




# EDUCATIONE

## The Link Between Students' Community Engagement Activities and Their Academic Achievement



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### Abstract

The study aimed to test the hypothesis that there is a significant relationship between students' community engagement practice and their academic performance. The study covered 284 students in total. Data were gathered with the help of the questionnaire. The participants were divided into two groups based on their questionnaire responses: "community-engaged students" and "no community-engaged students." Based on average scores, standard deviation, descriptive statistics, t-tests, and the chi-square test of independence, the data were then examined using SPSS 25. According to the study's findings, students actively involved in their communities received higher grades than those not at all involved. Moreover, while community engagement may have been believed to affect academic achievement, it is statistically significant in this study. Besides, there was a statistically significant association between gender and community engagement in the study. In addition, the study found that students' geographical backgrounds and community engagement were significantly associated. Based on the study's findings, it has been concluded that community engagement and students' academic success, gender, and geographical background have significant associations.

**Keywords:** Community Engagement, students' academic achievement, gender, geography, responses

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## INTRODUCTION

Student community involvement in higher education institutions is about reinventing the neighborhood or better understanding and engaging with diverse communities. Pedagogy is a specialized means of communicating throughout the curriculum, teaching, and assessing a course, material knowledge - and a philosophy - a worldview that includes community service ideals. The Fellowship is dedicated to assuming and implementing meaningful and collaborative ties between various stakeholders. All forms of service-learning, on the other hand, are anchored in multiple philosophical systems such as "participatory democracy," "volunteerism," "consumerism," and "social transformation." Student community engagement refers to the involvement of students in activities that address community needs and contribute to the betterment of society.

It is a form of experiential education that allows students to apply their knowledge and skills in real-world settings. Students have a greater awareness of their problems and difficulties and a sense of responsibility to their community through community projects (Hernández et al., 2023, p. 1). There are several ways to get involved, like participating in community-led research initiatives and volunteering for community service projects (Greenberg et al., 2020, p. 13). In addition, a plethora of opportunities exist for individuals to partake in voluntary activities within the community (Haque et al., 2021, p. 1). The consistent engagement of students in community service endeavors has been observed to yield favorable outcomes across various facets of their lives. To enhance the vocational education of students, numerous educational establishments have implemented strategic initiatives (Haque et al., 2021, p. 1).

The active participation of students in community affairs yields numerous benefits, encompassing the development of professional, diverse, interpersonal, and civic proficiencies (Angima & Gaebel, 2018, p. 55). However, ignorance, lack of time, and a lack of incentives and support are some of the problems that need to be resolved to increase student involvement in community engagement programs. Many people think well of student community service initiatives. It is general knowledge that communities, teachers, and students gain from university-led service-learning initiatives (Gibson et al., 2020, p. 5). The school's production of concentrated knowledge and learning processes that are divorced from the features of the setting that define students is one of the trickiest issues it is now dealing with.

To establish an authentic learning process, it has been proposed that service learning be used to communicate school information with society (Ortega Torres et al., 2020,

pp. 304–305). Numerous significant projects benefit from student participation. For instance, community empowerment initiatives for disaster risk reduction at the village level have benefited dramatically from student participation (Karnawati et al., 2013, p. 317). Student-led community service initiatives can potentially improve natural disaster-affected areas in the long run by fostering sustainable development and capacity building (Mwangi, 2013, p. 1).

The bigger picture of community service learning may be understood from this, and we can infer that participating in one's initiative for the benefit of the community, attempting to change the community, and community relationships are all included in the community engagement activities of students. From this angle, service learning is merely one of the more obvious ways that professors and students make a real connection to and seek to improve both their and other people's circumstances. As soon as one opens the door to a classroom or office, it is abundantly apparent how academic knowledge and the production of knowledge are connected to real-world relevance (Butin, 2010, p. 152). As a result, community service might take the shape of volunteer work, financial or other types of intrinsic or extrinsic contributions, or compassionate services.

Community participation, whether in service-learning, public scholarship, community-based research, or other means, may and does achieve this goal. It is a deliciously sophisticated and placed activity that shocks and encourages students (and instructors) to reassess their traditional habits of thought and belief. As a result, we must reconsider the essential core of scholarship, its methods, and its outcomes. It highlights community voices and practices. It facilitates transdisciplinary research and the reinvention of collaborative procedures. If so, practitioners and academics must consider the best ways to disseminate this knowledge (Butin, 2010, p. 133). As a result, higher education institutions are expected to match their principal operations with national and societal priorities.

The Ethiopian Higher Education Proclamation of 2009 lists the "design and provision of community and consultancy services that shall cater to the developmental needs of the country" as one of the goals and a crucial role of higher education institutions. Furthermore, the Ethiopian Education Sector Development Program V for 2015 emphasizes the necessity of good community engagement through several channels, such as research that can address institutional and national priorities and development plans. The same document emphasizes the importance of community engagement. It proposes the formation of a national multi-sectoral stakeholder council to develop a

national framework for research and community engagement and a resource mobilization and utilization system for research and community services. However, these still need to be implemented (Tamrat, 2019).

### **Purpose of the research**

All around the world, schools and universities regularly mandate their students to participate in required or elective community service projects. Numerous programs take the shape of orientation events for incoming students or are comparable initiatives that enroll many students in short-term, infrequently occurring activities (Giles & Eyler, 1994, p. 327). However, in developing countries such as Ethiopia, there needs to be more evidence to show the impact of such services on the participants and the community. This correlation study will try to fill in this gap.

We are encouraged to consider thoroughly, reflect upon, and comprehend educational institutions' and classrooms' goals, principles, and practices through the theoretical framework and academic training of service learning. We must confront the presumptions and implications of how we do science education, learning, and practice as educators, administrators, and policymakers (Butin, 2010, p. 6). The fact that many higher education institutions' teaching-learning procedures fail to include community service ideals as a crucial component of service-learning scholarship and practice is one of the gaps in Ethiopian higher education students' connection with the community.

The other gap in community engagement scholarship is the need for quantitative attempts to study the relationship between the academy and community engagement. This study is piloting the possibility of a quantitative move in service learning and its association with variables such as GPA, gender, and geographical origin. Quantitative analyses of service learning have been shown to improve its academic credibility. Research has demonstrated that service learning can positively impact educational outcomes, including improved academic achievement and performance on subject-matter exams (Dahan, 2016, p. 3). However, quantitative and qualitative methods have much to offer (Giles & Eyler, 2013, p. 53). Skepticism over service learning's educational merit continues despite published research reviews showing consistent positive student outcomes (Furco & Root, 2010, p. 16). These findings prove that service learning can enhance students' academic learning and contribute to their educational experience. As demonstrated by a meta-analysis of nine studies that examined courses according to the presence or absence of service learning components, the addition of quantitative research methodologies also improves the

body of evidence supporting service learning. As a teaching strategy, it contributes to the growing acceptance of service learning (Novak et al., 2007, p. 149).

Volunteerism benefits participants, counteracting cynicism and indifference, and can address national problems with limited government resources. Numerous studies show that young people's attitudes are still developing, making service-learning a high-impact educational approach that benefits overall development. One approach in this area is modeling students' learning outcomes about their learning experience—the different student, course, and pedagogical components. Service learning helps to enhance the design of learning activities so that the students can profit from the learning process, have a better knowledge of the learning process, and have a more accurate forecast of student results and learning outcomes.

It has been shown that incorporating service learning into a curriculum improves learning results. (Bardus et al., 2022, p. 2; Destriani et al., 2022, p. 294; Fu et al., 2023, p. 13763; Jurgens et al., 2022, p. 19). Studies demonstrate that service learning can enhance students' academic performance and positively impact their overall development (Leary et al., 2022, p. 1). The e-service learning course study showed comprehensive learning results and positively impacted the students' learning. In addition, teaching and learning in agricultural science and technology are a topic of agreement. More students reported that they had developed skills that improved the quality of their lives, and the effect of service learning on their education was positive. According to these results, adding service learning into a course can improve student learning objectives and advance professional and personal growth.

Students' participation in community service activities may be affected and related to many factors such as the age of the students, the morale of the students, their spiritual tendencies, the influence of an elderly family who participates in community service activities, the gender of the students, the socio-economic background of the students, the type of schooling they receive and even the policy of the school.

Youth participation in the community can take many different forms. Youth Ministry, Youth Leadership and Youth Media, Youth Research and Evaluation, Youth Organizing, Youth Philanthropy, Youth Civic and Political Engagement, and Youth Decision Making are some of the implementation types that youth engagement efforts often fall under. Young individuals perform community service. Picking up rubbish on a beach is one example of basic youth service. It also includes longer-term, more planned community service programs and service-learning efforts that link volunteer activity to academic objectives and classroom lessons (Robinson & Green, 2011, p. 252).

Though not all students participate equally, students in higher education institutions participate in community service projects. Certain studies have shown that certain people experience more than others. Students with strong academic standing, women, those whose first language at home was English, and 11th and 12th graders were more likely to engage. Males, sixth through tenth graders, and pupils with poorer grades, on the other hand, were less likely to participate.

Student government involvement, extracurricular activities, extracurricular activities outside of school, and jobs for money increased the likelihood of community service participation. For several reasons, students who attended private schools affiliated with churches are more likely to have performed volunteer work. Firstly, these schools often emphasize the importance of community service and instill values of altruism and social justice in their students. Students can improve their communication and planning skills by being involved in community organizations while still in school. Furthermore, students connect with other community members and acquire expertise by collaborating with individuals in diverse disciplines. It enhances the students' ethical background and principles resulting from their training in community service learning (Rahim et al., 2023, p. 19).

The other reason why students should participate in these schools is that they can establish a sense of community connectedness. While volunteers with similar motivations have been found to have selfish profiles, those with altruistic motivations have strong indicators of volunteering in other institutions when they volunteer in public (Lemos et al., 2019, p. 1). According to studies, Students who volunteer in various settings are more likely to consider social issues. Multiple services can provide college students with exposure to diverse social circumstances.

Making learning relevant, intellectually challenging, and emotionally affecting can be accomplished by letting students see instances of social injustice in their neighborhoods. The course taught me a lot about the real world and customer service. "Really opened my eyes to a lot of things" are just a few of the comments made by service-learning students. Students in service-learning courses are occasionally compelled to examine their biases. Students may interact for the first time with someone of a different race at a service facility (Evans, 2009, p. 123). For example, research conducted over the past five years examining the effects of an outdoor gardening program on community college students and four-year state university students discovered a substantial amount of evidence indicating that participation in community service programs such as gardening work and community service work

has had a significant positive influence on student academic performance, self-esteem, and self-efficacy, connection to campus and community, and a sense of belonging (Evans, 2009, p. 91).

The interactions they have with colleges can help students in a variety of ways. A few advantages include increased human and social capital development, faster economic growth, more robust professional and intellectual infrastructure in communities, progress toward sustainability, and research findings that can enhance society's social, economic, environmental, and cultural components. Creating informed and engaged citizens can also increase business and community responsibility. A better quality of life for communities can result from promoting social cohesion and social transformation (Marissa Popma & Kora Tushune, 2012, p. 40). It can also spark educated discussion on essential topics for communities.

In a similar token, the attempt to use students for community service has been historically implemented in Ethiopia. The Ethiopian University Service was established in 1964 as a degree requirement, with students obliged to labor in the provinces for one year (after the third year), primarily as teachers. This method also aided in disseminating campus politics to a much larger audience outside the university by boosting secondary school students' awareness of them and nurturing allegiance to university students' unofficial leadership (Adamu & Balsvik, 2017, p. 268). Thanks to another similar program, the students know exactly how the rural population lives. The Derg launched the Ediget Behibret Zemecha (Development via Cooperation Campaign), more colloquially known as Zemecha (campaign), which required students to serve as the primary implementers to bring about the projected development and changes in the nation (Adamu & Balsvik, 2017, p. 272).

Due to globalization and other factors, the nature and dimensions of community engagement has been changed. Hence, the Ethiopian government only recently introduced Ethiopia's Volunteer Community Service Program to engage the country's expanding youth population, foster integration and national cohesion, and create a tranquil, harmonious community. The program strives to increase respect for diversity, social cohesiveness, and peaceful cohabitation while promoting a culture of public service and national integrity. As a result, it will help to maintain long-term peace and stability. The program will work to accomplish supplementary and connected objectives under the direction of the Department of Peace, in close cooperation with other stakeholders, and with technical support from the United Nations Development Program (UNDP). The program aims to foster a culture of



voluntarism, national harmony, social cohesion, and integration to benefit the host community, the military, and the general public.

Ethiopian youth are given the tools they need to actively participate in national governance and development processes, fight for peace, and contribute to nation-building, peaceful coexistence, and long-lasting peace (*Ethiopian National Volunteer Community Service Programme | United Nations Development Programme*, n.d.). Additionally, community engagement produces research questions and findings that can be used to enhance the population's quality of life. One of the main objectives of higher education in Ethiopia is to produce responsible and competent citizens who can satisfy the quantitative and qualitative demand for a highly trained labor force based on the needs of the nation's socioeconomic development, according to Ethiopia's Education Sector Development Program.

Consequently, this may imply that one of the most significant duties of educational institutions in Ethiopia is a commitment to promote community development realistically and feasibly to attempt to alleviate some of the problems of inequality, poverty, and social difficulties. Therefore, active universities are crucial for the future of Ethiopia's economy and society. If Ethiopian higher education is to advance and strengthen its quality and relevance, a university-wide, institutionalized, and sustained commitment to community participation and research is necessary and a top priority (Popma & Tushune, 2012, p. 35).

The higher education proclamation, which outlines the policy and strategic orientations for universities in Ethiopia, indicates that institutions are increasingly expected to conduct and distribute research and studies based on national priority challenges. This is crucial for improving society's quality of life and lowering poverty nationwide. According to the World Bank study on the state of universities in Ethiopia, research, studies, and community services are necessary for Ethiopian universities to help society's social and economic development problems. Universities must conduct research and analysis to help students become knowledgeable citizens and experts who can solve problems.

The degree to which higher education institutions develop and enhance ties with the general public, industry, and services influences their applicability to society and social responsibility (Marissa Popma & Kora Tushune, 2012, p. 37). As a result, national development and poverty alleviation are critical objectives of higher education in Ethiopia. Studying the link between academic achievement and community engagement is one of the various dimensions of community engagement in Ethiopia

and any other country. The link between educational practice and social relevance lies at the heart of how we want to think about higher education today in many ways. Indeed, one might make a compelling case that service learning goals and methods are as relevant and vital now as they were forty years ago (Butin, 2010, p. 152).

As soon as one walks into a classroom or an office, it is evident that academic knowledge and knowledge generation are being combined with practical application. However, I believe that these rising trends—which I have already mentioned—prevent such hope from blossoming among the roots. It is essential to completely rethink how cohesive scholarship will develop inside academia in light of the shifting student demographics, faculty profiles, organizational structures, and practices. What exactly does a “non-traditional” student mean by service-learning or community-based research? How much should or should not “teaching faculty” be expected to embrace a time-consuming pedagogy that may or may not adhere to specified curricula or follow standardized result measures? Is it even possible to have “community service” or “public scholarship” in a for-profit college? (Butin, 2010, p. 152). Teaching undergraduates about complicated social concerns through lectures and text alone might be difficult. Students' service learning experiences in local areas have positively impacted their understanding of academic subjects.

Research has shown that service learning can contribute to knowledge construction and the internalization of class material. Service students achieved significantly higher academic performance than a control group of non-participating students. The results of this study demonstrate the value of giving SL's business university students (Martínez-Campillo et al., 2019, p. 1). Regarding knowledge construction, students involved in the service learning project report that their knowledge of science and critical thinking abilities have increased. They also note that their knowledge construction has changed overall during the service learning, particularly emphasizing personal development and civic engagement.

Furthermore, there were variations in the knowledge-building changes displayed by students under different experimental situations. This suggests that the students' knowledge construction is hampered at the task change turning point by varying experiences with services (Li et al., 2019, p. 399). According to these results, students' comprehension of academic courses is improved, and their ability to apply knowledge in the real world is encouraged by the hands-on experience that service-learning offers. Accordingly, this study aimed to analyze the connection between students' academic success and their involvement in volunteer work in the community. Specifically, the

relationship between community engagement and the students' background location will be studied, and the relationship between gender and community service activity will be explored. The study will test the following hypotheses:

H3. The success of a student's academic GPA and community service involvement are significantly correlated.

H1. There is a significant relationship between gender and involvement in community engagements.

H2. Volunteering in community service activities and a students' urban/rural geographical origin are significantly related.

## METHODOLOGY

### Research Design

The study used a quantitative approach. A correlation study that used statistical analysis for the questionnaire data was applied. The correlation study took place at Addis Ababa University. The questionnaire was administered to scale the student's responses to 10 questions. The answers on the community engagement questionnaire represented several points. The study focused on undergraduate students. The factors whose correlation is being studied were the students' participation in volunteer work and their GPA. Those who did or did not participate in community service were used to gauge the involvement of the students. Moreover, the study analyzed the correlation between other study variables, including gender, geographical origin of the students, and community engagement.

### Study Group

The study's primary objective was to investigate if there was a relationship between the community engagement activities of students and their academic success. We used Addis Ababa University undergraduate students involved in the study. The researcher used a random sampling approach. Using a straightforward random approach, a sample of students was selected to participate in the study. The researcher followed strict ethical procedures throughout the study, and the participants were informed about the intentions of the study before filling out the questionnaire. The students were given a hard copy of the questionnaire through their undergraduate coordinator. The undergraduate coordinator guided and made the students complete the questionnaire correctly and honestly. There were 284 students in the study, of which 221 reported participating in community engagement activities and 63 reported not getting involved. This difference was used to segregate the participants. The Sample size of

the study was 284. This means 287 or more measurements/questionnaires were needed to have a confidence level of 95% that the real value is within  $\pm 5\%$  of the measured/surveyed value. The reliability of the study was set to be at a 95% confidential interval.

### **Validity and Reliability**

Using Cronbach's alpha, the internal validity of the 5-item Scale was examined. The scale's overall alpha, according to the results, was .602. The reliability of the scale increased only after the deletion of one item, according to an analysis of individual item statistics.

### **Data Collection Tools**

The questionnaire was used to collect data from the students who were asked to provide background data on gender, major areas of study, Cumulative GPA, original location, and whether they are engaged in community service or not, and five additional Likert scale questions that required their responses in community engagement activities. This study was conducted on the main campus of Addis Ababa University. Addis Ababa University has its headquarters located at the main campus, which is six kilometers away, with a five-kilometer (Faculty of Technology-North), (Faculty of Business and Economics) and Black Lion (Medical Faculty) Lideta (Technology Faculty-South), Administers the Addis Ababa College of Business, Yared Music School, School of Dentistry, and Faculty of Veterinary Medicine.

### **Data Analysis**

IBM SPSS 25 was employed to facilitate the analysis process. Descriptive statistics, chi-square tests, and T-tests were implemented to express the research with figures.

## **FINDINGS**

According to the data, 82(28.9%) of those who took the questionnaire were majoring in Geography, 68 (23.9%) participants were from Language and Social Science Education, 125 (44.0%) participants were majoring in Social Work, and 9 (3.2%) were Civics and Ethical Education majoring students (see Table 1).

**Table 1***Major of the students*

| Major    | Geography | Social Science and Language Education | Social Work | Civics and Ethical Education | Total |
|----------|-----------|---------------------------------------|-------------|------------------------------|-------|
| <i>f</i> | 82        | 68                                    | 125         | 9                            | 284   |
| %        | 28.9      | 23.9                                  | 44.0        | 3.2                          | 100.0 |

**Table 2***Gender of the students*

| Gender | Male     |      | Female   |      | Total    |       |
|--------|----------|------|----------|------|----------|-------|
|        | <i>f</i> | %    | <i>f</i> | %    | <i>f</i> | %     |
| Valid  | 194      | 68.3 | 90       | 31.7 | 284      | 100.0 |
|        |          |      |          |      | 100.0    |       |

Table 2 shows the frequency distribution for the gender of students who participated in the study. The table shows that the majority of the participants, 194 (68.3%), were male, and 90 (31.7%) were female.

**Table 3***The geographical location of students /urban or rural*

| Geographic Region | Urban    |      | Rural    |      | Total    |       |
|-------------------|----------|------|----------|------|----------|-------|
|                   | <i>f</i> | %    | <i>f</i> | %    | <i>f</i> | %     |
| Valid             | 95       | 33.5 | 189      | 66.5 | 284      | 100.0 |
|                   |          |      |          |      | 100.0    |       |

As shown in Table 3 above, 95 (33.5%) participants were from urban areas, and 189 (66.5%) were from rural areas.

### **T-test for the Relationship between Academic Success and Community Engagement Practices**

H1. The success of a student's academic score and community service involvement are significantly correlated.

The first hypothesis developed by the researcher was that academic success is significantly correlated with community engagement. To test whether there is a significant relationship between the two variables, the researcher used a t-test. One of

the variables, i.e., GPA, is a continuous variable because it can take any possible value between 1.0 and 4.00. The other variable is dichotomous. Two hundred twenty-one students reported participating in the community service activities, and 63 said they did not. Hence, in this case, the most appropriate test would be the t-test. The mean of those who participated was 3.1694; for those who did not, it was 2.8710. SD (.44110) and SD (.64865) were registered for those who participated in community service and those who did not participate, respectively. This is indicated in the table below.

**Table 4***General Statistics*

| I give community service | n   | Mean   | Std. Deviation | Std. Error Mean |
|--------------------------|-----|--------|----------------|-----------------|
| Yes                      | 221 | 3.1694 | .44110         | .02967          |
| No                       | 63  | 2.8710 | .64865         | .08172          |

To determine if there is a significant difference between participation in community service and students' GPA, it was essential to use the t-test. The result of the test is presented below.

**Table 5***Independent Samples T-test for students' GPA*

|     | F      | sig  | t     | df  | Sig. (2-tailed) | Mean   | Std. Error Difference |
|-----|--------|------|-------|-----|-----------------|--------|-----------------------|
| GPA | 38.006 | .000 | 4.228 | 282 | .000            | .29846 | .07059                |

The mean GPA difference of the students was .29846, with a standard error difference of .07059. Students have reported participating in some service activity as per the distributed questionnaire. A t-test was used to compare the GPA of students involved in community engagement activities at the university and those who said they were never involved in community engagement activities. On average, there is a significant difference between those who participated in community service and those who did not. This difference was statistically significant,  $t(4.228) p = .000 = .0$ , 95% CI[.43741], indicating that the average GPA of the community-engaged students was more than what would have been expected due to chance.

**The Association between Gender and Involvement in Community Engagements**

H2. There is a significant relationship between gender and involvement in community engagements

The study's second premise was that there is a substantial association between gender and involvement in community interactions. The researcher employed the chi-square test to examine the hypothesis. If a researcher wishes to test a hypothesis concerning the distribution of a categorical variable, chi-square testing or another nonparametric test must be used. Because categorical variables can only have a few particular values, they cannot have a normal distribution (Turney, 2022). Therefore, to test the hypothesis, the researcher used the chi-square test.

**Table 6**

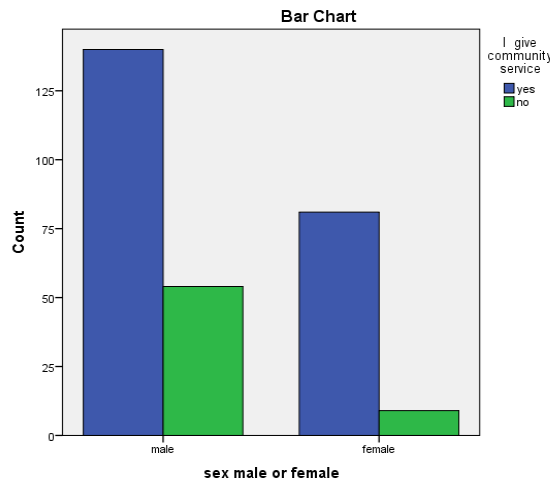
*Chi-Square Tests for the relationship between gender and community engagement practice of students*

| Variable | n   | Yes | No | Likelihood Ratio Value | Fisher's Exact Test (p) |
|----------|-----|-----|----|------------------------|-------------------------|
| Gender   |     |     |    | 12.621                 | .001                    |
| Male     | 194 | 140 | 54 |                        |                         |
| Female   | 90  | 81  | 9  |                        |                         |
| Total    | 284 | 221 | 63 |                        |                         |

\*0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.96.

\*\*Computed only for a 2x2 table

As the table above indicates, the Chi-square test results presented "0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 19.96." Therefore, the assumptions have not been violated. As noted in the table, the chi-square test of independence looked at the relationship between gender and involvement in volunteer work. There is sufficient evidence to conclude that the observed distribution deviates from the expected distribution if the p-value for a Chi-square test is less than or equal to your significance level. The categorical variables have a relationship with one another.



**Fig. 1.** Crosstabs bar chart for the relationship between gender and community engagement practice of students

### Relationship between Geographical Background and Community Service

H3. Volunteering in community service activities and students' urban/rural origin locations are significantly related.

The third hypothesis developed by the researcher was that volunteering and the geographical origin of the students are significantly related. To test the hypothesis, the researcher used the chi-square test.

**Table 7**

*Chi-Square Tests for the relationship between geographical background and community engagement*

| Variable              | n   | Yes | No | Likelihood Ratio Value | Fisher's Exact Test (p) |
|-----------------------|-----|-----|----|------------------------|-------------------------|
| Geographical Location |     |     |    | 14.910                 | .000                    |
| Urban                 | 95  | 86  | 9  |                        |                         |
| Rural                 | 189 | 135 | 54 |                        |                         |
| Total                 | 284 | 221 | 63 |                        |                         |

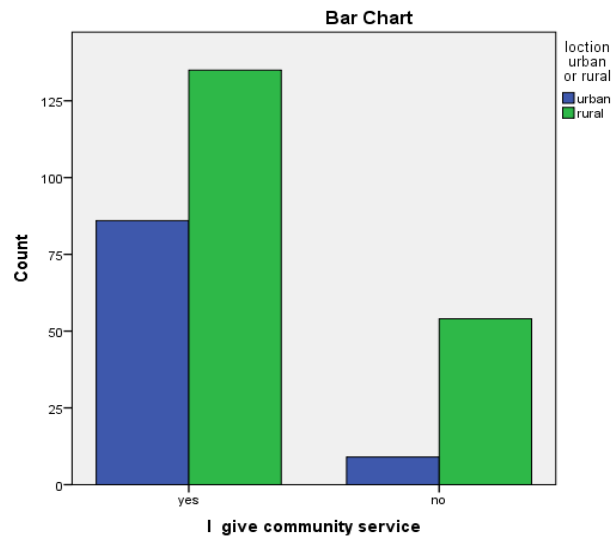
\*0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.07.

\*\*Computed only for a 2x2 table

A 2x2 table chi-square test was used to determine whether there was a significant difference between urban students' proportions and rural community service givers. As shown in the table above, "a. 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 21.07."



Here again, the chi-square test could be used to determine the significance of the study. This was because applying the approximation method was adequate in the study.



**Fig. 2.** Crosstabs bar chart for the relationship between urban /rural background and community engagement practice of students

### Data on Participation in Community Engagement Activity of the University

The second part of the questionnaire asked the students five items, like Likert scale survey questions. The students were asked to respond whether or not it is easy for them to become engaged in community service at the university.

Besides, they were asked to answer whether giving community service is essential and whether they have plans to participate in a community service activity in the future. In addition, the researcher asked the students whether they needed help doing community service at the university and whether doing it was boring or not. Their responses are presented below. As can be seen in Table 8, the study employed a questionnaire to explore students' responses about their participation in community engagement activity at the university - for example, whether they believed that it is easy for them to become engaged in community service at the university, if they need to give community service, or whether they have plans to give community service in the future and whether giving community service is often boring for them or not. The quantitative data revealed that most respondents favor participating in the university's community engagement activity.

**Table 8***Responses on students' community engagement activity at the university*

| <i>Responses(1-5)</i>   | Strongly Disagree |          | Disagree |          | Neutral  |          | Agree    |          | Strongly Agree |          |
|---|-------------------|----------|----------|----------|----------|----------|----------|----------|----------------|----------|
|   | <i>n</i>          |          | <i>n</i> |          | <i>n</i> |          | <i>n</i> |          | <i>n</i>       |          |
|   | <i>%</i>          | <i>%</i> | <i>%</i> | <i>%</i> | <i>%</i> | <i>%</i> | <i>%</i> | <i>%</i> | <i>%</i>       | <i>%</i> |
| It is easy for me to become engaged in community service at the university      | 9                 | 3.2      | 15       | 5.3      | 65       | 22.9     | 181      | 63.7     | 14             | 4.9      |
| It is important to me to give community service                                 | 43                | 15.1     |          |          | 39       | 13.7     | 130      | 45.8     | 72             | 25.4     |
| I can give community service in the future                                      | 32                | 11.3     |          |          | 18       | 6.3      | 152      | 53.5     | 82             | 28.9     |
| It is difficult for me to become engaged in community service at the university | 27                | 9.5      | 115      | 40.5     | 47       | 16.5     | 86       | 30.3     | 9              | 2.9      |
| Giving community service is often boring  | 53                | 18.7     | 84       | 29.6     | 90       | 31.6     | 48       | 16.9     | 9              | 3.2      |

## CONCLUSION, DISCUSSION AND SUGGESTIONS

The study's general objective was to analyze the connection between students' academic success and their involvement in volunteer work in the community. This study showed that students who were engaged in community service activities performed better than those who were not community-engaged. To meet its objectives, students were randomly selected, and a questionnaire was distributed to them. The questionnaire aimed to measure whether community service, gender, CGPA, and location were correlated and to gather information about their responses towards community service.

The independent t-test result for the community-engaged students and the students who were not community-engaged showed that the significance of the test was .000. Since this value is much lower than the standard alpha level on average, there was a statistically significant difference between those who participated in community service and those who did not. This difference was statistically significant,  $t(4.228)$   $p$

$=.000 = .0$ , 95% CI [.43741], indicating that the average GPA of the community-engaged students was more than what would have been expected due to chance. Moreover, the difference between the two groups was  $df = 284$ .

The study indicated a significant relationship between community engagement and academic scores. The p-value of the test was found to be .000, much higher than the alpha level set at 0.05. Therefore, the study's hypothesis, which stated that there was a significant relationship, was accepted in this study. Moreover, the difference between the two groups was  $df = 282$ . Since  $p < .000$  is much less than the study's chosen significance level  $\alpha = 0.05$ , there is enough evidence to accept the hypothesis, and the mean for community engagement and lack of community engagement was significantly different ( $t = 4.228 = 3.433$ ,  $p < .000$ ). The average community engagement activity was higher than the average no community engagement activity of students. Table 5 shows the test result of the significance of GPA differentials in community engagement. The GPA differentials of the students affected the students' community engagements, as shown. The null hypothesis was rejected, which states that students' academic GPA and community service involvement are not significantly correlated. In other words, differences in CGPA were attributed to the factor of community engagement.

The study's second objective was to check if there was a significant association between students' gender and their proclivity to participate in community activity. The researcher tested whether this hypothesis was true or not using the chi-square test. However, there was a significant relationship between gender and community participation, as found in the chi-square test significance level. Therefore, the alternate hypothesis was accepted as the study found a statistically significant association. There was a statistically significant association between gender and involvement in community engagements. The chi-square test P value is  $p = .001$ , showing that the association between these variables was statistically significant. Since the p-value in the study was less than the significance level, the researcher rejected the null hypothesis. Therefore, since the p-value was lower than the critical p-value of the study, which was established to be  $p < 0.05$ , the researcher concluded that the result was statistically significant. Hence, the researcher believed that there was enough evidence to accept the alternate hypothesis (H2), and this particular study concluded that gender and involvement had a statistically significant relationship in community engagement to reject the null hypothesis of the study.

The chi-squared test is used to compare the distribution of a categorical variable in one sample or group to the distribution in another. If the distribution of the category variable is not significantly different across groups, we can conclude that the distribution of the categorical variable is unrelated to the variable of groups. Alternatively, the categorical variable and groups are independent. For example, if males are more likely than women to have a given condition, there would be a greater possibility of finding a person with the condition among men than among women. We do not believe that gender is independent of the condition (Eric Heidel, 2023)

The hypothesis test evaluated the sample's evidence. The test was able to identify an effect; this did mean that the effect did exist. It indicated enough evidence in the sample to prove its existence. As a result, the test results did disprove the null hypothesis. Simply put, there was enough data to change the hypothesis test's default conclusion that the null hypothesis is true. The researcher found a statistically significant association in community engagement between male and female students. The other objective of the study was to test the association between community engagement and the students' background location. The chi-square test was conducted to see if there was a statistically significant relationship between the proportions of urban students and those who do rural community service. This difference was again statistically significant,  $p = .000$ . The study indicated a statistically significant association between rural and urban students in community engagement activity.

According to the chi-square assumption, at least five observations must be in each cell of the 2x2 table used for the analysis. The Chi-square test and Fisher's Exact test can be used to generate a traditional p-value when analyzing the relationship between two independent dichotomous categorical variables. This p-value determines whether the distribution of the predictor's levels across levels of the outcome variable differs significantly from what is predicted (Grubisich, 2017). As indicated in Table 7, this association was statistically significant,  $p = .000$ . There was a statistically significant association between rural and urban students by community engagement. The association of subjects who reported being of urban/rural origin did differ by community service. The exact P value is  $p = .000$ ,  $p > .05$ . There was a statistically significant association between the two variables.

The researcher wanted to test whether a "statistically significant" association existed between the variables to accept or reject the hypothesis. Since the chance was less than 0.05, it was possible to reject the null hypothesis. As such, in this example, where  $p = .000$ , the researcher could reject the null hypothesis. The researcher has evidence to

accept the alternative hypothesis. The alternative hypothesis was accepted for the time being because, at a significance level of .000, the result we obtained could happen too frequently for us to be confident that urban /rural origin affects community service engagement.

The quantitative data showed that most university students favor community service, with 71.2% of participants favoring it and 82.4% agreeing or strongly agreeing to give it in the future. However, many students disagreed with the statement that it is important to them to give community service. Most students found it easy to become engaged in community service, with 63.7% agreeing and 22.9% remaining neutral. However, 33.2% of students found it difficult to become engaged, and 45.3% disagreed or strongly disagreed with the statement that giving community service is often dull.

For example, as indicated in Table 8, 202 (71.2%) of participants favor the importance of giving community service, and 43 (15.1%) of students disagreed with the following statement: "It is important to me to give community service." Similarly, 234 (82.4%) of the students agreed or strongly agreed that they would give community service in the future; not a single student disagreed, and only 32 (11.3%) strongly disagreed. Besides, the students were asked whether it was easy for them to become engaged in community service at the university. In total, 181 (63.7%) agreed, and 65 (22.9%) remained neutral, whereas 14 (4.9%) strongly agreed, and 15 (5.3%) disagreed, and only 9 (3.2%) strongly disagreed with the statement. The data indicated that giving them community service may not be complicated as long as students have the initiative.

The students were also asked whether they needed help to become engaged in community service at the university. Data analysis revealed the results for the students. For example, as shown in Table 8, 95 (33.2%) of the students believed that they have difficulty becoming engaged in community service activities at the university, and 142 (50.6 %) of the students said they do not have any difficulty being engaged in the university's community service activities.

Most students did not believe that giving community service is often boring 84 (45.3%) either strongly disagreed or disagreed with the "giving community service is often boring" statement. In general, many of the students had more favorable responses to giving community service as compared to those with a negative response towards community service engagements. This difference may be explained by the fact that the students want to engage in community service positively. The result could also reflect that some students face difficulties engaging in community services. The connection

between service learning and the academic success of low-income and disabled students has to be further investigated. Besides, future research has to investigate the relationship between academic achievement and students' service learning proclivity through longitudinal research. Future studies must focus on the relationship between quality service-learning institutionalization and academic achievement and analyze the factors responsible for implementing service-learning programs.

### Limitations of the study

The sample size used in the study is low (284). Therefore, it is not represented to be generalized to the whole population. Besides, the students may have needed to disclose their GPA adequately. I recommend a larger sample size to arrive at definite conclusions.

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### Conflict of Interest

The author does not have any conflict of interest to declare.

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