

Correlation between Academic Motivation to Study Nursing and Health-Related Quality of Life among Nursing Students

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Abstract: Background: Student motivation is a vital determinant of academic performance and achievement, Motivation to select nursing as a career is guided by both intrinsic and extrinsic factors, Quality of life of medical field students and their motivation to learn are vital factors that have impact on their ability to learn, they need to ensure a functional level of quality of life if they are to maintain their motivation. **Objective:** evaluate correlation between nursing students' academic motivation to study nursing and their Health-Related Quality of Life. **Methods:** descriptive study was conducted during the second semester of academic year 2014/2015, at college of applied medical sciences, king Khalid University, Saudi Arabia. The total study sample was 239 female nursing students selected randomly from different academic levels. Three tools of data collection were used: Interviewing questionnaire, "MOS-SF 36 (version 1.0) with high reliability (Cronbach's alpha coefficient $r = 0.872$) and Academic Motivation Scale (AMS-C28), its reliability (Cronbach's alpha coefficient $r = 0.809$). **Results:** students' mean age was 20.68 with mean GPA 3.59, mean course load per week 15.8, mean hands-on training hours per week was 7.1. The results shown lowered mean scores of HRQOL eight health domains and academic motivation among study sample, GPA was found positively correlate to general health ($r=.274$, $p=0.01$). Hands - on training hours positively correlate to pain ($r=.129$, $p=0.05$). There are Positive correlation between students' general health and IM to know ($r=.215$, $p=0.01$), IM towards accomplishment ($r=.147$, $p=0.05$), EM – identified regulation ($r=.189$, $p=0.01$). Pain negatively correlate to motivation ($r=-.228$, $p=0.01$). **Conclusion:** The study findings reflect lowered scores of motivation and HRQOL eight health domains between the female nursing students, there are positive correlations between nursing students' general health, emotional wellbeing, energy &fatigue and their intrinsic motivation to know and extrinsic motivation. Counseling programs are recommended to improve nursing students' motivation and quality of life throughout academic study years to able them help others in the future. [Mona Mohamed Megahed Elbsuony. **Correlation between Academic Motivation to Study Nursing and Health-Related Quality of Life among Nursing Students.** *J Am Sci* 2016;12(12):95-103]. ISSN 1545-1003 (print); ISSN 2375-7264 (online). <http://www.jofamericanscience.org>. 13. doi:[10.7537/marsjas121216.13](https://doi.org/10.7537/marsjas121216.13).

Key words: Motivation, Nursing Students, Health -Related Quality of Life.

1. Introduction

Nursing is seen as a worthwhile job, providing the opportunity to serve people. [1] Nursing students' motivation towards their studies is an enquiry of energy, sustaining and directing their study behavior. There are many reasons why people choose the career of nursing, the desire to help or care for others, and to do something useful. [2] As caring for others was found to be a main motivator for nursing students choosing nursing education, although the fact that nearly half of them did not choose nursing studies as their first choice.[3]

Motivation is well-defined as the inner urge that moves a person to act. [4] It is a state of mind that influences accomplishments and human body actions. The most difficult part of any task or activity is staying motivated; motivation comes from inside the individual and affects how behavior is activated and maintained. [5] There is recognition that students need both the cognitive skills and the motivational willpower to succeed in college.

Motivation is classified as either intrinsic or extrinsic. The students are intrinsically motivated view learning as opportunities to satisfy their own inquisitiveness and their own desire for knowledge.[6] Intrinsic motivation is definite 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.[7] Enjoying learning for its positive feedback on learning outcomes are examples of intrinsic motivation which is a driving force to learn, perform and a wish to succeed. Attaining a desired grade or external reward explains extrinsic motivation. [8]

Motivation is a process of stimulating strengthening, continuing, and regulating the activities. [9] The motivation of students is a vital issue in higher education, particularly owing to importance of academic achievement in their professional life. [10] Motivation to learn is the capability of modeling, communication and direct guidelines or socialization by others such as parents,

peers, and teachers. [11, 12] Motivation and interest are essential component of human progress at all life stages particularly for pursuing further education. Nursing students' motivation has approved to be related to the successful outcome of education. [13]

Insufficient knowledge about the nursing field, new environment and inadequate knowledge about future career is the major factors affecting students' idea change to the university and after study years. [14] Nursing students traditionally experience difficulties with the science subjects in nursing curricula, that the degree of difficulty demand on studies is one of the factors that explaining low motivation of nursing students. [15, 16]

Several factors affected university students' health issues such as academic courses and training. [17] Positive interaction in relation to learning from clinicians and patients will likely to increase students' sense of accomplishment and their quality of life. [18] Quality of life is a multidimensional concept that typically includes self –reported measures of functional ability, psychological state, social function, and individual perception of his/her health there are other domains as well- instance: jobs, housing, schools, and the neighborhood. [19] Also quality of life was defined by WHO as the individual perception of his position in life, within the context of culture and system of values where the individual lives and in relation to his objectives, expectations, standards and concerns. [20]

Health – related quality of life is positively associated with high self-efficacy in health- related behavior literature. [21, 22] Quality of life of medical field students and their motivation to learn are critical factors that have impact on their ability to learn. [23] They need to ensure a functional level of quality of life if they are to maintain their motivation through their professional. [24] Limited studies have researched motivation and its relation to students' health – related quality of life, so the current study was conducted to evaluate correlation between nursing students' academic motivation to study nursing and their Health-Related Quality of Life.

2. Material and Methods

2.1 Research design

Descriptive study was conducted along the second semester from February to June, academic year 2014/2015.

2.2 Study setting and subjects

The Study was conducted at college of applied medical sciences for female nursing students, muhail Asir, King Khalid University, Saudi Arabia. The total study sample was 239 students selected randomly in nursing department from 312 students of different academic levels: level 2 to level 8.

2.3 Tools of data collection:

Tool (1): Interviewing questionnaire was used covered the following items (age, marital status, family income, number of family members, chronic disease, study level, GPA, number of course load hours per week, number of hands-on training hours per week, sleeping hours per day, practicing exercise and number of meals per day).

Tool (2): The Medical Outcome Study "MOS-SF (version 1.0)" is the RAND 36-item health survey taps eight health concepts as the following; physical function, bodily pain, role limitation due to physical of health problems, role limitation due to personal or emotional problems, emotional well-being, social function, energy/fatigue and general health perception. The tool is reliable (Cronbach's alpha coefficient $r = 0.872$).

Scoring: scoring procedure for MOS-SF 36 has been distributed by International Resource Center for health care assessment. In addition, each item is scored 0 to 100, a higher score indicating less limitation, better functioning or less pain (Ware & Sherbourne 1992, Hays & Shapiro 1992, and Stewart et al 1992). [25,26,27]

Tool (3): Academic Motivation Scale (AMS-C28); AMS has 28 items grouped into 7 subscales, 4 items each, scored on a likert scale ranging from one (does not correspond at all) to seven (corresponds exactly). An average of the total scores on each subscale is taken as the score. The subscales are: intrinsic motivation to know, intrinsic motivation towards accomplishment and intrinsic motivation to experience stimulation, extrinsic motivation – identified regulation, extrinsic motivation – introjected regulation, extrinsic motivation – external regulation and motivation, a high score on a subscale indicates high endorsement of that academic motivation (Vallerand et al. 1989). [28] The tool is reliable (Cronbach's alpha coefficient $r = 0.809$).

2.4 Field work:

- The researcher was collected the data over a period of 5 months after approval has been obtained from dean college of Applied Medical Sciences, Muhail Asser, King Khalid University.

- Each student completed the questionnaires individually.

- Review of the current national and international related literature was done by the researcher.

2.5 Ethical consideration:

- An official permission with written letter clarifying purpose of the study was obtained from the dean and the college research ethical committee to conduct the field work of the study.

- The researcher explained the aim of the study to the students included in the study, assured

maintaining anonymity and confidentiality of the students' data.

2.6 Statistical method for analysis:

Data entry inserted using SPSS statistical software packages. Data was presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and statistical measures have been adapted to describe central tendency and dispersion; mean and standard deviation for quantitative variables. Quantitative variables for groups were compared using Correlation (r) test was used as test of significance between groups. Significant difference is considered at $p < 0.05$, $p < 0.01$.

3. Results

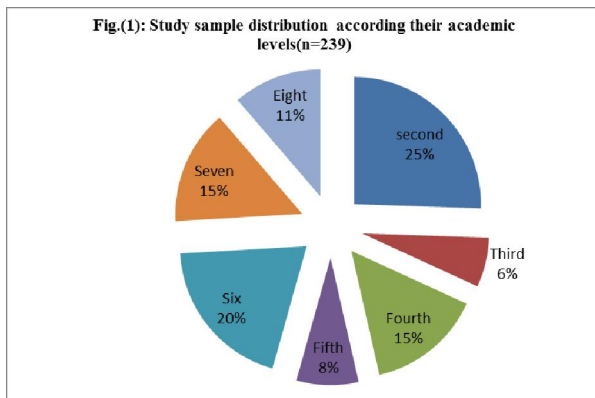


Figure (1). illustrates study sample distribution according to their academic levels, second level represented 25.5%, six level 19.7% but third level represented only 6.3%.

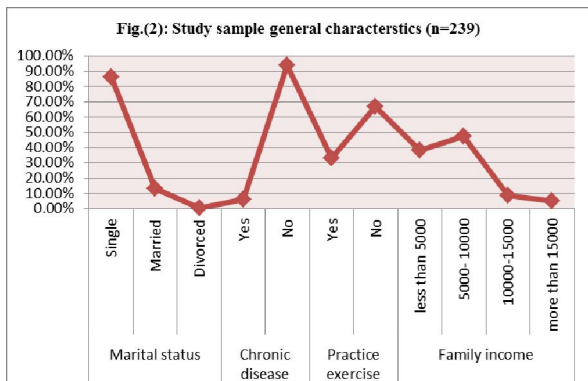


Figure (2). Total number of study sample was 239 majority of them (94.1%) were free from chronic diseases, 86.2% were single, 66.9% not practicing exercise, and 47.7% their family income was 5000-10000 SR.

As regard study sample general characteristics mean score, study sample mean age was 20.68 with mean GPA 3.59, high mean of family members 8.3, mean course load per week 15.8, mean hands-on training hours per week was 7.1, however mean hours of practicing exercise per week was 0.97. Table (1).

Table (1): Study sample general characteristics mean score (n =239)

Items	Mean (\bar{X} + SD)
Age / year	20.6820 + 1.38393
GPA	3.595 + 0.7502
Number of family members	8.3347 + 2.60028
Course load hours /week	15.8870 + 2.72242
Hands-on training hours /week	7.1004 + 3.65048
Sleeping hours / day	6.8410 + 2.25847
Exercise/ week	0.9791 + 1.77387
Meals per day	2.5900 + 0.82456

Table (2) showed lower scores of HRQOL eight health domains mean scores among study sample, among health domains the high mean scores was in Physical Functioning 65.13 and general health 63.74 however lowered scores was physical health 37.14, emotional problems (34.79).

Table (2): Study sample HRQOL mean score (n =239)

Items	Mean (\bar{X} + SD)
Physical Functioning	65.13+23.99
Role Limitation due to Physical Health	37.14+32.87
Role Limitations due to Emotional Problems	34.79+35.88
Energy/ Fatigue	44.47+18.44
Emotional Wellbeing	51.14+17.31
Social Functioning	49.40+26.63
Pain	52.75+26.38
General Health	63.74+18.67

Table (3): revealed that Physical Functioning among level six, and level five students was the highest (71.4, 70.23), Physical Health score was the lowest among level third students (21.6), as regard emotional problems level eight mean score was high (42.95) however third level scored (26.66), and for general health the third level mean score was high (68.66) and level eight was 52.2.

Table (3): Study sample HRQOL mean score by their levels

Items	Second (61)	Third (15)	Fourth (35)	Fifth (19)	Sixth (47)	Seventh (35)	Eighth (27)
Physical Functioning	64.48	60.37	63.65	70.23	71.04	60.15	63.78
Role Limitation due to Physical Health	35.65	21.6	34.28	46.05	39.94	39.28	38.8
Role Limitations due to Emotional Problems	30.05	26.66	34.28	42.10	35.8	35.71	42.59
Energy/ Fatigue	43.94	43.66	43.17	45.26	45.79	42.00	48.14
Emotional Wellbeing	52.72	52.00	45.37	64.84	57.10	44.34	43.40
Social Functioning	45.49	39.16	53.57	56.31	56.64	42.50	50.00
Pain	50.94	38.33	52.71	64.60	62.87	46.42	47.12
General Health	67.86	68.66	68.28	62.10	67.89	54.14	52.22

Table (4): represented lower academic motivation mean scores among study sample as follow: mean score to extrinsic motivation; identified regulation, introjected regulation, external regulation 4.35, 4.37, and 4.39 respectively, and intrinsic motivation to know also represented 4.27, while Motivation mean scores was 2.51.

Table (4): Study sample academic motivation mean score (n =239)

Items	Mean ($\bar{X} \pm SD$)
Intrinsic motivation to know	4.27 \pm 0.622
Intrinsic motivation towards accomplishment	3.73 \pm 0.708
Intrinsic motivation to experience stimulation	3.54 \pm 0.815
Extrinsic motivation – identified regulation	4.35 \pm 0.619
Extrinsic motivation – introjected regulation	4.39 \pm 0.710
Extrinsic motivation – external regulation	4.37 \pm 0.755
Motivation	2.51 \pm 0.928

As regard study sample academic motivation according their different academic levels table (5) clarified that intrinsic motivation was high among third and fourth level for 4.56 and 4.57, also in second, third and fourth level the results showed extrinsic motivation was high mean score for identified regulation (4.47, 4.63), introjected regulation 4.63, 4.73, 4.60 and external regulation 4.52, 4.51.

Table (5): Study sample academic motivation mean score by their levels (n =239)

Items	Second (61)	Third (15)	Fourth (35)	Fifth (19)	Sixth (47)	Seventh (35)	Eighth (27)
Intrinsic motivation to know	4.34	4.56	4.57	4.52	4.23	3.82	4.02
Intrinsic motivation towards accomplishment	3.92	3.65	3.67	3.84	3.68	3.47	3.74
Intrinsic motivation to experience stimulation	3.54	3.38	3.52	3.68	3.46	3.48	3.82
Extrinsic motivation – identified regulation	4.47	4.63	4.39	4.47	4.44	4.00	4.13
Extrinsic motivation – introjected regulation	4.63	4.73	4.60	4.13	4.26	4.11	4.19
Extrinsic motivation – external regulation	4.52	4.51	4.32	4.23	4.33	4.18	4.43
Motivation	2.34	2.20	2.35	2.63	2.02	3.05	3.33

GPA was found positively correlate to general health ($r=0.274$, $p=0.01$). Hands - on training hours positively correlate to pain ($r=0.129$, $p=0.05$). However number of meals per day was negatively correlate to physical functioning ($r=0.194$, $p=0.01$). Table (6)

Table (6): Correlations among study sample variables and quality of life subscales

Items	GPA	Course load	Hands-on training	Sleeping hours	Exercise	Meals per day
Physical Functioning	.023	.006	.005	.065	-.101	-.194**
Role Limitation due to Physical Health	.051	.010	.113	.023	-.046	.045
Role Limitations due to Emotional Problems	.058	.011	.029	.012	-.058	.098
Energy/ Fatigue	.093	.015	.002	.025	-.119	.108
Emotional Wellbeing	.011	.019	.117	.063	-.072	.046
Social Functioning	.081	.066	.020	.007	.027	.076
Pain	.041	.036	.129*	.008	-.025	-.059
General Health	.274**	.120	.097	.028	-.053	.088

***. Correlation is significant at the 0.01 level.*

**. Correlation is significant at the 0.05 level.*

GPA was found positively correlate to IM- to know ($r=.192$, $p=0.01$), EM – introjected regulation ($r=.231$, $p=0.01$), and negatively correlate to motivation ($r=-.277$, $p=0.01$). Hands - on training hours negatively correlate to IM to know ($r=-.179$, $p=0.01$), IM towards accomplishment ($r=-.175$, $p=0.01$), EM – introjected regulation ($r=-.220$, $p=0.01$) Table (7).

Table (7): Correlations among study sample variables and academic motivation subscales

Items	GPA	Course load hours	Hands-on training	Sleeping hours	Exercise/ week	Meals per day
IM- to know	.192**	-.028	-.179**	-.014	.029	.011
IM- towards accomplishment	.055	-.065	-.175**	.070	.048	.121
IM- to experience stimulation	-.040	.006	.022	.050	.049	.001
EM– identified regulation	.098	.123	-.021	.099	.057	.037
EM – introjected regulation	.231**	-.068	-.220**	.002	.046	.027
EM– external regulation	.059	-.028	-.072	-.002	-.014	-.086
Motivation	-.277**	.052	-.072	.082	.012	-.045

***. Correlation is significant at the 0.01 level.*

**. Correlation is significant at the 0.05 level.*

Table (8): Clarified correlation of eight health domain to academic motivation subscales; physical functioning negatively correlate to IM to experience stimulation ($r=-.153$, $p=0.05$), EM – introjected regulation ($r=-.149$, $p=0.05$), motivation ($r=-.158$, $p=0.05$). RL due to physical health negatively correlate to EM – introjected regulation ($r=-.165$, $p=0.05$), motivation ($r=-.179$, $p=0.01$). RL due to emotional problems negatively correlate to EM – introjected regulation ($r=-.185$, $p=0.01$), motivation ($r=-.128$, $p=0.05$), while positively correlate to IM towards accomplishment ($r=.127$, $p=0.05$). Energy/fatigue positively correlated to IM towards accomplishment ($r=.241$, $p=0.01$). Emotional wellbeing positively correlated to IM towards accomplishment ($r=.150$, $p=0.05$), EM – identified regulation ($r=.167$, $p=0.01$), but negatively correlate to motivation ($r=-.325$, $p=0.01$). Social functioning negatively correlate to motivation ($r=-.174$, $p=0.01$). Pain negatively correlate to motivation ($r=-.228$, $p=0.01$). General health positively correlated to IM to know ($r=.215$, $p=0.01$), IM towards accomplishment ($r=.147$, $p=0.05$), EM – identified regulation ($r=.189$, $p=0.01$), however negatively correlate to motivation ($r=-.337$, $p=0.01$).

Table (8): Bivariate correlations among study sample academic motivation subscales and quality of life subscales

Items	Physical Functioning	RL- due to Physical Health	RL- due to Emotional Problems	Energy/ Fatigue	Emotional Wellbeing	Social Functioning	Pain	General Health
IM- to know	-.114	-.063	-.016	.042	.173**	.027	.055	.215**
IM- towards accomplishment	-.101	.062	.127*	.241**	.150*	.081	.066	.147*
IM- to experience stimulation	-.153*	-.105	-.047	.021	.014	.011	-.075	.004
EM- identified regulation	.012	.018	-.024	.055	.167**	.077	.099	.189**
EM – introjected regulation	-.149*	-.165*	-.185**	-.006	-.105	-.115	-.109	.111
EM– external regulation	-.006	.043	-.086	-.053	-.021	-.029	-.078	.102
Motivation	-.158*	-.179**	-.128*	-.108	-.325**	-.174**	-.228**	-.337**

***. Correlation is significant at the 0.01 level.*

**. Correlation is significant at the 0.05 level.*

4. Discussions

Student motivation is a vital determinant of academic performance and achievement, it has been found to be a predictor of course attendance, course grades, and persistence in program of study. [29, 30, 31] Motivation to select nursing as a career is guided by both intrinsic and extrinsic factors. Intrinsic factors: work to help others, interesting work and work closely with people. Flexible hours, responsibility and autonomy, employment security over life of nursing are extrinsic factors. [32] Students are motivated to enter nursing for the altruistic reasons of caring for another person and desire for human contact. Students whose motivations are more intrinsic do better in school, with lower rates of withdrawal, lower rates of absenteeism, lower dropout rates, lower feelings of anxiety about school, and higher levels of academic performance. [33] There is evidence that suggests extrinsic motivation is a strong driving force for choosing nursing career. [34] Recent literature has noted high extrinsic goal orientation among sample of nursing students, including high achieving nursing students. [35] These results are in accordance with the present study which showed that the extrinsic motivation mean scores were high than intrinsic motivation mean scores between the students in different academic levels. In another study, participants considered the most important motivation of nursing study as employment and job market. [36] Furthermore other studies addressed that future employment and job position are the main motivations for high school and college students to choose nursing career for their academic in nursing students' point of view. [37, 38] Also Rongstad 2002 [39] shown that job security and sufficient carrier income are top priorities for applicant to choose their academic

program. Goal oriented factors such as becoming a nurse were reported in other studies. [16, 40, 41]

The present study showed that motivation score was low between the nursing students' this finding was in agreement with other studies that shown 30% nursing students continue their studies with no eager and motivation. [42, 43] This result was supported by some studies stated that we may face low level of motivation and satisfaction by students during next academic years. [44, 45] The results of some studies revealed that nursing students didn't have positive motivation and their satisfaction was almost low. [36,46] Abbaszadeh et al 2012 [47] investigate Students' motivation for nursing course over four years period and revealed decreasing trend of nursing students' motivation in following study years steadily. Al- Shuaibi et al 2013 [48] found that studies students had low to moderate level of motivation for academic achievement. Also Nilsson& Stomberg 2008 [16] indicated a significant decrease in motivation with the number of semesters among nursing students, and males show lower motivation than females.

Medical education appears to perpetuate stress through its intense academic workload, working with patients, and grading systems. [49] Students in medical field present higher levels of stress, responsibilities and academic pressure compared with other students of the same age in other programs that impact on student's health and quality of life. [50] The current study showed lower scores of HRQOL eight health domains mean scores among study sample; this finding is similar to study observed impairment in physical health, role limitation due to emotional problems, energy/ fatigue, emotional wellbeing, social functioning and pain scores in HRQL among medical field students. [51, 52] However this result disagreement with other studies. [53, 54, 55]

The present study GPA was found positively correlate to students' general health; there were positive correlation between Hands - on training hours and pain. This finding might be attributed to situations of real life are stressful to the students, in spite of clinical training situations was found stimulating and could be compared to vital learning experience in the clinical area, training most likely to get students new insight to their future occupation as registered nurses. [56]

The university students are at risk for number of psychosocial and physical health problems that may interfere with their ability to adapt and be motivated to academic accomplishment. [57,58,59,60] Concerning nursing students' academic motivation and their quality of life, the present study showed positive correlation between nursing students' general health, emotional wellbeing, energy & fatigue and their intrinsic motivation to know, intrinsic motivation towards accomplishment and extrinsic motivation. Also pain negatively correlates to students' motivation; furthermore role limitation due to physical health and emotional problems negatively correlates to students' motivation. Other study investigates area of QOL and motivation. [61] But the present study is the original study investigates academic motivation to study nursing and its relation to quality of life and using AMS-C28, MOS-SF 36 scales.

5. Conclusion & Recommendations

The current study reflected lower scores of motivation and HRQOL eight health domains between the nursing students' in different academic levels, and extrinsic motivation to study nursing were high than intrinsic motivation. Moreover there are positive correlations between nursing students' general health, emotional wellbeing, energy & fatigue and their intrinsic motivation to know and extrinsic motivation. Counseling programs are recommended to improve nursing students' motivation and quality of life throughout academic study years to able them help others in the future.

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