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Original Article

Modelling Transformation of Communities by Public Universities in Post Conflict Northern Uganda Using Economic and Demographic factors

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ABSTRACT

Scarcity of knowledge exists on how economic and demographic factors of surrounding communities influence the capacity of universities to transform them. This study examines the dimensions that contribute to community transformation in the context of the community surrounding Gulu University in post-conflict northern Uganda and the economic and demographic factors of the surrounding community that influence their transformation by Gulu University. The study employed a cross-sectional research design with a sample of 390 households. Self-administered questionnaires were used to collect data on household economic and demographic factors and data on dimensions of community transformation. Principal component analysis (PCA) was used to determine the contributions of the dimensions of community transformation, while logistic regression model was employed to determine economic and demographic factors that influence community transformation by Gulu University. The independent variables tested in the economic and demographic categories included age, gender, household size, occupation, alternative income, savings, credit, remittances, and education, while transformation formed the dependent variable. Findings revealed that the economic, physical, political and spiritual dimensions contribute more to the transformation of the community surrounding Gulu University, while the economic and demographic factors that had a significant influence on community transformation included occupation in civil service, business, and commercial farming (P=.004); and the level of education (P=0.044). The study concludes that the economic, physical, political and spiritual dimensions with their associated variables contributed more to community transformation. These can be used by other related studies to measure community transformation by universities in the context of developing countries. Furthermore, policies need to focus more on supporting the improvement of the business environment to promote commercial farming and university education since they have a higher multiplier effect on community transformation. Consequently, community members need to focus on business, harness commercial farming and achieve university level of education.

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INTRODUCTION

Universities are considered centres of knowledge creation and dissemination, but how economic and demographic factors may influence the capacity of universities to transform communities is largely less exploited in developing countries (Ongeng et al. 2018). Scarce reports indicate how economic and sociodemographic characteristics relate to community transformation (Bwalya, 2021; Halasz, 2015; Ceritoglu, 2014; Townsend. 1997). Bwalya et al. (2021) reported the importance of being a member of a savings group in bringing community transformation in Zambia, while Halasz (2015) studied the influence of education in enhancing social transformation in Eastern Europe and argued that it was not self-evident to use education for achieving social and economic goals. Furthermore, Ceritoglu (2014) reported that college graduates in Turkey contributed significantly to their household savings compared to other members.

Furthermore, Townsend (1997) studied how occupation as an economic factor can influence personal or social transformation of communities, while Kalule et al. (2019) observed that universities often use community outreach as a strategy for community transformation but with difficulty in responding to the unpredictable social features of communities. They noted that such education should result in a much-improved pattern of better living for individuals, but this is not often the case. A synthesis of the above literature reveals limited knowledge of the influence of economic and demographic factors in determining the capacity of higher institutions of learning in transforming communities in northern Uganda. This study is anchored under the Activity Theory (Engeström, 1999; Roth, 2004), whose core concern is the transformation of individuals and communities since people are not passive actors who respond to the conditions that govern their lives, but rather have the potential to change those circumstances. Using this theory, the study examined the contribution of indicators of community transformation and how economic and demographic factors of the surrounding communities influence Gulu University's role in community transformation in post-conflict northern Uganda.

Community transformation has been understood severally. According to Getu (2002), community transformation is a deeply rooted change in people's economic (i.e., occupation, income, savings, material wealth, investments, trained workforce, tax streams, and improved national output); physical (i.e., housing, electricity, water, and roads); social (i.e. health, skill, and education services); politics and freedom (i.e. free participation in leadership issues, taking part in political parties and civil society organisations, and the ability to express oneself), and spiritual (i.e., love, joy, peace, long-suffering, kindness, goodness, faithfulness, gentleness, and self-confidence) aspects of life. Getu explains that transformation is an ongoing process of changing and improving the way of doing things in the community, and the indicators for measuring community transformation are not meant to imply

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that certain goals may be reached at a certain time frame but assist in assessing how the journey is being walked. Additionally, Freire (1996), Harvey and Knight (1996), and Waghid (2002) view transformation from the social perspective measured through high standards of living, fitness for purpose, value for money, life experiences of student empowerment, and enhanced abilities to perform tasks.

According to Brown and Baker (2017), community transformation refers to initiatives to build up, energise, and stabilise social, environmental, and economic problems that limit community members' possibilities to better their living conditions. They measure community transformation by empowerment, engagement, trust, cohesion, and leadership role. This study borrows largely from Getu (2002), Harvey and Knight (1996) and Waghid (2002) and defines community transformation as a description of change and empowerment in the current way of people's livelihoods (economic, physical, social, political, and spiritual) setups to a better-preferred way. It measures community transformation using the following: economic (i.e., occupation, income, savings, material wealth, and investments); physical (i.e., housing, electricity, and water); social (i.e. health, skill, and education services), politics and freedom (i.e. free participation in leadership issues, taking part in political parties, civil society organisations, and the ability to express oneself); and spiritual (i.e., love, joy, peace, long-suffering, kindness, goodness, faithfulness, respect, and self-confidence) aspects of life. It is important to note that the terms determinant, dimension and factors are used interchangeably. On the other hand, the terms indicator and variable all refer to the same thing.

MATERIAL AND METHODS

The study was conducted in Gulu City in northern Uganda. Gulu City consists of two divisions (i.e., Pece-Laroo and Bar Dege-Layibi), and Gulu University is located in Pece-Laroo Division. The justification for choosing Gulu City was that it forms the surrounding community of Gulu University (Okello, 2010). Additionally, the area was chosen based on its location in an area that suffered conflict from 1986 to 2006, characterised by a low level of socio-economic development (Gulu University Strategic Plan, 2004/05-2008/09).

A cross-sectional research design was used to capture data on economic and demographic characteristics and data on dimensions of community transformation. The target population was the community surrounding Gulu University because the study's issues were centred on the university's contribution to community transformation, while the unit of analysis was the household.

The study sampled 390 respondents from Laro-Pece and Bardege-Layibi Divisions of Gulu City. These divisions consist of 21 parishes. However, only 4 parishes were sampled, i.e., Pece-Prison and Agwee in Laro-Pece Division, and Kanyagoga and Labour line parishes in the Bardege-Layibi Division. These 4 parishes were selected purposively based on their close proximity to the university. The sample size was computed from the household population above 18 years based on the procedure used by Israel (1992) at 5% error margin (*Table 1*)**.** Additionally, multi-stage sampling was used (Bennett & Iiyanagec, 1988), due to its cost-effectiveness and flexibility, and more than two sampling stages used. In this study, the first stage involved stratified sampling of the 2 Divisions in Gulu City. The second stage involved sampling two parishes from each division. The third stage involved random sampling of households and individual members.

In terms of data collection, self-administered questionnaires were used to collect data on economic and demographic factors, and data on the dimensions of community transformation. The self-administered questionnaires consisted of mainly closed-ended questions that were administered to respondents at their homes after seeking their consent. Closed-ended questions were used mainly because they offer a quick tool for data collection, coding, interpretation, and quantification of outcomes (Jones & Tanner, 2015).

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To analyse data obtained using a questionnaire, PCA was first used to determine the contributions of the dimensions of community transformation. The study had five dimensions of community transformation, i.e., economic, social, physical, political, and spiritual. Each of these dimensions had a varying number of indicators, i.e., economics had 6; social had 5; physical had 14; political had 5; spiritual had 8 variables, and in total, there were 38 variables. All these variables were subjected to PCA; however, the study began by assessing the prerequisites of PCA as suggested by Tabacnick and Fidell (2007). That is, (i) sampling adequacy and (ii) the strength of intercorrelation within the correlation matrix, which is measured by bivariate correlation coefficients that must be 0.30 and above. When the data was tested, the results met all the requirements; that is, the Kaiser-Meyer-Olkin (KMO) statistic was 0.78, which was quite above the minimum (0.6). The sample adequacy and Bartlett's test of sphericity were also statistically significant ($p < .001$). Furthermore, most intercorrelations in the correlation matrix were above 0.30. This demonstrated the suitability of using PCA as a statistical tool for data reduction technique in this study.

Table 1: Sample size determination

Study area	Sub Counties	Parishes	Population of persons above 18 years	Sample size at 5% error margin
Gulu City	Laro-Pece	Pece-Prison	3060	97
		Agwee	3571	107
	Bardege-Layibi	Labour line	1530	47
		Kanyagoga	4628	128
Total Population/ sample			12713	390

Sample size determination (Israel, 1992)

The first phase of PCA started with the extraction of determinants, where the extraction process aggregated the determinants and found out those that contributed more. The study applied scree plots to aid in the visualisation of the eigen values associated with each variable. Eigen value is the measure of the amount of variation in the variables associated with each determinant. The larger the eigenvalue of a variable, the more the variation explained by the variable in the dimension. Moreover, variables with eigen values less than 1 are usually considered to be less useful (Tabachnick & Fidell, 2007). This makes it possible to assess the quality of empirical determinants that are essential to the group of variables. In this way, one is able to judge the number of empirical determinants fundamental to a set of variables. The variables that qualify for the percentage of variance are accounted for by the predefined dimension presented. Usually, this estimate is called the communality estimate (weight). The variable's communality estimates should, as a rule of thumb, be at least 0.30 (Tabachnick & Fidell, 2007).

The next phase was rotation performed to illustrate the relationship between each variable and the determinant. This is where empirical evidence of factors is reconstructed since the study conceived or hypothesised the dimensions of community transformation based on the literature review. The study performed oblique factor rotation techniques based on the Promax algorithm; this approach allows for correlation between dimensions since Bartlett's test indicates correlation ($P < .001$). This result was presented using a pattern matrix, which provides additional evidence on the commonality criterion used to present the determinants of community transformation. Putting it differently, it represents the relation between a variable and a factor after removing the influence of other determinants.

Additionally, the study employed a multivariate logistic regression model to establish the potential economic and demographic predictors of community transformation by Gulu University. The choice of the regression model stems from the fact that the dependent variable was a categorical variable; that is, the respondents were asked

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whether they think the existence of Gulu University has transformed the surrounding community. The response was either *No* or *Yes* (*Table 2*). In the logistic regression model, it is well known that the independent variables (IVs) can either be categorical or continuous or both. However, in this study, all the IVs were categorical in nature. The following table presents how the data was coded for subsequent analysis.

Table 2: Dependent, Independent Variables and Codes

Variables	***Coded***
Dependent	
Community Transformation: Generally, do you think the existence of Gulu University has transformed the surrounding community?	No = 0 Yes =1
Independent	
Age groups in years	18-27 = 4 28-37 =3 38-47 = 2 48-57 = 1 58 and above = 0
Source of income: Do you have any alternative source of income?	No = 0 Yes =1
Saving: Do you have any form of savings?	No = 0 Yes =1
Credit: Do you have access to credit?	No = 0 Yes =1
Remittances: Do you have access to remittances?	No = 0 Yes =1
Household size: How many members are in your household?	Less than 5 =2 6-10 = 1 11 and above =0
What is the highest level of education you have attained?	None =4 Primary = 3 Secondary=2 Tertiary =1 University =0
What is your occupation?	Peasant =4 Civil Servant =3 Business = 2 Farmer & business=1 Farmer, civil servant & business = 0

Note: All categories coded as 0 are taken as references in the categories

RESULTS AND DISCUSSIONS

Indicators of Community Transformation

Initially, the study conceptualised community transformation based on 5 dimensions with 38 variables, following the definitions of Getu (2000), Harvey and Knight (1996), and Waghid (2002). When these were tested using PCA, all 6 components explained up to about 36% of the variance. However, having removed the redundancies, 4 dimensions with their respective 24 variables emerged (*Table 3*) to be contributing most to community transformation based on Eigen values greater than 3 and these include physical, economic, political and spiritual, which could explain the transformation in the context of the community surrounding Gulu University while the social dimension did not show up to be having any contribution. The total variance explained by the first six components increased to 52%. Thus, these explained more than half of the variance in community transformation.

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Findings on the contribution of the four dimensions (i.e., physical, economic, political. and spiritual) used for measuring community transformation (*Table 4*) revealed that, in the physical dimension, in the PCA component 1, housing aspects contributed more to community transformation and the factor loading ranged from .79 - .89. Similarly, in PCA component 3, the physical dimension variables of electricity reliability, connection to reliable sewage network, waste collection, and health care, contributed more to community transformation with a factor loading ranging from .45 - .84. In the same vein, in PCA component 4, access and reliability of safe water, and alternative water sources contributed more to community transformation with a factor loading of .74 - .81.

Table 3: The percentage variance for the components/dimensions of community transformation

Component	Initial Eigen values		
	Total	**% of variance**	**Cumulative %**
1	3.499	14.577	14.577
2	2.176	9.065	23.642
3	2.091	8.714	32.356
4	1.763	7.345	39.701
5	1.577	6.571	46.272
6	1.411	5.881	52.153
7	1.198	4.990	57.143
8	1.079	4.498	61.641
9	1.001	4.173	65.814
10	.865	3.604	69.418
11	.794	3.308	72.726
12	.755	3.145	75.872
13	.667	2.780	78.651
14	.655	2.730	81.382
15	.590	2.460	83.842
16	.579	2.414	86.256
17	.545	2.270	88.526
18	.501	2.088	90.614
19	.478	1.991	92.605
20	.445	1.855	94.460
21	.398	1.660	96.120
22	.371	1.546	97.667
23	.301	1.256	98.923
24	.259	1.077	100.000

To begin with, the contribution of housing to community transformation is likely to be because households who have invested in quality housing may attract good income in form of rent, which may help in facilitating their education and other investments and, in the long run, may generate a transformation of the household and consequently the community. This finding is related to a report by Avogo et al. (2017), who indicated the importance of housing in community transformation in Accra, Ghana.

Secondly, the contribution of health care to community transformation is likely to be a result of the important role that health plays in all spheres of life, i.e., in social, economic, political, and spiritual. For example, health matters a lot in industry, civil service, business, and agriculture. This study finding corroborates the report by Reid et al. (2019) who indicated that improvement in community health care contributed more to the transformation of homeless people as well as those with disabilities in Los Angeles and New York, respectively.

Thirdly, the contribution of the water indicator could be because of the importance of water in life, which covers its use domestically, in industry

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and in agriculture. This study finding relates to the report by Glenzer and Divecha (2020), who reported that providing water is important in achieving community transformation.

Furthermore, in PCA component 2 (*Table 4*), the study revealed that the economic dimension with its associated variables, i.e., having alternative income, savings, and access to credit, contributed more to community transformation with a factor loading ranging from .55 - .86. The high contribution by these economic variables is likely to be a result of the many income generating activities and employment opportunities that could have been created by the existence of Gulu University to the surrounding community. Consequently, several people could be involved in several alternative income-generating activities, which may have earned them some form of savings and, thus, can easily access credit from banks and other micro-financial institutions. Given that, banks and micro-financial institutions rarely extend credit to individuals who do not have consistent income or savings. This study findings conform to a report by Kumburu and Pander (2020), who found out the importance of savings and credit in generating community transformation in Tanzania. In the same vein, Bwalya and Zulu (2021) reported that community members who were in saving groups contributed more to community transformation in rural Zambia.

Additionally, in PCA component 2, 6 and 8 (*Table 4*), the study revealed that, in the political dimension, membership in associations, free participation in leadership issues, taking part in the activities of political parties, freedom of expression in public, and independent decision making contributed more to transformation and the factor loading ranged from .54 - .87. The high contribution of the variables in the political dimension to transformation of the community surrounding Gulu University is most likely because of the association of political activities with community development programmes. Membership in associations and participation in leadership and political parties enhances enlightenment and exposure, which supports local community development programmes. The study finding is in conformity with a report by Zhang and Liao (2022), which showed that in China, political participation led to the transformation of the community of Guangzhou city.

In PCA components 5, 7, and 9 (*Table 4*), the spiritual dimension variables that contributed more to community transformation included faithfulness, respect, love, joy, peace, and belief in God. Their factor loading ranged from .55 - .93. It is possible that these spiritual aspects have been popularised by the religious denominations that have been attracted by the existence of Gulu University and indeed, they have prospered in preaching spiritual transformation, which is creating harmony and consequently good grounds for investments and community transformation. This is in line with the assertion by Haussmann et al. (2024) and Getu (2002), who indicated the importance of spiritual aspects in community transformation.

Influence of Economic and Demographic Characteristics on the Capacity of Gulu University to Transform the Community

The study examined the influence of economic and demographic factors on community transformation at Gulu University (*Table 5*). Findings revealed that occupation and level of education had a statistically significant contribution towards community transformation. To begin with, occupation had a statistically significant influence on community transformation (P=.004). Occupation was further disaggregated into four parts, i.e., business, civil servant, commercial farmer, and peasant farmer, which were the reference points. In this, the contribution of a commercial farmer was statistically significant, i.e., about 41 times more than that of the peasant farmer (P=0.00, OR (odd ratio) = 41.61 and CI (confidence interval) = 5.72-302.63).

Similarly, the contribution of a civil servant was also statistically significant, i.e., about 15 times more than that of a peasant farmer (P=0.001, OR=15.45, CI=3-00-79.58) and in the same vein, the contribution of a businessman was also statistically significant i.e., about 11 times more

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than that of a peasant farmer (P=0.024, OR=11.15, CI=1.38-89.92). Generally, the significant contribution of occupation into community transformation is likely to be because it keeps individuals more active and constructive than those unoccupied who may be redundant. This finding agrees with Zur and Rudman (2013), who reported that globally, people who are in active occupation contribute more to community transformation. This also concurs with Laliberte (2019), who reiterated the importance of occupation in contributing to the improvement of individual's quality of life and transformation of society.

In particular, the contribution of commercial farming is likely to be brought about by the use of better inputs, which in the end lead to better returns that can be ploughed back to generate more output and ultimately contribute more to household and consequently community transformation unlike in peasant farming which is for bare subsistence. This is in agreement with reports by Leavy and Poulton (2007) and Giller et al. (2009), who indicated that communities are likely to be transformed by commercial farming.

Furthermore, the contribution of civil service is significant likely due to its support to democratic processes and has established structures useful for the promotion of community transformation (Park & Perry, 2013). In Quebec, Jetté (2011) reported that the civil service sector developed the ability to innovate in terms of social practices and contributed immensely to community transformation.

Additionally, the significant contribution of the businessman to community transformation could be because of the possibility of employability of several individuals in any single business venture. The finding is in line with the report that in Nigeria, the rural Lagos community was empowered through business development and employment promotion to transform the community (Kolawole & Ajila, 2015). Furthermore, a change process was implemented in Nebraska through investments, which created and expanded its impact on the community's capacity to initiate and sustain a process of change, particularly in building social capital for community transformation (Emery & Flora 2020).

Findings also revealed that the level of education had a significant contribution to community transformation (P=0.044). Education level was disaggregated into 5 levels, i.e., none, primary, secondary, tertiary, and university, which were the reference points. The findings revealed that for those with below university level of education, their contribution to community transformation was negative, with primary and secondary levels having significantly negative contribution, i.e., for primary, P=0.004, OR=.120, CI=.03-.51 and for secondary, P=.046, OR=.25, CI=.06-.98. Higher level of education (especially university) is likely to be associated with more exposure, knowledge and application for community transformation, unlike lower levels of education that are not likely to be associated with exposure, thereby, not contributing much to community transformation. The significant contribution of education to community transformation may also be due to the association between education, knowledge, creativity, empowerment and community transformation. This finding is in line with Tilbury and Wortman (2008), who argue that education empowers and enlightens people to engage in sustainable activities and community transformation. Nonetheless, this study finding is in agreement with the report by Li (2020), who used systems theory to argue that university education has the potential to transform communities.

Furthermore, despite the contributions of age groups not being statistically significant, the contributions of the lower age groups were twice as much as that of age group 58 and above in contributing to community transformation (18-27 P=0.341, OR=1.73, CI=.56-5.38). The youthful persons are likely to be more energetic and more active to contribute to community transformation than the elderly. This finding is in line with the report by Buheji (2018) who reported that youth learn faster and better through practical experience and adapt easily to the environment to contribute to community transformation.

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Table 4: Determinants of transformation among the community surrounding Gulu University in Northern Uganda

	Component								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Alternative income	.037	.545	.140	.122	.014	.079	-.148	.054	-.007
Savings	.051	.864	-.071	-.050	-.017	-.089	-.063	-.018	.050
Access to credit	-.016	.798	.008	-.004	-.080	-.017	.121	-.060	-.029
Participate in leadership	-.003	-.002	.007	.054	-.078	.861	-.031	.006	-.004
Political participation	-.046	.006	.042	-.111	-.014	.873	-.035	-.072	-.030
Member to association	-.026	.538	-.171	.033	.193	.220	.080	.168	.033
Self-expression	-.013	.013	.127	-.084	-.017	.116	-.020	.745	-.011
Independent decision making	.048	.002	.037	.010	-.053	-.153	.055	.863	-.115
House roof	.889	.064	.002	-.061	-.001	-.031	-.030	.014	.044
Wall of the house	.789	-.037	-.132	.102	.041	-.039	-.013	.046	-.061
Floor of the house	.854	.020	.087	-.039	-.039	.015	.014	-.016	.089
Electricity reliability	.213	.073	.449	-.010	-.012	.105	.130	-.192	-.311
Connection to reliable sewerage network	.078	-.102	.734	.016	.028	.081	-.008	.078	.106
Waste_collection_disposal	-.041	-.063	.843	.020	.041	-.048	-.036	.126	-.051
Health care education	-.155	.103	.635	.028	.028	-.011	.035	-.012	.188
Reliable water access	.116	-.041	-.059	.805	.030	-.001	.011	.001	-.050
Access to safe water	-.113	.071	.091	.748	-.008	-.056	.052	-.082	-.189
Alternative water sources	-.020	.004	.044	.752	-.065	-.012	-.079	.008	.231
Love	-.057	.085	.033	.006	-.036	-.051	.858	.072	.017
Joy	.028	-.083	-.018	-.018	.012	-.019	.866	-.029	.067
Peace	.084	-.137	-.072	.118	.075	.225	.174	.009	.552
Faithfulness	-.034	.007	.058	-.065	.933	-.043	-.005	-.084	-.084
Respect	.038	-.023	.029	.039	.864	-.049	-.018	.021	.080
Believe in God	.020	.119	.168	-.094	-.055	-.160	-.018	-.133	.804

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
a. rotation converged in 6 iterations.

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In terms of household size (*Table 5*), with a reference point of those households with 11 members and above, the contribution of households with 6-10 members was 3 times more than those with 11 members and above and also marginally statistically significant (P=.054. OR=3.01, CI=.98-9.21). While those with less than 5 members contributed 2 times more than those with 11 members (P=0.292, OR=1.82, CI=0.59-5.60). This finding implies that larger households could have higher pressure on available resources if only a few members are employed as compared to smaller households. This finding is related to the report by Bhandari (2013) on an agrarian setting in Nepal, which indicates that, in addition to other factors known to influence transformation, many household members obstruct the ability of a household to transition to community transformation. However, this study finding is not in conformity with a report by Lazear and Michael (1981) which revealed that increase in family size is associated with significant real-world benefits, suggesting that larger families might be better positioned to influence community transformation.

Findings also revealed that, respondents gender, neither having alternative income nor access to credit and savings nor remittances, contributed negatively to transformation and their multiplier effect to transformation is less than 1. This finding implies that having alternative income, access to credit and remittances may not play an important role in improving livelihoods and contribute to community transformation. This study finding in not in conformity with a report from Munduli and Musuka (2020) who studied a fishing community in Zambia and revealed that alternative income and external remittances greatly contributed to minimise dependance on the fishery source, improve family health, and promote harmony and consequently contributed to community transformation.

Table 5: Economic and demographic characteristics that influence community transformation

Independent variables	B	SE.	Sig.	Exp(B)	95% CI for EXP(B)	
					Lower	Upper
Age category in years			.886			
18-27	.550	.578	.341	1.733	.558	5.383
28-37	.518	.571	.365	1.678	.548	5.142
38-47	.483	.615	.432	1.621	.486	5.411
48-57	.198	.643	.757	1.220	.346	4.299
58+ reference point	-	-	-	-	-	-
Gender (Female)	.135	.326	.678	1.145	.604	2.169
Household number			.111			
Less than 5	.603	.572	.292	1.827	.596	5.601
6-10	1.100	.572	.054	3.005	.980	9.210
11+ reference point	-	-	-	-	-	-
Occupation			.004			
Business	2.412	1.065	.024	11.154	1.384	89.915
Civil servant	2.738	.836	.001	15.454	3.001	79.580
Commercial farmer	3.728	1.012	.000	41.611	5.721	302.630
Peasant farmers	-	-	-	-	-	-
Alternative income	-.514	.370	.165	.598	.290	1.235
Savings	.165	.379	.663	1.179	.562	2.477
Access to credit	-.558	.383	.145	.572	.270	1.212
Access to remittances	-.005	.326	.987	.995	.526	1.882
Education level			.044			
None	-1.406	1.308	.282	.245	.019	3.182
Primary	-2.097	.728	.004	.123	.030	.512
Secondary	-1.401	.702	.046	.246	.062	.976
Tertiary	-1.267	.808	.117	.282	.058	1.373
University- reference	-	-	-	-	-	-

The dependent variable was community transformation.

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CONCLUSION

The four dimensions and their associated variables that the community surrounding Gulu University perceived to contribute more to community transformation included physical (housing, electricity, health, and water), economic (alternative income, savings, and access to credit), political (participation in politics and leadership, membership in associations, self-expression, and independent decision making); and spiritual (love, joy, peace, faithfulness, respect, and believing in God). These imply that, in terms of community transformation, the above-mentioned variables matter more for the majority of the people in the community surrounding Gulu University. Thus, these dimensions and their associated variables can be used by other related studies to measure community transformation in the context of developing countries. Also, there is a need for further research to determine which of these aspects have a high effect on transformation.

The findings showed that civil service, business and commercial farming categories of occupation, and achievement of university level of education were the economic and demographic factors that had a significant effect on community transformation. Thus, policies need to focus more on promoting civil service, supporting the improvement of the business environment, promoting commercial farming and university education since they have a higher multiplier effect on community transformation. Consequently, community members need to adopt commercial farming and take up civil service jobs by first emphasising education.

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