

Students' opinions about Nursing Education and its Relation to Their Academic Motivation

Sahar M. El-Khedr^{1&3} and, Youssryea M. Ibrahim^{2&3}

¹Department of Pediatric Nursing, Faculty of Nursing, Tanta University, Egypt.

²Department of Critical Care, Faculty of Nursing, Mansoura University, Egypt.

³Umm Al-Qura University

Sahar.khedr@yahoo.com.

Abstract: Motivation refers to reasons that underlie behavior that is characterized by willingness and volition. Intrinsic motivation is animated by personal enjoyment, interest, or pleasure, whereas extrinsic motivation is governed by reinforcement contingencies. Motivation can be defined in a number of ways. Generally, it is defined as a driving force that initiates and directs behavior. In other words, motivation is a kind of internal energy which drives a person to do something in order to achieve something. Academic motivation refers to internal processes that stimulate and sustain activities aimed at achieving specific academic goals. Motivation plays a crucial role in the performance of students. Self-determination theorists posit that academic motivation is multidimensional in nature, and is comprised of three global types of motivation: intrinsic motivation, extrinsic motivation, and A motivation. **The aim** of this study is to determine Students' opinions about Nursing Education and its Relation to Their Academic Motivation. This study has a descriptive correlational **design**. One hundred fifty students were involved in this study. A questionnaire sheet was used for data collection. It consisted of two parts. The first part of the questionnaire was used to collect socio-demographic data. The second part was the Academic Motivation Scale (AMS). **The results** of this study revealed that there were statistical significant correlations between desire for nursing education and total academic motivation of intern, fourth, and second year students. Significant correlation was also found between family encouragement, family opposition and total academic motivation. Statistically significant correlations were evident between total intrinsic motivation, total extrinsic motivation, total academic motivation and total training for all nursing students. It is recommended to study the effect of academic motivation on academic achievement of nursing students.

[Sahar M. El-Khedr and, Youssryea M. Ibrahim. **Students' opinions about Nursing Education and its Relation to Their Academic Motivation.** *J Am Sci* 2013; 9(3): 496-503]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>.

Key words: Academic motivation, Students' opinions, Nursing education.

1. Introduction

Motivation refers to “the reasons underlying behavior” ⁽¹⁾. Motivation has been a central theme of inquiry among psychologists due to its strong association with biological, cognitive and social regulation and the consequential effects upon human behavior ⁽²⁾. Motivation can be defined as a driving force within individuals by which they attempt to achieve some goals in order to fulfill a need or expectation ⁽³⁾.

Student motivation has been associated with student engagement, adjustment, persistence, help seeking and performance which are important outcomes to education ^(2, 4). Student motivation to enroll for a degree and the intensity of it will influence students' dedication and approach to study ⁽⁵⁾. One of the leading human motivation theories in the psychology literature is self-determination theory (SDT) which is widely tested and applied in various fields such as education, sports, parenting, health and well-being ⁽²⁾. This theory asserts that to understand why people participate in certain activities or behave in certain ways, the different types of motivation need

to be distinguished as they would lead to varied outcomes ⁽⁶⁾.

Autonomous motivation is based on self-regulated orientation which comprises of intrinsic motivation and the type of extrinsic motivation in which people have identified with an activity's value and integrated into the sense of self (i.e. identified regulation) ⁽⁶⁾. For instance, individuals engage in higher education which is accompanied by interest and excitement in learning new things, thriving towards accomplishments and/or because the importance of higher education pursuit is internalized within the individual. Controlled motivation, on the other hand consists of extrinsic motivation in the forms of external regulation where one's behavior is determined by external contingencies of reward and punishment and interjected regulation which action is based on approval motive, avoidance of shame or contingent self-esteem ⁽²⁾.

Academic motivation can be understood as the motivation to decide for and continue with university studies. Motivation for the behavior can range from a motivation or unwillingness, to passive compliance, to active personal commitment. Intrinsic motivation

refers to “doing an activity for the inherent satisfaction of the activity itself”. A person is intrinsically motivated if an activity is done for itself and for the pleasure that derives from doing the activity.⁽⁶⁾

The development of intrinsic motivation is dependent on the degree in which the innate psychological needs of autonomy, relatedness, and competence are supported by the social environment⁽⁷⁾. If behavior is not restricted by external forces, people can experience their actions as self-determined. If students are scientifically oriented and study because dealing with the topic itself and scientific thinking in general is of interest, these students are intrinsically motivated⁽⁸⁾. Acting and the action goal are thematically corresponding. These students are primarily interested in learning and not in qualifications⁽⁷⁾.

Extrinsic motivation is related to behavior that is not done for its own sake but for external reasons. These external reasons can be rewards or punishments. Students behave to attain a desired consequence such as tangible rewards or to avoid a threatened punishment. “A motivation” describes the situation where the student perceives his or her behavior as being determined by external forces completely out of his or her own control⁽⁷⁾.

Academic motivation is close to the term “motivation to learn”⁽⁹⁾. “Motivation to learn” deals with psychological processes which explain the appearance and involvement of learning activities and its effects. Another factor influencing academic motivation is the social background of students; particularly the educational background of the parents⁽⁹⁻¹¹⁾.

Any kind of motivation may be also influenced by the students’ general expectations towards studying. If the personal goal of studies is primarily vocationally oriented in the sense that the student expects practical knowledge, skills development and a good preparation for the future job, this student is extrinsically motivated. He or she acts because the action goal is in the center of interest. Students of such kind aim to apply acquired knowledge directly to their jobs⁽⁸⁾.

Nursing students’ motivation is related to the successful outcome of education. However, reasons and motivation for studying nursing might change during the course of the nursing program⁽¹²⁾. Clinical experience and professional challenges might be reasons for nursing students to change their preferences. Conceptions of nursing before entering the nursing program can influence nursing students in their decision to continue their education⁽¹³⁾. Active support from knowledgeable and experienced practitioners contributed to realizing their aims⁽¹⁴⁾. Students in clinical education are mainly motivated by achievement⁽¹⁵⁾. The benefits of feedback in clinical

education increased student confidence, motivation and self-esteem, and also improved clinical practice.⁽¹⁶⁾

As nursing studies today are not teacher-controlled in all areas of learning, the studies require active, independent and self-directed learning. This may be considered demanding and thus may influence students’ degree of motivation. Support from supervisors on goal orientation, conditioned by individual need, would help students to maintain their motivation. To achieve good study results, the supervisor may communicate to the students that their current competence and skill will continue to develop⁽¹⁷⁾. There are limited studies concerning nursing students’ self-rated motivation during the course of their education.

A lot of emphasis on college students having motivation to be successful, and also what role the educator has on this motivation. Students also need to be engaged in their learning. Many feel that motivation is an essential requirement in order for learning to occur^(18, 19). Motivation for a specific behavior is regulated by either internal choice or external force. Behavior is divided into two components: behavior that is self-determined and behavior that is controlled. When behavior is self-determined, the locus of causality is perceived to be internal, and when behavior is controlled, the locus of causality is perceived to be external.^(19, 20)

Individuals are motivated by goals that meet their basic needs, and motivation is maximized in situations that promote those needs. In the educational setting, academic performance is influenced by teachers, peers, or family members. The specific type of motivation that is enhanced depends on the situation. When the needs of relatedness, autonomy, and competence are met, students appear better adjusted and perform better academically⁽²⁰⁾.

2. Subjects and Methods

A-Subjects

Design:

This study has a descriptive correlational design that was used to determine Students’ opinions about Nursing Education and its Relation to Their Academic Motivation

Setting:

The Faculty of Nursing, Umm Al-Qura University.

Sample :

This research used a purposive sampling method from nursing students. The sample includes students at different levels: second-year, third-year, fourth-year and intern students were involved. All students who were willing to participate in this study did participate. The total number of students involved in this study was 150. Fifty students were interns, 40 students were in their fourth year of study, 27 students were in their

third year of study and 33 students were in their second year. A pilot study was done on 15 undergraduate nursing students.

Tools:

One tool was used to collect data in this study. The first part of the tool was a questionnaire sheet that was used to collect socio-demographic data which included students' age, year of graduation, desire to enter nursing program, parents encouragement and opposition to nursing education on admission to the faculty. The second part of the tool was the Academic Motivation Scale (AMS). This tool was developed by Vallerand *et al.* (1992).⁽²¹⁾ It consisted of 28 items grouped into 7 subscales, 4 items in each subscale. An average of the total scores on each subscale was 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-interjected regulation", "extrinsic motivation-external regulation" and "A motivation"⁽²¹⁾.

The AMS items were translated from English to Arabic by the researchers. Minor modifications were made to adjust the wording of the items to the Arabic approach and understanding. Finally, to assess the adequacy and the clear understanding of the Arabic version of items and instructions a pre-test was conducted with 15 undergraduate nursing students. In the present study the researchers used a 5 point Likert scale instead of a 7 point in order to facilitate data collection. Cornbach's Alpha was used to test the reliability of AMS in the pilot study which was 15 undergraduate nursing students, and the result was 0.913.

Data collection:

Interviews were conducted with students, and the aim of the study was explained to them. Those who agreed to participate were involved in the study. The questionnaire sheet and AMS were distributed to students in the different study years.

B-Methods:

The researchers collected data from the students of the Faculty of Nursing. Approval was obtained from the Head of the Nursing Program. The students' approval to participate in the study was also obtained.

Statistical analysis

SPSS software package version 17 was used for statistical analysis. Simple frequencies mean, standard deviation, Chi square and *P* test, correlations and anova test were used when appropriate.

3. Results

Figure 1 reveals that nearly one third (30.3%) of the second-year students aged from 18 to 20 years. The majority of third-year nursing students (92.6%) aged

from 20 to 22 years compared to 18%, 35% and 69.7% of the intern, fourth-year and second-year students respectively. 82% of the intern students aged from 22-24 years compared to nearly two thirds (65%) of the fourth-year students and 7.4 % of the third-year students.

Figure 2 demonstrates students' opinions about nursing education on admission "yes responses". It was evident that only one third (36.4%) of the second-year nursing students had the desire to join a nursing program, 21.2% found family encouragement and nearly two thirds of the second year students (66.7%) had families who opposed them to join a nursing program. 55% third-year students and 55% of fourth-year students had the desire to join nursing education compared to nearly one third (34%) of intern students. 77.8% of third-year students, 70% of fourth-year students and 64% of intern students were encouraged by their family for nursing education. While, 18.5%, 25% and 32% of the third-year students, fourth-year students and intern students respectively found opposition from their family.

Students' opinions about clinical training and trainees were represented in table 1. It was clear that the majority of students (86%, 92.5%, 100% and 97%) of intern, fourth, third and second year respectively found that laboratory training enforce students to be competent. 90%, of intern students, 97.5% of fourth-year students, 92.6% of third-year students and 93.9% of second-year students found support from trainees in laboratories. More than three quarters of students (80%) of both intern and fourth year students mentioned that trainees encourage them to be competent compared to 88.9% of third-year and 84.8% of second-year students. The majority of the students (90% of intern students 97.5% of fourth-year students, 92.6% of third-year students and 93.9% of second-year students) mentioned that clinical training encourages teamwork. There were statistically significance differences regarding total training ($\chi^2 / 83.52$ and *P*-value / 0.000*).

Table 2 demonstrates students' motivation towards nursing education. It was evident that the majority of students (94% of intern students, 95% of fourth-year students, 85.25% of third-year students and 84.8% of second-year students) had intrinsic motivation. 82% of intern students were intrinsically motivated towards accomplishment compared to 87.5%, 77.8% and 72.7% of the fourth, third and second year students respectively. Extrinsic motivation / identified regulation was reported by nearly equal percentages of 82% of intern students, 82.5% of intern students and 85.2% of third-year students compared to 69.7% of second-year students. Nearly one third (30.3%) of second-year students reported a motivation compared to 26% of intern students, 15% of fourth year students and 3.7% of third-year students.

Statistically significant differences were found in all Academic Motivation Subscales.

Table 3, presents students mean of total academic motivation subscales and total training between the different groups of students. "A motivation" marked the highest form of motivation amongst the total sample with a mean response of 21.89. There was a statistically significant difference between academic motivation and total academic training. Students were predominantly motivated by extrinsic motivation – external regulation, with a mean response of 18.74. A mean response of intrinsic motivation / towards accomplishment was 8.98 followed by intrinsic motivation / to experience stimulation with 6.73, which is a type of autonomous motivation.

Regarding table 4, there was a statistically significant correlation between desire for nursing education and total academic motivation of intern, fourth-year, and second-year students. A statistically significant correlation was also found between family encouragement, family opposition, and total academic motivation of fourth-year students.

The correlation between total training and total academic motivation subscales was illustrated in table 5. It was clear that there was a statistically significant correlation between total training and total intrinsic motivation, total extrinsic motivation, and total academic motivation for all nursing students. A statistically significant correlation between. A motivation and total training was evident only with the second year students.

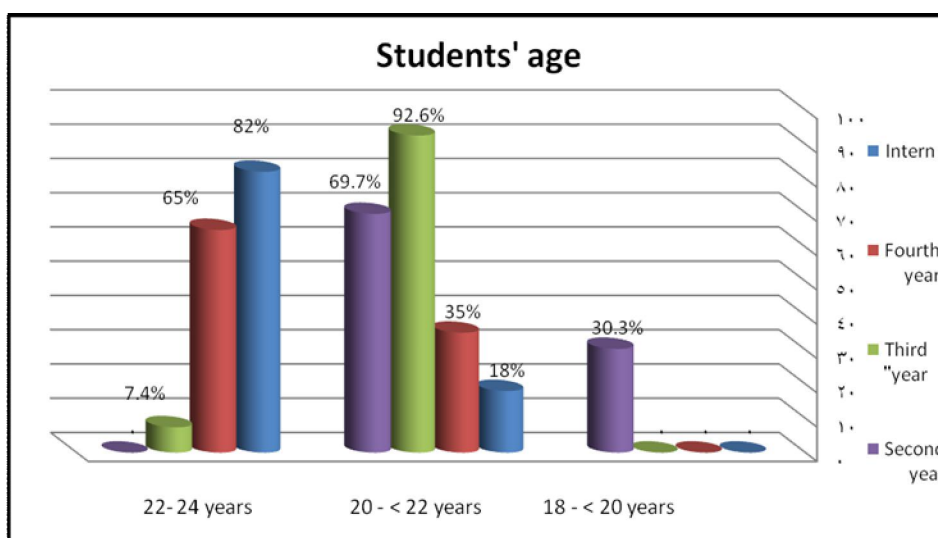


Figure 1: Percentage distribution of students according to age

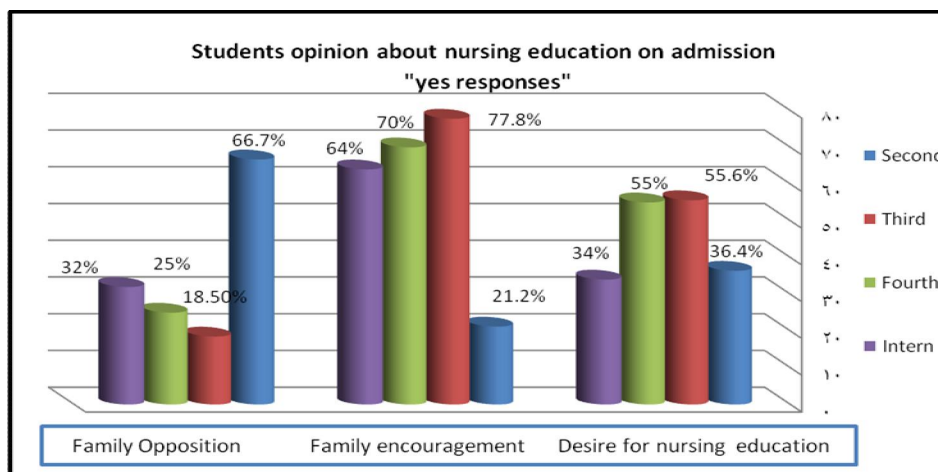


Figure 2: Percentage distribution of students according to desire to study nursing, family encouragement and family opposition to study nursing

Table 1: Percentage distribution of students according to their opinions about clinical training and trainees.

Items	Intern	Fourth year	Third year	Second year
	%	%	%	%
1. Lab. training is beneficial	84	92.5	100	97
2. Hospital training is beneficial	88	85	100	87.9
3. Lab training is better than hospital training	32	35	22.2	27.3
4. Coping with patients is better than manikin	86	92.5	96.3	97
5. Lab. training enforce students to be competent	86	92.5	100	97
6. I found support from trainee in Lab.	90	97.5	92.6	93.9
7. I found support from trainee in hospitals	74	90	92.6	72.7
8. Trainees are always present during training	64	80	92.6	84.8
9. Trainees enforce me to be competent	80	80	88.9	84.8
10. Clinical training enforce teamwork cooperation	90	97.5	92.6	93.9
Total training $\chi^2 / 83.52$ P- value / 0.000*				

N.B. The table shows positive responses

* Significant at ≤ 0.05 level

Table 2: Percentage distribution of Students According to academic motivation subscales

Motivation toward nursing education	Intern	Fourth year	Third year	Second year	χ^2	P-value
	%	%	%	%		
1. Intrinsic motivation	94	95	85.2	84.8	204.77	0.000*
2. Intrinsic motivation/ towards accomplishment	82	87.5	77.8	72.7	60.12	0.000*
3. Intrinsic motivation /to experience stimulation	74	95	85.2	69.7	50.04	0.000*
4. Extrinsic motivation— identified regulation	82	82.5	85.2	69.7	58.44	0.000*
5. Extrinsic motivation— interjected regulation	88	90	96.3	78.8	239.66	0.000*
6. Extrinsic motivation— external regulation	66	70	81.5	54.5	19.80	0.011*
7. A motivation	26	15	3.7	30.3	171.12	0.000*

N.B. Table shows positive responses only.

* Significant at ≤ 0.05 level

Table 3: Mean of total academic motivation subscales and total training between the groups of the students. (A nova test)

Motivation toward nursing education	Mean Square	F	P-value
• Intrinsic motivation	3.02	0.71	0.546
• Intrinsic motivation — towards accomplishment	8.98	1.64	0.182
• Intrinsic motivation — to experience stimulation	6.73	1.23	0.300
• Extrinsic motivation— identified regulation	3.84	0.78	0.502
• Extrinsic motivation — interjected regulation	1.34	0.28	0.837
• Extrinsic motivation—external regulation	18.74	3.03	0.031
• A motivation	21.89	4.72	0.004 *
• Total training	43.53	2.88	0.038*

*Correlation is significant ≤ 0.05 level.

Table 4. Correlations between Students' age, encouragement, family opposition and total academic motivation

Items	Intern Academic motivation		Fourth year Academic motivation		Third year Academic motivation		Second year academic motivation	
	r	t	r	t	r	t	r	t
Age	0.115	0.427	0.110	0.500	0.065	0.747	0.152	0.399
Desire	0.410	0.003**	0.479	0.002**	0.127	0.526	0.375	0.031*
Family encouragement	0.219	0.126	0.548	0.000**	0.318	0.106	0.124	0.492
Family opposition	0.134	0.353	0.483	0.002**	0.235	0.239	0.198	0.268

** Correlation is significant ≤ 0.01 level .

* Correlation is significant ≤ 0.05 level

Table 5. Correlations between total training and total academic motivation subscales for all students.

Items	Total training Intern		Total training Fourth year		Total training Third year		Total training Second year	
	r	t	r	t	r	t	r	t
Total intrinsic motivation	0.476	0.000**	0.595	0.000**	0.724	0.000**	0.622	0.000**
Total extrinsic motivation	0.501	0.000**	0.482	0.002**	0.661	0.000**	0.634	0.000**
Total a motivation	0.068	0.639	0.282	0.078	0.038	0.852	0.447	0.009**
Total academic motivation	0.542	0.000**	0.557	0.000**	0.715	0.000**	0.617	0.000**

** Correlation is significant ≤ 0.01 level .

4. Discussion

Motivation is the attribute that moves us to do or not to do something. Motivation drives behavior and effort towards success. It involves a constellation of beliefs, perceptions, values, interests, and actions. Academic motivation can be considered as "enjoyment of learning characterized by a mastery orientation; curiosity; persistence; task-endogeny; and the learning of challenging, difficult, and novel tasks" (22) Students can have high motivation but may also require academic assistance. They may not be connecting with the theory component of the nursing classes or are having difficulty applying the information into clinical situations on test material. The Nursing Faculty may have to be open to a variety of ways to encourage students to ask for assistance. Due to the nursing shortage, nursing faculty must develop new ways to make nursing appealing to college students. One way is for a nursing faculty to hire employees that display personal characteristics that appeal to students.

The present study revealed that only one third of second year-students had the desire to join the nursing program, compared to nearly half of the third and fourth-year students. More than two thirds of third-year, fourth-year and intern students were encouraged by their parents, compared to only one fifth of second-year students. More than two thirds of second-year students had parents who opposed to them joining a nursing program compared to nearly one quarter of the

third-year, fourth-year and intern students. Law and Arthurs (2003) (22) addressed the influence of parents and reported that 28% of sampled high school students were interested in studying nursing, and that their choice was significantly influenced by parental influence or demographic factors such as gender (22). A similar study by Harrigan *et al.* (2003) identified parental pressure as the major factor in preventing the Native Hawaiian, Samoan and Filipino students from choosing nursing as their career (23).

Parental influence plays a substantial part in students' total academic motivation in the present study. Statistically significant correlations were found between desire to join a nursing program, parents encouragement, parents opposition and total academic motivation. These results are supported by Beggs *et al.* (2008) who found that parental influence featured strongly in affecting the choice of choosing nursing as a career (24).

The present study revealed a statistically significant correlation between total training and total academic motivation subscales. There were statistically significant correlations between total intrinsic motivation, total extrinsic motivation, total academic motivation and total training, for all nursing students. Statistically significant correlation between a motivation and total training was evident only with the second year students. This may be due to the fact that intrinsic motivation and self-determined forms of

extrinsic motivation are generally related to positive academic outcomes because behavior under these conditions is volitional and self-endorsed.

As evident in this study a motivation marked the highest form of motivation amongst the total sample with a mean response of 21.89. A statistically significant difference was found. Students were predominantly motivated by extrinsic motivation – external regulation, with a mean response of 18.74. A mean response of intrinsic motivation / towards accomplishment was 8.98 followed by intrinsic motivation / to experience stimulation with 6.73, which is a type of autonomous motivation. These results contradict with the study of Chong *et al.* (2012) who reported that the mean of the total sample indicated that extrinsic motivation – external regulation (5.81) is the strongest form of motivation amongst the sample for their study. This is followed by extrinsic motivation – identified regulation (5.76) and intrinsic motivation – to know (5.34) while “A motivation” marked the least form of motivation amongst the total sample with a mean response of 2.54.⁽²⁵⁾

A high level of extrinsic and intrinsic motivation in this study is dependent on structured conditions which allow feelings of autonomy and flexibility. Transferred to academic settings autonomy is perceived when the organization of studies provides students freedom of decision-making. Active participation in the studies has also the potential to generate the feeling of autonomy. Training orientation has a positive effect on intrinsic and extrinsic academic motivation. In the nursing education, it is imperative that nursing instructors facilitate and propel students' motivation in the classroom as well as in the clinical setting. The finding of this study is congruent with the study of McKeachie *et al.* (2011)⁽²⁶⁾ who discuss intrinsic and extrinsic motivation. Extrinsic motivators are usually rewards, recognition, and the approval of others. If students are intrinsically motivated, they are usually learning because of the content or just for the pleasure of learning. Usually students will have multiple reasons for their learning which causes them to have a variety of intrinsic and extrinsic factors⁽²⁶⁾.

5. Conclusion

It was concluded from this study that nursing students are highly motivated by both intrinsic and extrinsic academic motivation. This may be due to active participation of the students in their studies. Training orientation has a positive effect on intrinsic and extrinsic academic motivation. Statistically significant differences are evident between total

training and total motivation subscale. There is a statistical correlation between students' opinion about nursing education, desire to join nursing program, parental enforcement and contradiction for nursing education and total academic motivation.

Recommendations

1. Repeat the same study following a "longitudinal approach" tracking the second year nursing students till graduation, to examine the relationships among academic achievement, academic self-concept, and academic motivation for nursing students.
2. Conduct further studies on the effect of academic motivation on academic achievement of nursing students.
3. Conduct further studies on the relationship between students' self-concept and intrinsic academic motivation.
4. Conduct further studies on the impact of different factors (social, financial, infrastructure factors) on students academic motivation.
5. Develop a self-concept enhancement intervention programs for second-year nursing students to improve their academic motivation and achievement.

References

1. Guay, F., Julien Chanal 1., Catherine F., *et al.*, Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal of Educational Psychology*, 2010; 80(4): 711–735.
2. Deci E.L., R.M. Ryan. *Self-Determination Theory: A Macrotheory of Human Motivation, Development and Health*. *Canadian Psychology*, 2008; 49 (3): pp. 182-185.
3. Murphy, F. Motivation in nurse education practice: A case study approach. *British Journal of Nursing*, 2006; 15(20):1132-1135.
4. Meece J.L., E.M. Anderman, L.H. Anderman. Classroom goal structures, student motivation, and academic achievement. *Annual Review of Psychology*. 2006; 57, pp. 487-503.
5. Kember D., C. Hong, A. Ho. Characterizing the motivational orientation of students in higher education: A naturalistic study in three Hong Kong universities. *British Journal of Educational Psychology*, 2008;78, pp.313–329.
6. Ballmann M., J.J. Mueller. Using self-determination theory to describe the academic motivation of allied health professional-level college student. *Journal of Allied Health*, 2008; 37(2): pp.90-96.

7. Deci, E.L. & Ryan, R.M.. Handbook of self-determination research. Rochester, UK: University of Rochester Press; 2002.
8. Murtonen, M., Olkinuora, E., Tynj P. & Lehtinen, E."Do I Need Research Skills in Working Life?" University Students' Motivation and Difficulties in Quantitative Method Courses. Higher Education, 2008; 56, 599-612.
9. Becker, R. What Could be Done in Order to Motivate the Working Classes for University Education? An Empirical Simulation with Implications for Educational Politics. 2009; 61, 563-593.
10. Schindler, S. Assessing the Cumulative Impact of Primary and Secondary Effects on the Way from Elementary to Tertiary Education. A Simulation Study for Germany. Equal soc Working Paper 2010, http://www.equalsoc.org/uploaded_files/publications/sim_schindler.
11. Schindler, S. & Lorz, M. Mechanisms of Social Inequality Development: Primary and Secondary Effects in the Transition to Tertiary Education Between 1976 and 2005. European Sociological Review, doi: 2011; 10.1093.
12. Dearnley C, Matthew B. Factors that contribute to undergraduate student success. Teach Higher Educ. 2007;12(3):377–91.
13. Kloster T, Hoie M, Skar R. Nursing students' career preferences: a Norwegian study. J Adv Nurs. 2007;59(2):155–62.
14. Spouse J. An impossible dream? images of nursing held by pre-registration students and their effect on sustaining motivation to become nurses. J Adv Nurs. 2000;32(3):730–9.
15. Mrayyan TM, Modallal R, Awamreh K, Atoum M, Abdullah M, Suliman S. Readiness of organizations for change, motivation and conflict-handling intentions: Senior nursing students' perceptions. Nurse Educ Pract. 2008;8(2):120–8.
16. Clynes MP, Raftery SE. Feedback: An essential element of student learning in clinical practice. Nurse Educ Pract. 2008;8(6):405–11.
17. Ofori R. Measuring motivational orientations toward support-seeking: the development and predictive validity of the Motives for Tutorial Support-Seeking Questionnaire. Nurse Educ Today. 2006;26(3):228–39.
18. Deci, E.L. & Ryan, R.M. Intrinsic motivation and Self-Determination in Human Behavior. New York: Plenum. Retrieved July 6th, 2011 from <http://library.nau.edu/>.
19. Young, A., Johnson, G., Hawthorne, M. & Pugh, J. Cultural Predictors of Academic Motivation and Achievement: A Self-Deterministic Approach. College Student Journal, 2011; (45): 1, pp.151-163, 13p. Retrieved July 6th, 2011 from: <http://www.nau.edu/>.
20. Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. Motivation and education: The self-determination perspective. Educational Psychologist, 26, 325-346. Retrieved July 6th, 2011 from <http://library.nau.edu/>.
21. Vallerand, R., Charest, J., Salvy, S., et.al. The Academic Motivation Scale: A measure of intrinsic, extrinsic and a motivation in education. Educational and Psychological Measurement, 1992; 52:1003–1017.
22. Law, W., & Arthur, D. What factors influence Hong Kong school students in their choice of a career in nursing? International Journal of Nursing Studies, 2003; 40(1): 23 - 34.
23. Harrigan R., Gollin L., & Casken J., Barriers to increasing native Hawaiian, Samoan, and Filipino nursing students: perceptions of students and their families. Nursing Outlook, 2003; 51(1): 25 - 30.
24. Beggs, J., Bantham, J., & Taylor, S. Distinguishing the factors influencing college students' choice of Major. College student Journal, 2008; 42(2): 381 – 394.
25. Chong Y. S & Ahmed P.K., Understanding Student Motivation in Higher Education Participation: A Psychometric Validation of the Academic Motivation Scale in the Malaysian Context. DOI: 10.7763/IPEDR. 2012; 53 (26); 118-122.
26. McKeachie, W.J. and Svinicki, M., McKeachie's Teaching Tips. Houghton Mifflin Company, New York, Belmont, CA : Wadsworth, 2011. www.worldcat.org