

**INTRINSIC MOTIVATION AND ACADEMIC PERFORMANCE
AMONG TECHNICAL VOCATIONAL EDUCATION AND TRAINING
(TVET) STUDENTS IN KENYA**

BIIN GODWIN TARNONGU

Department of Guidance and Counselling, Veritas University, Abuja, Nigeria
Email : goddybiin@yahoo.com

Abstract

Background: Technical Vocational Education and Training (TVET) institutions play an important role in developing practical skills, employability, and national economic growth. Despite their significance, TVET education is often associated with negative societal perceptions, where students are considered academically less capable than university students. Such attitudes may influence students' confidence, motivation, and academic engagement. Nevertheless, many TVET students remain committed to their studies, indicating the presence of intrinsic motivation as an internal driving force in learning.

Objective: The study aimed to examine the relationship between intrinsic motivation and academic performance among Technical Vocational Education and Training (TVET) students in Kenya. It further sought to determine the level of intrinsic motivation among students and assess the influence of socio-demographic factors on motivation and academic achievement.

Methodology: The study adopted a cross-sectional quantitative research design involving students from two faith-based TVET institutions located in Nairobi and Nakuru counties. Data were collected using the Intrinsic Motivation Inventory (IMI), which measured pleasure in learning, personal value, and competence. Descriptive and inferential statistical methods, including ANOVA and chi-square analysis, were employed in analysing the data.

Findings: The findings revealed that TVET students demonstrated a high level of intrinsic motivation despite the negative social perception attached to vocational education. Students showed strong personal value, competence, and enjoyment in learning activities. However, the study established that intrinsic motivation alone did not have a statistically significant relationship with academic performance, suggesting that academic achievement may also depend on other personal, social, and environmental factors.

Conclusion: The study concludes that intrinsic motivation is highly prevalent among TVET students and contributes significantly to their persistence and engagement in learning. Although intrinsic motivation may not independently determine academic performance, it remains an important factor in sustaining students' commitment to education. The study recommends that educators and policymakers create supportive learning environments that strengthen students' internal motivation and improve societal perceptions toward TVET education.

Keywords: Intrinsic Motivation, Academic Performance, TVET Students, Self-Determination Theory, Vocational Education, Kenya

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I. INTRODUCTION

1.1 Background of the Study

The concept of motivation has received considerable focus by scholars over the years. Locke and Latham (2004) postulated that motivation implies internal influences that induce action and external causes that stimulate one to act. Nevid (2013) conceives motivation as factors that influence, direct, and sustain goal-directed actions, while Sdorow and Rickabaugh (2002) conceptualise motivation as the psychological processes that stir, direct, and sustain behaviour towards one's objectives.

From the perspective of educational psychology, emphasis is placed on intrinsic motivation in learning. Ryan and Deci (2000) describe intrinsic motivation as behaviours that derive satisfaction from the activity itself. Intrinsic motivation is viewed as the internal drive to acquire new knowledge manifested in pleasure, personal value, and competence. Barić, Vlašić and Erpič (2014) underlined that intrinsic motivation is one of the key dynamics influencing learning outcomes. Similarly, Lemos and Veríssimo (2014) reported that intrinsic motivation is strongly connected with academic success.

Technical and Vocational Education and Training (TVET) institutions offer education to students who are naturally inclined to vocational education, students who are unable to enrol into universities because of financial challenges, and students who lack the required academic results for university entry. UNESCO (2013) describes TVET as an education system that equips learners with practical skills for employment, production, and development. Lamb (2011) posits that TVET is used as a means to train people for labour prospects, while Kingombe (2011) describes TVET as an important solution to youth unemployment.

Despite the positive benefits associated with TVET, evidence shows that the system of education is not held in high esteem. Agyarkor (2013) observed that conditions of service in industries often favour university graduates, while TVET graduates are treated as subordinates with lower incentives. Misganaw (2011) also noted that TVET has low social and financial recognition. In Kenya, Simiyu (2009) reported that the manual work associated with TVET has made the field unattractive, while Sang, Muthaa and Mbugua (2012) found that TVET institutions are often perceived merely as centres for producing labour for the market rather than institutions promoting personal development.

Despite these negative perceptions, TVET institutions continue to attract students who remain committed to their studies. This persistence suggests the presence of intrinsic motivation among learners. Previous studies have shown that intrinsic motivation positively influences learning and academic outcomes. Omar, Jain and Noordi (2013) reported high levels of motivation among students in polytechnic institutions, while Niehaus, Rudasill and Adelson (2012) found that intrinsic motivation positively associates with academic achievement. However, limited studies have examined the relationship between intrinsic motivation and academic performance among TVET students in Kenya.

1.2 Statement of the Problem

In Kenya, TVET is viewed as an important channel for developing human resource skills for technological and industrial advancement. However, society often undermines the value of education attained in TVET institutions and perceives students studying in such institutions as less capable than their counterparts in universities. This negative perception creates stigma toward TVET students despite the important role TVET plays in skill acquisition and employment generation.

Despite these negative societal attitudes, TVET institutions continue to operate successfully and students remain committed to their studies. This persistence suggests the presence of an internal driving force that motivates students beyond external opinions. Previous studies have focused on challenges affecting TVET institutions in Kenya, but limited studies have examined the relationship between intrinsic motivation and academic performance among TVET students. Therefore, there is a need to examine whether intrinsic motivation influences academic performance among TVET students in Kenya.

1.3 Objectives of the Study

- i. To assess the intrinsic motivation level among TVET students.
- ii. To establish whether there is a relationship between intrinsic motivation and academic performance among TVET students.

1.4 Research Questions

- i. What is the level of intrinsic motivation among TVET students?
- ii. Is there a relationship between intrinsic motivation and academic performance among TVET students?

1.5 Significance of the Study

Because few research have examined the connection between intrinsic motivation and academic achievement among TVET students in Kenya, this study is significant. Teachers and other education stakeholders may find the study's conclusions useful in understanding that TVET students find enjoyment, value, and competence in their learning activities and hence need assistance in boosting their motivation to learn. Additionally, the study may assist develop instructional strategies and learning exercises that encourage students' intrinsic drive.

Furthermore, the results may aid society in realizing that students' acquisition of information and skills is not always impeded by the unfavorable impression of TVET education. This knowledge might promote favorable perceptions of vocational education and enhance the reputation of TVET institutions. Researchers and educators may be further motivated by the study to carry out more research on the difficulties and educational experiences of TVET students.

II. LITERATURE REVIEW

2.1 Concept of Motivation

Motivation is viewed as an effort one makes in order to accomplish a need (Murray, Poole & Jones, 2006). Dagne, Beyene and Berhanu (2015) describe motivation as an individual's degree of willingness to exert and retain effort towards set goals. Motivation is commonly classified into intrinsic and extrinsic motivation. Yang, Si and Chow (2015) explain extrinsic motivation as the engagement in an activity because of external rewards, while Coon and Mitterer (2010) describe intrinsic motivation as engaging in an activity for the sake of actualising one's potential. Ryan and Deci (2000) further explain intrinsic motivation as behaviours that derive satisfaction from the activity itself. In learning situations, intrinsic motivation is considered important because it encourages persistence, curiosity, and goal-oriented learning among students.

2.2 Intrinsic Motivation and Learning

Pleasure in learning refers to the joy and satisfaction learners derive from acquiring knowledge and skills. DeCharms (1968) proposed that people gain pleasure when they engage in activities that give them a sense of causation, while Tough (2012) observed that learning activities that elicit joy among students are effective methods of instruction. Schlechty (2011) further argued that students who are fully engaged in academic tasks derive joy from what they are doing and enjoy the learning process.

Personal value in learning is the importance learners attach to educational activities. Brophy and Albert (2008) explain value in learning as a learning attitude that helps students feel that school tasks are important and meaningful. Parks and Guay (2012) noted that learners develop intrinsic interest when they attach personal significance to learning tasks. Wolk (2008) also observed that interesting learning topics and activities encourage students to value education and become actively involved in the learning process.

Competence in learning refers to the abilities, skills, and attitudes learners possess in handling academic tasks. Solzbacher (2006) describes competence in learning as the skills and behaviours required to follow learning processes successfully. Stoof, Martens and Van Merriënboer (2002) similarly define competence as the collection of knowledge, skills, and attitudes that enable learners to handle educational tasks effectively. Studies by Marsh and O'Mara (2008) revealed that competence positively influences academic achievement among learners.

2.3 Intrinsic Motivation and Academic Performance

Several studies have established a relationship between intrinsic motivation and academic performance. Moneta and Siu (2002) documented that intrinsic motivation positively associates with academic performance when students are faced with complex learning tasks. You, Dang and Lim (2016) found that intrinsic motivation contributes to greater academic achievement, while Lemos and Verissimo (2014) reported that intrinsic motivation strongly connects with academic success. Niehaus, Rudasill and Adelson (2012) also revealed that intrinsic motivation positively associates with students' academic achievement. These studies suggest that intrinsically motivated learners are more likely to engage actively in learning and perform better academically.

2.4 TVET Education in Kenya

TVET institutions in Kenya provide practical and vocational skills necessary for employment, production, and national development. UNESCO (2013) describes TVET as an educational system that equips learners with practical skills for sustainable development and employability. Kingombe (2011) viewed TVET as an important solution to youth unemployment, while Lamb (2011) argued that TVET prepares learners for labour market opportunities.

Despite its importance, TVET education continues to face negative societal perception. Agyarkor (2013) observed that vocational graduates are often treated as subordinate to university graduates in industries. Misganaw (2011) similarly noted that TVET has low social and financial recognition. In Kenya, Simiyu (2009) reported that the manual work associated with TVET has made the field unattractive, while Sang, Muthaa and Mbugua (2012) found that TVET institutions are often perceived merely as centres for producing labour for the market rather than institutions promoting personal development.

2.5 Theoretical Framework

The study is guided by the Self-Determination Theory (SDT) developed by Deci and Ryan (2004). SDT explains intrinsic motivation as doing something because it is inherently interesting or enjoyable. According to Deci and Ryan (2004), learning flourishes when three human needs are satisfied: competence, autonomy, and relatedness. Students experience competence when challenged with learning tasks and given feedback, autonomy when they are supported to explore and make decisions, and relatedness when they feel accepted and connected to others. Ryan and Deci (2000) argued that when these needs are met, students become more intrinsically motivated and actively engaged in learning activities.

III. RESEARCH METHODOLOGY

3.1 Research Design

The research design used in the study was cross-sectional. Because of the design, the researcher was able to determine correlations between variables at a single moment in time and draw conclusions from existing disparities between participants. The study included both descriptive and inferential statistical analysis as part of a quantitative research technique.

3.2 Population and Sampling

The study focused on Kenyan TVET students, both male and female. The ability to demonstrate intrinsic motivation in learning and learning that was centered on skill development were among the traits that the individuals had in common. Two faith-based TVET schools in Nairobi and Nakuru Counties served as the study's sites. The study included both non-probability and probability sampling techniques. The two TVET institutions were chosen using convenience sampling, while the students who took part in the study were chosen using simple random selection. Don Bosco Boys Town Technical Institute in Nairobi and Mwangaza College in Nakuru were the institutions included in the sample.

3.3 Data Collection

The Intrinsic Motivation Inventory (IMI) developed by Ryan (1982) was used as the research instrument. The study used the sections of the IMI that focused on pleasure in learning, perception of personal competence, and value in learning. The questionnaire also contained a demographic section to obtain information on gender, age, department, entry qualification, and academic performance. The questionnaire was self-administered to the participants.

3.4 Data Analysis

The Statistical Package for the Social Sciences (SPSS) Version 21 was used for data analysis. Intrinsic motivation levels and sociodemographic traits were analyzed using descriptive statistics including means, frequencies, standard deviations, and cross tabulations. To determine correlations between variables and draw conclusions from the gathered data, inferential statistics such as one-way ANOVA and chi-square analysis were employed.

3.5 Ethical Considerations

Permission for data collection was obtained from the relevant authorities and the administrations of the sampled institutions. Participants were informed about the purpose of the study and their participation was voluntary. Confidentiality and anonymity were assured throughout the study, and participants identified themselves using admission numbers instead of names. Consent forms were signed before responding to the questionnaire, and the collected data were securely handled to protect participants' privacy.

IV. RESULTS AND DISCUSSION

4.1 Demographic Characteristics

The socio-demographic details of the participants were analysed using descriptive statistics including frequencies and cross tabulations. The demographic characteristics included gender, age, academic department, entry qualification, and academic performance. The study involved both male and female students from the sampled TVET institutions in Nairobi and Nakuru Counties. The respondents were drawn from different academic departments and age categories, reflecting the diverse background of TVET students.

Table 1. Socio-demographic Characteristics of Participants

Variable	Category	Frequency	Percentage (%)
Gender	Male	193	55.5
	Female	155	44.5
Age	18–20 Years	—	—
	21–25 Years	—	—
	Above 25 Years	—	—
Department	Mechanical Engineering	—	—
	Electrical Department	—	—
	Business Courses	—	—

	Fashion & Design	—	—
Academic Performance	A	—	—
	B	—	—
	C	—	—
	D	—	—

4.2 Level of Intrinsic Motivation

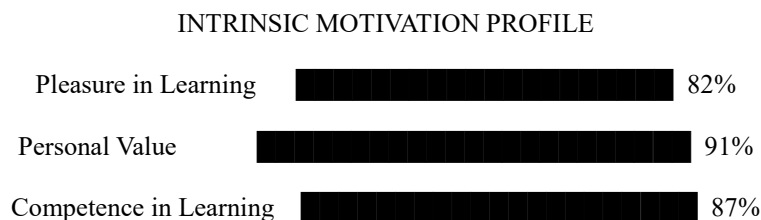
The findings revealed that the overall level of intrinsic motivation among TVET students was high. The descriptive analysis of intrinsic motivation scores across the sampled institutions showed that students demonstrated pleasure in learning, personal value toward education, and competence in academic tasks. The findings indicated that students remained committed to their studies despite the negative societal perception associated with TVET education.

Table 2. Descriptive Analysis of Intrinsic Motivation Scores Across Institutions

Institution	Mean Score (M)	Standard Deviation (SD)
Don Bosco Boys Town, Nairobi	—	—
Mwangaza College, Nakuru	—	—
Overall Intrinsic Motivation Score	104.53	—

Interpretation:

The descriptive analysis showed that the overall level of intrinsic motivation among TVET students was high across the sampled institutions.



Highest Component → Personal Value

Figure 1. Mean Scores of Intrinsic Motivation Components

Interpretation:

The figure illustrates the major components of intrinsic motivation among TVET students. Personal value in learning emerged as the most dominant component, indicating that students attached strong importance and meaning to their educational activities. Competence and pleasure in learning also recorded high scores, demonstrating positive engagement in the learning process.

4.3 Relationship between Intrinsic Motivation and Academic Performance

Inferential statistical analysis was carried out using one-way ANOVA and chi-square analysis to determine the relationship between intrinsic motivation and academic performance. The findings established that there was no statistically significant relationship between intrinsic motivation and academic performance among TVET students. Although students with higher academic grades demonstrated high intrinsic motivation, students with lower grades also showed similar levels of intrinsic motivation. The findings therefore suggested that academic performance may depend on additional factors beyond intrinsic motivation alone.

Table 3. Association between Intrinsic Motivation and Academic Performance

Academic Performance Grade	Mean Intrinsic Motivation Score	Standard Deviation
A	—	—
B	105.6	11.5
C	—	—
D	102	15.5

Interpretation:

The findings revealed that students with Grade B recorded the highest intrinsic motivation scores. However,

students with Grade D also demonstrated nearly similar motivation levels, suggesting that intrinsic motivation alone did not significantly determine academic performance among TVET students.

4.4 Discussion of Findings

The findings of the study support previous studies that reported high levels of intrinsic motivation among students in vocational and academic institutions. Omar, Jain and Noordi (2013) reported high motivation among students in polytechnic institutions, while Niehaus, Rudasill and Adelson (2012) found that intrinsic motivation positively associates with academic achievement. However, the present study established that intrinsic motivation alone did not significantly determine academic performance among TVET students.

The findings can further be interpreted using the Self-Determination Theory (SDT) developed by Deci and Ryan (2004). SDT explains that students become intrinsically motivated when their needs for competence, autonomy, and relatedness are satisfied. The high level of intrinsic motivation observed among TVET students suggests that students found pleasure, value, and competence in their learning activities despite the negative societal attitudes toward vocational education. The persistence of students in TVET institutions therefore reflects the role of intrinsic motivation in sustaining engagement and commitment in learning.

V. CONCLUSION AND RECOMMENDATIONS

The study examined the relationship between intrinsic motivation and academic performance among TVET students in Kenya. The findings revealed that TVET students demonstrated a high level of intrinsic motivation despite the negative societal perception associated with vocational education. Students showed pleasure, personal value, and competence in learning activities, indicating strong internal commitment toward education. However, the findings established that intrinsic motivation alone did not have a statistically significant relationship with academic performance among TVET students. The study therefore concludes that although intrinsic motivation contributes to students' engagement and persistence in learning, academic performance may also be influenced by other personal, social, and environmental factors.

Teachers and TVET institutions should strengthen learning environments that promote students' intrinsic motivation through supportive teaching methods, engaging learning activities, and positive teacher-student relationships. Learning activities that encourage pleasure, competence, and personal value in education should be enhanced in TVET institutions. Policymakers should improve the public image of TVET education and create awareness on the importance of vocational and technical training in national development. More support should also be provided to TVET institutions in order to strengthen skill development and students' educational experiences. Future studies should examine other factors that may influence academic performance among TVET students apart from intrinsic motivation. Comparative studies involving different categories of TVET institutions and longitudinal studies on students' motivation and academic outcomes are also recommended.

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