

ACADEMIC MOTIVATION AND ACADEMIC ACHIEVEMENT AMONG UNDERGRADUATE STUDENTS OF FEDERAL UNIVERSITY DUTSE, JIGAWA STATE, NIGERIA

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Abstract

This paper is titled "Academic Motivation and Academic Achievement among Undergraduate Students of Federal University Dutse, Jigawa State, Nigeria". Two objectives in line with hypotheses guided the study. Descriptive survey design was adopted. Study population was (710) males and (518) female 300 level students of Federal University Dutse, Jigawa State, Nigeria. Simple random sampling technique was used to select a sample of 306 participants. Questionnaire was the instrument used for data collection and it had a Cronbach Alpha reliability coefficient of .821. Data collected were analysed using inferential statistic of paired and independent sample t-test. The finding of this study revealed that academic motivation has significant influence on academic achievement among undergraduate students of Federal University Dutse, Jigawa State, Nigeria ($t= 5.86, p=0.001$). The finding of this study revealed that significant gender difference exists in academic motivation ($t=4.54, p=0.010$). The difference was in favour of female students. It was recommended that university authority should help the students to be well motivated academically through support from parents, lecturers and co students as this have significant influence on academic achievement; and psychologist and counsellors should be able to distinguish the differences between male and female students in their academic motivation and manage each group of under graduate students appropriately.

Keywords: Academic achievement, academic motivation, undergraduate students.

Introduction

Motivation is an explanatory concept that is used to explain behaviour. It gives the reasons for people's actions, desires, and needs. In an academic environment, motivation directly or indirectly affects the process of learning and teaching, and is one of the important elements in the development of students' achievement and education. Motivation is the primary force responsible for the initiation, intensity, and persistence of behaviour. Motives are causes that produce certain effects or actions (including inaction). The source of a person's motivation may be intrinsic, derived from internal processes, and/or extrinsic, the result of external forces (Usher & Morris, 2012). Likewise, individuals can be impelled to act by conscious and non-conscious motives. According to Li and Zheng (2017) academic motivation can be defined as a form of cognitive and emotional arousal that influences a learner's academic achievement. It is an internal state that activates, directs and maintains learning-related behaviours. The bulk of behaviours indicating the

academic motivation involves insisting on doing difficult assignments, hardworking or effort into learning to reach mastery and choosing assignments which need great effort. Academic motivation refers to the cause of behaviours that are in some way related to academic functioning and success, such as how much effort students put forth, how effectively they regulate their work, which endeavours they choose to pursue, and how persistent they are when faced with obstacles (Usher & Morris, 2012).

On one hand, Wigfield and Eccles (2002) sees academic motivation as a student's desire (as reflected in approach, persistence, and level of interest) regarding academic subjects when the student's competence is judged against a standard of performance or excellence. Academic motivation is defined by a student's desire (as reflected in approach, persistence and level of interest) regarding academic subject when the student's competence is judged against a standard of performance or excellence (Mangal, 2013). Therefore, academic motivation is a driving force behind students' motivation to learn. It is the need and desire to excel in academic work. Academic behaviours can be seen as intrinsically motivated, extrinsically motivated or a motivated. But it usually seen that the youths of today often lack academic motivation at the secondary school level which is considered a period of storm and stress and developmental changes which makes their interest and attention divided among many things like peer group, engaging in entertaining activities like movies, social networking, altruism or other everyday activities in the school and community. They may also find academic activities in the school not engaging and interesting. Research has shown that one of the most prominent academic problems plaguing today's youth is lack of motivation towards academic activities (Gupta, 2017).

Motivation is a state in which one is excited from 'within' by needs, motivations, aspirations, desires or motives for a particular behaviour directed toward achieving a goal, which acts as an external stimulus to the behaviour (Petz, 2005). Motivation can be basically categorized into two that is intrinsic and extrinsic motivation.

Intrinsic (internal) motivation is a need arisen from internal impulses which are not caused by external influences, and the only reward inherent to intrinsic motivation is the pleasure of learning, cognition, development of knowledge and skills, encouraged by personal interests. Strengthening the intrinsic motivation leads to higher student achievement, greater creativity and flexibility of thinking and better long-term memory. Variable intrinsic motivation can be encouraged by certain social atmosphere. There are three basic psychological needs associated with intrinsic motivation: the need for autonomy, defined as the self-regulation of personal behaviour, the need for competence as a necessity the success and the control of our own environment, and the need for coherence, that is, a sense of belonging to a particular social group (Simons-Morton & Haynie, 2002). On the other hand, the negative impact on the intrinsic motivation have all expected material rewards and all forms of external control, such as deadlines, surveillance, threats, which are invasive of the personal autonomy, the primary curiosity and desire for challenge (Deci & Ryan, 2000).

Extrinsic (external) motivation is influenced by external factors, various forms of incentives, such as awards, praises, reviews, progress in work and others for example, which impact the development of motivation (Rheinberg, 2008). Motivation is widely acknowledged to enhance performance, learning goal and achievement of the students (Amrai, Motlagh, Zalani & Parhon, 2011). It refers to reasons that underlie the behaviour that is characterized by willingness and choice. Academic motivation can develop confidence in one's ability along with an increased value of education and desire to learn. Motivation for academic achievement is attributed to behaviours which lead to learning and achievement (Masaali, 2007). Afolayan, Donald, Onasoga, Babafemi and Juan (2013) investigated the relationship between Motivation and academic achievement of nursing students, Niger Delta University, Bayelsa State, Nigeria. His finding indicated that anxiety is a common cause of poor academic achievement during examination among few students. This motivation is often expressed as psychological, physiological and behavioural abnormalities during examination.

Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university. School systems mostly define cognitive goals that either apply across multiple subject areas (for example, critical thinking) or include the acquisition of knowledge and understanding in a specific intellectual domain (for example, numeracy, literacy, science, history) (Steinmayr, 2017).

Success of student in the classroom and university takes a vital part in the academic progress of the students (Yawa, Balarabe & Mohammed 2021). Parents, teachers and school administrators alike take understanding of the academic wellbeing of the students. Yardsticks are set by school authorities to quota presentation of the study, the usual performance average set by the university will define whether a student has accomplishments or not. In the evaluation of students' performance, Pekrun and Elliot (2006) argued that achievement is the behaviour of an individual that can be assessed nonstop by another individual. Therefore, academic achievement has been seen as a term used for student based on how well they are doing in studies and classes. This explanation tends to address academic achievement as the conclusion of all the happenings of the student in the school.

Academic achievement of university students can also be examined as the amount to which a student has achieved his educational goals. This means that, the student academic performance is measured by the extent to which a student can reach the instructive goal they have previously put in place. The higher institution measures academic achievement in numerous ways which include continuous assessment test (CAT) and a number of standardize test and examination. By this method, areas of strengths and weaknesses are in students' academic performance determined and estimated in order to advance on the learning process of the student (Pekrun & Parry, 2007). Therefore, academic achievement should be considered to be a multifaceted construct that comprises different domains of learning. Recent research on gender and academic motivation by Bugler, Mcgeown and Thompson (2013) revealed that girls generally reported higher level of academic motivation whilst teacher reports of behaviour were poorer for boys. Interestingly, boy's reported levels of academic motivation were significantly more closely associated with teacher reports of their classroom behaviour. More so, field information shows and remained proved by analysis that female has positive connection with academic motivation and are more academically motivated than male students (Khan, Ilyas & Waheed, 2022).

Statement of the problem

Interaction with both male and female undergraduate students of Federal University Dutse, Jigawa State by different authors revealed that their academic achievement has been on the decline over the years. This may be attributed to students' poor belief that he/she can be able to accomplish a specific task and lack of desire to excel academically. This lack of natural interest may influence their academic achievement. Many students are observed to have set back regarding their achievement which is evident by their negligence as absconding from lectures, lack of concentration, lack of supports and many more. Such kinds of students do not seem to have respect for the courses they study let alone striving hard to pursue excellence. This poor academic belief may mar students' achievement since the motivation to make one persist may in turn strengthen him/her in their academic endeavours is no more. If the motivation to achieve this is very slim, such students' academic achievement may be tampered with. Counsellors will be able to help these students professionally to motivate students to achieve academically. Therefore, this study was set up to investigate the influence of academic motivation on academic achievement among undergraduate students of Federal University Dutse, Jigawa State, Nigeria.

Objectives of the study

The objectives of the study are as follow:

1. To determine the relationship between academic motivation and academic achievement among undergraduate students of Federal University Dutse, Jigawa State, Nigeria.
2. To find out whether differences exist between male and female in their academic motivation among undergraduate students of Federal University Dutse, Jigawa State, Nigeria.

Hypotheses

The following hypotheses guided this study:

H₀₁: There is no significant relationship between academic motivation and academic achievement among undergraduate students of Federal University Dutse, Jigawa State, Nigeria.

H₀₂: There is no significant difference between male and female in academic motivation among undergraduate students of Federal University Dutse, Jigawa State, Nigeria.

Methodology

Research design for this study was survey design. The design was the most suitable method to be used in this study, because it enables the researcher to generate data through the standardized collection procedures based on highly structured research instrument(s) and well defined study concepts and related variables. In survey method, participants answer questions administered through interviews or questionnaires. The population of this study was made up of seven hundred and ten (710) males and five hundred and eighteen (518) female 300 level students of Federal University Dutse, Jigawa State, Nigeria. Simple random sampling technique was used to select a sample of 306 participants. This sample was drawn from the entire population under study and the selection was in conformity with the Research Advisors (2006) table for determining the sample size with 0.05 degree of accuracy at 95% confidence level. The instrument used for data collection in this study was academic motivation inventory. The instrument comprised of fifteen (15) items adapted from Heater (1981). It has five points Likert scale consisting of Strongly Agreed (SA), Agreed (A), Not Sure (NS), Disagreed (D), Strongly Disagreed (SD). Both the validity and reliability of the instrument was ensured. The instrument was validated to determine the face and content validity, its relevance and appropriateness in the study. Reliability measure was determined using Cronbach's Alpha. The instrument was found to have a reliability coefficient of .821. The data collected were analyzed using descriptive and inferential statistics. Using Pearson product moment correlation coefficient PPMC(r) and Paired sample t – test was used to test the hypotheses 1 and hypothesis 2. The hypotheses were tested at 0.05 alpha level of significance. SPSS version 25.0 were used for data analysis and storage.

Results

H₀₁: There is no significant relationship between academic motivation and academic achievement among undergraduate students of Federal University Dutse, Jigawa State, Nigeria

PPMC(r) statistic from Table 1 showed that academic motivation has significant relationship on academic achievement among students of Federal University Dutse, Jigawa State, Nigeria. This is because the calculated p value of 0.002 is less than the 0.05 alpha level of significance and the computed r value of 5.96 is greater than the 1.96 at df 304. Therefore, the null hypothesis which states that there is no significant relationship between academic motivation and academic achievement among students of Federal University Dutse, Jigawa State, Nigeria is hereby rejected.

H₀₂: There is no significant difference between male and female in academic motivation among undergraduate students of Federal University Dutse, Jigawa State, Nigeria

The independent sample t-test statistic from table 2 showed that difference between male and female exists in academic motivation among students of Federal University Dutse, Jigawa State, Nigeria. This is because the calculated p value of 0.010 is less than the 0.05 alpha level of significance and the computed t value of 4.54 is greater than the 1.96 t-critical value at df 304. Therefore, the null hypothesis which states that there is no significant gender difference in academic motivation among students of Federal University Dutse, Jigawa State, Nigeria is hereby rejected.

Table 1. PPMC statistic on the relationship of academic motivation and academic achievement among students of Federal University Dutse, Jigawa State, Nigeria.

Category	N	Mean	Std. Dev	Df	Corl.	p	Decision
Academic Motivation	306	51.08	5.310	304	5.86	0.001	Significant
Academic Achievement	306	2.63	0.634				

Significant at $p < 0.05$.

Table 2. Independent sample t-test statistic on the difference between male and female in academic motivation among students of Federal University Dutse, Jigawa State, Nigeria.

Category	N	Mean	Std. Dev	Df	Corl.	p	Decision
Male	177	54.23	5.013	304	4.54	0.010	Significant
Female	129	57.34	5.514				

Significant at $p < 0.05$.

Discussion of Findings

The finding of this study revealed that academic motivation has significant influence on academic achievement among undergraduate students of Federal University Dutse, Jigawa State, Nigeria. This finding agrees with that of Li and Zheng (2017) that academic motivation can be defined as a form of cognitive and emotional arousal that influences a learner's academic achievement. The finding also concurs with that of Mangal (2013) who posited that academic motivation is defined by a student's desire (as reflected in approach, persistent and level of interest) regarding academic subject when the students' competence is judge against a standard of performance or excellence. Academic motivation is a driving force behind student's motivation to learn. It is the need and desire to excel in academic work. Academic behaviours can be seen as intrinsically motivated, extrinsically motivated or a motivated. The finding can further be back with the work of Afolayan et al. (2013) who investigated the relationship between Motivation and academic achievement of nursing students, Niger Delta University, Bayelsa State, Nigeria. This finding is in congruence with that of Adegboyega (2018) whose finding revealed that majority of Nigerian undergraduates have a high level of academic motivation. Also, Bakar, Alsmadi, Ali, Shuaibu, and Solahudin (2022) revealed a significant relationship between student motivation and academic achievement (CGPA) among undergraduate students at University Sultan Zainal Abidin, Terengganu, Malaysia.

The finding of this study revealed that significant gender difference exists in academic motivation among undergraduate students of Federal University Dutse, Jigawa State, Nigeria. The difference was in favour of female students. This finding agrees with that of Bugler, Mcgeown and Thompson (2013) revealed that girls generally reported higher level of academic motivation whilst teacher reports of behaviour were poorer for boys. Interestingly, boy's reported levels of academic motivation were significantly more closely associated with teacher reports of their classroom behaviour. The finding further goes in line with that of Khan, Iliyas and Waheed (2022) who lamented that field information shows and remained proved by analysis that female has positive connection with academic motivation and are more academically motivated than male students. Shekhar and Devi (2012) indicated that Males and Females differ significantly on achievement motivation. Females have higher achievement motivation compared to males. However, Liu and Zhu (2009) found significant differences in achievement motivations of male and female senior high school students, male students have higher achievement motivations than female students. The result of this study contradict with the finding of Bedel (2013) who found that gender doesn't cause any significant difference in academic motivation. In summary, the research on gender differences in achievement for males and females has resulted in inconsistent findings. Some researchers have found no difference, whereas others have found differences.

Conclusion

The result of this study revealed that academic motivation has significant influence on academic achievement. The result also indicated that female students were more academically motivated than their male counterparts among undergraduate students of Federal University Dutse, Jigawa State, Nigeria.

Recommendations

The following recommendations were drawn:

1. University authority should assist the students to be well motivated academically through support from parents, lecturers and co students as this have significant influence on academic achievement
2. Psychologist and counsellors should be able to distinguish the differences between male and female students in their academic motivation and manage each group of under graduate students appropriately.

References

- Adegboyega, L. O. (2018). Influence of Achievement Motivation on Nigerian Undergraduates' Attitude towards Examination. *International Journal of Instruction*, 11(1), 77-88.
- Afolayan, J. A., Donald, B., Onasoga, O., Babafemi, A. A. & Juan, A. A. (2013). Relationship between anxiety and academic performance of nursing students, Niger Delta University, Bayelsa State, Nigeria. *Advances in Applied Science Research*, 4(5), 25-33.

- Amrai, K., Motlagh, S. E., Zalani, H. A., & Parhon, H. (2011). The relationship between academic motivation and academic achievement students. *Procedia Social and Behavioral Sciences*, 15, 399-402.
- Bakar, N. A., Alsmadi, M. S., Ali, Z., Shuaibu, A., & Solahudin, M. H. (2022). Influence of Students' Motivation on Academic Achievement Among Undergraduate Students in Malaysia. *Journal of Positive School Psychology*, 6(2), 3443-3450.
- Bedel, A. (2013). Comparison of academic empowerment and anxiety levels of students with and without grade repair. *Journal of National Education*, 43(200), 111-122.
- Bugler, M., Mcgeown, S.P. & Thompson, H.S.C. (2013). Gender differences in adolescents' academic motivation and classroom behaviour. *Educational psychology*, 35(5), 1-16.
- Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behaviour, *Psychological Inquiry*, 11, pp. 227-268.
- Gupta, P. K. (2017). Impact of academic motivation on academic achievement. *Educational Psychology*, 3, 22-29.
- Heater, S. (1981). A new self-report scale of intrinsic versus extrinsic orientation in the classroom: Motivational and informational components. *Developmental Psychology*, 17(3), 300-312.
- Khan, T., Ilyas, M. & Waheed, T. (2022). Examining the role of gender in academic motivation among students: Evidences from district Malakand. *Journal of Research in Humanities and Social Science*, 10(9), 298-302.
- Li, S. & Zheng, J. (2017). The effect of academic motivation on students English learning achievement in the schoolbag-based learning environment. *Smart Learn. Environ.* 4(3).
- Liu, Q., & Zhu, X. (2009). Investigation and analysis on the achievement motivations of 278 Senior High School Students. *International Journal of Psychological Studies*, 1(1), 229-240.
- Mangal, S.K. (2013). *Advance Educational Psychology*, (2nd Ed.) PHI Learning Private Ltd. Delhi.
- Masaali, S. (2007). *Relationship between reading study and academic achievement among students in IU*. [dissertation]. Isfahan: Khorasgan Slamic Azad University.
- Pekrun, R., & Perry, R.P. (2007). The control value theory of achievement emotions: An integrative approach to emotions in education. In: Schutz PA, Pekrun R, editors. *Emotion in education*. Elsevier Academic; (13–36).
- Pekrun, R., & Elliot, A.J. (2006). Achievement goals and discrete achievement emotions: A theoretical model and prospective test. *Journal of Educational Psychology*, (583–597).
- Petz, B. (2005). Psihologijski rječnik, Naklada Slap, Zagreb.
- Research Advisors (2006). *Determining Sample Size for Research Activities*. Educational and Psychological Measurement, 30, pp. 607-610.(<http://research-advisors.com>), All rights reserved.
- Rheinberg, F. (2008). *Intrinsic motivation and flow-experience*. In H. Heckhausen, & J. Heckhausen (Eds.), *Motivation and action* Cambridge, UK: Cambridge University Press. Pp. 323-348.
- Shekhar, C. & Devi, R. (2012). Academic motivation across gender and different academic majors. *Journal of Educational and Developmental Psychology*, 2(2), 105-109.
- Simons-Morton, B. G., & Haynie, D. L. (2002). *Growing up drug free: A developmental challenge*. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, K. A. Moore, & The Center for ChildWell-Being (Eds.). *Well-being: Positive development across the life course* (pp. 109-122). Mahwah, New Jersey: Lawrence Erlbaum.
- Steinmayr, R., (2017). Subjective Well-being: *Test Anxiety, Academic achievement testing for reciprocal effects*. *Frontier Psychology*, 6,19-94.
- Usher, E.L., & Morris, D.B. (2012). Academic Motivation. In: Seel, N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA. https://doi.org/10.1007/978-1-4419-1428-6_834.
- Wigfield, A. & Eccles, J.S., (2002). *Development of achievement motivation*. San Diego: Academic Press.
- Yawa, A.W., Balarabe, M. & Mohammed, A. I. (2021). Influence of gender on test anxiety, academic motivation and academic achievement among universities students in North-West Zone, Nigeria. *International Journal of Innovative Science and Research Technology*, 6(2), 658-663.