

MEASURING THE ACADEMIC MOTIVATION OF SELECTED FIRST YEAR NURSING STUDENTS: A PRELIMINARY STUDY

Author Information:

David Paul R. Ramos

ORCID No. 0000-0001-9663-6633

Assistant Professor II, College of Nursing

Pamantasan ng Lungsod ng Maynila

Gen. Luna cor. Muralla Sts., Intramuros, Manila, Philippines

Co-author:

Edith G. Habig

Instructor II, Pamantasan ng Lungsod ng Maynila

Gen. Luna cor. Muralla Sts., Intramuros, Manila, Philippines

Correspondence should be sent to:

David Paul R. Ramos

09273233438/ dpramos@plm.edu.ph

325 S. dela Cruz St. Tondo, Manila, Philippines

ABSTRACT

The concept of motivation has spawn great interest in the field of education and research. A preliminary investigation was conducted to measure the academic motivations of 53 first year nursing students. The research design was descriptive quantitative in nature. Data collection was done through the administration of a personal data sheet and the Academic Motivation Scale for College students. Results showed that students scored high in external motivation – external regulation, which indicates that they are motivated by rewards and constraints. Furthermore, most students were motivated to go to college because they believe that college education can better prepare them for their career. Gender and age were found to have no significant effect on any of the subscales. Implications and recommendations were also discussed.

Keywords:

Academic Motivation, Academic Motivation Scale, Nursing Students, Internal Motivation, External Motivation, Amotivation

1. Introduction

The concept of motivation has spawn great interest in the field of education and research. Motivation was found to be correlated with academic performance (Kusurkar, et al., 2013), professional identity (Wasityastuti, et al., 2016), and job satisfaction (Toe, et al. 2013), among others. Academic motivation answers the question, “Why do students go to college? The Academic Motivation Scale College Version (Vallerand et a., 1992) has been used in various studies to

measure an individual's motivation to go to college. The AMS is a well-tested psychometric instrument rooted in Self-Determination Theory (SDT) by Deci & Ryan (1985). The SDT links personality, human motivation and optimal functioning. It postulates that there are two main types of motivation – intrinsic and extrinsic – which are powerful forces in shaping who we are and how we behave (Deci & Ryan, 2008).

The English version of the AMS has been found to have satisfactory levels of internal consistency (mean alpha value = .81) and temporal stability over a one-month period (mean test-retest correlation = .79). It is composed of 28 items subdivided into seven subscales which assess three types of intrinsic motivation (intrinsic motivation to know, to accomplish things and to experience stimulation), three types of external motivation (external regulation, introjected and identified), and amotivation.

Intrinsic motivation refers to the fact of doing an activity for itself, and the pleasure and satisfaction derived from participation (Deci, 1975; Deci and Ryan, 1985; as cited in Vallerand, et al., 1992). In intrinsic motivation to know, one performs an activity for the pleasure and the satisfaction that one experiences while learning, exploring, or trying to understand something new (Vallerand, et al. 1989). Intrinsic motivation toward accomplishments is defined as engaging in an activity for the pleasure and satisfaction experienced when one attempts to accomplish or create something (Vallerand, et al. 1992). Lastly, intrinsic motivation to experience stimulation occurs when one engages in an activity in order to experience stimulating sensations, such as sensory pleasure, fun and excitement, derived from one's engagement in the activity.

Extrinsic motivation on the other hand, pertains to behaviors which are engaged in as a means to an end and not for their own sake (Deci, 1975, as cited in Vallerand, et al., 1992). External regulation occurs when behaviors are regulated through external means such as rewards and constraints. Introjected regulation occurs when individuals begin to internalize the reasons for his or her actions. When a behavior becomes valued and judged important for the individual, and especially when it is perceived as chosen by oneself, then the internalization of extrinsic motives becomes regulated through identification.

Amotivation occurs when individuals do not perceive contingencies between outcomes and their own actions. They are neither intrinsically nor extrinsically motivated.

Technological advancements have changed how the generations of today are motivated to go to school. In the article of Gilbert (2013), he explored what is, what works, and what possibilities exist to address the complexities of learning, complexities of educational systems, and complexities of determining positive outcomes of educational efforts. He recommended to change delivery methods and to provide different learning environments to accommodate the needs of students. He mentioned that students might not be motivated academically because they feel that they are being left out. In addition, financial or economic situations may also be a factor in one's reasons to go to school (Labaree, 2011). In the Philippines, sending your children to private schools is considered a privilege.

There is a dearth of local literature that explores the academic motivations of Filipino nursing students. The present study aimed to address this data gap to add to local literature by determining the academic motivations of selected first year students of a local university.

1.2 Purpose

The present study is a preliminary investigation which is aimed at determining first year nursing students' academic motivations. The findings of this study have practical implications for identifying individuals who may need career counseling or any type of intervention to assist them in their academic endeavors. Specifically, it addressed the following questions:

1. What is the profile of the respondents in terms of gender and age?
2. What are the academic motivations of first year nursing students?
3. Is there a significant difference in the students' academic motivations between males and females?
4. Is there a significant difference in the students' academic motivations when they are grouped according to age?

2. Methodology

2.1 Research Design

The research design was descriptive quantitative in nature. Data collection was done through the administration of a personal data sheet and the AMS-C 28 to determine the academic motivation of first year nursing students. The research was conducted at a local university in the City of Manila.

A nonprobability, convenience sampling method was utilized to select the respondents. Fifty-six first year nursing students were initially included in the sample and were given the questionnaire. Cases were excluded when data were missing or have multiple answers ($n = 3$). The final sample consisted of 53 students (14 males and 39 females), with a mean age of 17.9811 and SD of .53675.

2.2 Instruments

Demographic/Personal Data Sheet. The first part of the questionnaire determined the demographic profile of the students which included age, sex, and block/section.

The Academic Motivation Scale College Version (AMS-C 28). The Academic Motivation Scale by Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, & Nathalie M. Briere (1989) measures the seven subscales of motivation towards college studies. It contains 28 items assessed on a 7-point scale. The AMS-C 28 is subdivided into seven subscales which measures three types of intrinsic motivation (intrinsic motivation to know, to accomplish things, and to experience stimulation), three types of extrinsic motivation (external, introjected, and identified regulation) and amotivation. The original Academic Motivation Scale was developed in French and was translated in English. The English version has satisfactory levels of internal consistency (mean alpha value = .81) and temporal stability over a one-month period (mean test-retest correlation = .79). Results of a confirmatory factor analysis confirmed the seven-factor structure of the AMS.

The following table provides the component scoring for AMS-C 28:

| Component | Item Numbers |
|---|---------------|
| Intrinsic motivation to know (IMTK) | 2, 9, 16, 23 |
| Intrinsic motivation to accomplish things (IMTA) | 6, 13, 20, 27 |
| Intrinsic motivation to experience stimulation (IMTE) | 4, 11, 18, 25 |
| Extrinsic motivation – external (EMER) | 1, 8, 15, 22 |
| Extrinsic motivation – introjected (EMIN) | 7, 14, 21, 28 |
| Extrinsic motivation – identified regulation (EMID) | 3, 10, 17, 24 |
| Amotivation (AM) | 5, 12, 19, 26 |

2.3 Data Gathering Procedure

The researcher was granted permission by the developer of the instrument to use the AMS-C 28 in this study. Consequently, a written consent to take part in the study was given and obtained from selected first year nursing students informing them of their rights to withdraw from the study at any point during the data collection process. The nature and purpose of the study were explained at the onset. For students who are below 18 years old, a parental consent form for minors were also obtained.

Collection of data was done through the use of a personal data sheet and the Academic Motivation Scale College Version. Prior to its administration, the questionnaire was face validated by three experts/ individual parties with knowledge on test construction in terms of its usability, appropriateness and understandability in the Philippine context. Information regarding the respondents' demographic profile such as age, sex, factors that influence them in choosing nursing as an academic major, and perceptions on the challenges facing nursing as an academic major were also collected.

Data analysis was conducted through descriptive and inferential statistics. Convenience sampling technique was utilized. Measures to ensure anonymity and confidentiality were conducted. Participants were informed that they may ask any questions or raise any concerns about the study.

2.4 Statistical Analyses

The statistical analyses conducted dealt with comparisons between genders and perceived average monthly income (t-test and ANOVA).

3. Results

3.1 Demographics

Majority of the students were 18 years old (n=38) and female (n=39). The mean age is 17.9811 with SD of .53675, as shown in Table 1:

Table 1: *Distribution of Age and Sex of the Students*

| Demographic Profile | Classification | Frequency (f) N=373 | Percentage (%) |
|---------------------|----------------|------------------------|----------------|
| Age | 17 | 8 | 15.1 |
| | 18 | 38 | 71.7 |
| | 19 | 7 | 13.2 |
| Sex | Male | 14 | 26.4 |
| | Female | 39 | 73.6 |

3.2 Academic Motivation

The students included in this preliminary study exhibited relatively low levels of amotivation (AM) (M = 8.5283, SD = 4.458511) compared to the other subscale scores.

Table 2: *Mean and standard deviation of the measures of academic motivation*

| Scale | N | Me | SD |
|-------|-----|------|-----|
| IMTK | 53 | 22.5 | 4.7 |
| | 472 | 6189 | |
| IMTA | 53 | 21.3 | 4.4 |
| | 208 | 3228 | |

| | | | |
|------|----|------|-------|
| IMTE | 53 | 18.1 | 4.9 |
| | | 509 | 9768 |
| EMID | 53 | 24.3 | 3.8 |
| | | 774 | 7907 |
| EMIN | 53 | 20.7 | 4.8 |
| | | 170 | 8867 |
| EMER | 53 | 24.0 | 4.1 |
| | | 377 | 9231 |
| AM | 53 | 8.52 | 4.5 |
| | | 83 | 8511 |
| IM | 53 | 62.0 | 13. |
| | | 189 | 23819 |
| EM | 53 | 69.1 | 10. |
| | | 321 | 33671 |

Students exhibited higher levels of external motivations than internal motivations, specifically, external regulation ($M = 24.0377$, $SD = 4.19231$) and identified regulation ($M = 24.3774$, $SD = 3.87907$). Overall, the students' aggregate scale score of external motivation ($M = 69.1321$, $SD = 10.33671$) is higher than the internal motivation score ($M = 62.0189$, $SD = 13.23819$).

Table 3 presents the per item mean and standard deviation for each of the 7 subscales.

Table 3: Mean and standard deviation of each item

| Scale | Statements | Mean | Standard deviation |
|--|--|----------|--------------------|
| Intrinsic motivation to know | 2. Because I experience pleasure and satisfaction while learning new things. | 5.547170 | 1.294456 |
| | 9. For the pleasure I experience when I discover new things never seen before | 5.660377 | 1.254889 |
| | 16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me. | 5.509434 | 1.612722 |
| | 23. Because my studies allow me to continue to learn about many things that interest me. | 5.830189 | 1.354989 |
| Intrinsic motivation towards accomplishment | 6. For the pleasure I experience while surpassing myself in my studies. | 5.075472 | 1.327940 |
| | 13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments. | 5.528302 | 1.353113 |
| | 20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities. | 5.113208 | 1.476227 |
| | 27. Because college allows me to experience a | 5.603774 | 1.149241 |
| Intrinsic motivation to experience stimulation | 4. For the intense feelings I experience when I am communicating my own ideas to others. | 4.490566 | 1.551955 |
| | 11. For the pleasure that I experience when I read interesting authors. | 4.415094 | 1.473274 |

| | | | |
|--|--|----------|----------|
| | 18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written. | 4.452830 | 1.526258 |
| | 25. For the "high" feeling that I experience while reading about various interesting subjects. | 4.792453 | 1.459169 |
| Extrinsic motivation: external regulation | 1. Because with only a high-school degree I would not find a high-paying job later on. | 5.981132 | 1.447685 |
| | 8. In order to obtain a more prestigious job later on. | 6.264151 | 1.021894 |
| | 15. Because I want to have "the good life" later on. | 6.358491 | 1.057834 |
| | 22. In order to have a better salary later on. | 5.433962 | 1.575161 |
| Extrinsic motivation: Introjected regulation | 7. To prove to myself that I am capable of completing my college degree. | 5.566038 | 1.704174 |
| | 14. Because of the fact that when I succeed in college, I feel important. | 5.396226 | 1.510726 |
| | 21. To show myself that I am an intelligent person. | 3.962264 | 1.556157 |
| | 28. Because I want to show myself that I can succeed in my studies. | 5.792453 | 1.230361 |
| External motivation: Identified regulation | 3. Because I think that a college education will help me better prepare for the career I have chosen. | 6.452830 | 0.991619 |
| | 10. Because eventually it will enable me to enter the job market in a field that I like. | 6.113208 | 1.120789 |
| | 17. Because this will help me make a better choice regarding my career orientation. | 5.980769 | 1.075400 |
| | 24. Because I believe that a few additional years of education will improve my competence as a worker. | 5.943396 | 1.473028 |
| Amotivation | 5. Honestly, I don't know; I really feel that I am wasting my time in school. | 2.094340 | 1.244436 |
| | 12. I once had good reasons for going to college; however, now I wonder whether I should continue. | 2.660377 | 1.663446 |
| | 19. I can't see why I go to college and frankly, I couldn't care less. | 1.924528 | 1.190492 |
| | 26. I don't know; I can't understand what I am doing in school. | 1.849057 | 1.350160 |

The results showed that statement number 3, "Because I think that a college education will help me better prepare for the career I have chosen" has the highest mean ($M = 6.452830$, $SD = 0.991619$). This indicates that students have identified college education as preparation for future careers. Students scored low in amotivation items.

3.3 Sex and Academic Motivation

There was no significant difference in any of the seven subscales when grouped according to gender, at $p = .05$, as shown in Table 4. This means that the difference in the scores between males and females in each of the subscales may be due to chance.

Table 4: Comparison of student's academic motivation when grouped according to sex

| Scale | Computed <i>t</i> -value | <i>p</i> -value | Decision | Interpretation |
|--|--------------------------|-----------------|-----------|---------------------------|
| Intrinsic motivation to know | 1.273 | .209 | Accept Ho | No Significant Difference |
| Intrinsic motivation towards accomplishment | .524 | .602 | Accept Ho | No Significant Difference |
| Intrinsic motivation to experience stimulation | -.378 | .707 | Accept Ho | No Significant Difference |
| Extrinsic motivation: external regulation | 1.001 | .321 | Accept Ho | No Significant Difference |
| Extrinsic motivation: introjected regulation | -1.023 | .311 | Accept Ho | No Significant Difference |
| Extrinsic motivation: identified regulation | .697 | .489 | Accept Ho | No Significant Difference |
| Amotivation | -.703 | .485 | Accept Ho | No Significant Difference |

3.4 Age and Academic Motivation

A one-way analysis of variance (ANOVA) compared students' academic motivations across age. Results indicate that there were no significant differences in any of the seven subscales of academic motivation when they are grouped according to age. This means that, age may not significantly affect why students go to college. This result may also be due to the small number of respondents being compared.

Table 5: Comparison of student's academic motivation when grouped according to age

| Scale | Computed F-value | p-value | Decision | Interpretation |
|--|------------------|---------|-----------|---------------------------|
| Intrinsic motivation to know | 1.383 | .260 | Accept Ho | No Significant Difference |
| Intrinsic motivation towards accomplishment | .849 | .434 | Accept Ho | No Significant Difference |
| Intrinsic motivation to experience stimulation | .159 | .853 | Accept Ho | No Significant Difference |
| Extrinsic motivation: external regulation | 1.562 | .220 | Accept Ho | No Significant Difference |
| Extrinsic motivation: introjected regulation | 1.957 | .152 | Accept Ho | No Significant Difference |
| Extrinsic motivation: identified regulation | 1.114 | .336 | Accept Ho | No Significant Difference |
| Amotivation | .111 | .895 | Accept Ho | No Significant Difference |

In addition, the AMS-C 28 was found to have high reliability as measured by Cronbach's alpha ($\alpha = .91$).

4. Discussion

This study was a preliminary investigation to identify first year nursing students academic motivations. Fifty-three first year nursing students aged 17-19 years old were included in the final sample. The Academic Motivation Scale College Version was used to identify students' academic motivations. Results showed that gender has no significant effect on academic motivation. This was not consistent with the findings of Bugler, et al. (2013) wherein girls were found to have significantly higher academic motivations than boys. Age was also not found to be a predictor of motivation. Although this may be due to the small sample size.

Summary of Findings

1. The students exhibited higher scores of external motivation than internal motivation.
2. The students scored high in external motivation – external regulation, which indicates that they are motivated by rewards and constraints.
3. Most of the students are motivated to go to college because they believe that college education can better prepare them for their career.
4. Gender has no significant effect on any of the subscales.
5. Age has no significant effect on any of the subscales.

Recommendations

In view of the findings presented, the following are recommended:

1. The study revealed that students have higher levels of extrinsic motivation than intrinsic motivation. This means that earning more money, getting better opportunities and better outcomes are the most prevalent factors driving academic motivation. Understanding these factors have important implication for faculty, administrators and policy makers.
2. Faculty members should consider being mindful that students may want more of a direct connection between course material and how it will benefit them when it is applied to achieving a career goal or other outcomes.
3. Tailor course materials, activities and assignments to be tied closely with the students' career goals to have greater efficacy.
4. Administrators may want to focus on providing career relevant degree programs.
5. Keep extracurricular activities to a minimum.
6. For policy-makers and industry leaders to provide better and equitable jobs.
7. For future researches, a more rigorous randomized and larger sample is recommended. Also, include examination of other variables, such as student-faculty interaction, and student engagement.

REFERENCES

- Bugler, M., McGeown, S. P. & St. Clair-Thompson, H. (2013). Gender differences in adolescents' academic motivation and classroom behavior. *Educational Psychology*, 35 (5).
- Carroll, J. W. (2016). Academic motivations of degree-seeking undergraduate students at a for-profit university in the United States. Retrieved from <https://repositories.lib.utexas.edu/handle/2152/39605>
- Creswell, John W. (2014). *Research design: Qualitative, quantitative and mixed methods approach* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- Gravetter, F. J. & Porzano, L. B. (2012). *Understanding research methods for behavioral sciences*. Singapore: Cengage Learning Asia Pte. Ltd.
- Kusurkar, R. A., Westers, P. Vos, C. M. P. & Croiset, G. (2013). How motivation affects academic performance: A structural equation modelling analysis. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3569579/>
- Polit, D. F., & Beck, C. T. (2004). *Nursing research: Appraising evidence for nursing practice* (7th ed.). Philadelphia: Wolters Klower/Lippincott Williams & Wilkins.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C. & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C. & Vallieres, E. F. (1993). On the assessment of intrinsic, extrinsic and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. *Educational and Psychological Measurement*, 53.
- Wasityastuti, W. (2016). Correlation between academic motivation and professional identity in medical students in the Faculty of Medicine of the Universitas Gadjah Mada Indonesia. *Educacion Medica*, 19 (1). Retrived from <https://www.sciencedirect.com/science/article/pii/S1575181317300104>