Baccalaureate Nursing Students' Motivation for Attending University and its Relationship with their Academic Achievement

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Abstract: The purpose of the current study was to investigate the influence of motivation for attending university on academic achievement among Baccalaureate nursing students. The design of this study was descriptive correlational. A stratified random sample of 150 students enrolled in Baccalaureate nursing program, college of nursing, King Saud Bin Abdulaziz University for Health Sciences-Jeddah used in the study. Students' motivation for attending university was measured using The University Student's Motivation Questionnaire version 2 (TUSMQ v2). Students reported high cumulative GPA (M=3.6, SD=0.6), and high levels of motivation for attending university (M=169, SD=28.4). Students identified career and qualifications and altruism as the most common motivators for attending university. Saudi nursing students reported high levels of both motivation for attending university and academic achievement. A significant correlation was existed between students' academic achievement and motivation for attending university. Study findings suggested enhancing both extrinsic and intrinsic motivation among college students.

Key Words: Nursing, Students, Motivation, Attending University, Academic, Achievement

1. Introduction:

Psychologist and educators have long considered the role of motivation in students' achievement and learning, there is recognition that students need both the cognitive skills and the motivational will to succeed in college. The increasing attention given for understanding the characteristics that promote high levels of academic performance and expectations among college students has led the researchers to examine the personal non-cognitive factors that affect performance (Linnenbrink and Pintrich, 2002; Tavani and Losh, 2003).

Motivation is a state of mind that stimulates activities and human body actions. The most difficult part of any task or activity is staying motivated; motivation comes from within the individual, and affects how behavior is activated and maintained (Perez and Fleury, 2009). Motivation is defined as the inner urge that moves or prompts a person to action ((Resnick, 2002). Motivation to learn is the ability modeling, communication and direct instructions or socialization by others such as parents, peers, and teachers ((Bandura, 2004; Brophy, 2010).

Number of studies has been conducted to assess the role of student motivation toward academic performance and different definitions of students' motivation have been used by various researches. Afzal et al. (2010) viewed students' motivation as a force beneficial to the learner. Most motivation theorist believes that motivation is involved in the performance of all learned responses and learned behavior will not occur unless it is energized (Pintrich and Schunk, 2002).

Student motivation can be categorized into two types; intrinsic and extrinsic. Intrinsic motivation is defined as motivation to engage in an activity for its own sake, whereas extrinsic motivation refers to motivation to engage in an activity as a means to an end (Sansone and Harackiewicz, 2000). So, students with intrinsic motivation are more enthusiastic, self driven, challenging and feel pleasure in their studies, also they tend to utilize strategies that require more effort and allow them to process information more intensely (Pintrich and Schunk, 2002), while students with extrinsic motivation try to drag themselves with academic assignments, feel compelled to learn, and always put minimal efforts to achieve maximum appreciations (Hindi and Harackiewicz, 2000).

The motivation of students is an important issue in higher education, particularly owing to importance of academic achievement in their professional life (Afzal et al., 2010). Academic achievement is defined as the outcome of education, the extent to which a student has achieved his/her educational goals (Tavani and Losh, 2003). Pekrun et al. (2002) defined academic achievement as excellence in all academic disciplines, in class as well as extracurricular activities, it includes excellence in sports, behaviors, confidence, communication skills, punctuality, assertiveness, arts and culture.

The dominant measures of academic achievement are grades and especially college grade point average (CGPA) on a four-point scale with four as a representation for the grade "A" and one as a representation for the grade "D", it was attested by their frequent use as criterion variables in research, grade point average (GPA) is commonly used and frequently cited as a major indicator of student achievement (Kuncel et al., 2005).

Common factors cited more frequently in the literature and known as significant predictors affecting academic achievement among university students are personal, non-cognitive variables e.g. self-esteem, motivation, and self efficacy (Walker et al., 2006), personal, cognitive variables e.g. high school grade-point average, and college entrance examinations (Dante et al., 2011), demographic variables e.g. gender, race, ethnicity, and parental level of income (Hijazi and Naqvi, 2006), and institutional variables e.g. the faculty's interactions with students, availability of financial aid, the institution's climate and environment, and special programs such as academic seminars (DeBerard et al., 2004).

Motivational factors are viewed as the predictors of academic achievement, several studies have been conducted to assess the effect of motivation on academic achievement, findings revealed that motivation was a significant predictor of academic achievement among university students. Motivation has been shown to positively influence academic performance in students in domains of general and medical education (Vansteenkiste et al., 2006).

One study was conducted to investigate the effect of students' motivation on academic performance among students studying in different universities of Pakistan, the study accentuates that students' motivation is a vital part of students' success. Findings indicated a significant positive

relationship between student's motivation and student's academic performance, this relationship is reciprocal, meaning students who are more motivated perform better and student who perform better become more motivated (Afzal et al., 2010).

Another study designed to determine predictors of academic performance among student athletes at the University of Oklahoma, findings concluded that academic motivation was significant predictor of academic performance (Gaston-Gayles, 2004). A recent study of motivation concluded that a positive predictor of academic success was motivation to attend college among West Coast University students (Jessica et al., 2005).

Motivation was positively correlated with academic performance among medical student of University Medical Center, Amsterdam, Netherlands (Kusurkar et al., 2011). Tavani and Losh, (2003) addressed the relationship between motivation and levels of performance among university students, results showed that motivation levels are strong predictors of students' academic performances, the greater and higher levels of motivation at accomplishing a goal, the higher the levels of academic performances among Southeastern University students.

Studying motivation and its relationship with academic achievement particularly in nursing students is important because nursing education is different from general education in several aspects such as high intensity of study, training at simulation laboratory, the requirement to carry out clinical work along with study and the need to follow a highly specifically defined path to be able to qualify to practice as nurses.

Although several studies investigated the relationship between university students' motivation and academic achievement among western population at both general and nursing education, correlation between motivation and academic achievement among Arab population has not been addressed in nursing education as there are no published studies assessing this relationship, specifically in Saudi Arabia. Therefore, the purpose of this study is to investigate the influence of motivation on academic achievement among Baccalaureate nursing students in Jeddah.

2. Purpose of the study:

The purposes of the current study were:

- To describe motivation for attending university among Baccalaureate nursing students.
- To determine the relationships between motivation for attending university, academic achievement and demographic variables among Baccalaureate nursing students.
- To assess differences between educational stream I and II regarding their motivation for attending university and academic achievement.

3. Methodology:

3.1. Design: Descriptive correlational

3.2. Settings: King Saud Bin Abdulaziz University for Health Sciences, College of Nursing, Jeddah, Saudi Arabia

3.3. Study subjects:

A stratified random sample of 150 students (115 educational stream I and 35 educational stream II) out of 310 students enrolled in educational stream I (232) and II (78), enrolled in Baccalaureate

nursing program, college of nursing, King Saud Bin Abdulaziz University for Health Sciences-Jeddah.

3.4. Inclusion criteria:

- Students who were willing to participate in the study.
- Educational stream I and II students.
- Students who have cumulative Grade Point Average (GPA).

3.5. Exclusion criteria:

- Students who were not willing to participate in the study.
- Students who did not have cumulative Grade Point Average (GPA).

3.6. Sampling technique:

A stratified random sampling. Students' educational stream used for stratification to ensure proportionate sample size of both educational stream I and II as represented in the population. Stream I students are secondary school graduates and follow what is known as the conventional program, stream II students are holders of Bachelor of Science degree and they follow what is known as the graduate entry accelerated program. The students' lists obtained from the department of admission and registration (DSAR), the required number of students; stream I and II selected randomly from each list to be included in the study.

3.7. Data collection:

The nature and purpose of the study were explained to the students by the research investigators. A written consent obtained from the students who agreed to participate in the study. A demographic data form was administered to the students to collect information about students' age, marital status, number of children, educational stream, level of education, and cumulative Grade Point Average (GPA). Also a self-administered questionnaire was distributed to the students to collect data from them about their motivation for attending university.

3.8. Instruments / measurements:

The University Student's Motivation Questionnaire version 2 (TUSMQ v2) used as a tool to collect relevant data regarding students' motivation for attending university. TUSMQ2 instrument was developed by Neill, (2004) to measure university student's motivation, it contains 30-items distributed equally for each motivator. The items measure both intrinsic and extrinsic motivation of students. There were two intrinsic motivators; Self-exploration and Altruism and four extrinsic motivators; Rejection of Alternative Options, Career and Qualifications, Social Enjoyment, and Social Pressure in the questionnaire; each motivator contains 5 items. The items were based on eight point Likert scale, for each item, students rated themselves on a scale of 1 to 8; 1 being "Very False", towards, 8 being "Very True". Students' academic achievement was measured using Cumulative Grade Point Average (GPA).

3.9. Statistical analysis:

Data coded and analyzed using SPSS version 18. Basic descriptive statistical analysis conducted to determine the frequency distributions, M, SD of the study variables. Pearson's Product Moment correlation coefficients calculated to assess the relationships among study variables. T-test used to assess the differences in students' motivation for attending university and academic achievement between stream I and II.

3.10. Ethical considerations:

Students were informed about the nature of the study. A written consent obtained from the students who agreed to participate in the study. All information obtained from students was confidential. All students were informed that their participation in the study is voluntary. No names attached to the questionnaire. All information obtained was kept in a locked file and no one had access to the data except the researchers. The study was presented to College of Nursing Research Committee (CON-RC). The study was conducted after approval.

4. Results:

Demographic characteristics of the sample are included in Table 1. Students were predominantly single, enrolled in educational stream I, levels of education five, three and eight of the nursing program, their age ranged from 19-30 years, mean age was 22.2$\pm$2.4

Descriptive results for cumulative GPA and motivation for attending university are included in Table 2. Students reported high cumulative GPA, (M=3.6, SD=0.6), and high levels of motivation for attending university (M=169, SD=28.4). Students reported high levels of both extrinsic motivation for attending university (M=106.5, SD=18.6) and intrinsic motivation for attending university (M=62.5, SD=12.6). Students reported that career and qualifications was the most common extrinsic motivator for attending university (M=32.8, SD=5.8), followed by the intrinsic motivators altruism (M=31.9, SD=6.7), and self-exploration (M=30.5, SD=6.7), also social enjoyment (M=25.3, SD=7.1), rejection of alternative options (M=24.8, SD=6.2), and social pressure (M=23.6, SD=6.8) were reported as extrinsic motivators for attending university.

Pearson's Product Moment correlation coefficients were calculated to assess the relationships among the study variables. As shown in Table 3, cumulative GPA was positively associated with motivation for attending university ($r = 0.15$, $p < .05$), the extrinsic motivator career and qualifications ($r = 0.17$, $p < .05$), the intrinsic motivator self-exploration ($r = 0.16$, $p < .05$) and negatively associated with extrinsic motivation ($r = -0.15$, $p < .05$), extrinsic motivators rejection of alternative options ($r = -0.19$, $p < .05$), social enjoyment ($r = -0.17$, $p < .05$), and social pressure ($r = -0.21$, $p < .01$). Students' age was positively correlated with the extrinsic motivator rejection of alternative options ($r = 0.16$, $p < .05$), and negatively correlated with the intrinsic motivation ($r = -0.15$, $p < .05$), and the extrinsic motivator social pressure ($r = -0.18$, $p < .05$). Educational stream was correlated with the extrinsic motivators rejection of alternative options ($r = 0.22$, $p < .05$), and social pressure ($r = -0.15$, $p < .05$), also level of education was correlated with the extrinsic motivator social enjoyment ($r = 0.15$, $p < .05$). The strength of these correlations is at a moderate level.

Table 4 presents differences in the major study variables by educational stream. Cumulative Grade Point Average and motivation for attending university did not differ by stream. The extrinsic motivators rejection of alternative options (t=-2.8, p<0.01) and social pressure (t=1.8, p<0.05) differed significantly by educational stream. Educational stream I students experienced more social pressure as extrinsic motivator for attending university than stream II students, while educational stream II students reported higher scores of the extrinsic motivator rejection of alternative options than stream I students.

5. Discussion:

The aim of the current study was to investigate the influence of motivation for attending university on academic achievement among Baccalaureate nursing students

The level of motivation for attending university among Saudi Baccalaureate nursing students as measured by TUSMQ v2 was high, also the academic achievement among Saudi Baccalaureate nursing students as measured by cumulative Grade Point Average (GPA) was high. This finding is in agreement with what was reported by Kusurkar et al. (2012) in their study of motivation and its effect on academic performance among 383 medical students of University Medical Center Amsterdam; they reported high levels of motivation and academic performance among medical students.

As regards types of motivation for attending university, students reported high levels of both extrinsic and intrinsic motivation. Similar finding was reported by Lin Lin et al. (2003) in their study of college student intrinsic and/or extrinsic motivation and learning, they reported high levels of both extrinsic and intrinsic motivation for attending university among college students at the University of Michigan.

As regards the subscales of both extrinsic and intrinsic motivation, career and qualifications was the most common extrinsic motivator for attending university among Saudi Baccalaureate nursing students, followed by the intrinsic motivators altruism, and self-exploration, also social enjoyment, rejection of alternative options, and social pressure were reported as extrinsic motivators for attending university. This finding is consistent with that of Afzal et al. (2010) who reported that career and qualifications was the most common motivator for attending university followed by motivators of rejection of alternative options, social pressure, altruism and self-exploration among college students studying at different universities of Pakistan.

The third part of the discussion is devoted to discuss the study results related to the relationships among the study variables; academic achievement, motivation for attending university and demographic variables. A significant correlation was existed between students' academic achievement and motivation for attending university (r = 0.15, p< .05). The strength of this correlation is at a low level. Current research findings are in agreement with what was reported by Moneta and Siu, (2002) in their study of motivation, academic performance and creativity among Hong Kong college students which revealed that students' motivation was a significant predictor of their academic performance. The strength of this correlation was at a moderate level. Possible explanations for such contradictory reports from the current study and the previously mentioned study could be because both studies were conducted in two different countries so the samples were

different too in terms of, culture, values, believes, job markets and nursing college curriculum which in turn affect the personal non-cognitive factors influencing students' academic performance.

Academic achievement was positively associated with the extrinsic motivator career and qualifications ($r = 0.17$, $p < .05$), and the intrinsic motivator self-exploration ($r = 0.16$, $p < .05$) and negatively associated with extrinsic motivation ($r = -0.15$, $p < .05$), extrinsic motivators rejection of alternative options ($r = -0.19$, $p < .05$), social enjoyment ($r = -0.17$, $p < .05$) and social pressure ($r = -0.21$, $p < .01$). So the more extrinsically motivated a student is, the lower her academic performance, and the more intrinsically motivated a student, the higher her academic performance. Current research results are consistent with Afzal et al. (2010) who reported that college students at different universities of Pakistan who are intrinsically motivated perform much better academically than students who are extrinsically motivated.

As regards the relationship between motivation for attending university and demographic variables, students' age was positively correlated with the extrinsic motivator rejection of alternative options ($r = 0.16$, $p < .05$), and negatively correlated with the intrinsic motivation ($r = -0.15$, $p < .05$), and the extrinsic motivator social pressure ($r = -0.18$, $p < .05$). Educational stream was significantly correlated with the extrinsic motivators rejection of alternative options ($r = 0.22$, $p < .05$), and social pressure ($r = -0.15$, $p < .05$), also level of education was correlated with the extrinsic motivator social enjoyment ($r = 0.15$, $p < .05$). The strength of these correlations is at a moderate level. This finding was expected and supports previous studies addressing academic motivation and academic performance among university students in Emirates of Dubai (Fortes et al., 2010).

As regards differences in motivation for attending university by educational stream, educational stream I students experienced social pressure as a motivator for attending university more than stream II students, while stream II students were motivated to attend university because they are concerned with their future careers and job opportunity more than stream I students.

6. Conclusion:

Saudi nursing students reported high levels of motivation for attending university and academic achievement. Students experienced high levels of both types of motivation; extrinsic and intrinsic motivation for attending university. Career and qualifications was the most common extrinsic motivator for attending university while altruism was the most common intrinsic motivator. A significant correlation was existed between students' academic achievement and motivation for attending university, students who attained the highest level of academic achievement are those who are simultaneously high in intrinsic motivation and low in extrinsic motivation.

Age, educational stream, and level of education were significantly correlated with students' motivation for attending university. Students differed in their motivation for attending university according to the educational stream, stream I students experienced social pressure as a motivator for attending university more than stream II students, while stream II students were motivated to attend university because they are concerned with their future careers and job opportunity more than stream I students.

7. Recommendations:

Study findings suggested enhancing both extrinsic and intrinsic motivation among college students in order to encourage an attitude towards deep learning, high effort and good performance. It is also recommended that universities and colleges should provide appropriate orientation for their students about the possibility of career prospects and make students aware of the possibility of developing valuable qualifications and skills required for their future careers.

8. Research limitations: The study sample was collected from only one nursing college which makes it difficult to generalize the study
findings to all Saudi nursing students in Saudi Arabia. Since the information about motivation for attending university was collected
on self-administered questionnaire we can't rule out information bias.

9. Acknowledgement:

My appreciation and thanks for the students at the College of Nursing, King Saud Bin Abdulaziz University for Health sciences, Jeddah, Saudi Arabia who collected the data and participated in the study and helped in the accomplishment of this study (Eman Al Shomrani, Sabah Al Zahrani, Meaad Mohammad, Zainah Al Sulmy, Faizah Al Sulami).

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Table 1: Demographic Characteristics of Students

Variable	N	%
Age		
Mean age 22.2±2.4		
Marital status		
Single	136	90.7
Married	14	9.3
Educational stream		
I	115	76.7
II	35	23.3
Level of education		
Five	52	34.7
Three	40	26.7
Eight	22	14.7

Variable	M	SD	Range	Possible Range
Cumulative GPA	3.6	0.6	2-4.9	2-5
Motivation for Attending University	169	28.4	63-225	30-240
Extrinsic motivation	106.5	18.6	42-150	20-160
Career and qualifications	32.8	5.8	9-40	5-40
Social enjoyment	25.3	7.1	5-39	5-40
Rejection of alternative option	24.8	6.2	5-38	5-40
Social pressure	23.6	6.8	6-40	5-40
Intrinsic motivation	62.5	12.6	21-80	10-80
Altruism	31.9	6.7	11-40	5-40
Self-exploration	30.5	6.7	9-40	5-40

Table 2: Descriptive Statistics of Students' Motivation for Attending University and Cumulative Grade Point Average

Table 3: Relationships among Students' Motivation for Attending University, Cumulative Grade Point Average and Demographic Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1) Academic achievement												
2) Motivation for attending university	.15*											
3) Extrinsic motivation	-.15*											
4) Rejection of alternative options	-.19*										.16*	.22**
5) Career and qualifications	.17*											
6) Social enjoyment											-.17*	.15*
7) Social pressure	-.21**									-.18*	-.15*	
8) Intrinsic motivation										- .15*		
9) Self-exploration	.16*											
10) Age												
11) Educational stream												
12) Level of education												

*p<.05, **p<.01

Table 4: Differences between Educational Stream I and II by their Motivation for Attending University and Cumulative Grade Point Average

Variables		Mean	t-test	
			T	P
Rejection of alternative options (Extrinsic)	Stream I	24.1	-2.8	.01

	II	27.3		
Social pressure (Extrinsic)	Stream I	24.2	1.8	.05
	II	21.7		

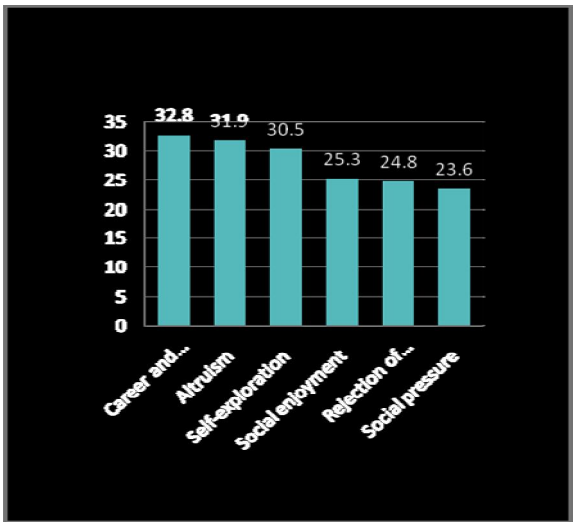

Figure1. Extrinsic and intrinsic motivators for attending university

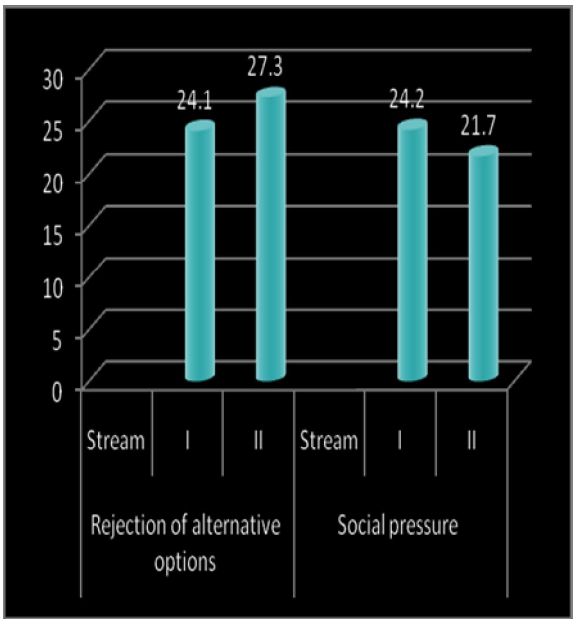

Figure 2. Differences in motivation between stream I and II