2.01	168	4.65***
	control	14.88	3.11		

* p < 0.05. ** p < 0.01. *** p < 0.001.

As the above table shows, the mean Grade Point Average (GPA) of experimental group was higher than that of control group. The result of statistical testing showed the two mean GPAs are significantly different and are unlikely to have occurred by chance. Therefore, the first hypothesis of the present research (suggesting that academic achievement of newcomer students who participated in the educational program of academic and life skills at Hormozgan University performed much better than students who never passed the program) is approved.

Table 2. Comparison between experimental and control groups with a view to life skills

Variable	Changes Resource	SS	DF	MS	F
Life Skills	Pre-test	157.09	1	157.09	67.47***
	Group	353.49	1	353.49	151.89***

* p < 0.05. ** p < 0.01. *** p < 0.001.

As the above table shows, Analysis of covariance (ANCOVA) regarding the alternative hypothesis indicated a significant difference between the post-test grades of experimental and control groups, i.e. the independent variable is effective on the dependent variable, and there is a significant difference between the two experimental and control groups. Therefore, the second hypothesis of the present research (suggesting that life skills of newcomer students who participated in the educational program of academic and life skills at Hormozgan University performed much better than students who never passed the program) is approved.

Diagram 1 displays factorial structure of the hope scale in the present study. As observed in Diagram 1, all items have suitable factorial load in running the confirmatory factor analysis of the hope scale and all coefficients are higher than 0.40. In other words, the items significantly affected their own related factor (p<0.001).

DISCUSSION

The results of data analysis show that the statistical analysis using T-test showed that progress rate of the experimental group both in the first and second semester of academic year was much higher than the control group, which was significantly different at P<0.001. In other words, teaching study and life skills improved the progress of experimental group. The result is consistent with Terner's findings, Zhao& Kuh, Kuo et al. that point

out those skills and abilities in students are crucial for successful performance at university and suggest that a range of social and educational skills are vital for academic success [24, 25 and 26]. Essential courses on educational and life skills offered to students would help them easier adapt with requirements of university life and eventually move away from chances of failure towards achievement and prosperous graduation.

The statistical results obtained from analysis of covariance testing showed the educational program was significant ($P < 0.0001$) after controlling the effects of pretest, i.e. teaching students life skills was effective on their knowledge and grades. It can be stated that subjects were different in their knowledge of the skills and abilities before the educational program was offered, In fact, they were balanced to the same level of the examined proficiency employing analysis of covariance, and then the effects of the educational program on students' knowledge of the skills was evaluated, which proved positively effective according to the results shown in the table above. Therefore, the alternative hypothesis of the research is approved and findings are consistent with the results obtained by O'Connor et al. [27], avoiding risky behaviors; Sumyung & Namhee [28], better adaptability of students; Lavasani [29], higher grades in life skills exams; Aghajani [30] improved mental health. Knowledge of suitable life skills would provide an opportunity for individuals to act normally in their daily life and effortlessly and positively conform to social environment and culture when dealing with other people. In addition, life skills would help individuals boost their level of adaptability and psychological capacity.

In a situation where young students benefit from life skills, they take responsibility for their well-being, make healthy decisions, and generally lead a safe and sound lifestyle throughout adolescence and adulthood, which ultimately enables them to perform taking advantage of their potentials and become prepared to encounter future needs and changes. Lack of information about appropriate lifestyles endangers students' health, i.e. poor life and social skills would bring about mental illness and social problems, fault of which is mainly found with parents and pre-university schools that fail to adequately educate students [31]. According to Darren & Gazda [8] life skills are essential for a productive life and should be promoted throughout every age span, including childhood, adolescence and adulthood.

This study is limited to only 144 subjects, in order to get in depth it can be broadened by selecting higher sample size. So suggesting the future implementation of the study it should be repeated with larger sample.

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