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Research Article

Understanding the drivers of educational achievements: a study of primary schools in Teru district, Afar regional state, Ethiopia

Ahmed Abduletif Abdulkadr[1*] and Jemal Muhamed Adem[2]

[1] Samara university, department of Economics.
[2] Samara University, Department of Political Sciences. Email: jemalmuhamed166@gmail.com
*Corresponding author Email: ahmedabduletifabdulkadr@su.edu.et

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Abstract

Although education in Ethiopia is free, pastoralist regions like the Afar National Regional State (ANRS) have long been underserved, resulting in persistently low educational quality. Despite rising enrollment, ANRS continues to rank last nationwide, and the specific causes of poor student performance remain insufficiently understood. This study investigates the factors affecting primary school achievement in the remote pastoralist district of Teru Woreda. Using a mixed-methods design, data were collected from 341 randomly selected students across three primary schools and three Alternative Basic Education centers. Analysis using descriptive statistics, correlation, and multivariate regression shows that school facilities, student interest, study time, and family academic follow-up positively influence performance. Family wealth, however, has a negative effect, as better-off households often prioritize livestock management over schooling. The model explains 51.4% of the variance in student outcomes. Overall, academic performance in Teru Woreda is shaped by inadequate school infrastructure, low motivation, weak study habits, and limited family support, compounded by pastoralist livelihood demands. Targeted, context-sensitive policy interventions are needed to address these challenges.

Key words: Pastoralists, formal education, Academic Performance, family wealth, School facilities

1. INTRODUCTION

In the Ethiopian education system, the government acts as the primary sponsor for primary and secondary education. However, at the tertiary level, specifically for undergraduate degree programs, students are expected to share the cost through a loan scheme that they repay upon

gaining employment. This underscores the national value placed on education, a sentiment echoed by Norhidayah et al. (2009), who concluded that students' academic performance is a critical driver of a country's overall development.

Despite this national framework, pastoralist societies in Ethiopia, including the Afar, have historically been marginalized, manifested in a long-term neglect of essential social services. For decades, investment in educational infrastructure within these communities was profoundly insufficient. In recent years, access to education in the Afar region has seen measurable improvements, though the quality of education delivered remains poor due to a multitude of factors. Education is universally recognized as the cornerstone for achieving all development goals and enhancing overall community livelihood. It forms the foundation for not only economic advancement but also for addressing governance gaps (Petros, 2015), influencing health outcomes, income generation, and social mobility. It is therefore imperative to extend educational access to all communities, irrespective of their remote location or mobile pastoral livelihood.

Over the past decade, access to education in the Afar National Regional State (ANRS) has indeed improved, with schools now established in all districts of the region. For instance, the study area contains 16 primary schools and 14 Alternative Basic Education (ABE) centers. Despite this quantitative increase, the quality of infrastructure remains a severe challenge, with many classes still conducted outdoors under trees, without formal buildings or furniture. This is reflected in the region's educational rankings; as indicated by the Ministry of Education (MoE, 2017), ANRS ranks last among all Ethiopian regions and city administrations, with a net enrollment rate of only 11.7% for pre-primary education and a Gross Enrollment Ratio (GER) of 66% for primary education.

Although progress has been made since 1994, the rate of school completion and the achievement of intended educational outcomes in ANRS remain critically low. This low educational attainment is attributed to a complex web of challenges. Externally, these include pervasive practices like early marriage (Birhanu, 2017), a livelihood system centered around mobility, a lack of parental interest in formal schooling, and a severe deficiency in teaching facilities and libraries. Furthermore, Birhanu (2017) identifies the scarcity of water resources-around which nomadic life revolves-and the absence of a pastoralist-specific education policy as fundamental obstacles to improving literacy rates. Additional factors include the inherent mobility of the pastoralist system,

recurrent droughts that devastate the region, and a general lack of community awareness regarding the benefits of education. Jackson (2011) also highlights a critical shortage of teachers and the long distances children must travel to school as major barriers negatively affecting student retention, completion rates, and transition to higher education levels.

In the contemporary world, education is not only a fundamental human right but also a pivotal instrument for poverty reduction and improving living standards (Debebe, 2014; Kadzamira and Rose, 2003). It is key to enhancing quality of life and is indispensable for survival in today's knowledge-driven, competitive global economy. Considered the engine of human development, education is crucial for the socio-economic progress of any nation. It is a powerful tool for bridging political and socio-economic disparities between communities, thereby fostering local and regional economic development (Petros, 2015). This view is supported by research from Gyimah--Brempong et al. (2005), which found that education has a significant positive impact on the growth of household per capita income.

Amid growing global demand for technological proficiency and the digitalization of work, students represent the future labor force (Vida et al., 2020). According to Kimani et al. (2013), education shapes citizens' values, skills, and knowledge. Consequently, providing quality education is a top priority for development policymakers seeking to enhance labor productivity. The education sector is expected to act as a transformative force for society by equipping students with high-quality skills. With increased globalization, a well-skilled labor force is not only a domestic necessity but can also be exported, potentially boosting foreign currency earnings through remittances.

Therefore, for the Afar region to develop, it requires a highly skilled labor force, which is a direct result of strong academic performance at all educational levels. Numerous studies have investigated the factors influencing students' academic performance. Research indicates that performance can be affected by a multitude of variables, including: Parental involvement (Christie, 2005; Hussain, 2006), Student learning abilities, gender, and race (Hanson, 2000), Family income level (Raychauduri et al., 2010; Noble, 2006; Guth & Vasa, 2003), School leadership (Yusuf, 2012; DEE, 1999; Emerson & Goddard, 1993), Teacher quality and motivation, which is significantly influenced by salary levels (Gorman, 2007) and which in turn profoundly impacts student achievement (Afe, 2001), Student motivation to learn, identified as a key factor in

achievement (Ramsdal et al., 2013), Student agency, as students themselves play a pivotal role in their success through the number of hours spent studying and the learning strategies they employ (Nichols & Sutton, 2006; Tella, 2007).

The study rationale stems from the persistent educational underperformance in Ethiopia's pastoralist regions, particularly the Afar, despite expanded access. These communities face unique challenges including inadequate school infrastructure, low student motivation, deficient family support, and socio-economic priorities that deprioritize formal education. The research gap lies in the limited understanding of specific factors hindering academic achievement in pastoralist contexts, as existing interventions have been largely ineffective and insensitive to the pastoralist livelihood and socio-cultural dynamics. This study aims to fill this gap by identifying and analyzing key determinants of primary students' academic performance in Teru Woreda, providing evidence necessary for targeted, context-specific policy responses that address the complex barriers within pastoralist education systems.

The study aims to identify the key factors shaping the academic performance of primary school students in Teru Woreda, Afar Regional State, by examining how school facilities, student interest, study habits, and family academic support influence learning outcomes. To achieve this, it assesses the effects of educational resources, personal motivation, time spent studying, and family follow-up on students' overall performance.

2. MATERIALS AND METHODS

2.1. Study area

This research was conducted in Teru woreda, one of the 37 constituent woreda (district) administrations within the Afar Regional State of Ethiopia. The study area is characterized by a predominantly pastoralist community whose livelihood is exclusively dependent on livestock production. Consequently, the local population practices a mobile pastoral system, a traditional livelihood strategy adapted to the arid and semi-arid environment, which involves the seasonal movement of people and their herds in search of water and pasture.

2.2. **Population and sampling frame**

As previously indicated, the woreda's educational infrastructure comprises 14 Alternative Basic Education (ABE) centers and 16 conventional primary schools. The total target population for this

study consists of the approximately 965 students currently enrolled and actively attending these institutions.

2.3.**Sample size determination**

To ensure the sample's representativeness and statistical reliability, the sample size was calculated using a simplified formula for proportion estimation, as pioneered by Yamane (1967). This widely accepted formula is particularly suited for homogeneous populations and provides a scientifically rigorous method for determining a minimum sample size from a known population.

$$n = \frac{N}{1 + Ne2}$$

Where N is the number of registered primary school students in the woreda, and e is the level of precision. Accordingly, for a 95% confidence level and e. = 0.05, size of the sample we get the sample size as

$$n = \frac{2300}{1 + 2300 * 0.05 * 0.05} = 340.74 \approx 341$$

2.4.**Sampling strategy and data sources**

The study employed a probabilistic sampling approach to ensure representativeness. A simple random sampling (SRS) technique was utilized to select schools from the comprehensive sampling frame of all primary schools within the woreda. This process resulted in the random selection of three primary schools and three Alternative Basic Education (ABE) schools. Subsequently, a proportional allocation method was applied to each selected school to determine the number of respondents required from each, after which individual sample respondents (e.g., students, teachers) were chosen randomly within the schools.

Primary data were gathered through a multi-method strategy to ensure triangulation. A self-structured questionnaire was administered to the sampled respondents. To complement the survey data and provide deeper contextual insight, semi-structured interviews and focus group discussions (FGDs) were conducted with key stakeholders, including family members and teachers.

2.5. **Research Design and Analytical Methods**

The research adopted a mixed-methods design, integrating both quantitative and qualitative approaches for a comprehensive analysis of the primary data. This convergent design allowed for the collection and analysis of both types of data concurrently.

Quantitative data obtained from the survey questionnaires were analyzed using statistical techniques. Descriptive statistics (e.g., means, standard deviations) were computed to summarize the characteristics of the dataset. Furthermore, a multivariate regression model was employed to identify and measure the simultaneous influence of multiple independent variables on the dependent variable (e.g., academic performance).

Qualitative data derived from interviews and FGDs were subjected to thematic analysis. This process involved transcribing, coding, and identifying emergent themes. The findings from this qualitative analysis were used to corroborate, elaborate upon, and provide richer context for the quantitative results, thereby facilitating a more nuanced interpretation of the study's findings.

3. RESULT AND DISCUSSION

3.1.Descriptive Analysis

Table 1 presents the descriptive statistics based on the Likert scale (1= the lowest, and 5= the highest), summarizing the responses collected for the key variables in this study. The data indicate that the mean score for student academic performance is 2.57 with a standard deviation of 1.428, suggesting a moderate level of performance with considerable variation among the student respondents.

Regarding the perceived influencing factors, the mean scores for school facilities (M=4.02), family wealth (M=3.98), study hours (M=4.05), and family follow-up (M=4.4) are notably high. These elevated mean values demonstrate a strong consensus among respondents that these variables exert a significant impact on student academic performance. The corresponding standard deviations for these variables (SD=0.924, 0.945, 1.195, and 0.709, respectively) indicate relatively low to moderate levels of dispersion in the responses, reflecting a general agreement around these mean values.

Conversely, the variable measuring the perceived impact of students' interest to learn yielded a mean score of 2.77 with a standard deviation of 0.68. This comparatively low mean score, situated near the midpoint of a typical Likert scale, signifies that respondents were uncertain or neutral regarding the influence of student interest on academic performance. The low standard deviation further indicates that this uncertainty was consistent across the respondent pool, with little variation in their responses.

Table 1. Descriptive statistics

Study variables	Mean	SD
Performance Of The Student	2.57	1.428
School Facilities	4.02	.924
Interest Of Student To Learn	2.77	.860
Study Hours	4.05	1.195
Family Follow Up	4.40	.709

3.2.The relationship between predictors and academic achievement

The analysis of the degree of association, as measured by the correlation coefficients, reveals distinct relationships between the independent variables and student academic performance. The results indicate positive associations for several key factors: school facilities (r = 0.352), student interest to learn (r = 0.394), study hours (r = 0.373), and family follow-up (r = 0.412). In contrast, a significant negative association was identified between student performance and family wealth (r = -0.443).

Table 2. Correlation matrix among the educational variables in the study (N=341)

No	Study variables	1	2	3	4	5	6
1	Performance of the Student	1					
2	School facilities	.352**	1				
3	Family Wealth	-.443**	-0.04	1			
4	Interest of Student to Learn	.394**	.155**	-.124*	1		
5	Study Hours	.373**	.372**	-0.009	.176**	1	
6	Family Follow Up	.412**	0.071	-0.056	.223**	.284**	1

**values are significant at the 0.01 level (2-tailed); *values are significant at the 0.05 level (2-tailed).

As illustrated in Table 2 above, the statistical significance of these relationships was tested. The results demonstrate that all independent variables, including family wealth, are statistically significant ($p < 0.05$). The negative magnitude of the coefficient for family wealth confirms an inverse relationship; as family wealth increases, the academic performance of students tends to decrease.

3.3. The effects of educational variables on academic achievement

Furthermore, a multivariate regression analysis was employed to quantitatively assess the collective and individual effects of the specified independent variables on educational outcomes. The model summary, presented in Tables 3 and 4, indicates that the combined independent variables account for 51.4% of the total observed variance in students' academic performance. This substantial explanatory power, as measured by the R-squared value of 0.514, demonstrates that the

model captures a significant proportion of the factors influencing student achievement. The remaining variance is likely attributable to other exogenous factors not included in the current model.

Table 3. Model summary

Model	R	R Square	Adjusted R Square	SE
1	.717[a]	.514	.506	1.004

a. Predictors: (Constant), family follow up, family wealth , school facilities, interest of student to learn, study hours

Moreover, in order to analyse the overall strength of the model, ANOVA was conducted. Hence, the ANOVA result shows that the model is significant with F value of 58.684.

Table 4. Modeling data fit to predict academic achievement

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	295.985	5	59.197	58.684	.000[b]
	Residual	279.421	277	1.009		
	Total	575.406	282			

a. Dependent Variable: performance of the student

b. Predictors: (Constant), family follow up, family wealth , school facilities, interest of student to learn, study hours

The quality of education, a critical determinant of student academic performance, is significantly compromised by several interconnected factors. Primary among these are the inadequacy or outright absence of essential school facilities—including textbooks, sanitation infrastructure (toilets), potable water, scientific laboratories, and libraries. This foundational deficit is compounded by the poor quality of pedagogical instruction and an underdeveloped pastoral education policy that fails to address the specific needs of the local context. These elements collectively create an environment that hinders effective teaching and learning, thereby adversely impacting student achievement.

The statistical relationship between these independent variables and academic performance (the dependent variable) is quantified in the regression analysis presented in Table 5. The model elucidates the strength, significance, and magnitude of each factor's influence. As indicated in the table, school facilities account for 33.8% of the observed variation in students' academic performance. The statistical significance of this relationship is confirmed by a p-value of less than 0.05 at a 95% confidence level. This result allows us to conclude that the availability and quality of school facilities exert a statistically significant and substantial influence on academic outcomes.

This finding is consistent with existing literature; it corroborates the work of Norhidayah et al. (2009), who concluded that the diligent utilization of educational facilities has a significant positive impact on student achievement. Furthermore, it aligns with Young (1999), who demonstrated a positive correlation between library usage and student academic scores.

Similarly, student interest in learning is shown to be a powerful predictor, explaining 36.6% of the variance in academic performance. With a p-value also below the 0.05 threshold of significance, there is sufficient evidence that student interest has significant impact. Therefore, it is conclusively a major influencing factor. This quantitative result is substantiated by observational data: a prevalent lack of student preparedness for classes, a demonstrated lack of commitment in completing homework assignments, and widespread disinterest in regular class attendance were consistently identified as key behavioral drivers negatively affecting academic performance in the region.

Table 5. Individual contributions of educational variables on academic achievement

Varibles	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95.0% CI**	
	B	SE	β			Lower Bound	Upper Bound
(Constant)	-0.376	0.526		-0.714	0.476	-1.412	0.661
School facilities	0.338	0.07	0.219	4.822	.000	0.2	0.477
Family wealth	-0.589	0.064	-0.39	-9.228	.000	-0.715	-0.464
Interest of student to learn	0.366	0.073	0.22	5.027	.000	0.222	0.509
Study hours	0.205	0.056	0.171	3.635	.000	0.094	0.316
Family follow up	0.557	0.09	0.277	6.218	.000	0.381	0.734

a. Dependent Variable: performance of the student

The regression analysis reveals that several factors exert a statistically significant influence on student academic performance. Study hours account for approximately 20% of the variation in academic performance providing sufficient evidence that study hours have significant impact.

A more substantial effect is observed for family follow-up and support, which explains 55.7% of the variation in academic performance. With a p-value less than 0.001, it can therefore be conclusively stated that family follow-up has a strong, statistically significant, and positive impact on student achievement.

As summarized in Table 5, four key variables such as school facilities, student interest to learn, study hours, and family follow-up are all statistically significant predictors of academic

performance ($p < 0.05$ for all). The positive magnitude of their coefficients indicates that they each share a positive relationship with the dependent variable; as these factors increase, academic performance improves.

Conversely, the analysis yields a counterintuitive finding regarding family wealth. While also statistically significant ($p < 0.001$), its relationship with academic performance is negative, as indicated by its coefficient. This suggests that higher levels of family wealth are associated with lower academic achievement among students. To elucidate this paradoxical result, focus group discussions were conducted with families.

The qualitative data reveal that affluent families often exhibit a lower prioritization of academic performance. This attitude stems from two primary perceptions: first, a belief that existing family wealth negates the necessity for academic success as a means of future financial security, and second, a more immediate economic need for children to contribute to managing the family's livestock resources. Furthermore, these families often possess an instrumentalist view of education, perceiving its end goal merely as employment and a salary, rather than valuing its role in holistic personal and intellectual development. This mindset leads to the diversion of student time and focus away from scholastic activities, thereby negatively impacting performance. This finding contradicts numerous previous studies that consistently report a positive correlation between socioeconomic status and academic achievement.

The paradoxical negative effect of family wealth on academic performance in pastoralist communities, such as in the Afar region, reflects an underlying attitude that undervalues education beyond its economic returns. Literature from pastoralist contexts, like the Borena community, supports this view, showing schooling is seen as a loss of labor vital for herding livelihoods, with little demand-side encouragement for education despite government efforts to improve supply (Boru, 2020). This creates a unique barrier where financial capacity does not translate to educational investment due to socio-cultural and livelihood priorities. Contrary to the widely accepted global understanding that higher family wealth correlates with increased student enrolment, pastoralist communities like those in Ethiopia display a paradoxical trend. In these contexts, even affluent families often underinvest in formal education due to socio-cultural and economic realities unique to pastoralism. For instance, AUMA et al. (2013) identify financial constraints as a significant barrier to education among pastoralists; however, wealth

does not automatically translate into greater educational participation because wealthier families may prioritize herding labor over schooling. This reflects a broader disconnect where education is viewed narrowly as a means to earning money rather than a pathway to holistic personal development, leading to underestimation of its long-term value. Such findings emphasize the need for tailored policy interventions that address not only economic barriers but also cultural perceptions and livelihood priorities within pastoralist communities to improve educational access and outcomes.

In addition to the quantitatively measured variables, key informant interviews with educational experts revealed several institutional and pedagogical barriers that undermine student performance. Experts noted that textbooks often rely on unfamiliar, non-localized examples that limit meaningful learning; many teachers lack adequate professional competence and ethics; continuous assessment practices are poorly implemented; and overall school management and administration remain weak, collectively constraining students' academic progress.

In addition to this, some anonymous key informant interviewees said that there are some family members who doesn't contribute to the efforts of the school leadership by challenging the changes of rules. These factors collectively represent significant systemic challenges that contribute to the low academic performance observed in the region.

4. CONCLUSION AND RECOMMENDATIONS

Students represent the foundational human capital for a nation's future, poised to become its next generation of policymakers, leaders, managers, and primary engines of development. A country's future socio-economic conditions, demographic profile, and the quality of its labour force are fundamentally contingent upon the academic achievements of its student population across all educational levels. Consequently, it is imperative to properly shape and equip primary school students with the necessary norms, values, and moral frameworks, as this early formation is critical for assuring sustainable long-term development.

Guided by this concept, this research is predicated on the understanding that identifying the principal determinants that constrain student academic performance - and addressing these bottlenecks at their source-is a vital strategy for building a resilient and sustainable economy. The study focuses on the Afar region of Ethiopia, a context where unique challenges intensify these

concerns. The majority of the Afar people are illiterate and maintain a mobile pastoral livelihood system. This nomadic tradition poses significant obstacles to educational access and complicates the consistent delivery of quality instruction.

This research was conducted in a particularly remote area of the Afar region, characterized by its overall low level of infrastructural development, which further compounds the existing barriers to effective education.

The availability and quality of school facilities are established as significant positive determinants of student academic performance. However, within the study area, a pronounced deficiency in these essential resources: such as laboratories, libraries, and instructional materials was identified as a critical factor impeding student achievement.

Furthermore, student motivation and intrinsic interest in learning are profoundly influential on academic outcomes. Regrettably, the research indicates a pervasive lack of such motivation among the student population in this region. This is largely attributable to insufficient academic monitoring and support from two key sources: families and teachers. The situation is exacerbated by a consistent pattern of poor parental follow-up on student progress. This is particularly consequential given that robust familial guidance and consistent engagement are well-documented to have a markedly positive impact on student performance.

Another significant factor is independent study time. The number of hours dedicated to self-directed study was found to be a strong predictor of academic success. Nevertheless, students in the study area demonstrate poor reading habits and allocate minimal time to studying. This is driven by two primary obstacles: first, familial pressures prioritize domestic chores and labor over academic pursuits, limiting the time available for study. Second, a practical infrastructural barrier, the lack of electricity or adequate lighting in homes, severely restricts the ability to study during evening hours, further entrenching poor academic habits.

Paradoxically, family wealth emerged as a factor with a negative correlation to academic performance. The data suggest that students from more affluent households often underperform. This counterintuitive finding is explained by a clear socio-economic preference: rather than valuing the long-term benefits of formal education, wealthy families prioritize immediate, practical economic contributions from their children. These families predominantly direct their children's

efforts toward managing livestock and other enterprises, actively diverting time and focus away from academic activities. Consequently, this reallocation of effort away from scholastic development detrimentally affects their educational outcomes.

Policy responses must therefore go beyond infrastructure provision and address these cultural-economic dynamics. Practical recommendations include designing pastoralist-sensitive education policies that integrate flexible schooling schedules aligned with herd movements, raising community awareness on the broader benefits of education, incentivizing families to value academic achievement beyond immediate economic gains, and incorporating livelihood-compatible curriculum that respects pastoralist culture. Additionally, family engagement programs should emphasize long-term personal and community development benefits of education to transform perceptions and priorities within affluent pastoralist families, ensuring equitable access and supportive environments for sustained academic success in these unique settings.

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REFERENCES

Afe, J.O. (2001). Reflection on becoming a teacher and the challenges of teacher education: Inaugural lecture series 64. Benin City: University of Benin.

Auma, G. - Migosi J. - Omuki K. (2013): Factors affecting access to universal primary education by nomadic pastoralists: A case of Sankuri division Garissa district Kenya. *Universal Journal of Education and General Studies*, 2(3):98–108.

Birhanu, M. (2017). Children's Participation in Schooling and Education in Pastoralist Woredas of Afar Region: Prospects , Challenges and Policy Implications. *Quest Jurnals Journal of Research in Humanities and Social Science*, 5(2): 50–63.

Boru, A.K. (2020). Education for Borena pastoralist community children in Ethiopia: practices and challenges. *Ethiopian Journal of Education and Sciences*, 15:19-32.

Christie, K. (2005). Changing the nature of parent involvement. *Phi Delta Kappa*, 86(9): 645- 646.

Debebe, A. (2014). Children access in primary education in Dasenech and Nyangatom pastoralist community of South Omo: Achievement, challenges and policy implications. Addis Ababa University, Ethiopia.

Department of Education and Employment (1999). Professional development. London: DfEE.

Emerson, C. & Goddard, I. (1993). Managing staff in school. Oxford: Heinemann Educational.

Gorman, L. (2007). Teacher incentives and students' performance. National Bureau of Economic Research. Available at: https://live-nber.pantheonsite.io/sites/default/files/2019-08/jun07.pdf

Guth, L. & Vasa, L. (2003). Factors of household economics which influence the competitiveness of the family farms in Hungary. Annals of the Polish Association of Agricultural and Agribusiness Economists 5 (6) 19-23.

Gyimah-Brempong, K., Paddison, O., & Mitiku, W. (2005). Higher Education and Economic Growth in Africa. Journal of Development Studies, 42:509–529.

Hanson, J.B. (2000). Student performance and student growth as measure of success: A evaluator's perspective. Paper presented at annual meeting of the American educational research association New Orleans. Louisiana. 25 April.

Hussain, C.A. (2006). Effect of Guidance Services on Study Attitudes, Study Habits and Academic Achievement of Secondary School Students. *Bulletin of Education and Research*, 28 (1): 35-45.

Jackson, E. (2011). The role of education in livelihoods in the Somali region of Ethiopia. *Feinstein International Centre, Tufts University.*

Kadzamira, E.and Rose, P. (2003). Can free primary education meet the needs of the poor? Evidence from Malawi. *International Journal of Educational Development*, 23(5), 501- 516.

Kimani, G. N., Kara, A. M. & Njagi, L. W. (2013). Teachers' factors influencing students' academic achievement in secondary schools in Nyandarua County, Kenya. International journal of education and research, 1(3), 1-14.

MOE, (2017). Ministry of Education, Education Statistics. Annual Abstract of 2016/17, Google. Key words, Education Statistics. Annual Abstract of 2016/17.

Nichols, J. B., & Sutton, C. (2006). Improving academic performance through the enhancement of teacher/student relationships: The relationship teaching model. *International Christian Community of Teacher Educators Journal*, 1(2), 4.

Noble, J.P., Roberts, W.L. & Sawyer R.L. (2006). 'Student Achievement, Behavior, Perceptions, and Other Factors Affecting ACT Scores'. ACT Research Report Series 2006 - 1.

Norhidayah, A., Jusoff, Ali., S., Najah, M. & Salamt, A.S.A. (2009). 'The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia'. *Canadian Research & Development Center of Sciences and Cultures*, (4): 81-90.

Petros, W. (2015). Provision Of and Participation in Primary Education in the Pastoralist Regions of Afar and Somali of Ethiopia. Academic Dissertation University of Tampere, Tampere.

Ramsdal, G., Gjærum, R.G. & Wynn, R. (2013). Dropout and early unemployment. *International Journal of Educational Research* 62 (2013):75–86.

Raychaudhuri, A., Debnath, M., Sen, S., & Majumder, B. G. (2010). Factors Affecting Students' Academic Performance: A case study in Agartala Municipal Council Area. Bangladesh e-journal of Sociology, 7(2). 34-41.

Tella, A. (2007). The impact of motivation on student's academic achievement in mathematics among secondary school students in Nigeria. *Eurasia journal of Mathematics, Science & Technology Education*, 3(2):149-156.

Vida, I., Spaller, E. & Vasa, L. (2020). Potential effects of Finance 4.0 on the employment in East Africa. Economy and Sociology / Economie si Sociologie 2020 (2), 29-42.

Yamane, Y. (1967). Mathematical Formulae for Sample Size Determination.

Young, S. W. H., & Rose, M. A. (1999). *Library Usage and Academic Performance*. University of Wollongong.

Yusuf, A.F. (2012). Influence of principals' leadership styles on students' academic achievement in secondary schools. *Journal of Innovative Research in Management and Humanities*, 3(1): 113 - 121.

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