Volume 8-Number 2- October 2025

Ethiopian Journal of Behavioral Studies

Online ISSN: 3006-6336
Print ISSN: 2788-6301

Addis Ababa University

College of Education and Behavioral Studies

ኩሉ አመክሩ፣ ወዘሠናየ አጽንዑ።

ETHIOPIAN JOURNAL OF BEHAVIORAL STUDIES (EJOBS)

ETHIOPIAN JOURNAL OF BEHAVIORAL STUDIES (EJoBS)

VOLUME -8 NUMBER-2 October 2025

ORIGINAL ARTICLES

SHORT COMMUNICATIONS

Ethiopian Journal of Behavioral Studies, October 2025, 8(2), 1-35

Exploring the Relationship between Adolescents' Values and their Engagement in Nonviolent Behavior

Mitiku Hambisa[1]

DOI: https://doi.org/10.63990/ejobs.v8i2.12277

Received: 1 October 2024; Accepted: 18 June 2025

Abstract

This study examined the relations between values (Self-transcendence Values, [ST] and Self-enhancement Values, [SE]) and Nonviolent Behavior (NVB). The study employed a quantitatively driven mixed methods design and was conducted on Ethiopian adolescents attending their secondary schools in Addis Ababa. A total of 171 randomly selected adolescents (87 females and 84 males) from two randomly chosen schools participated in the study. Five of these adolescents (3 females and 2 males) participated in a qualitative study. Questionnaire and a semi-structured interview were used to collect data. To analyze the quantitative data, descriptive statistics, correlation, and structural equation modeling (SEM) were employed. Analysis of Moment Structures (AMOS) and Statistical Package for the Social Sciences (SPSS) were used for this purpose. Qualitative data were analyzed thematically using Open Code version 4.03. It was found that the two higher order values (i.e., ST and SE) accounted for a substantial amount of variance in NVB independently (50.30% for ST and 32.40% for SE) and jointly (70.60%). The study also found that the structural model that linked ST, SE and NVB fit the data adequately. Moreover, the relations found among these variables are in line with the pattern predicated by Shalom Schwartz's Basic Individual Values Theory. Implications of these findings are discussed.

***Keywords**:* Nonviolent behavior, value priority, self-transcendence values, self-enhancement values, peace, peace psychology

[1] Assistant Professor at School of Psychology, CELS, AAU. Email-lovemitiku@yahoo.com

Introduction

There is an urgent need for peace in our current world. According to Institute for Economics and Peace ([IEP], 2023), in the last one and half decade a considerable number of countries encountered a steady decrease in peacefulness while the global economic impact of violence increased to $17.5 trillion in 2022. This amount of money could feed, educate, rehabilitate and protect the environment of millions of impoverished people. Likewise, IEP indicated that Africa continued to be one of the world's least peaceful regions. From these observations, it seems that the Roman legacy, "*Si vis pacem, para bellum*," which translates to, "*If you want peace, prepare for war*" is at work (Galtung, 2001, p. 11135). Ethiopia is not an exception to this. Although Ethiopia is regarded as a symbol of pride and Pan Africanism as it is not colonized by foreign forces, the course of its history is characterized by incidents of internal conflict, oppression and violence (Pham et al., 2023). According to IEP's (2023) Global Peace Index, Ethiopia ranks 151st out of 163 countries with a deteriorating and low level of peacefulness. A pilot study conducted by the Ministry of Peace of the Federal Democratic Republic of Ethiopia (2023) also indicated that peace indicators at the community level were significantly lower. Moreover, Mitiku and Tilahun (2019) identified a number of impeding factors related to family, media, religion, educational institutions, and socio-cultural challenges that influence the development of nonviolent behavior (NVB) in the Ethiopian context.

What should we do to make individuals, interpersonal relationships, communities, nations and our world peaceful? One of the answers from the field of Peace Psychology would be developing peaceful personality. In line with Nelson

(2014), NVB (sometimes used as a synonym of nonviolence) is an aspect of peaceful personality. The term *nonviolence* is composed of *no* and *violence* both of which have negative connotations (Johansen, 2007). But these negative words together give rise to one of the qualities demanded from the citizens of the 21st century—saying no to violence. However, Johansen indicated that some scholars including peace activists regard the absence of a serious physical violence in human interactions as the distinguishing feature of nonviolence. In fact, nonviolence includes ending violence or resolving conflicts without committing further violence. But, can the mere carrying out of an activity without violence be regarded as nonviolence? Peace psychologists and other professionals in the field (e.g., Mayton, 2009; Nelson, 2014; Kool & Agrawal, 2020) answered *no* to this question. The reason is that nonviolence is not the mere absence of violence. Besides signifying the absence of violence, nonviolence should target abating or abolishing violence and oppression. Likewise, there is a difference between peace and nonviolence. According to Summy (2005), while peace is an ideal state of being and the goal that one strives for, nonviolence is the way or the method that leads to this goal. In this sense, pacifism represents a belief and nonviolence is related mainly with action. Mayton (2009) amalgamated behavioral connotations of nonviolence provided by different authors. In the behavioral sense, Mayton noted, nonviolence involves using power and influence without being violent even to the individuals who work actively to thwart one's goal achievement.

United Nations Educational, Scientific, and Cultural Organization (UNESCO, 1949) contended that peace should begin from where war once began - the minds of human beings. After 62 years of UNESCO's contention, a new and comprehensive empirical model, the Diamond Model of Nonviolence ([DMN]; Mayton et al., 2011),

appears to suggest that the starting point for promoting world peace is promoting peace within the individual. . However, there is a remarkable gap in the empirical literature with regard to investigating conditions that promote or inhibit development of a nonviolent individual (Kool & Agrawal, 2020).

One of the factors that is claimed to influence NVB is value priority (VP). Social-psychological literature (e.g., Sagiv & Roccas, 2017; Schwartz, 1992) considered values as internalized principles that guide an individual's behavior across situations. A person's values form a system of hierarchically ordered structure according to their importance. The concept of the relative importance of values leads to the notion of VP. VPs help people identify things less important or more important in their lives. According to value researchers, it is the priority that they assign to values, not necessarily the actual values they hold, that distinguish among people (Cieciuch et al., 2014). While there are also group level values such as cultural values, the focus of the present study was individual level values. Schwartz (1992) developed his most influential and respected Basic Individual Values Theory and refined it further (Schwartz et al., 2012). The theory's core tenet is that values are arranged in a circular pattern according to their underlying motivations. The refined theory has 19 basic values grouped into four higher order values; that is, conservation, openness to change, self-enhancement (SE) and self-transcendence (ST) values. Schwartz et al. (2012) indicated that depending on the purpose of their study, researchers can select and use a large or a small set of values. Accordingly, ST and SE were selected to examine relations between VP and NVB in the current study. These higher order values were selected because, according to the Basic Individual Values Theory, they are incompatible values which are assumed to be related to NVB positively (ST) and

negatively (SE). Thus, this selection was made in line with one of the purposes of the present study, namely examining whether the relationship among NVB, ST and SE follow the pattern predicated by Shalom Schwartz's Basic Individual Values theory.

SE versus ST dimension aligns values according to their roles in motivating people to be concerned about and care for other people (high ST) or accentuate on personal outcomes (low ST). As components of the SE value, power and achievement focus on the tendency of an individual for personal success and exerting control on other people. ST values emphasize concern and care for those with whom one has frequent contact (benevolence) or displaying acceptance, tolerance, and concern for all people regardless of group membership (universalism) (Schwartz, 1992; Schwartz et al., 2012).

One of the several reasons for studying values is understanding their impacts on behavior. This is because if the relationship between behavior and values is not clear and meaningful, investments made to establish and change behaviors by influencing values (e.g., using formal education and media) will be of little importance. Scholars who accept the guiding role of values argue that acting is one of the ways through which people display the important values they hold and that value-consistent action is rewarding (Bardi & Schwartz, 2003).

In line with this contention, some studies have attested substantial associations between values and behaviors. Among the myriads of behaviors that empirical research found to be associated with personal values (Roccas & Sagiv, 2010) are violence and NVB. For instance, in a study conducted on Jewish and Arab high school adolescents in Israel, while SE values (power) correlated positively with self-reported violent behavior, ST (universalism and conformity) values correlated negatively with this

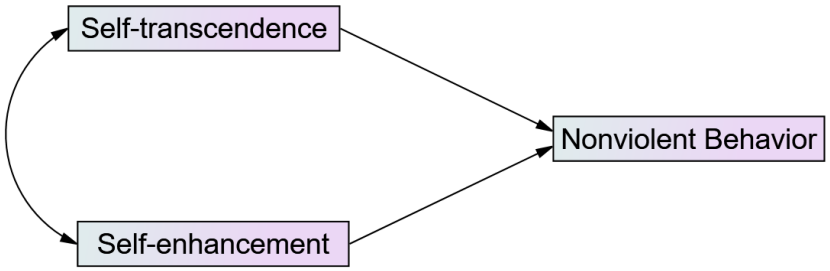
behavior (Knafo et al., 2008). These findings supported the researchers' hypothesis that lower power values and higher universalism values play protective roles against violent behavior. On the other side of the coin and including the higher order value dimensions, further hypothesis that SE values are negatively related to NVB whereas ST value is positively related to NVB can be formulated.

One of the mechanisms by which culture and society curb aggressive and killing potentials in human beings is by inculcating moral values in the individual members. Literature that relate values and nonviolence indicate that values play indispensable roles in maintaining social tranquility by bridling potentials of violence within individuals (Miklikowska & Fry, 2012). More to the point, in line with Miklikowska and Fry's idea, while ST value is antithetical to violence, aggression is related to the SE dimension of VP. Likewise, Mayton and his colleagues (Mayton, 2009; Mayton & Furnham, 1994; Mayton et al., 1999) report that nonviolent individuals place higher priorities on universalism and benevolent values. On the other hand, these researchers pointed out that peaceful persons place lower priorities on power, hedonism and stimulation values. These findings were replicated in a study conducted by Mayton et al. (2013) in such a way that SE values (achievement, power and hedonism) were negatively correlated with interpersonal and societal nonviolence subscales. ST values (universalism and benevolence) were positively correlated with interpersonal nonviolence. Even though Ethiopia's cultures have a plethora of pro-peace values (e.g., hospitality, cooperation, respectfulness, and tolerance), values and their relations with NVB were not given adequate empirical attention (Alagaw, 2012; Mitiku, 2024). Given that many studies were conducted in the Western culture and that DMN is a new model which needs to be substantiated in other cultures, examining relations between values

and NVB in the Ethiopian context (Figure 1) is reasonable. Likewise, the Basic Individual Values Theory suggests that ST and SE are conflicting (incompatible) values (Sagiv & Roccas, 2017; Schwartz et al., 2012), implying the need to examine the relation between these values (as depicted in Figure 1) in the Ethiopian context.

Figure 1

Conceptual Model that Guided the Study



Research Questions

1. Does the structural model (Figure 1), which relates ST, SE, and NVB, fit the data?
2. Do the relationships among NVB, ST and SE follow the pattern predicted by Shalom Schwartz's Basic Individual Values theory?
3. What proportion of the variance in NVB do ST and SE explain independently and jointly?
   - 3.1 What are the adolescents' experiences regarding the influence of their ST values on their NVB?
   - 3.2 What are the adolescents' experiences regarding the influence of their SE values on their NVB?

Operational Definitions of Constructs

- **Nonviolent Behavior (NVB):** NVB refers to interactions involving words, deeds, and experiences with others that are not intentionally harmful but geared towards peacefulness. In the context of the present study, NVB was assessed by items adapted from the Interpersonal Subscale of the Diamond Scale of Nonviolence (DSN) (Mayton et al., 2011).

- **Values**: Values are moral as well as social principles that are considered to be important and therefore guide one's life (Schwartz, 2017). VP is the importance of one value relative to other values. In this study, VP is measured by items adapted from the six-point scale Portrait Value Questionnaire (PVQ-RR) (Schwartz et al., 2012) pertinent to the following two bipolar higher-order values.
    - ***Self-transcendence (ST) values*** are the values that indicate the tendency of individuals to go beyond their selfish concerns so as to contribute to the welfare of others. They include benevolence (i.e., *preservation and enhancement of the welfare of people with whom one is in frequent personal contact*) and universalism (i.e., *understanding, appreciation, tolerance, and protection for the welfare of all people and nature*) values.
    - ***Self-enhancement values (SE)*** are the values that indicate the degree to which individuals strive to enhance personal interests. This dimension includes power resource (i.e., *power through control of material and social resources)* and power dominance (i.e., *power through exercising control over people)* values.

Methods

Design of the Study

This study employed a mixed research approach. Of the several types of mixed research designs discussed by Creswell (2012), the embedded design (QUAN + qual) was employed in the present study, where quantitative and qualitative data were collected concurrently. This design was preferred because it allows quantitative data to serve as the primary dataset, enhanced by qualitative data for additional depth and context..

Population, Sample and Sampling Techniques

This study was conducted in Addis Ababa city, which has been serving as the capital city and cultural hub of Ethiopia for about 130 years. Addis Ababa is also the home of people of diverse ethnicity, languages and religions. The study was conducted in two randomly selected (one government and one private) secondary schools in this City. The focus was on government and private schools because they encompassed majority of the total number of students who attended secondary schools in the city. While the selected government school was Woizero Kelemework (located in Arada Subcity) with 1,004 grade 11 and 12 students (Male = 368, Female = 636), the private school was Kegn Azimach Andarge W/Giorgis (located in Gullele Subcity) with 211 grade 11 and 12 students (Male = 100, Female = 111) . Thus, at the time of data collection, there was a total of 1,215 students (Male = 468, Female = 747) in the selected schools. Depending on this data, 1,215 was considered to be the accessible population of the study. Sideridis et al. (2014) suggest a sample size of 70 to 80 participants to be

adequate for structural model fit. Kline (2016) indicates that latent variable models which use multiple indicators for constructs (as in the present study) need smaller sample sizes. Moreover, Hair et al. (2019) suggest a minimum sample size of 150 for models with seven constructs or less. Depending on these suggestions and the number of constructs in the present study (i.e., three constructs (see Figure 1)), it was intended to use a minimum sample size of 150. Anticipating the number of students who may be unwilling or unable to participate in the study, and that some responses could be incomplete or inappropriate, and therefore discarded, 30 more participants were added to 150; as a result, 180 adolescents participated in the study.

. In order to decide the number of participants that was to be selected from each stratum of sex (Male or Female), Stream (Natural or Social Science) and school type (Government or Private), proportional stratified sampling was used. Then, online random number generator was used to select the participants as per the proportion of each stratum.

Although all of the participants (N= 180) were present, able, and willing to participate in the study, data screening indicated that 9 of the participants did not respond to the items appropriately and thus were excluded. Hoelter's Critical N (Byrne, 2010) for models in this study were greater than 200 at both 0.05 and 0.01 indicating that the present study's sample size (i.e., N = 171) was adequate. Table 1 shows the demographic characteristics of the 171 participants who remained in the analyses. Five of these adolescents (3 Females and 2 Males; 2 Females and 1 Male from Government School; 1 Female and 1 Male from Private School) were purposively selected and interviewed to generate qualitative data. Nearly half of the participants of the study were females (n = 87; 50.88%). The majority of the participants were grade eleven (n

=112; 65.50%), and natural science stream students (n = 135; 78.95%) from government school (n = 97; 56.73%). While the educational level of fathers or male guardians of the respondents varied from *No Education* (n = 4; 2.3%) through *Grades 11 or 12* (n = 39; 22.80%) to *PhD and above* (n = 2; 1.2%), that of the mothers or female guardians ranged from *No Education* (n = 10; 5.80%) through *Grades 11 or 12* (n = 41; 24%) to *Master's Degree* (n = 7; 4.1%).

Table 1

Demographic Characteristics of the Study Participants (N = 171)

School	**School Type**	**Sex**		**Grade**		**Stream**		**Total**
		Male	**Female**	**11**	**12**	**Natural Science**	**Social Science**	
W/ro Kelemework	Government	45	52	71	26	71	26	97
Kegn Azimach Andarge W/Giorgis	Private	39	35	41	33	64	10	74
Total		*84*	*87*	*112*	*59*	*135*	*36*	*171*

In a similar manner, the family's reported overall monthly income varied from *Less than 500 Birr* (n = 3; 1.80%) to *greater than 10, 000 Birr* (n = 55; 32.20%). (Note that *Birr* is the main unit of Ethiopian currency and that 1 USD = 53.7057 Birr at the time of data collection). The age of the participants ranged from 16 years (n = 26; 15.20%) to 22 years (n = 1; .6%) (Mean = 17.42; SD = .99). The implication is that the participants were mid and late adolescents who could provide adequate data for the study.

Data Gathering Tools

In this study, a questionnaire composed of two scales (Diamond Scale of Nonviolence, DSN and Portrait Value Questionnaire Revised, PVQ-RR), demographic items was used. The scales were adapted from previously developed instruments. Moreover, an individual, in-person semi-structured interview was used to gather qualitative data for the present study. The interview items were developed based on the literature and focused on the influence of ST values (e.g., How do you think that your ST values as benevolence influence your NVB. Explain your lived experiences in this aspect) and that of SE values on NVB (e.g., How do you think that your SE values as power dominance influence your NVB. Explain your lived experiences in this aspect.)

The instruments (Questionnaire and Interview Guide) were translated by the following procedures of forward and backward translation. Initially, the instruments were adapted in the English language. Then, these tools were translated into Amharic by a bilingual (English and Amharic) language expert. Upon completion, another bilingual (English and Amharic) language expert back translated the Amharic version into English. Moreover, the equivalence of both versions was checked by two other professionals. These professionals indicated that most of the Amharic version items were good representations of their corresponding English versions. However, depending on their suggestions, some Amharic items were modified in such a way that they represent their English versions more accurately.

The Diamond Scale of Nonviolence (DSN)

The DSN was used to measure the nonviolent behavioral tendency of the adolescents. Developed by Mayton et al. (2014), the short form of DSN has four levels (intrapersonal, interpersonal, societal, and world) with 10 items in each level and good

internal consistency reliabilities. The response categories of the DSN range from *definitely true for me* (4) to *definitely not true for me* (1). Mitiku (2024) adapted and used the DSN with Ethiopian school adolescents and reported adequate internal consistency reliability for the items. In the present study, 10 items in the interpersonal subscale (e.g., *Even though some people for whom I have done good things paid me back with evil, I will not stop doing good things for people*) were used.

The Revised Portrait Value Questionnaire (PVQ-RR)

In the present study, items that measure the ST and SE higher values were adapted from the PVQ-RR (Schwartz et al., 2012) and used to measure adolescents' VPs. ST and SE values are composed of specific values that are measured by three items each. Accordingly, 6 items that measure Universalism values (e.g., *It is important to him/her to be tolerant toward all kinds of people and groups*) and Benevolence values (e.g., *It is important to him/her to be a dependable and trustworthy friend*) and other 6 items that measure Power Dominance (e.g., *It is important to him/her to have the power to make people do what he/she wants*) and Power Resource (e.g., *It is important to him/her to have the power that money can bring*) values were used. In previous empirical studies, CFA confirmed the validity of these values (Schwartz & Butenko, 2014). Participants rate the extent to which the person that the items portray is like them on a scale that ranges from *not like me* (1) to *very much like me* (6). Depending on the intensity of the ratings, the values that the respondents hold are inferred from values of the person that they consider being like them.

The items were translated into Amharic (the working language of Ethiopia and one that the study participants can understand) by bilingual (English-Amharic)

language experts. The optimal number of items per subscale with the highest possible reliability coefficients obtained from reliability analysis using Cronbach alpha are indicated in Table 2. The commonly used lower limit for Cronbach's alpha is .70. However, due to its inherent limitations (e.g., reliability

Table 2

Reliabilities (Cronbach Alpha,α; Index of Quality, IoQ) of the Subscales of Portrait Value Questionnaire Revised (PVQ-RR) and the Interpersonal Subscale of the Diamond Scale of Nonviolence (DSN) in the Present Study (n=171)

Scale	**Subscale**	**K**	*α*	IoQ
PVQ-RR	ST	4	.611	.76
	SE	5	.703	.75
DSN	Interpersonal	7	.705	.71

Notes: ST= Self-transcendence; SE=Self-enhancement; K = Number of items

varies dramatically with varying number of items, it does not use factor loadings to estimate reliability and it is not a very good indicator of whether a set of items measures a single factor) a reliability measure derived from factor loadings, index of quality (IoQ) (Saris & Gallhofer, 2014; Schwartz, et. al., 2012), was used for further examination of the reliability. It is evident from Table 2 that for two of the subscales, IoQ produced higher reliability coefficients than did Cronbach's alpha. This indicates that the lower Cronbach's alpha of the ST subscale was not only due to the problems inherent in the items but also to the approach used for estimating the reliability (Mitiku, 2024).

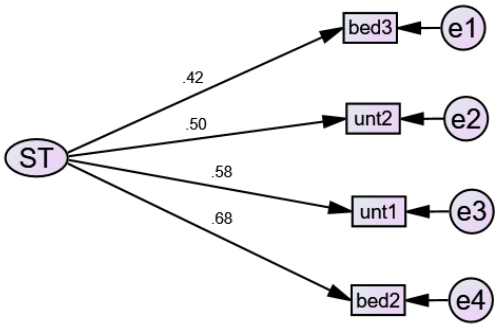
Data Analysis Techniques

In the present study, confirmatory factor analysis (CFA), descriptive statistics, correlational analysis and structural equation modeling (SEM) were used to analyze the data. For both CFA and SEM, Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA) were used to assess fitness of the models to the data. The recommended cutoff criterion for a good fitting model is: for RMSEA less than 0.06 to 0.08; for CFI, values close to .90 or .95 are considered as an acceptable level of fit (Schumacher & Lomax, 2010). CFA was used to examine the construct validity of the items, measuring the three latent factors (ST, SE, and NVB).

For ST, with the removal of 2 items (i.e., bed1 and unt3 out of a total of 6) that CFA indicated to disturb fitness of this model to the data, the CFA model shown in Figure 2 was found to fit the data well [χ^2 (2) = .875, p = .646; CFI = 1.00; RMSEA =.000 (90% CI: (.000, .119), PCLOSE = .748)].

Figure 2

CFA Model of Items Measuring ST

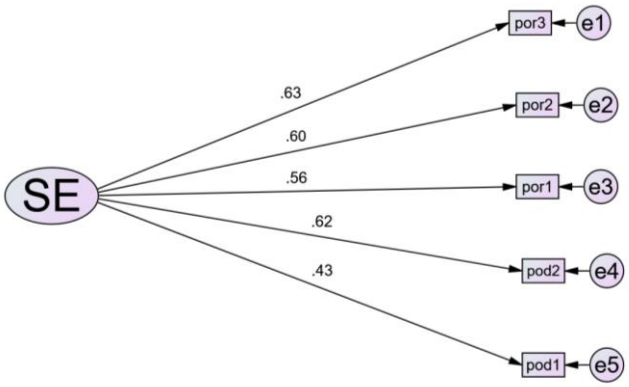


Similar procedures were followed in examining the construct validity of the items measuring SE. Accordingly, with the removal of 1 item (i.e., pod3 out of a total

of 6) that CFA indicated to disturb fitness of this model to the data, the CFA model shown in Figure 3 was found to fit the data well [χ^2 (5) = 8.134, p = .149; CFI = .975; RMSEA =.061 (90% CI: (.000, .133), PCLOSE = .339)].

Figure 3

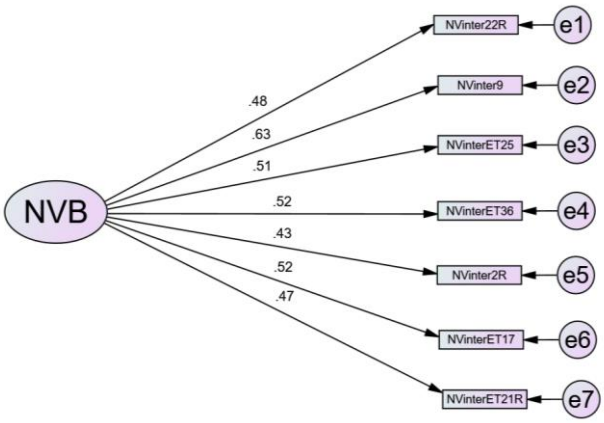
CFA Model of Items Measuring SE



For the Interpersonal Subscale of the DSN, with the removal of 3 items (i.e., NVinter3, NVinter4, NVinter10 out of a total of 10) that CFA indicated to disturb fitness of this model to the data, the CFA model shown in Figure 4 was found to fit the data well [(14) = 25.226, p = .032; CFI = .927; RMSEA =.069 (90% CI: (.02, .111), PCLOSE = .215)].

Figure 4

CFA Model of Items Measuring the Interpersonal Subscale of the DSN



Thus, it is evident from results presented in Figures 2-4 that the fitness of the CFA models of the three latent factors is acceptable. Moreover, the standardized loadings ranged from .42 (bed3) to .68 (bed2) (see Figures 2-4) and all of them were statistically significant ($p<.001$). These results indicated the construct validity of the items selected to measure the three major variables of the present study.

Moreover, descriptive statistics (i.e., frequencies and percentages) were used to describe the demographic characteristic of the participants of the study. Pearson Product Moment Correlation Coefficient was used to examine the zero-order correlations among variables of the study. SEM was used to examine fitness of the model that guided the study (see Figures 1 & 5) and contributions of ST and SE values to NVB. In order to examine tenability of the assumptions of linearity and normality, graphical and scatterplot methods (Tabachnick & Fidell, 2013) were employed. Generally, these assumptions were found to be tenable.

Furthermore, thematic analysis was used to analyze qualitative data. OpenCode version 4.03 (Umea University, 2018) was used for this purpose. Initially, the transcripts were segmented and categorized into codes. These codes were further refined (by reexamining the transcripts and the segments) and finally reduced to themes. Considering that qualitative studies are more sensitive to participants' private concerns and therefore prone to ethical issues, only adolescents aged 18 years or older were interviewed. Written informed consents were obtained from the participants after giving them orientation on the study's overall purpose. Furthermore, participants were oriented about the expected duration and procedures of the study and that they can stop participating in the study once they begin without incurring any undesirable consequences. In order to maintain the ethical principle of confidentiality, pseudonyms (i.e., AY, AX, BK, BN, AB) were used in presenting qualitative results.

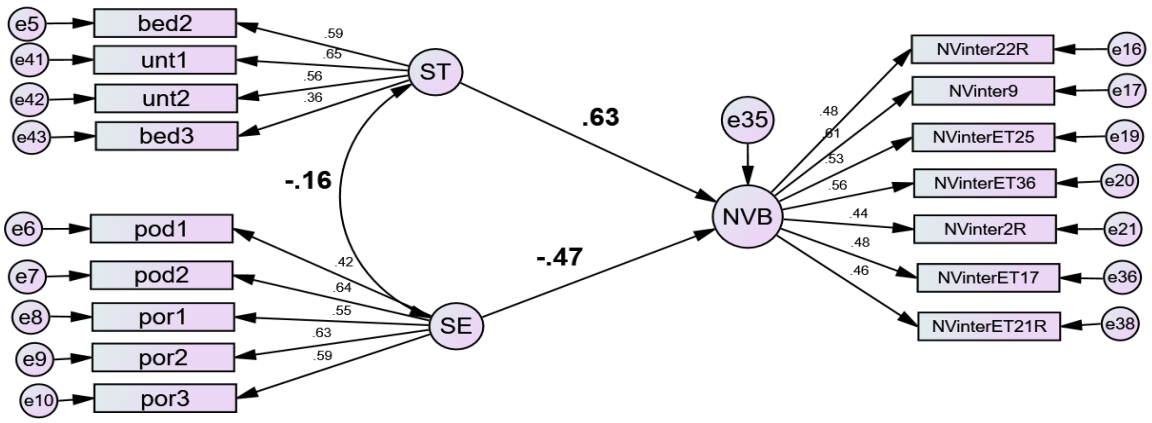
Results

Fitness of the Model that Guided the Study

The first research question of the present study sought to examine fitness of the model that guided the study (Figure 1). Examining the fitness of the model before analyzing the structural relations was mandatory. This is because unless the fitness of the model to the data is adequate, estimates of the structural relations will not be reasonable (Byrne, 2010). Thus, at the outset, the structural model depicted in Figure 5 was tested. This model was found to fit the data well [χ^2 (101) = 134.773, p = .014; IFI = .926; CFI = .923; RMSEA = .044 (90% CI = (.021, .063), PCLOSE = .670)]. This implies that the model can be used to explain the relations among variables of the study (i.e., ST, SE and NVB).

Figure 5

The Structural Equation Model Output from AMOS
Notes. ST= Self-transcendence; SE = Self-enhancement; NVB = Nonviolent Behavior



Relationships among Values and Nonviolent Behavior

The second research question of the present study was intended to examine whether the relations among NVB, ST and SE follow the pattern predicated by Shalom Schwartz's Basic Individual Values theory. Results are presented in Table 3. Both ST and SE were found to relate to NVB moderately and significantly ($p<.01$). Likewise, in the direction predicted by Schwartz's theory, while ST was found to be related to NVB positively, SE was found to be related to NVB negatively.

Table 3

Correlations among ST, SE and NVB (N = 171)

	1. ST	**2. SE**	**3. NVB**
1	1		
2	-.073	1	
3	.441**	-.398**	1

Notes. *ST= Self-transcendence; SE = Self-enhancement; NVB = Nonviolent Behavior; **p<0.01*

On the other hand, themes emerged from qualitative data analysis (i.e., the linkage between SE values and NVB and, ST values and NVB) supported quantitative results presented in Table 3. The adolescents illuminated that SE values hamper peacefulness. One of them, for example said, "… My self-focused values have harmed my relationship with people; they contributed to disagreements, not to agreements, with others. For example, when I tell my friends that I want to pursue something new, they distance themselves from me." (Interviewee AY). Similarly, Interviewee AX uttered, "My self-focused values hurt my peacefulness; if you are selfish, you get into conflict with people."

Likewise, the finding that ST is related positively to NVB is substantiated by the qualitative findings. Exemplar in this case is Interviewee BK's elucidation that other-focused values lead to peacefulness.

> My values are concerned with helping people. Just because I help others, I sleep a peaceful sleep. Thus, my values help me to be a peaceful person. My values are my anchors; they support me to do good things for other people.

Similarly, Interviewee BN illustrated that ST values help one to live with other people peacefully.

> Yes, my values have made me peaceful. I think more than prioritizing yourself, when you prioritize others, you live with others peacefully. Most people want you to do something for them. When you give priority to them, you will be likable; your relationship with others will be smooth.

Proportion of the Variance Explained in Nonviolent Behavior by Values

The third research question of the preset study sought to examine independent and joint contributions of ST and SE to NVB. Table 4 indicates that, although both higher order values explained statistically significant proportions of variance in NVB, the independent contribution of ST ($R^2 = 50.30\%$, $\beta = .71$, $p < .001$) exceeds that of SE ($R^2 = 32.40\%$, $\beta = -.57$, $p < .001$). Moreover, the joint contribution of ST and SE to NVB (i.e., $R^2 = 70.60\%$) was found to be greater than their independent contributions. R^2 can be converted to measures of effect size, notably Cohen's f^2 (Cohen, 1988). A common rule of thumb for f^2 is that .02 represents a small effect, .15 a medium effect, and .35 a large effect. Accordingly, the individual and joint contributions of ST and SE in the present study (see Table 4) ranged from .479 to 2.401 which imply that all of the effects are large.

Table 4

Contributions of ST and SE to NVB (N = 171)

Model	**R^2**	**f^2**	**Standardized Coefficient (β)**	**Structural**
ST	.503	1.012	.709***	
SE	.324	.479	-.569***	
ST and SE	.706	2.401	.630***; -.466**	

Notes. *ST= Self-transcendence; SE = Self-enhancement;*

NVB = Nonviolent Behavior; f^2 = Effect Size of R^2; ***p<0.01;*

****p<0.001; R^2 = squared multiple correlation*

Qualitative data also support results presented in Table 4. Interviewee AB elucidated that while ST values enhance NVB, SE values (power resources and dominance) can have a debilitating effect on NVB.

> Giving priority to other people have helped me to live peacefully with them. If they are really interested in something, I leave it for them. Conflict will not be created. I do not want to be a manager and extremely rich person. I want to have resources that enable me to help others. If you are rich, fame comes, and this may not be good; even your behavior changes. You start worshipping your resources. Sometimes, I observe the rich and wish that I do not be like them. I pray to God that He gives me resources with which I live and help my family.

Furthermore, Interviewee AX explicates the debilitating role of SE values with the notion that it might be difficult for a person who engages in self-enhancement to be at peace with other people.

> In the first place, a person who is led by self-enhancement values cannot be called a peaceful person. He is in a conflict with himself. When he gets one thing, he strives to get the other. Human need is not limited. Thus, because a self-centered person cannot be satisfied, he cannot be peaceful. He harms another person to get what he wants, to satisfy his own needs.

Moreover, Interviewee AY illuminated the idea that even physical trainings that aim at enhancing physical wellness (i.e., self-enhancement) can be an obstacle to peaceful relationships.

> I participated in a weight lifting training for two months. But I understood that such trainings give you overconfidence and lead you in the wrong directions; I feared this and stopped the training. There was a cashier who works in a bank who was also strictly attending the training. This cashier told me that he was being troubled because he became muscular and he even could not stop exercising while counting Birr. At this time, your thinking capacity will decrease, you may be thinking in terms of your muscle. This does not foster peaceful relationship among people. I observed and understood these things; they are inconsistent with my values; thus, I stopped the training.

In a similar manner, participants elucidated that deficiency in aspects of ST values including equality, social justice, and broad-mindedness leads to lack of peace.

> My values have contributed to my peacefulness. When you give priority to others, people like you. When you understand your culture and religion, you also understand others, that they also have their own… Now, everywhere, there is no peace. It is the failure to understand what it means to be human being that gave birth to this. We have forgotten that all of us have a red blood cell. Human being is above all creatures. If we understand this, everything will be resolved. (Interviewee BK).

Discussion

This study was intended to examine the relations between higher order values (i.e., ST and SE) and NVB. The first research question of the present study asked about the fitness of the structural model that guided the study (i.e., Figure 1).

Constructing theories and building models are at the heart of the scientific process. Even though models are often used to represent phenomena visually or diagrammatically, most of the time, models and theories are used interchangeably (Jaccard & Jacoby, 2020). In the present study, an attempt was made to subject the developed conceptual model to advanced statistical test using structural equation modeling (SEM). In SEM, the entire system of variables in the hypothesized model is tested statistically in a simultaneous analysis so as to determine the extent to which the model is consistent with the data. Goodness-of-fit measures are used to examine this in

such a way that if goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among variables; if it is inadequate, the tenability of such relations is rejected (Byrne, 2010). Nonetheless, SEM literature explicates that no conceptual model perfectly represents the reality that it purports to represent. Thus, SEM scholars argued that some models tend to be more wrong than others (Kline, 2016). The process of examining fitness of a model, therefore, involves searching for models that better represent the data. This leads to the use of the most common approach to SEM–model generating. In the model generating approach, after rejecting the initial model because of its poor fit to the data, the parameters are reestimated thereby leading to a modified model (Byrne, 2010; Hoyle, 2012).

Basically, SEM has two parts: measurement and structural. While the measurement model uses CFA to test the relation between the latent factors (ST, SE and NVB in the present study) and their indicators (i.e., items), the structural model examines the link among the variables. The common practice in SEM (also implemented in the present study), is first testing the measurement model and then proceeding to testing the structural model (Blunch, 2013; Byrne, 2010; Hair et al., 2019; Kline, 2016). In the present study, for the measurement models (see Figures 2, 3 and 4) the model generating approach to SEM was used. As a result, fitness of the modified CFA models of the latent factors were found to be adequate.

The next step in the SEM is testing the structural model. Accordingly, items that were obtained from the final versions of the measurement models were used to represent NVB, and the higher order values (ST and SE) in the structural model. The fitness of the structural model was also found to be acceptable. Thus, the structural model that guided the present study can be used to provide reasonable explanations of

the relations among ST, SE and NVB. Mitiku (2024) developed and tested a Peace Engineering Model in which any environment and person-related variables can be incorporated and tested. The present study added higher order values (ST and SE) as person-related variables and found the model to be meaningful. Thus, the theoretical and practical implications of the model developed and tested in the present study is far-reaching, particularly for the field of Peace Psychology. In this field, generating knowledge by developing, testing and applying theories and models has become an issue, particularly in the "South" where the making and valuing of scientific knowledge has been limited as knowledge was mainly diffused from the "North" (Mayton, 2001; Law & Bretherton, 2017).

The present study also examined whether the relations among NVB, ST and SE follow the pattern predicated by Shalom Schwartz's Basic Individual Values theory. It was found that while the correlation between ST and NVB was positive and statistically significant, negative relationship was found between SE value and NVB. That is, as ST increases, NVB also increases and vice versa; the result also implies that as SE increases, NVB decreases and vice versa, results which were also substantiated by qualitative findings. Overall, these findings indicate that the value priorities that guide the adolescents' lives can play positive or negative roles in NVB. Consistent with results of the present study, other studies (e.g., Mayton et al., 1996) have found that prioritizing universalism and benevolent values (aspects of ST values) is more of characteristics of peaceful than non-peaceful persons. It is also documented that peaceful persons prioritize less power values (aspects of SE values) than non-peaceful persons (Mayton, 2014) implying that SE is related with NVB negatively. Moreover, these results are consistent with a number of other studies which have reported positive

correlations between ST values and behaviors expected to be related positively with NVB including cooperation (Sagiv et al., 2010), altruism (Bardi & Schwartz, 2003), peacefulness of groups (Miklikowska & Fry, 2010), favorable attitudes toward welfare (Feldman & Steenbergen, 2001), and willingness to make contact with out-group members (Sagiv & Schwartz, 1995). In a similar manner, the negative relation found between SE values and NVB in the present study can be corroborated by that of Bardi and Schwartz (2003) and Sagiv et al. (2010) which found negative relations between SE and cooperation, altruism and empathy.

In line with Schwartz et al.'s (2012) theory, values are arranged based on the principles of conflict and compatibility in such a way that adjacent values represent compatible motivations whereas the opposite values represent conflicting motivations. This theory predicts that behavior is likely to be associated similarly with values that are compatible and differently with values that are conflicting (Schwartz, 1992). This study supported the pattern predicated by Schwartz's theory as ST was found to be positively related with NVB while negative correlation was found between SE and NVB (see Table 3 and Figure 5) thereby indicating the differential effects of ST and SE on NVB. Thus, this study substantiated what a plethora of other cross-cultural studies found (Benish-Weisman et al., 2017; Sanderson & McQuilkin, 2017; Schwartz, 2017; Schwartz & Butenko, 2014).

With regard to the proportion of variance in NVB explained by ST and SE, the present study found that the higher order values (ST and SE) explained statistically significant and large proportions of variance in NVB independently and jointly. Moreover, the joint contribution of ST and SE to NVB was found to be greater than their independent contributions. Compared to SE, ST was found to contribute more to

NVB. Results from the qualitative analyses also indicated that values do have roles to play in augmenting or debilitating peaceful behavior.

Although the author of this article was not aware of an empirical study that examined contributions of ST and SE to NVB in the Ethiopian context, generally, results of the present study are in consonance with results of some studies conducted outside of Ethiopia. For instance, Mayton et al. (2013) examined the link between values and NVB among college students in the USA. These researchers found that ST values (i.e., universalism and benevolence) were positively correlated with interpersonal nonviolence. On the other hand, Mayton et al.'s study revealed that SE values were negatively correlated with interpersonal nonviolence. Similarly, Mayton et al. (1996) found among college students that ST values (i.e., benevolence, conformity and universalism) were prioritized by nonviolent students. Nonetheless, Mayton et al.'s study found that individuals with more propensity of violence tended to prioritize SE value. Knafo et al. (2008) also reported that, among 907 Jewish and Arab school adolescents in Israel, SE value was correlated positively with self-reported violent behavior, and that ST value correlated negatively with this behavior. Knafo et al. also found that ST and SE values explained 12% of the variance in aggressive behavior. Depending on results of their study, Knafo and his colleagues concluded that lower power values (i.e. lower levels of SE value) and higher universalism values (i.e., aspects of ST value) protect against violent behavior. Indeed, owing to the strong positive roles that they play in augmenting antisocial behaviors (thereby confirming that SE values are anti-nonviolence), SE values have been labeled as unethical "dark values" (Kajonius et al., 2015). Thus, it can be claimed that while ST values are pro-nonviolence values, SE values are anti-nonviolence values.

Conclusions and Implications

One of the conclusions that can be drawn from results of the present study is that the relation between values and NVB can be modeled meaningfully. Moreover, what can be deduced from the results is that values that adolescents prioritize play important roles in enhancing or debilitating their NVB. Indeed, it can be said that while ST values are pro-peace, SE values are anti-peace principles that guide adolescents' lives.

Results of the present study have a number of practical and policy implications. Findings of the present study indicate that while ST values contribute to NVB positively, SE values contribute to NVB negatively. Thus, the more one augments ST values and the more one restrains SE values, the more one enhances NVB, thereby furthering building of culture of peace. However, because the need to self-enhance seems to be natural that starts with fulfilling basic needs and reach its climax at the self-actualization stage (Maslow, 1968), it may be those aspects of enhancing the self that become deleterious for other people (probably because they foster violence) that should be restrained. The often-forgotten stage in Maslow's hierarchy of needs is ST, the stage at which individuals enter peak and plateau experiences; that is, the experiences of peace, unity of all things and ultimate truth (Moss, 2001) which all may contribute to NVB positively.

The results also have implications for policies and endeavors that promote peace building and social cohesion in Ethiopia. In this country, there is a need for gearing policies, governance and programs towards strengthening resilience and responsiveness for peace (Ministry of Peace of the Federal Democratic Republic of Ethiopia, 2023). Such plans and practices benefit from focusing on mechanisms of enhancing

adolescents' values so as to enhance NVB thereby contributing to building culture of peace.

Furthermore, developing and changing values in such a way that they foster NVB is the task of socialization agents (e.g., family, peers, religion institutions, schools, and media) as these agents influence values directly or indirectly. However, rather than attempting to change anti-nonviolence values (i.e., SE values) identified in the present study once they are developed, curbing development of these values and augmenting development of pro-nonviolence values (i.e., ST values) seems to be more effective and economical. This is because the literatures (e.g., Roccas et al., 2017) indicate that owing to their stable nature (values are at the core of one's identity) and ethical concerns, changing values deliberately is difficult. Moreover, results of the present study help adolescents to understand that their own VPs influence their NVB and that they can improve their NVB by improving their VPs.

Implications to Future Research

Although the present study used advanced statistical procedures, tested the model that guided the study and generated the model that has important theoretical and practical implications, as any other scientific research, it has also limitations that should be kept in mind when interpreting and using the results. First, only interpersonal component of the DMN was used in the present study. Thus, future researchers are recommended to include other components (e.g., intrapersonal and societal) in their studies.

Second, only adolescents attending grades 11 and 12 in Addis Ababa city were included in the present study. This limits generalizability of the results. Future studies should extend the present study and test the validity of the model among rural and urban

grade 9 and 10 adolescents, college and university students and the youth outside of the educational system (e.g., the unemployed and employed youth). Moreover, because peacebuilding process starts from the family (Mitiku, 2024) and children are the foci of this process, and values of children (the values literature shows that the youngest age for which values were examined so far is 6.5 years) and early adolescents deserve more empirical attention (Doring et al., 2016), future research may benefit from extending the present study to the population of Ethiopian children and early adolescents. Moreover, future studies can investigate the structures and profiles of values in the Ethiopian context.

Third, although the general rule of thumb for internal consistency of scales for research purpose is over .70 and lower reliability coefficients may be tolerated in studies that employ latent variable models (Kline, 2016) as in the present study, the internal consistency reliability coefficient (i.e., Cronbach alpha) of ST (although its IoQ = .76 was acceptable) was below the lower limit (i.e., .70). Thus, future researchers should improve sample size and quality of items measuring ST and explore the associations among variables in the present study with higher scale reliabilities.

References

Alagaw Ababu (2012). Entrenching the COP in Ethiopia: Challenges and opportunities. *Anthology of Peace and Security Research, 3*, 71-124.

Bardi, A., & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin, 29*(10), 1207-1220.

Benish-Weisman, M., Daniel, E., & Knafo-Noam, A. (2017). The relations between values and aggression: A developmental perspective. In S. Roccas & L. Sagiv (Eds.), *Values and Behavior: Taking a Cross Cultural Perspective* (pp. 97-114). Cambridge University Press.

Blunch, N.J. (2013). *Introduction to structural equation modeling using IBM SPSS statistics and AMOS*. SAGE Publications.

Byrne, B.M. (2010). *Structural equation modeling with AMOS* (2nd ed.). Taylor and Francis Group.

Cieciuch, J., Davidov, E., Vecchione, M., & Schwartz, S.H. (2014). A hierarchical structure of basic human values in a third-order confirmatory factor analysis. *Swiss Journal of Psychology, 73*(3), 177-182.

Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative Research* (4th ed.). Pearson Education.

Doring, A.K., Daniel, E., & Knafo-Noam, A. (2016). Introduction to the special section: Value development from middle childhood to early adulthood—New insights from longitudinal and genetically informed research. *Social Development*, *25*(3), 471–475. . doi: 10.1111/sode.12177.

Feldman S., & Steenbergen, M.R. (2001), The humanitarian foundation of public support for social welfare. *American Journal of Political Science, 45*, 658-677.

Galtung, J. (2001). Peace. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (pp. 11134-11139). Elsevier Science.

Hair, J., Black, W., Babin, B., & Anderson, R. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning EMEA.

Hoyle, R.H. (2012). Model specification in structural equation modeling. In R. H. Hoyle (Ed.),

Handbook of structural equation modeling (pp.126-144). The Guilford Press.

Institute for Economics and Peace (2023). *Global Peace Index: Measuring peace in a complex world*. http://visionofhumanity.org/resources.

Jaccard, J., & Jacoby, J. (2020). *Theory construction and model-building skills: A practical guide for social scientists* (2nd ed.). The Guilford Press.

Johansen, J. (2007). Nonviolence: More than the absence of violence. In C. Webel & J. Galtung (Eds.), *Handbook of peace and conflict studies* (pp.143-159). Routledge.

Kajonius, P. J., Persson, B. N., & Jonason, P. K. (2015). Hedonism, achievement, and power: Universal values that characterize the Dark Triad. *Personality and Individual Differences, 77*, 173–178. doi:10.1016/j.paid.2014.12.055.

Kline, R. B. (2016). *Principles and practice of structural equation modelling* (4th ed.). The Guilford Press.

Knafo, A., Daniel, E., & Khoury-Kassabri, M. (2008). Values as protective factors against violent behavior in Jewish and Arab high schools in Israel. *Child Development, 79*(3), 652 -667.

Kool, V. K., & Agrawal, R. (2020). *Gandhi and the psychology of nonviolence (volume 1): Scientific roots and development.* Palgrave Macmillan.

Law, S.F., & Bretherton, D. (2017). The imbalance between knowledge paradigms of north and south: Implications for peace psychology. In Mohamed, S., Shahnaaz, S., & Daniel, J. C. (Eds.), *Enlarging the Scope of Peace Psychology: African and World-Regional Contributions* (pp. 19-38). Springer International Publishing AG.

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). Van Nostrand Reinhold.

Mayton, D. M. (2009). *Nonviolence and peace psychology: Interpersonal, societal, and world peace.* Springer Science + Business Media.

Mayton, D. M. (2014). Peacefulness as nonviolent dispositions. In G. K. Sims et al. (Eds.), *Personal peacefulness: Psychological perspectives* (pp., 7-16). Springer Science + Business Media.

Mayton, D. M., & Furnham, A. (1994). Value underpinnings of antinuclear political activism: A cross-national study. *Journal of Social Issues, 50*(4), 117-128.

Mayton, D. M., Diessner, R., & Granby, C.D. (1996). Nonviolence and human values: Empirical support for theoretical relationships. *Peace and Conflict: Journal of Peace Psychology, 2*, 245–254.

Mayton, D. M., Jackson, T. W., Caraway, F., McCurdy, L. N., & Simmons, J. C. (2013, August). *Values and the Diamond Scale of Nonviolence: Evidence for validity* [Poster presentation]. Annual meeting of the American Psychological Association, Honolulu, HI.

Mayton, D. M., McCoy, J. C., Brink, M. Z., Thompson, K. A., & Burke, K. D. (2011, August). *Intrapersonal, interpersonal, societal, and world nonviolence* [Poster presentation]. Annual convention of the American Psychological Association, Washington, D. C.

Mayton, D. M., Peters, D. J., & Owens, R. W. (1999). Values, militarism and nonviolent predispositions. *Peace and Conflict: Journal of Peace Psychology, 5*(1), 69-77.

Mayton, D.M. (2001). Nonviolence within cultures of peace: A means and an ends. *Journal of Peace Psychology, 7*(2), 143-155.

Mayton, D.M., Nesbitt, K.M., Ross, R.L., Schuerman, L.M., Rowe, G.B., & Voshell, K.M. (2014). *A New Short Form of the Diamond Scale of Nonviolence* [Poster presentation]. Annual convention of the Western Psychological Association, Portland.

Miklikowska, M. & Fry, D.P. (2010). Values for peace. *Beliefs and Values,* 2, 124-137.

Miklikowska, M., & Fry, D.P. (2012). Natural born nonkillers: A critique of the killers-have-more-kids idea. In D. J. Christie, & J. E. Pim (Eds.), *Nonkilling psychology (pp. 43-70)*. Center for Global Nonkilling.

Ministry of Peace of the Federal Democratic Republic of Ethiopia. (2023). *The Ethiopian Peace Index, Pilot study: Establishing a baseline of peace at multiple levels and identifying entry points for resilience.*

Mitiku Hambisa, & Tilahun Sineshaw. (2019). The pillars of violence and nonviolence through the prism of students' lived experiences: A phenomenological investigation. *Ethiopian Journal of Behavioral Studies, 2*(1), 1-18.

Mitiku Hambisa. (2024). Beginning from the Very Beginning: The Role of Family Environment in Shaping Adolescents' Nonviolent Behavior. *Ethiopian Journal of Behavioral Studies, 7*(1), 118-153.

Moss, D. (2001). The roots and genealogy of humanistic psychology. In K. J. Schneider, F. T. Bugental, & J. F. Pierson (Eds.), The handbook of humanistic psychology: Leading edges in theory, research, and practice (pp.5-20). Sage Publications.

Nelson, L. L. (2014). Peacefulness as a personality trait. In G. K. Sims et al. (Eds.), *Peace psychology book series* 20 (pp., 7-16). Springer Science + Business Media.

Pham, P. N., Metekia, T.S., Deyessa N., Mah, A., Vosniak, L., & Vinck, P. (2023). *Ethiopia peace and justice survey*. Harvard Humanitarian Initiative.

Roccas, S., & Sagiv, L. (2010). Personal values and behavior: Taking the cultural context into account. *Social and Personality Psychology Compass, 4*, 30-41.

Roccas, S., Sagiv, L., & Navon, M. (2017). Methodological issues in studying personal values. In S. Roccas & L. Sagiv (Eds.), Values and behavior: Taking a cross cultural perspective (pp. 15-50). Cambridge University Press.

Sagiv, L & Roccas, S. (2017). What personal values are and what they are not: Taking a cross-cultural perspective. In S. Roccas & L. Sagiv (Eds.), *Values and behavior: Taking a cross cultural perspective* (pp. 15-50). Cambridge University Press.

Sagiv, L. & Schwartz, S. H. (1995). Value priorities and readiness for out-group social contact. *Journal of Personality and Social Psychology*, 69, 437-448.

Sagiv, L., Sverdlik N., & Schwartz N. (2010). To compete or to cooperate? Values' impact on perception and action in social dilemma games. *European Journal of Social Psychology*. Advance online publication.

Sanderson, R., & McQuilkin, J. (2017). Many kinds of kindness: The relationship between values and prosocial behavior. In S. Roccas & L. Sagiv (Eds.), Values and behavior: Taking a cross cultural perspective (pp. 75-96). Cambridge University Press.

Saris, W. E., & Gallhofer, I. N. (2014). *Design, evaluation, and analysis of questionnaires for survey research* (2nd ed.). John Wiley & Sons.

Schumacher, R. E., & Lomax, R.G. (2010). *A beginner's guide to structural equation modeling* (3rd ed.). Taylor and Francis Group.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), Advances in experimental social psychology (Vol. 25, pp. 1-65). Academic Press. doi: 10.1016/S0065-2601(08)60281-6.

Schwartz, S. H. (2017). The refined theory of basic values. In S. Roccas & L. Sagiv (Eds.), Values and behavior: Taking a cross cultural perspective (pp. 51-74). Cambridge University Press.

Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., … Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology, 103*(4), 663-688. doi:10.1037/a0029393.

Schwartz, S.H., & Butenko, T. (2014). Values and behavior: Validating the refined value theory in Russia. *European Journal of Social Psychology, 44*, 799-813.

Sideridis, G., Simos, P., Papanicolaou, A., & Fletcher, J. (2014). Using structural equation modeling to assess functional connectivity in the brain: Power and sample size considerations. *Educational and Psychological Measurement, 74*(5), 733–758.

Summy, R. (2005). Understanding nonviolence in theory and practice. In A. Aharoni (Ed.), *Encyclopedia of life support systems: Peace literature and art*. Eolss Publishers. http://www.eolss.net.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson Education.

Umea University. (2018). *OpenCode 4.03.* http://www.phmed.umu.se/enheter/epidemiologi/forskning/open-code/

United Nations Educational, Scientific, and Cultural Organization. (1949). *Preamble to the Constitution*.

Ethiopian Journal of Behavioral Studies, October 2025, 8(2), 36-88

The Contribution and Challenges of School Feeding Program on Students' Educational Outcomes: The Case of Public Primary Schools in Gulele-Sub-City

Alene Matsentu[1]

DOI: https://doi.org/10.63990/ejobs.v8i2.12278

Received: 2 October 2024; Accepted: 18 June 2025

Abstract

This study investigates the contribution and challenges of the School Feeding Program (SFP) on educational outcomes in public primary schools in Gulele Sub-City of Addis Ababa City Administration. The educational outcome variables of this study encompass academic performance, enrollment rates, attendance rates, dropout rates, and repetition rates. The study employed a quasi-experimental design with a mixed-method approach. The study utilized both secondary and primary data collection methods, including qualitative data from an open-ended questionnaire at Hamle 19/67 Public Primary School, which was used to triangulate the quantitative findings. The study analyzed data from 14,898 grade 8 students who took the Primary School Leaving Certificate Exam (PSLCE) from 2018/19 to 2021/22 across 18 public primary schools that benefited from the SFP. The analysis of OLS regression showed that students receiving the program had a 9.6% higher likelihood of promotion and scored an average of five points higher compared to non-beneficiaries. Additionally, the program significantly improved enrollment, reduced dropout rates, and decreased repetition rates. The findings suggest revising the budget allocation per student, expanding the SFP to secondary schools, and ensuring the program's sustainability, with a recommendation for parents and government to further invest in students' education to enhance future outcomes.

Key Words: Academic performance, dropout, educational outcomes, enrollment, public primary schools, school feeding program

[1] Frontieri Consult, Addis Ababa, Ethiopia. Email: adalmatsentu@gmail.com

1. Introduction

Every day, millions of children around the world go to school on an empty stomach, which negatively affects their concentration and ability to learn (World Food Programme [WFP], 2023). In addition, the WFP indicates that there are millions of children, particularly girls, who do not attend school because their families need them to help in the agricultural work or perform domestic duties. School meal programs can help address many of these challenges.

The School Feeding Program (SFP) is a multi-sectorial game-changer that improves children's education, health, and nutrition (WFP, 2023). SFPs are powerful tools for combating child hunger. Around the world, SFPs are gaining momentum and support as their multitude of benefits becomes apparent. In addition to tackling hunger, well-planned SFPs have been found to boost school attendance and performance and protect children from all forms of malnutrition, including micronutrient deficiencies and childhood obesity (Global Food Banking Network, 2022).

With this understanding, the UN Sustainable Development Goal 4 indicates that ensuring inclusive and equitable quality education is the foundation for improving people's lives and sustainable development (MoE, 2018). The Ethiopian Government has also shown its commitment to expanding and improving the quality of early childhood education programs in its ESDP V (2015-2020) and GTP II (2015-2020) programs. Following the international and national growing interest in the area, assessing the state-of-the-art of early childhood care and education in the country becomes mandatory. Among other critical interventions, effective implementation and

expansion of school feeding programs are very important as most children come from poor households that cannot afford regular meals. This may also help curb the issue of absenteeism (MoE, 2018).

Nevertheless, food insecurity and malnutrition still hold back economic growth and persist to be major bottlenecks. The learning outcomes of students in Sub-Saharan Africa, particularly those in rural areas, remain unsatisfactory. For instance, of the continent's approximately 128 million school-aged children, only half attend school and learn basic skills (Brookings, 2016).

The Ministry of Education is aware that poor health and nutrition can negatively impact pupil's ability to learn, attend school, and concentrate. With this understanding, interventions targetting school children are increasingly considered pivotal to enhancing the health and nutrition status of the population as a whole (MOE, 2012).

As elaborated in Yirga (2020), the WFP, USAID, Yenat Weg, the Ministry of Education, and other donors have undertaken school feeding programs for about 850,000 school children in Ethiopia, mainly targeting primary school children, over the past two decades. The program is envisioned to reduce school dropout rate, absenteeism, and poor academic performance (WFP, 2018).

SFPs address one of the main barriers to regular school attendance: hunger. Malnutrition, often caused by food insecurity, directly impacts children's ability to concentrate in class and their overall participation in educational activities

(Bouterakos & Bundy, 2021). By providing meals or snacks, SFPs reduce short-term hunger, which has been shown to improve students' ability to focus, participate in class, and perform academically (Adelman, 2009). This improved cognitive function directly influences enrollment rates, as children are more likely to attend school when their nutritional needs are met. Furthermore, a well-nourished child is less likely to suffer from illnesses, thereby reducing absenteeism.

In line with this, SFPs have been shown to motivate parents to send their children to school, particularly in rural or economically disadvantaged areas where food security is a major concern. When children are provided with meals at school, parents are more likely to enroll their children and ensure they attend regularly, knowing that their nutritional needs will be met (Adelman, 2009; Amanuel, 2021). This is especially critical in areas where the opportunity cost of schooling is high due to household labor needs or where families struggle to provide enough food.

The introduction of SFPs in rural Burkina Faso increased girls' enrollment by 5 to 6 percentage points in one academic year (Kazianga, 2009). Evidence from Ethiopia, where food insecurity is prevalent, shows that SFPs help boost enrollment by offering a tangible incentive to attend school (Misrak, 2018; Zenebe, 2018). This indicates that targeted feeding programs can have a direct impact on school attendance, especially among vulnerable groups such as girls, who may otherwise face barriers to education.

In line with this, the Addis Ababa City Administration in 2020 launched a school feeding program providing free meals and school materials for more than 300,000 students at primary schools as the city intensified its efforts to stop student drop-out

from the state-run schools (Ethiopian Monitor, 2020). It also established an agency to run a free meal program that supplies nutritious food items and provides school materials to children to increase educational outcomes through improved enrollment, enhanced academic performance, reduced dropouts, and decreased repetition rates.

In addition, it is public information that Addis Ababa was awarded the Milan Pact Award of 2022 during the 8th annual gathering of the Milan Urban Food Policy Pact (MUFPP) for gaining exceptionally positive results in its large-scale school feeding program for more than 450,000 children in 225 public elementary schools in Addis Ababa (EATFORUM, 2022).

1.1. Statement of the problem

School feeding programs (SFPs) have been widely recognized as a crucial intervention in improving children's nutritional status, school attendance, and enrollment. Several empirical studies have demonstrated that SFPs positively affect children's health and education by addressing hunger, which, in turn, enhances students' ability to focus, engage in class, and attend school regularly. In Sub-Saharan Africa, where many children face challenges such as hunger, poverty, and limited access to quality education, SFPs are seen as a promising strategy to break the cycle of under-nutrition and poor educational outcomes (World Food Programme, 2013). Albeit the growing body of evidence confirming the contributions of school feeding programs, their comprehensive contribution to educational outcomes are adequately in Ethiopia, particularly in urban areas like Addis Ababa.

Even though numerous studies (for instance Assefa, 2022 and Yirga, 2020) have revealed the positive contribution of SFP in school enrollment and attendance, there is a paucity of research that directly examines their contribution to more comprehensive educational outcomes like academic performance, dropout rates, and repetition rates. Studies in countries like Nigeria and Cameroon have shed light on the positive contribution of school feeding programs in school enrollment, but they have often ignored the effects of these programs on long-term academic success or the quality of learning (Misrak, 2018). While attendance and enrollment are necessary, understanding how SFPs influence actual learning outcomes over the course of a child's education is equally important.

Furthermore, existing literature falls short of investigating thoroughly the mechanisms through which school feeding programs influence educational outcomes. Although studies such as Jepkemboi (2018) have explored the physical and cognitive benefits of school feeding, little is known about how providing meals influences students' cognitive abilities, concentration, and overall academic performance in the long term. The mechanisms through which school feeding programs impact cognitive function and learning outcomes need further studies to provide a clearer understanding of how school feeding program directly translates into academic achievement.

Moreover, there is inadequacy of research on the contextual and implementation challenges that affect the efficacy of school feeding programs, particularly in urban locations like Addis Ababa. Although studies have generally reported the benefits of school feeding programs, factors such as financial constraints, implementation

challenges, and community involvement are often underexplored. Addis Ababa, with its unique urban challenges, including rapid population growth, food insecurity, and socioeconomic disparities, presents a context where these factors could significantly influence the effectiveness of SFPs. Therefore, a detailed exploration of the local conditions and implementation challenges in urban areas is needed to understand the broader applicability and sustainability of these programs in Ethiopian urban settings.

A significant gap in the literature also lies in the lack of longitudinal studies evaluating the long-term effects of SFPs. While short-term benefits, such as improved attendance and health outcomes, have been well-documented, there is limited empirical evidence on the sustainability of these effects over time. Few studies have tracked students' academic trajectories over multiple years to assess whether the benefits of school feeding persist and contribute to sustained educational improvement. This study aims to bridge this gap by analyzing school feeding programs' contribution to academic performance, dropout rates, and repetition rates.

Additionally, many existing studies focus primarily on physical health outcomes or enrollment rates, without sufficiently addressing other critical educational indicators such as academic achievement, attendance, and student retention. As a result, there is a need for more comprehensive evaluations that consider multiple outcome variables to fully understand the effects of SFPs on students' overall educational experiences and challenges.

Another underexplored area in the literature is the potential role of school feeding programs in addressing gender and socio-economic disparities in education. While

some studies have touched on gender disparities in access to education, there is limited research on whether school feeding programs help narrow these gaps or promote social equity in education. Understanding whether SFPs have a differential contribution to boys and girls or on children from different socio-economic backgrounds is crucial for ensuring that these programs contribute to inclusive and equitable educational outcomes.

Finally, despite the Ethiopian government's efforts to implement large-scale school feeding programs, there is a lack of rigorous studies that evaluate their contribution to educational outcomes in urban areas like Addis Ababa. Most existing studies have been conducted in rural or conflict-affected regions, with little attention given to the unique challenges and opportunities that exist in Ethiopia's urban contexts, particularly in major cities like Addis Ababa.

Thus, this study seeks to fill the gaps in the literature by conducting a comprehensive analysis of the contribution of school feeding programs in Addis Ababa's Gulele Sub-City. By examining a broader range of educational outcomes, such as academic performance, attendance, enrollment, dropout rates, and repetition rates, this study provides valuable insights into the effectiveness of school feeding programs in urban Ethiopia. Additionally, it explores the long-term contribution of these programs, the mechanisms through which they influence educational outcomes, and the implementation challenges that affect their success. The findings of this research offer critical recommendations for improving the design and execution of school feeding

programs, ensuring that they are optimized to meet the needs of students and contribute to achieving sustainable educational outcomes.

1.2. Objectives of the Study

Given the background information and statement of the problem presented above, this study was conducted with the following general and specific objectives.

1.2.1. General Objective of the Study

This study aimed to examine the contribution of the school feeding program to students' educational outcomes. It also aimed to assess the implementation challenges of the school feeding program in Gulele Sub-city.

1.2.2. Specific Objectives of the Study

The specific objectives of the study were to investigate the contribution of the school feeding program to the academic performance of 8th-grade students (including average score and passing status), students' school enrollment, school attendance, dropout rate, and repetition rate. Additionally, the study aimed to assess the extent of the school feeding program's implementation and the challenges faced in Gulele Sub-City.

1.3. Theoretical and Conceptual Framework

The theoretical and conceptual framework for this study is grounded in behavioral, social learning, cognitive, and humanistic (Maslow’s Hierarchy of Needs) theories.

These theories provide a comprehensive understanding of how school feeding programs (SFPs) can influence students' academic performance, attendance, and retention. Below is an integration of these theories about school feeding interventions.

Behavioral Theory: focuses on how external stimuli (rewards and reinforcement) influence behavior. According to Skinner (1953), behavior is shaped by its consequences, whereas positive reinforcement encourages desirable behaviors. In the case of school feeding programs, meals serve as positive reinforcement that encourages school attendance, participation, and academic performance. By addressing hunger, a major barrier to concentration, SFPs help foster improved school attendance and academic focus. In the application of the school feeding program, the provision of meals as a reward for attending school can be seen as a form of operant conditioning (Skinner, 1953). Studies have shown that children who receive regular meals are more likely to attend school and perform better academically (Adelman, 2009). The SFP helps reinforce the behaviors of regular attendance and academic engagement by addressing the immediate physiological need for food.

Social Learning Theory: Social learning theory, developed by Bandura (1977), emphasizes that learning occurs through observation and imitation of others. This theory asserts that children can be motivated to attend school and engage academically when they see the positive outcomes associated with such behaviors, particularly when they observe peers benefiting from school feeding programs. The implementation of school feeding programs in communities with high levels of food insecurity, students are likely to observe their peers benefiting from the provision of

meals, which can serve as a powerful motivator for school attendance. Additionally, social interactions around food can promote social bonding, further encouraging attendance and reducing absenteeism.

Cognitive Theory: Cognitive theory, as articulated by Piaget (1970), focuses on the mental processes involved in learning, such as attention, memory, and problem-solving. Hunger directly affects cognitive functions like concentration and memory, which are critical for academic success.

According to the cognitive perspective, SFPs help improve students' attention and memory by addressing nutritional deficiencies, thereby enhancing their academic performance application lack of school feeding programs is a major factor that inhibits cognitive development, particularly in children. By addressing basic nutritional needs, SFPs improve cognitive functions, which, in turn, enhance learning outcomes. Studies have demonstrated that improved nutrition leads to better school performance (Ahmed, 2004). Thus, providing meals in schools can significantly contribute to cognitive improvement, which impacts academic achievement and retention.

Maslow's Hierarchy of Needs (Humanistic Theory): Maslow (1943) proposed that human beings are motivated by a hierarchy of needs, starting with basic physiological needs such as food, water, and shelter, followed by safety, social needs, esteem, and self-actualization. In the context of school feeding programs, providing meals addresses the fundamental physiological needs of students, which form the foundation for achieving higher-order needs such as safety, social belonging, and academic

success. The implementation of school feeding programs satisfies students' basic physiological needs for food. SFPs allow students to progress toward higher-level needs, such as safety, social connection, and academic achievement. With their nutritional needs met, students are better positioned to focus on learning, feel secure in their school environment, and engage meaningfully in academic tasks.

In addition to the above, several points emphasize the determinant role of food in Maslow's hierarchy of needs; the need for achievement will not drive a person's thoughts and behaviors until needs on the lower levels have been met. According to Maslow, humans cannot pay full attention to their education unless their basic nutritional needs are met. He argues that "for the chronically and extremely hungry man, life itself tends to be defined in terms of eating. Anything else will be defined as unimportant" (Maslow, 1943, pp. 373-374; Woodhouse & Lamport, 2012). Consequently, the cognitive processes and behaviors associated with the more advanced levels on the hierarchy cannot be achieved; great academic performance cannot be expected from students experiencing basic needs deprivation (Woodhouse & Lamport, 2012).

From an economic point of view, Dessalegn (2011) contended that severe poverty primarily limits households from sending children to school as their day-to-day survival - rather than educational needs - becomes the top priority. As a result, such households cannot provide children with the opportunity to go to school and learn. On top of this, even if some costs, such as school fees, are free, such households still do not have the means to cover other costs such as books, clothes, shoes, or

transportation. Thus, these households are unable to afford the cost of schooling and instead involve their children in money-generating activities or take care of their younger siblings at home. In response to such and other economic barriers to school participation, SFPs provide economic incentives for households to send their children to school (Desalegn, 2011). In addition, Adelman et al. (2019) stated that the decision of households on whether to send children to school is determined by comparing the expected future benefits of education to the current cost. Some research consistently demonstrated that education yields numerous long-term benefits for both individuals and society. For instance, education is a significant determinant of individual earning potential. Individuals with higher levels of education generally earn more than those with less education. According to Psacharopoulos and Patrinos (2018), individuals with higher education levels tend to have higher lifetime earnings, often making the financial return on investment in education substantial. School feeding programs, by ensuring that children can attend school regularly and focus on their studies, increase the likelihood that students will complete their education, leading to greater earning potential in the future (Adelman, 2009).

In addition, on a broader scale, education contributes to national productivity and economic growth. As argued by Barro (2001), societies with higher education levels tend to have higher levels of economic development and political stability. Moreover, education is associated with lower crime rates, increased civic participation, and better governance (Lochner, 2011). By ensuring access to education for children in food-insecure areas, SFPs can help children attend school, laying the foundation for

long-term societal benefits, including a more educated, healthier, and productive population (WFP, 2023).

Finally, education empowers individuals to make informed decisions, improve their livelihoods, and contribute positively to society. Moreover, educated parents are more likely to invest in their children's education, creating a cycle of empowerment across generations (Chepkwony et al., 2013). School feeding programs support this cycle by reducing hunger, which can hinder academic performance and retention, thereby enhancing the educational opportunities available to future generations (Meyers et al., 2013).

Citing Kaziangaet al., (2009), Desalegn (2011), from a nutrition perspective, further illuminated that the interplay between nutrition and education can generally be conceived in three ways. First, the nutrition and health of a child influence learning and performance in school. That is, poor nutrition affects children's cognitive function and hence limits their ability to participate in learning activities at school. Second, malnourished and unhealthy children are unable to attend school regularly, which in turn results in poor academic performance. Third, hungry children face difficulties in concentrating and accomplishing more complex tasks than well-nourished ones.

Adelman (2019) stated that the School Feeding Programs can contribute to children's educational improvements in three ways. First, they can enhance children's enrollment and regular school attendance by encouraging parents to send their children to school regularly. Second, they can improve cognitive functions by

enhancing children's attention and concentration while minimizing the prevalence of short-term hunger, which is also a major factor in worsening the cognitive function of a child. Third, they can enhance academic performance via the accomplishment of the above two objectives (Adelman, 2019).

Organizational documents also state that one of the goals for the school feeding program is to increase academic performance, school attendance, and student enrollment to achieve improved educational outcomes. The school feeding program is also expected to reduce the number of children who do not attend school due to poor health and malnutrition. The programs have impact on school participation (Bisratemariam, 2017, cited in Hailemariam, 2018). In addition, the WFP emphasizes that poor dietary intake can leave students susceptible to illness or cause headaches and stomachaches, resulting in school absences. Other studies have indicated that the diet children take has an impact on their academic performance, including health, behavior, and thinking skills (WFP, 2016).

1.4. Empirical Evidence

According to Assefa (2022), the school feeding program is an intervention that aims at improving primary school students' enrollment, increasing attendance and reducing students' retention in primary schools. In addition, Adelman (2009) stated that there are three objectives associated with school feeding. First, SFPs can motivate parents to enroll their children and see that they attend school regularly. Second, SFPs can improve the nutritional status of school-age children over time and alleviate short-term hunger in both malnourished and otherwise well-nourished schoolchildren.

Third, SFPs can improve cognitive functions and academic performance via reduced absenteeism and increased attention and concentration due to improved nutritional status and reduced short-term hunger. He further justified that SFPs are appealing because, if properly designed and implemented, they lead to a growth in the number of children being enrolled with better academic performances.

From a perspective, Dessalegn (2011) argues that severe poverty primarily restricts households from sending children to school because their day-to-day survival, and not educational needs, stands to be their immediate priority. Consequently, such households cannot afford to send their children to go to school and learn. Besides, even if some costs, such as school fees, are free, households still do not have the means to cover other costs such as books, clothes, shoes, or transportation. Thus, such households cannot afford the cost of schooling and instead engage their children work in money-generating activities or look after their younger siblings at home. To curb such and other economic barriers to school participation, SFPs provide economic incentives for households to send their children to school (Desalegn, 2011). Adelman et al. (2019) argues that the decision of households on whether to send children to school is determined by comparing the expected future benefits of education to the current cost.

On the other hand, Kaziranga (2016) drawin on a randomized trial conducted in rural Burkina Faso argues that school feeding programs in this specific context of agricultural households without an active labor market can increase enrollment, but may fail to improve attendance and academic performance for a larger number of

children. The SFP has a statistically significant positive effect on learning as measured by achievement test scores. Participation in the SF program increases test scores by 15.7 percentage points (Ahmed, 2004, cited in Abiye, 2017). The study by Chepkwony et al. (2013), cited in Abiy (2017), also suggested that schools with SFP had the higher academic performance compared to those without SFP.

On the contrary, Ermias (2008), cited in Abiye (2017) substantiated that SFP had no significant positive effect on academic performance. However, in the Tamale metropolis, following the SFP, pupil enrolment rose, leading to an increase in class size, which affected the availability of teaching and learning materials (Aliu & Fawzia, 2014). The study observed that the increase in enrollment in the South Tongu district increased the workload of the school, which led to a higher demand for the School Feeding Program

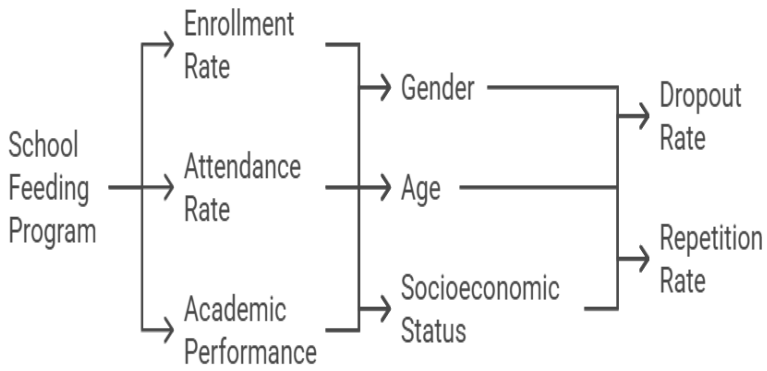
The above discussions establish a theoretical framework for the relationship of food and academic achievement, school attendance, and enrollment. This indicates the existence of a causal relationship or, at least, an associated relationship between food and academic achievement, school attendance, and concentration. Abraham Maslow's need hierarchy also emphasized the contribution of food to the school performance of children such as achievement, concentration, and paying attention (Woodhouse & Lamport, 2012 as cited in Abiye, 2017) helped generate the conceptual framework for this particular study. The theoretical framework that guides the study was adopted from Frederick Dayour (2015). Figure 1 below analyzes the relationship between school feeding programs and school enrollment and attendance. The conceptual

framework diagram is represented by dependent and independent variables within boxes. The variables, including the school feeding program, academic achievement, attendance, enrollment, dropout rate, and repetition rate, are measured variables. The causal linkages are indicated by the arrows, which show the relationship between variables. A positive relationship is when an increase in one variable is linked to an increase in another variable, whereas a negative relationship is when an increase in one variable is linked to a decrease in another variable. In a bidirectional relationship, the variables have an impact on one another, both positively and negatively.

Regarding the causal relationship of variables, the School Feeding Program (SFP), as an independent variable, has a direct positive effect on the dependent variables - enrollment rates, school attendance, academic performance, dropout rates, and repetition rates. Additionally, age, another independent variable, influences attendance and academic performance, with older students potentially experiencing higher dropout rates. Gender also plays a significant role in shaping enrollment rates, attendance, academic performance, dropout rates, and repetition rates, as gender-based barriers to education may exist and affect students differently.

Figure 1

Visual representation of conceptual framework on School feeding



Source: Adapted from Frederick Dayour (2015), the Effect of the School Feeding Program

2. Methods

2.1. Approach and Design

A quasi-experimental design was employed to assess the effect of the school feeding program on educational outcomes. A mixed research design was employed using primary and secondary data collection methods. Both qualitative and quantitative data were collected on students' academic performance, including

average scores and passing status, dropout rate, repetition rate, attendance rate, and student enrollment. This study was conducted in Gulele Sub-City of Addis Ababa, located in the northern part of the city.

2.2. Data Collection Methods and Procedure

The study used both primary and secondary data sources. Document review was applied to collect quantitative data covering the period from 2017/18 to 2021/22 from the Addis Ababa City Administration Education Bureau. Similarly, data during the same years were gathered from Gulele Sub-city Education Office. Besides, qualitative data were gathered using Key Informant Interviews with the head of the education office at the sub-city level, school directors, students, and parents on the benefits of the school feeding program, challenges, and its contribution to educational outcomes.

2.3. Population, Sample Size, and Sampling Method

The study population comprised Grade 1–8 students from 23 public schools located in 10 districts of Gulele Sub-City, Addis Ababa. A complete enumeration (census) of the 23 schools was conducted to collect data on various student-related factors, including enrollment, attendance, repetition, dropout rates, academic performance, and other pertinent issues. Among these schools, a sample of 18 primary public schools benefiting from the school feeding program was selected as the treatment group, while the years prior to the program's implementation (2017/18 and 2018/19) served as the comparison group. This design allowed for an assessment of the changes in outcomes between the years when the program was implemented and

when it was not. Of the 23 schools, 18 were eligible for analysis met the inclusion criteria and were deemed eligible for analysis.

For the analysis of academic performance, 8th-grade students who took regional examinations between 2018/19 and 2021/22 were included in the census. A total of 16,294 students (7,250 males and 9,044 females) were initially considered, with 14,898 students (6,585 males and 8,313 females) selected for analysis based on the inclusion and exclusion criteria. The inclusion criteria for the 18 schools were as follows: i) participation in the school feeding program, ii) grades 1–8, iii) location in *Gulele* Sub-City, and iv) operation before 2017/18. These criteria ensured the schools selected were suitable for the study's focus on enrollment, attendance, dropout rates, and repetition rates. For 8th-grade students, the inclusion criteria focused on their subject scores, regular attendance, school type, and examination year to assess academic performance. Schools excluded from the analysis were pre-primary schools, private schools, mission schools, evening programs, and schools where Afan Oromo was not offered as a subject.

For the qualitative part of the study, a case study was employed, utilizing purposive sampling techniques to select participants, including students, school principals, sub-city-level experts, and parents. The primary reason *Hamle* 19/67 school was selected was because the school was the best performing on school feeding program implementation. The sampling involved two key informant interviews, three in-depth interviews, and one observation at the sub-city level and the *Hamele* 19/67 School community. These qualitative data were used to further

investigate the contribution of the school feeding program to students' academic performance, attendance, enrollment, and implementation challenges encountered.

2.4. Ethical Consideration

In keeping the standards of scientific research ethics and confidentiality, the researcher obtained informed consent from school principals, guardians, and students as an essential component of the data collection process, especially for qualitative data collection. A clear and understandable written consent form was prepared for each research participant to sign, with the full right to decline or participate in the study. The form explained the objective of the study, the focus and purpose of the information to be collected, the way the information would be utilized, and to whom the research findings would be shared.

2.5. Study Variables

Dependent Variables: The dependent variables included academic performance, attendance, enrollment rate, repetition rate, and dropout rate. Academic achievement is treated as a continuous variable that measures the individual students' academic performance, while enrollment, attendance, repetition rate, and dropout rate are measured at the school level.

Independent variables: Based on the conceptual framework provided in Figure 1 above, the explanatory variables were identified as school feeding program, age, and gender. A dummy variable was created to distinguish between treatment and control

years depending on whether or not the school feeding program intervention was in place.

2.6. Methods of Data Analysis and Assumptions

The nature of this study required the application of both qualitative and quantitative data analysis methods. For descriptive statistical analysis, measures of central dispersion (e.g., variance) along with frequencies, ratios, or percentages were calculated. Measures of central tendency such as mean (average) were also used to describe the quantitative data about the education outcomes of each school such as the enrolment rate, attendance rate, and dropout rate.

In addition to this, to assess the contribution to students' academic performance of the School Feeding Program, the data were analyzed using an OLS (Ordinary Least Squares) regression analysis to see the outputs of the regression (coefficients) since it is an unbiased estimator of the real values of alpha and beta. The OLS formula for a simple linear regression with one independent variable x and one dependent variable y is:

$$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \cdots \beta_n X_n + e_o$$

Where β0=intercept,

β1=slope (unknown constant), and

ε=random error component.

Here, where y is a dependent variable, we want to predict that x is the independent variable, and β0 and β1 are the coefficients that we need to estimate. The STATA software application, version 17, was used to analyze the organized dataset. In addition, the qualitative information was organized using the explanatory analysis method to see the depth of the information on the school feeding program from Hamle 19/67 school, which was purposively selected as the model school in the implementation of the School Feeding Program.

2.6.1. Variable Coding and OLS Assumptions of Diagnostic Statistics Robust Regression

For the purpose of analysis, variables were created and coded for OLS regression to analyze the contribution of the school feeding program on students' academic performance while accounting for other control variables. The following variables were coded for the purpose.

- **SFP (School Feeding Program)**: A dummy variable (1 if the year is a treatment year, 0 if control year). This will allow you to measure the direct contribution of the school feeding program on the academic performance of students.
- **Gender**: A dummy variable to distinguish between male and female students. This could help control for potential gender differences in academic outcomes.

- **Academic performance** is considered a dependent variable that could be measured by a continuous variable like "test scores," "average score," or "passing status" (binary: 0 = fail, 1 = pass).

The key OLS assumptions and their relevance to your study on SFP and academic performance are as follows. The following were the assumptions and valuables codes used for dependent and independent variables.

- **Linearity:** The relationship between the presence of the school feeding program and students' academic performance was accurately represented by a linear model. It means an increase in the number of school meals provided has a consistent contribution to academic performance across different years.
- **No Perfect Multicollinearity**: No high correlation between the school feeding program and other variables such as gender, and others, which could distort the estimation of the SFP's contribution to academic performance.
- **Exogeneity (No Endogeneity)**: The school feeding program has been considered as an exogenous factor, meaning its implementation is not driven by unobservable factors that also affect academic performance, such as economic conditions of parents, studying tutors, school and extracurricular curricula.
- **Homoscedasticity (Constant Variance of Errors)**: The residuals (or errors) of the model should have a constant variance when predicting academic performance school feeding program year and without.

- **Independence of Errors**: There were no autocorrelation residuals for one observation should not be correlated with the residuals for another observation.

While analyzing OLS regression, the multicollinearity, heteroscedasticity, and other OLS assumptions have been done. When looking at the diagnostic statistics of OLS and robust regression, there is no significant difference comparing the coefficient estimates, standard errors, t-statistics, and p-values of OLS as well as the R-squared and adjusted R-squared, the regression result justifies that the OLS is robust and reliable. The table below shows the result of diagnostic statistics of OLS robust regression of grade 8^{th} students pass and fail and average score.

Table 1:

Diagnostic Statistics Robust Regression (Linear regression)

Pass_Fail	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Treatment_Control	.096	.007	12.92	0	.082	.111	***
Gender	-.058	.005	-11.97	0	-.067	-.048	***
Age	-.048	.002	-29.91	0	-.051	-.045	***
Constant	1.623	.025	63.98	0	1.574	1.673	***

Mean dependent var	0.868	SD dependent var	0.339
R-squared	0.221	Number of obs	14898
F-test	384.351	Prob > F	0.000

Akaike crit. (AIC)	6302.724	Bayesian crit. (BIC)	6333.160

*** p<.01, ** p<.05, * p<.1*

Average_Score_excl~s	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Treatment_Control	4.749	.208	22.79	0	4.341	5.158	***
Gender	-3.081	.19	-16.19	0	-3.454	-2.708	***
Age	-1.435	.049	-29.12	0	-1.531	-1.338	***
Constant	76.015	.797	95.43	0	74.453	77.576	***

Mean dependent var	52.932	SD dependent var	12.392
R-squared	0.159	Number of obs	14522
F-test	490.432	Prob > F	0.000
Akaike crit. (AIC)	111806.541	Bayesian crit. (BIC)	111836.875

*** p<.01, ** p<.05, * p<.1*

Source: Source: Own computation from AAEB data, 2023.

3. Results

3.1. Grade 8 Students' Pass and Fail Status Analysis

As portrayed in Table 1, on average, 81.1%, 77.7%, 96.6%, and 96.8% each year passed the PSLCE from 2018/19 to 2021/22, respectively. The percentage of students

who passed the exam was distributed from a minimum of 81.1% in 2018/19 in the comparison year to a maximum of 96.8% in 2021/22 in the school feeding treatment year. Data on gender-wise comparison showed that male students' passing rate was higher than their female counterparts in all academic years. Despite the figure changes between male and female students over the years, the school feeding program has a positive contribution to both genders.

When comparing the results of 2018/19, during which school feeding intervention was not taking place, 81.1% of the students passed the PSLCE, while 96.8% did during the intervention year of 2021/22. In this result, there is a 15.7 percentage point increase or positive change in 8th-grade students' passing performance. Despite other factors that this study did not consider, it is possible to indicate that the school feeding program meaningfully contributed to the students' academic performance. However, the positive changes in academic performance are manifested, and the occurrence of variabilities created in 2019/2020, the effect of the COVID-19 pandemic, and other factors were justifiable reasons.

Table 2

Grade 8 students' performance in PSLCE

	Gender					
	Males		Females		Total	
	Fail	Pass	Fail	Pass	Fail	Pass
Year	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
2018/19 (Control)	15.3%	84.7%	21.8%	78.2%	18.9%	81.1%
2019/20 (Intervention)	16.8%	83.2%	26.2%	73.8%	22.3%	77.7%
2020/21 (Intervention)	3.1%	96.9%	3.6%	96.4%	3.4%	96.6%
2021/22 (Intervention)	2.6%	97.4%	3.8%	96.2%	3.2%	96.8%

Source: Own computation from AAEB data, 2023.

3.2. Mean Score of Grade 8 Students in PSLCE

For Grade 8 students, the school feeding program started in 2019/20 and was designated as the treatment year, as 2018/19 was the control year – the final year before school feeding program started. The average student results during the school feeding intervention years indicated that there were progressive and considerable positive performances in 2019, 2020/21, and 2021/22 intervention years (50.52, 54.69, and 57.87), respectively, compared with the 2018/19 control year (49.63%). When looking at the gender comparison of the students' results, male 8th-grade students achieved better than female 8th-grade students compared with the control, and all school feeding intervention years did. The average score was the highest in 2021/22 for the intervention and the lowest for the control groups when we compared

the performance after the school feeding program was practiced. With this mean score, it is possible to conclude that the school feeding program had a positive impact on students' academic achievement, both for male and female students.

Table 3

Average Score of Grade 8 Students in PSLCE

Year	Gender		
	Males' Mean Score Excluding Absentees	Females' Mean Score Excluding Absentees	Total Mean Score Excluding Absentees
2018/19(Control)	50.85	48.68	49.63
2019/20 (Intervention)	52.61	49.01	50.52
2020/21 (Intervention)	56	53.64	54.69
2021/22(Intervention)	59.36	56.49	57.87

Source: Own computation from AAEB Data, 2023, Grade 8 students master sheet, 2023

3.3. OLS Regression Analysis on Students Pass or Fail Status

In this OLS regression analysis, the dependent variable was the 8th-grade students' pass or fail result, excluding absent students. The model used for adjusted R-squared was 0.221, and the number of observations considered for OLS regression was 14,898, as seen in the table below. The result showed that the school feeding program variable had a significant contribution to the dependent variable. The coefficient of 0.096% result indicated that the school feeding program had a contribution of 0.096 on the passing probability of every student each year. This implies that the students who benefited from the school feeding program had an

additional chance of passing of 9.6% compared with those who did not benefit from the school feeding program. The R-squared value of 0.221 also indicated that about 22% of the variation in the students' passing performance can be explained by the school feeding program intervention. In this regard, school feeding has a positive contribution to the students' academic achievement. The p-value of school feeding is less than 0.05, which implies the school feeding program is a statistically significant predictor of the passing performance of 8th-grade students.

The standard error of the school feeding program was 0.06. This measures the variability of the slope around its true value. The confidence interval for the academic achievement or 8th-grade passing result was (0.0845, 0.108), which implies that we are 95% confident that the true slope of the regression line lies within this interval. On the other hand, as can be seen in the OLS regression, the gender coefficient was significant, indicating the gender difference in academic achievement. In this result, we can understand that being female reduced academic achievement by 0.058, holding all other variables constant. This can be interpreted that there was a significant gender gap in academic achievement, which needs further investigation. A look at the age coefficient, one can see that there was reduced performance by 0.048 as age increased. This can also suggest that age had a significant contribution to the dependent variable.

Table 4

OLS regression on students' pass or fail

Pass/Fail	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Treatment/Control	.096	.006	16.05	0	.085	.108	***
Gender	-.058	.005	-11.70	0	-.067	-.048	***
Age	-.048	.001	-62.93	0	-.049	-.046	***
Constant	1.623	.015	109.52	0	1.594	1.652	***

Mean dependent var	0.868	SD dependent var	0.339
R-squared	0.221	Number of obs	14898
F-test	1412.200	Prob > F	0.000
Akaike crit. (AIC)	6302.724	Bayesian crit. (BIC)	6333.160

**** p<.01, ** p<.05, * p<.1*

Source: Own computation from AAEB data, 2023

3.4. OLS Regression Analysis of Grade 8 Students' Average Scores

The model yielded an adjusted R-squared of 0.1589, and the number of observations considered for OLS regression was 14,522, as can be seen in the table below. The result showed that all independent variables had a significant contribution to the dependent variable. The results showed that the average score of 8th-grade students was 76.01472. In addition, the coefficient of the 4.74928 result indicated that the school feeding program had a contribution of 4.74928 more-point scores on their

average academic results across intervention years, and the coefficient is statistically significant at the 1% probability level.

This implies that every year, the average score of each student lies in the range of 76.01472 to 80.764. This means that the students who benefited from the school feeding program had an average of 5 points higher than those who did not benefit from the school feeding program. This significant positive change increased by additional average scores of five every year, excluding all other factors that this study did not consider. The R-squared value is 0.1591, which means that about 16% of the variation in the average academic scores can be explained by the school feeding program intervention. In this regard, school feeding and academic achievement have a significant relationship or impact. The P-value of school feeding is less than 0.05, which implies the program is a statistically significant predictor of the academic performance of grade 8 students.

The standard error for the school feeding program, which measures the variability of the slope around its true value, was 0.231. The confidence interval for the academic achievement of 8th-grade students was (4.2959, 5.2026), which implies that we are 95% confident that the average additional academic achievement obtained because of school feeding is not less than 4.3 and not more than 5.2. Moreover, the gender coefficient indicated that the variable had a significant contribution to the dependent variable, and the coefficient is significant at the 1% probability level. The findings showed that we are 95% confident that the average academic score of female students was lower than that of male students by 3.1 points. On the other hand, the

age coefficient, as age of the students increases, performance decreases by 1.435. This can also suggest that age has a significant contribution to the dependent variable.

Table 5

OLS regression on students' score

Linear regression

Average Score excl~s	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Treatment – Control	4.749	.231	20.53	0	4.296	5.203	***
Gender	-3.081	.19	-16.23	0	-3.454	-2.709	***
Age	-1.435	.031	-46.40	0	-1.495	-1.374	***
Constant	76.015	.588	129.28	0	74.862	77.167	***

Mean dependent var	52.932	SD dependent var	12.392
R-squared	0.159	Number of obs	14522
F-test	915.720	Prob > F	0.000
Akaike crit. (AIC)	111806.541	Bayesian crit. (BIC)	111836.875

**** p<.01, ** p<.05, * p<.1*

Source: Own computation from AAEB data, 2023.

3.5. Results on Students' Enrollment Rate

Regarding the students' enrolment rate, the mean analysis indicated that 1000, 1072, 1017, 978, and 1017 students were enrolled in each school in the 2017/18,

2018/19, 2019/20, 2020/21, and 2021/22 academic years, respectively. However, the variation in 2020/21 was exceptionally low and had either dropped or stayed at the baseline comparative year level. There were fairly few changes during the first year, and there were 17 students additionally enrolled compared with the 2017/18 (control year) enrolment and 2021/22 (treatment year). This suggests that the school feeding program contributed to the students' enrollment. External factors, such as the COVID-19 pandemic, may have influenced variations in enrollment rate.

Table 6

Students' enrollment by school

Year	Students' enrolment per School- (Mean)			Enrolment Total (N=18)		
	Males	Females	Total	Males	Females	Total
2017/18	459	541	1000	8262	9741	18003
2018/19	500	572	1072	8997	10293	19290
2019/20	476	540	1017	8576	9722	18298
2020/21	467	511	978	8399	9197	17596
2021/22	497	520	1017	8945	9359	18304

Sources: Own computation from Gulele Sub-city data, 2023

3.6. Results on Students' Repetition Rate

According to the line graph, the likelihood of grade repetition among students in Gulele Sub-City's public primary schools is relatively low. The data reveals notable variations in repetition rates over the years, indicating significant differences between the treatment and control periods. Specifically, the graph demonstrates a consistent

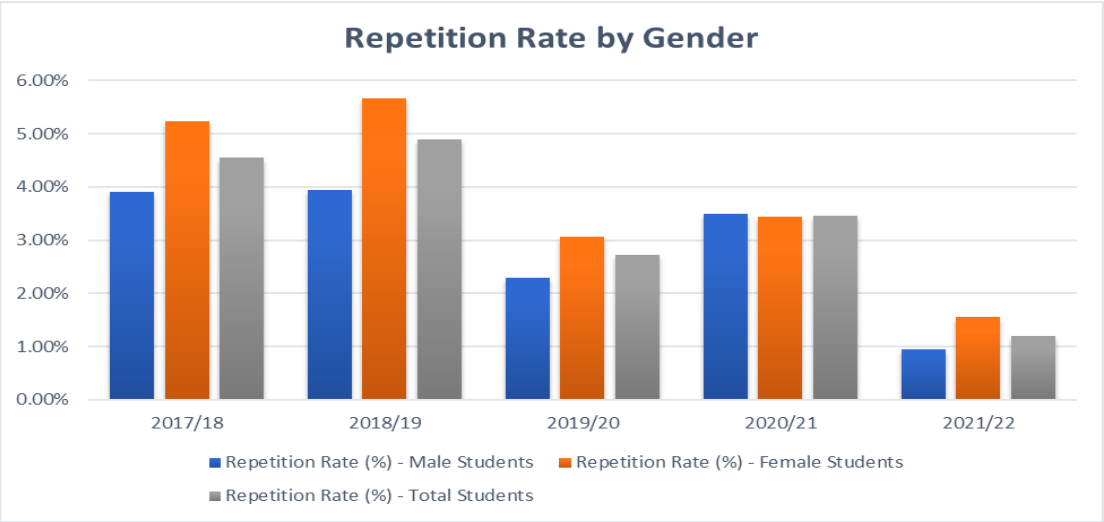
decline in repetition rates during the years when the school feeding intervention was implemented.

Compared to the control years (2017/18 and 2018/19), where the total repetition rate stood at 4.5, the intervention years (2019/20, 2020/21, and 2021/22) saw a marked decline, with repetition rates dropping to 2.8, 3.2, and 1.1, respectively. While the variations are somewhat pronounced, the overall trend suggests a positive contribution to the school feeding program. However, external factors, such as the COVID-19 pandemic, likely influenced the repetition rates during some of the treatment years (2020/21), which stood at 3.2.

From this study, it can be inferred that the school feeding program has contributed to reducing grade repetition rates in *Gulele* Sub-City. Additionally, when examining the trend from a gender perspective, the program positively impacted both male and female students, though the reduction in repetition rates was more pronounced among male students compared to their female counterparts.

Figure 2

Changes on Students Repetition Rate by Year



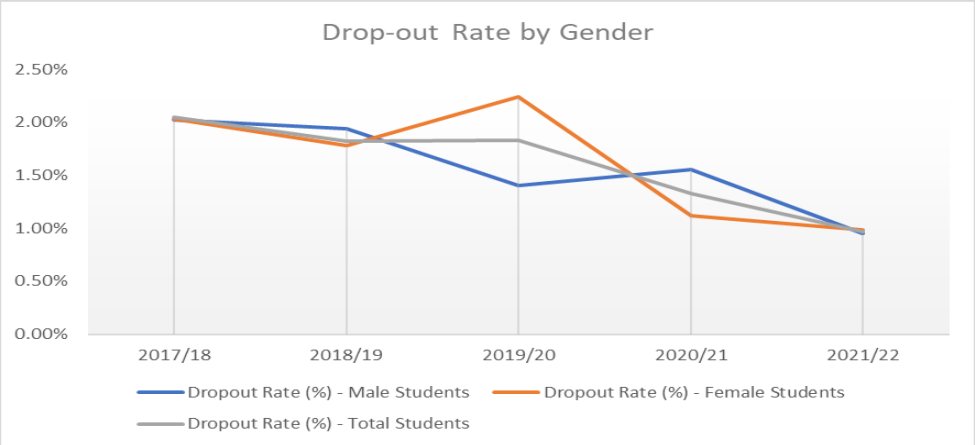
Source: Own Computation from Gulele Sub-City Data, 2023

3.7. Results on Students' Dropout Rate

The result shows that the dropout rate was 2.05% at the baseline or comparison year (2017/18) and decreased throughout the treatment years after the school meal program was implemented (1.83, 1.33, and 0.97, respectively, in 2019/20, 2020/21, and 2021/22). However, the dropout rate in 2019/20 was comparably higher than in 2017/18 and 2018/19, the control years. The primary reason for this was most likely the impact of the COVID-19 outbreak. Then, the school feeding program contributed positively to the student dropout rate, which reduced from 2.05% to 0.97% when the control and treatment years were compared. Despite the school feeding program having significant contributions of both sexes to reduce dropout, it is largely contributed for females than males.

Figure 3

Change in dropout rate



Source: Own computation from Gulele Sub-City data, 2023.

3.8. Findings from Explanatory Case Study

This explanatory qualitative case study has been conducted at Hamle 19/67 School level and Sub-city level to capture the views and perspectives of beneficiaries and implementors at the School and Government office level. According to qualitative findings, the school feeding program Key Informant Interview Gulele Sub-city and case study in Hamle 19/67 has shown a positive contribution to educational outcomes by reducing hunger, allowing students to focus on education, and supporting families who cannot afford meal provisions. The program has significantly decreased the dropout and repetition rates among students and has also helped students arrive at school early without waiting for their breakfast at home. In addition, academic performance and attendance rates have also increased over the years. The respondent portrayed that the positive result was because the program created a conducive school environment, allowing students to participate more actively in extra-curricular activities and increased learning interest.

School feeding programs have significantly improved students' behavior, social cohesion, equality, and respect by providing similar food in the same room for all, regardless of their economic and social status. In addition, the findings indicated that families and teachers are giving less attention and insufficient funding of tutorial materials provision and transportation from school-to-home trips, which may affect the student's academic performance. As students attend school regularly, there will be less absenteeism due to sickness and learners become attentive and effective.

School feeding also provides students with timely food that they may not get at home, enhancing their self-confidence and time management. However, concerns

arise when schools are closed during the summer season as such food may not be accessible to the beneficiaries. Parents also believe that the government's free meals are a significant benefit to households and schools.

Other studies conducted using qualitative methods concur with this study that parents, teachers, and students have a strongly positive opinion on the effectiveness of a school feeding program in that it reduces absenteeism and increases students' enrollment rates (Master's Capstone Projects, Center for International Education, University of Massachusetts Amherst, n.d.).

The case study highlighted that the School Feeding Program has made significant strides in improving educational outcomes, student behavior, and social dynamics. Nonetheless, challenges such as limited funding, meal quality, and the lack of standardization across the program must be addressed to fully maximize its benefits for students, schools, and communities. To further strengthen and ensure the program's sustainability, improvements in monitoring, a larger budget, and greater community involvement are essential.

3. Discussions

This section examines how the findings of this study align with or diverge from existing research on the contribution of school feeding programs (SFP) to educational outcomes, particularly student enrollment rates, dropout rates, repetition rates, and academic performance. The discussion is structured based on these key outcome variables.

Regarding the academic performance of 8th-grade students, the findings reveal a 15.7 percentage point increase in passing rates, indicating that the SFP significantly contributed to student achievement. While other external factors that not accounted for in this study may have influenced these results, the positive effect of the program remains evident. This finding is consistent with the study by Awojobi (2009), as cited by Tagoe (2018), which reported a significant improvement in primary school pupils' academic performance due to SFP. However, fluctuations observed in 2019/2020 partially attributable to the COVID-19 pandemic and other external disruptions suggest that additional factors may have played a role in academic outcomes during that period.

When assessing mean academic scores, the results confirm that the SFP positively impacted students' academic achievement, benefiting both male and female students. This is in line with Abiy (2017), who concluded that school feeding programs significantly improved student attendance and academic performance. Similarly, Tagoe (2018), as cited in Awojobi (2019), confirmed that primary school pupils who participated in SFP demonstrated substantial academic improvements. Moreover, the OLS regression results indicate that the SFP is a statistically significant predictor of 8th-grade students' academic performance, reinforcing findings from Ahmed (2004), as cited in Abiye (2017), which showed a 15.7 percentage point increase in test scores due to SFP participation.

In terms of gender disparities, the OLS regression analysis reveals that gender has a significant contribution to academic performance, with female students scoring

0.058 points lower than their male counterparts, holding all other variables constant. This suggests the presence of a gender gap in academic performance, warranting further investigation into potential barriers faced by female students. Similarly, the study finds that age negatively affects academic performance, with an estimated 0.048-point decrease per additional year. This implies that as students grow older, they may experience increased attention diversion, potentially affecting their academic success. Furthermore, the coefficient estimate of 4.74928 suggests that students benefiting from the SFP scored, on average, 5 points higher than non-beneficiaries, with statistical significance at the 1% probability level. Interestingly, this finding contrasts with Ermias (2008), as cited in Abiye (2017), who concluded that SFP had no significant contribution to students' academic performance.

With regard to student enrollment, the study finds only modest changes in the initial year of implementation, with 17 additional students enrolling when comparing the 2017/18 control year to the 2021/22 treatment year. This suggests that while SFP contributed positively to school enrollment, its contribution may have been moderate. Supporting this finding, Destaw et al. (2021) reported that the SFP in Addis Ababa led to a moderate increase in enrollment rates, particularly among middle- and late-adolescent boys.

The findings further indicate that the SFP contributed to reducing student repetition rates in Gulele Sub-City. The trend analysis also shows a gendered effect, with the program lowering repetition rates for both male and female students, albeit with a greater benefit observed among male students. This aligns with the findings of

Gosheme(2020), who highlighted the role of SFP in decreasing school repetition rates.

Concerning dropout rates, the results reveal a reduction from 2.05% to 0.97% when comparing control and treatment years, demonstrating the program's effectiveness in keeping students in school. While SFP contributed to lowering dropout rates for both sexes, its contribution was more pronounced among female students. In agreement with this, Amanuel (2021) asserted that the proper implementation of SFP significantly reduces dropout rates while improving academic performance and school enrollment.

Additionally, qualitative studies support these findings, with parents, teachers, and students expressing strong positive opinions on the effectiveness of SFP in reducing absenteeism and increasing student enrollment. This sentiment is echoed in the Master's Capstone Projects at the Center for International Education, University of Massachusetts Amherst (n.d.), which emphasized the program's role in enhancing student retention and participation.

Overall, the findings of this study largely align with previous research, highlighting the positive contribution of SFP on academic performance, enrollment, and retention. However, the observed gender disparities and the relatively moderate effect on enrollment suggest that further research is needed to address potential challenges and optimize the program's effectiveness. The study also acknowledges that external factors, such as the COVID-19 pandemic, may have influenced

variations in educational outcomes, emphasizing the need for ongoing evaluation and policy adjustments.

4. Conclusions and Recommendations

4.1. Conclusions

This study aimed to examine the contribution of the School Feeding Program (SFP) on the academic performance, enrollment, dropout rates, and repetition rates of primary students in Gulele Sub-City, Addis Ababa. The findings revealed significant positive changes in multiple educational outcomes, indicating that SFP has a substantial effect on students' academic success. In this result and the research questions, the following conclusions are drawn:

The study clearly demonstrates that the school feeding program positively impacted students' academic performance. Over the course of the intervention years (2019–2022), there was a consistent improvement in the percentage of students passing the Primary School Leaving Certificate Exam (PSLCE), with a notable 15.7 percentage point increase in passing rates between the non-intervention year (2018/19) and the intervention year (2021/22). The regression analysis further supports this finding, with school feeding significantly contributing to a higher passing probability (9.6% increase in the likelihood of passing each year). This suggests that the provision of meals enhanced students' cognitive abilities, concentration, and overall academic achievement. The average academic score during the feeding years increased by approximately 5 points per student each year, further affirming the positive influence of school feeding on academic success.

In addition, gender was found to have a significant contribution to academic outcomes, with male students generally outperforming female students across all years, both before and during the school feeding intervention. Although the school feeding program improved academic performance for both genders, the gender gap persisted, suggesting that further attention is needed to address the factors contributing to lower academic achievement among female students. This finding highlights the need for future studies to explore how school feeding programs can be tailored to bridge gender disparities and promote gender equity in educational outcomes.

Moreover, the school feeding program demonstrated a modest positive effect on student enrollment, with an increase in enrollment numbers from 2017/18 to 2021/22. While the variation in enrollment was not drastic, the overall trend supports the idea that SFP contributes to a more stable and consistent student enrollment. Regarding dropout rates, there was a notable decrease in dropout percentages over the years. The dropout rate reduced from 2.05% in 2017/18 to 0.97% in 2021/22, suggesting that school feeding programs help retain students in school, particularly among female students. Similarly, repetition rates declined during the school feeding years, with a more substantial reduction among male students. These findings align with previous research, such as that by Gosheme (2020), showing that SFPs reduce repetition rates, contributing to higher retention and lower dropout rates.

The study acknowledges that external factors, such as the COVID-19 pandemic, may have temporarily skewed some of the results. For instance, the dropout rate in

2019/20 was higher than in control years, likely due to the disruptions caused by the pandemic. However, the overall trends suggest that once the school feeding program was implemented, it contributed to the stabilization of these rates in subsequent years, highlighting the resilience and positive contribution of the program even in the face of global challenges.

Major lessons (knowledge) acquired during the process of the undertaking of the researcher, **t**he study demonstrates that school feeding programs have a significant, positive contribution to both academic performance and student retention, as evidenced by increased passing rates, reduced repetition rates, and a lower dropout rate. In addition, gender remains a key factor in academic performance, with male students outperforming female students. This underscores the need for gender-specific interventions within school feeding programs to further reduce educational disparities. Above all, contextual factors, such as the COVID-19 pandemic, can temporarily affect academic outcomes, but the school feeding program still shows long-term potential to contribute positively to students' educational success.

This research answers the research question that **t**he school feeding program had a statistically significant positive effect on academic achievement, with a notable increase in passing rates and average academic scores. While the program improved outcomes for both genders, male students showed better academic performance overall, a significant gender gap in performance persists, suggesting the need for gender-specific interventions. The school feeding program contributed to a reduction in dropout rates, a decrease in repetition rates, and a modest increase in enrollment.

These changes were especially notable among female students. The study highlights that while the pandemic impacted results in some years, the overall effect of the school feeding program remained positive, contributing to reduced dropout rates and improved academic performance.

Overall, the study underscores the importance of school feeding programs as a tool for improving academic outcomes in Ethiopia, particularly in urban areas like Addis Ababa. It not only confirms the positive short-term benefits of SFPs but also reveals how these programs can help mitigate long-term challenges such as repetition, dropout, and enrollment instability. However, the persistence of gender disparities in academic performance calls for more targeted interventions to ensure that school feeding programs contribute to equitable educational opportunities for all students. The significant findings from this study provide valuable evidence to policymakers and educators on the role of school feeding in fostering academic success and educational equity.

4.2. Recommendations

Based on the conclusion drawn, the researcher believes that many issues need to be considered to effectively implement school feeding programs and thus recommends the following measures.

1. **Enhance Gender-Sensitive Approaches in School Feeding Programs:**

   While the school feeding program positively impacted both male and female students, the gender gap in academic performance remained significant, with

male students outperforming female students. To address this disparity, it is recommended that future school feeding programs implement gender-sensitive interventions. These could include targeted support for female students, such as mentoring, academic tutoring, and awareness campaigns to encourage girls' engagement and persistence in school.

2. **Expand and Sustain School Feeding Programs:** The positive effects on academic performance, enrollment, and retention underscore the importance of sustaining and expanding school feeding programs. It is recommended that the government and educational authorities prioritize the continued funding and scaling up of these programs, particularly in urban areas like Addis Ababa, where enrollment stability is critical. Efforts should be made to ensure that school feeding is implemented consistently across all schools and not disrupted by external factors such as pandemics or budgetary constraints.
3. **Focus on Long-Term Monitoring and Evaluation:** Although this study demonstrates the positive effects of school feeding programs, it is important to continue monitoring and evaluating their long-term impact. Regular assessments should be conducted to track the sustainability of the improvements in academic performance, dropout rates, and repetition. This would provide crucial data for making adjustments to the program, ensuring that it remains effective and adapts to changing educational and social contexts.
4. **Address Contextual and Implementation Challenges:** While the school feeding program has shown significant benefits, the study also highlights the

potential challenges related to its implementation, such as financial constraints (e.g., 22 Birr per day per student which is insufficient) or logistical issues in urban settings. It is recommended that further research explore these challenges and identify strategies to overcome them. Local governments, communities, and schools should collaborate closely to ensure efficient delivery and adequate funding for the program. Additionally, considering the contribution of external factors like the COVID-19 pandemic, contingency plans should be developed to ensure the program's continuity during crises.

5. **Invest in Supporting Academic Outcomes Beyond Feeding:** While school feeding has been shown to improve academic performance, it is important to recognize that feeding alone cannot address all the factors influencing student success. Therefore, it is recommended that school feeding programs be integrated with broader educational reforms. This could include enhancing teaching quality, providing additional academic resources, and implementing psychosocial support services to address factors like stress or low motivation that can affect student achievement.
6. **Promote Community Involvement and Stakeholder Engagement:** The success of school feeding programs is often linked to the support and active involvement of local communities. It is recommended that schools engage parents, local businesses, and other community stakeholders in the planning and implementation of school feeding programs. This would not only ensure a more sustainable and effective program but also create a sense of shared responsibility for students' well-being and academic success.

7. **Further Research on Long-Term Gender and Age-Specific Effects:** Given the findings on gender disparities and the contribution of age to academic performance, further research should focus on understanding the specific needs and challenges faced by different student demographics. Studies could explore how school feeding programs can be tailored to address the cognitive, social, and emotional needs of students based on their gender, age, and socio-economic status using new research models and study designs, likewise quasi-experimental designs and others.

By implementing these recommendations, stakeholders can optimize the effectiveness of school feeding programs, ensuring a provision of long-term educational benefits for all students, particularly in urban areas like Addis Ababa. These steps will contribute to reducing educational disparities, improving academic outcomes, and fostering better equity in education.

References

Abiy Yohannes (2017), *The effect of School Feeding Program on the school performance of primary public school children in Arada Sub City, Addis Ababa*, Unpublished MA thesis, AAU

Adelman, S. G.-L. (2019). School feeding reduces anemia prevalence in adolescent girls and other vulnerable household members in a cluster randomized controlled trial in Uganda. *The Journal of Nutrition, 149*(4), 659–666. https://doi.org/10.1093/jn/nxz001

Adelman, S. (2009). School feeding programs and academic performance. *Journal of Nutrition Education and Behavior, 41*(2), 1-4. https://doi.org/10.1016/j.jneb.2008.09.003

Ahmed, A. (2004). The impact of school feeding programs on school attendance and academic performance in developing countries. *The International Food Policy Research Institute*.

Aliu, M. & Fawzia, S.(2014). Assessing Ghana School Feeding Programme on the Enrollment of Beneficiary Schools in the Tamale Metropolitan Assembly of Northern Ghana. *International Journal of Economics, Commerce and Management,* 2(10), 1-30

Amanuel, G. (2021). Impact of school feeding programs on educational outcomes in Ethiopia: A case study of rural regions. *Journal of Educational Research, 32*(4), 110-124. https://doi.org/10.1056/edures.2021.0032

Assefa, M. (2022). Challenges and impacts of primary school feeding: Implications for selected primary schools in Addis Ababa. *PJERE, 64-76.*

Barro, R. J. (2001). *Education and economic growth*. Harvard University Press.

Bisratemariam. (2018). *The impact of Ye Enat Weg school feeding program on school participation and dietary intake of children in Addis Ababa*. St. Mary's University.

Bouterakos, M., & Bundy, D. A. (2021). School feeding programs and their impact on child health and education outcomes. *Global Health Action, 14*(1), 1-13. https://doi.org/10.1080/16549716.2021.1923839

Chepkwony, D., Kariuki, J., & Kosgei, S. (2013). Impact of school feeding programs on cognitive and academic performance of students. *Journal of Educational Psychology, 51*(3), 200-208.

Dayour, F. (2015). Effect of the National School Feeding Programme on pupils' enrolment, attendance, and retention: A case study of Nyoglo of the Savelugu-Nantong Municipality, Ghana. *Canadian Journal of Behavioural Science, 341-353.*

Destaw, A., Tesfaye, A., & Kiros, A. (2021). Impact of school feeding programs on school enrollment and retention rates in Ethiopia: A case study of rural areas. *Journal of African Education and Development, 21*(3), 55-67. https://doi.org/10.1016/j.jaed.2022.05.008

Destaw, Z., Wencheko, E., Kidane, S., Endale, M., Challa, Y., Tiruneh, M., Tamrat, M., Samson, H., Shaleka, D., & Ashenafi, M. (2021). Impact of school meals on educational outcomes in Addis Ababa, Ethiopia. *Public Health Nutrition, 25*(9), 2614–2624. https://doi.org/10.1017/s1368980022000799

Ethiopian Monitor. (2020, January 25). Addis Ababa to set up agency to run free meal program. *https://ethiopianmonitor.com/2020/01/25/addis-ababa-to-set-up-agency-to-run-free-meal*

Gosheme, G. (2020). *Assessment of the implementation of the school feeding program in selected primary schools of Addis Ababa* [Unpublished master's thesis, Addis Ababa University].

Kazianga, H. (2009). The impact of school feeding programs on school enrollment and gender equity in rural Burkina Faso. *Food Security, 1*(3), 201-215. https://doi.org/10.1007/s12571-009-0009-1

Lochner, L. (2011). The economics of crime and punishment. In J. H. Abowd & A. B. Krueger (Eds.), *The economics of crime* (pp. 1-30). Princeton University Press.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396. https://doi.org/10.1037/h0054346

Meyers, A., Jackson, A., & Ghirardi, L. (2013). The impact of school feeding programs on educational outcomes in developing countries. *Educational Researcher, 44*(5), 294-304.

MOE. (2012). *National school health and nutrition strategy*. Ministry of Education.

MoE. (2018, July). *Ethiopian Education Development Roadmap (2018-2030).* Education Strategy Center (ESC).

Psacharopoulos, G., & Patrinos, H. A. (2018). Returns to investment in education: A decennial review of the global literature. *Education Economics, 26*(5), 1-16.

Skinner, B. F. (1953). *Science and human behavior*. Free Press.

The Global Food Banking Network. (2022, March 1).Developing a School Feeding Program: *https://www.foodbanking.org/resources/developing-a-school-feeding-program/*. Retrieved from https://www.foodbanking.org/resources/developing-a-school-feeding-program/

WFP. (2018). *Homegrown school feeding resource framework synopsis*. FAO.

WFP. (2020). A chance for every schoolchild: Partnering to scale up school health and nutrition for human capital, WFP School Feeding Strategy 2020–2030. World Food Programme.

WFP. (2023, March 21). *School meals*. Retrieved from https://www.wfp.org/school-meals.

Yirga, A. (2020). *School feeding in Addis Ababa: The case of Bole Sub-City*. Addis Ababa University.

Zenebe, M. (2018). School feeding program and its influence on enrollment and attendance in Ethiopia. *African Journal of Educational Development, 10*(2), 45-60. https://doi.org/10.1016/j.ajed.2018.04.005

Ethiopian Journal of Behavioural Studies, October 2025, 8(2), 89-131

Influences of Selected personal and Contextual Factors on Primary School Teachers' Formative Assessment Practices in Sheger City

Gadisa Terefe[1], Tilahun Gidey[2] and Dame Abera[3]

DOI: https://doi.org/10.63990/ejobs.v8i2.12279

Received: 1 December 2024; Accepted: 30 June 2025

Abstract

This study aimed to identify teachers' level of formative assessment practice and examine the main personal and contextual factors that influence this practice. A mixed methods research approach, involving an explanatory sequential design, was employed. A stratified random sampling technique was used to select participants for the survey. Teachers' survey questionnaires, principals' (key informants) interviews, classroom observation, and students' focus group discussion guides were used to gather data. Frequency counts, percentages, and multiple regression were used to analyse the quantitative data. The qualitative data were analysed using the deductive organization of responses from participants into themes, and the two data strands were then logically integrated. Findings showed that teachers' formative assessment practices varied widely. Although most teachers self-reported as proficient or advanced uses of formative assessment, classroom observations indicated mainly limited practices of formative assessment. The discrepancies between self-reported data and observed practices suggest potential overestimation in self-assessments. The major factors hampering a successful formative assessment practice in primary schools are teachers' low level of understanding of the strategies of formative assessment, minimal support from school leaders, the school's tendency to promote the summative assessment type, large class size, teachers teaching subjects they were not trained for or not adequately trained for, and the absence of instructional materials (including textbooks). Implications for practice and policies in the area of formative assessment were discussed.

Keywords: Formative assessment, assessment practice, personal factors, contextual factors, primary school teachers

[1] PhD candidate at School of Psychology, Addis Ababa University, CELS, Ethiopia
[2] Associate Professor at School of Psychology, Addis Ababa University, CELS, Ethiopia
[3] Associate Professor at School of Psychology, Addis Ababa University, CELS, Ethiopia

Introduction

Formative assessment (FA) is a process that teachers and/or students engage in to gather data on student progress and use it to inform decisions for the next lesson plans (Irons, 2008). It can take place at any point during the process of teaching and learning (Cagasan et al., 2020). FA is widely recognized for enhancing student learning and teaching effectiveness (Black & Wiliam, 1998; Brookhart, 2011). It involves gathering evidence to adjust instruction in real time (Irons, 2008).

There are four key FA strategies that characterise it: clarifying learning objectives to students, generating evidence of learning, providing feedback, and learners' self-and-peer assessment (Black & Wiliam, 1998; Brookhart, 2007). In order to gather evidence of student learning and use it to tailor instruction to the needs of specific students or the class as a whole, teachers need to use a variety of assessment techniques, such as questioning, observation, self-assessment, and peer assessment (Black & Wiliam, 2009). Giving students timely, targeted, and useful feedback enables them to recognize their strengths and limitations and modify their learning strategies (Wiliam, 2011). Teachers are required to be competent enough to use FA embedded in the classroom instruction. Several studies have investigated teachers' classroom implementation of FA.

A study by Stiggins (2005) on teachers' use of FA across different grade levels and subject matters revealed varying levels of practice. Some of them greatly implemented it, whereby they frequently used FA strategies to collect information about their students' learning processes and modify teaching, while others had low

practice levels with more reliance on summative tests. Popham (2008) and Ruiz-Primo et al. (2006) also carried out studies that examined how teachers used FAs in their classroom settings. They both found that most teachers practiced FAs on an average basis. Some teachers showed a high level of commitment towards using this method for instruction, consistently applying questioning techniques, self-assessments, and feedback as their guiding principles, whereas for others it was less common, despite some cases involving only minimal application of these strategies (Ruiz-Primo et al., 2006).

In Ethiopia, the recently formulated General Education Curriculum Framework stipulated that classroom assessments must be continuously used to improve instruction (MoE, 2020). It particularly highlighted the need for continuous assessment at the primary school level, with an emphasis on improving students' proficiency in language, mathematics, morality, aesthetics, physical development, and the environment. The ultimate goal is to enhance both student learning and teacher effectiveness. Existing local studies, however, showed a varied extent of FA use. For instance, Yidenek (2018) explored seven grade 9 EFL teachers' integrated approach to classroom assessment practices and found that the teachers used only summative and no formative assessment methods. Dereje et al. (2022), in their study on secondary school EFL teachers' classroom assessment conceptions and practices, reported that teachers who participated in the study used summative assessment tools, although they believed in the positive roles FA could play. Hailay and Abate (2022), on their part, studied assessment for learning practices and challenges and observed that close-ended self-report data showed the presence of FA practices, whereas qualitatively gathered data revealed no formative but only summative assessment uses in the schools. With their

mixed-methods study on the practices of FA in selected secondary schools, Janbo et al. (2020) found that teachers sometimes communicate learning objectives and provide formative feedback. The authors further reported that the teachers varied considerably in their FA practices. Moreover, a study on secondary school science teachers' practice of assessment for learning (Askalemariam, 2015) revealed similar findings with a very low practice of FA. The author also reported that the teachers did not use a variety of FA strategies due to a lack of science resources, a large class size, a shortage of time, inadequate school support, a lack of appropriate professional development activities, a lack of instructional materials, students' and teachers' negative perceptions towards FA, a lack of knowledge and skills about FA, and the large content of courses.

However, all of the above-mentioned local studies, except one study by Sintayehu (2016) conducted at the primary school level in Chagni, addressed teachers' FA practices at the tertiary and secondary education levels. For example, Askalemariam (2015), Dereje et al. (2022), Janbo et al. (2020), and Yidenek (2018) were carried out on classroom assessment practices in the secondary schools of the country.

Successful implementation of FA depends on the existing associated factors that either facilitate or inhibit its practice. The primary factors influencing FA practices that have been extensively studied in the literature fall mostly into two groups: contextual and personal factors (Zi Yan et al., 2021). Research has shown the most common personal factors influencing FA were the teachers' instrumental attitude, their understanding of it, and their teaching experience. The way teachers perceive and embrace FA (i.e., their attitude) greatly affects their utilization of it. According to Ruiz-

Primo and Furtak (2006), teachers who are convinced that FA is vital to improving student learning tend to employ it more often.

In connection with teachers' understanding of FA, research shows that teachers who possess a solid understanding of assessment principles and procedures are more inclined to employ FA regularly (Hattie & Timperly, 2007; Heritage, 2010). To this end, education and training that focus on FA can assist teachers in acquiring the necessary knowledge and skills to effectively use it (Brookhart, 2007; Heritage, 2010).

In addition, teaching experience was also reported by some studies to be associated with FA practice. For instance, Hattie and Timperely (2007), after analysing extensive research, reported that experienced teachers are more able to implement FA effectively using strategies such as explaining learning goals explicitly, providing students with timely feedback based on the achievement of those goals, and promoting intrinsic student motivation and self-regulation.

Researchers have further reported several contextual factors that can affect teachers' FA practices, such as instructional time, workload, assessment policy, class size, and support from leaders. Teachers who perceive that they have less time available used FA less frequently (Hailay & Abate, 2022). There is also an impact of existing curriculum and assessment policies on the mode teachers adopt for FA. For instance, schools that place a higher priority on summative assessments could give FAs less attention (Black & Wiliam, 1998; Ruiz-Primo & Furtak, 2006).

Similarly, class size affects the frequency with which teachers use FA strategies (Ruiz-Primo & Furtak, 2006). That is, in smaller classes (i.e., classes with fewer than

25 students), teachers use techniques such as question and answer, feedback, and peer assessment more frequently, perhaps due to individual involvement and increased opportunity to respond (Garfield & Ben-Zvi, 2007; Ruiz-Primo & Furtak, 2006).

Regarding support for teachers, Black and Wiliam (1998) and Ruiz-Primo and Furtak (2006) reported that teachers who received support from school leaders were more likely to use FA consistently.

This study was guided by Kozma's (2003) three-level model, which explains the factors influencing classroom practice. Kozma proposed three levels of influences on teachers' understanding and adoption of novel classroom instructional practices. In the model, he identified three distinct but interacting levels of contextual factors: micro, meso, and macro, which are believed to explicitly affect teachers' classroom practices.

The immediate classroom context is included in the micro-level factors. A range of effects from the classroom may fall into this category. This could involve the teacher's assessment literacy, the number of pupils, and the students' past success in the subject matter, among other distinctive characteristics of both the teacher and the students. Furthermore, access to in-class technologies and resources, such as boards and other materials that could aid in assessment, could be considered at the classroom level (Kozma, 2003).

The meso-level is made up of elements that directly affect the classroom yet are not located within it. These elements are usually classified as school-level factors. Meso-level elements that are strongly related to the school include, for instance, the school's climate supporting assessment procedures, policies, and assistance from

leadership regarding assessments, and resources for assessments across the entire school. Conversely, the meso-level encompasses a broader conceptual scope than the school alone since it can take into account elements that impact the classroom but are not physically present in it. Parents' demands and community expectations are examples of meso-level influences that are not school-specific (Kozma, 2003).

The macro level is made up of distal factors that do not directly affect the classroom but can indirectly affect the meso-level and the classroom as a result. Education policy at the federal, state, and local levels may be included at the macro-level, depending upon the framework of educational governance. This may also include policies from the school's affiliated social institutions in the case of private and non-governmental schools (e.g., community or religious organizations funding the school) (Kozma, 2003).

Therefore, because the present study mainly focused on examining the nature and extent of influences of various factors on the teachers' FA practices, it was preferred to be underpinned by Kozma's theoretical framework of influencers of teachers' classroom practice. The study sought to develop a comprehensive model of how personal and contextual factors simultaneously influence teachers' FA practice. Knowing the factors that can affect the proper implementation of FA assists teachers and other decision- makers in figuring out things to be improved in order to maximize its effective utilizations.

In Ethiopia, studies that have investigated the factors associated with proper FA practice are scarce. To the researchers' knowledge, Askalemariam (2016) and Hailay

and Abate (2022) are the only two, who have studied factors associated with FA practices. These available scarce studies reported what a few teachers mentioned as factors influencing FA practices, which included lack of resources, large class size, shortage of instructional time, inadequate school support, lack of appropriate professional development activities, students' and teachers' negative perceptions of FA, teachers' lack of knowledge and skills about FA, and the large content of subjects, without considering the relative contribution of these multiple factors that can explain teachers' FA practices (Askalemariam, 2016; Hailay & Abate, 2022). Thus, the present study aimed at examining the practices and challenges associated with FA among teachers in Sheger City.

Overall, this study highlights notable justifications. The justifications emphasise:

Contextual Significance and Timing: This study aligns with the time context and the educational transformations currently taking place in Ethiopia. The Ethiopian Ministry of Education has shown commitment to implementing FAs, as stipulated in the general education curriculum framework. Therefore, it is crucial to examine its current classroom practices.

Existing Research Gaps: The role that FA plays in improving students' learning is being recognised globally. However, there seems to be a dearth of research on this subject within the Ethiopian context at the primary education level. The literature reviewed mainly focused on secondary and higher education institutions, leaving a gap in understanding the primary school-level teachers' practice of FA.

Mixed Methods Approach: The study used a mixed-methods approach to gaining an in-depth insight into the teachers' FA practices. This approach enables the triangulation of information on the subject obtained from surveys, key informant

interviews, classroom observation and students' focus group discussions. This methodology also establishes the credibility of the findings and provides a deeper understanding of the beliefs, challenges, and practices of teachers towards FAs.

Consequences for Educational Stakeholders: The results of the study could have enormous significance for several educational stakeholders, including teachers, educational administrators, and policymakers. By delineating what works in FA, the study may improve teacher training programmes and instructional methods.

Additionally, the findings from this study can be useful for long-term educational planning and policy formulation. This research may also compare the local practice with the best practice globally and offer practical recommendations that promote the development of a framework in support of teachers in the implementation of the FA.

Teacher Empowerment and Professional Growth: Ultimately, the study aims to empower the teacher. It will do so by creating an environment that encourages the professional growth of the teachers through the effective use of FA. The teachers' understanding of the FA strategies will be improved, and they will adopt more student-centred methodologies in their classes. Moreover, the results might promote teamwork among the teachers. They may share the best practices and improve their teaching skills together. This will create a culture of continuous professional growth.

Studying primary school classroom practices, including FA practices, is particularly pertinent as they are the foundation phases of schooling where children begin to further develop and enhance their cognitive and affective capacities for learning new knowledge and skills, thereby establishing a base for future development (DeLuca et al., 2013). The main research questions were:

1. What is the level of FA practice in primary schools?

2. What personal (teachers' instrumental attitudes towards FA, teaching experience, understanding of FA) and contextual (support from school leaders, class size, time constraints, workload, and assessment policy) factors significantly predict teachers' FA practices?

Operational definition of key terms

In this study,

- **FA practice:** refers to levels of teachers' use of FA strategies and principles.
- **Personal Factors:** include teachers' individual traits and characteristics, which vary from person to person that can shape their implementations of FA. E.g., attitude, understanding, experience, etc.
- **Contextual factors:** involve factors that are external to the individual teacher but that have immediate influence upon FA practices – especially factors related to the school itself or its surrounding community. E.g., leaders' support, school policy on assessment, working condition, etc.
- **Instrumental attitude towards FA:** refers to teachers' opinions regarding the importance of FA in the teaching and learning process.
- **Feedback:** It is a comment or piece of information that learners receive from a teacher on the process or product of a learning task.

Methods

The study's questions were addressed using a mixed-methods approach. The main intentions of using a mixed research approach in this study were to deeply explore

teachers' formative assessment practices and the influencing factors, while also enriching quantitative findings with qualitative insights..

The particular mixed research design employed in this study was the explanatory sequential design (QUAN → qual). Surveys of teachers, classroom observation, FGD with selected students, and interviews with key informants (i.e., school principals) were used to gather data. As a result, quantitative data were collected and examined first (via a teacher survey). Subsequently, further data was gathered using key informant interviews, classroom observation and focus group discussions to get more information on teachers' FA practices and associated factors. The two data strands were mixed based on theme breakdowns to present the findings in a clear and understandable manner.

Description of the Study Site

Sheger City is a city that Oromia Regional State has organized by combining the former Sebeta, Burayu, Lega-tafo Lege-dadi, Sululta, and Gelan towns. It covers 160,000 hectares of land, with a reported population size of around 3,000,000. The city has 12 sub-cities and 36 districts (woredas). The city surrounds and is attached in all directions to the country's capital city, Addis Ababa, and hence could be considered an educational and economic centre. The education offices are established at sub-city levels. Sheger City embraces more experienced and qualified teachers with diversified cultures, coming from all directions and outlets to the city in search of a better life and educational opportunities, which may make it an important context for examining the phenomenon under investigation.

Study Participants and Sampling Techniques

Sampling Techniques

First, three sub-cities out of a total of twelve were chosen using the lottery method. These three sub-cities were Gefersa Guje, Gelan Guda, and Sebeta. Fortunately, there are more teachers available in these sub-cities than can be included in the study, and the distribution of teachers within the sub-cities is generally balanced concerning qualifications, gender, experience, and other characteristics. Only government-owned primary schools were included in the study due to resource limitations.

Instead of visiting numerous schools with fewer teachers, the first three schools in each sub-city with the highest number of teachers were selected. The intention was to focus on the larger schools that could accommodate more pupils in order to make the greatest use of the few resources. Within these three sub-cities, there were 858 teachers teaching in 44 primary schools. Thus, 272 was the sample size determined by applying Yamane's (1967) straightforward formula for calculating sample size: n= (N)/ (1+N (e^2)). Stratified random sampling was used to select participants after the sample size was determined. A proportionate allocation of participants was made based on the population size of each sub-city.

Ultimately, a total of 223 teachers (M = 107, F = 113, and 3 lacking gender information) selected by the lottery method from the primary schools in the three sub-cities filled in the questionnaire. Gefersa Guje sub-city accounted for 95 (42.6%) of the teachers who filled out the questionnaire; Sebeta and Gelan Guda sub-cities accounted for 30.5% and 26.9% of the teachers who responded, respectively, as is shown in Table 1.

Overall, the study involved teachers from nine primary schools—three from each sub-city. The elementary schools were located in the following sub-cities: Roge-Game, Haro Jila, and Kaleab from Sebeta; Alemgena, Daleti, and Melka Sebeta from Gelan Guda; and Kolobo, Chorisa, and Ethio-Yugoslav from Gefersa Guje. The teachers' distribution across a range of socio-demographic factors, such as sex, the subjects they teach, and their access to pre-service and in-service training, suggests that the samples appear to be representative of the target population and enables inferences or generalizations about the characteristics of the sample to the target population.

Moreover, the researchers purposefully selected four instructional leaders from four primary schools as key informants to participate in semi-structured interviews, with the aim of obtaining deeper and richer information on the teachers' FA practices. They were chosen because they were close to one of the researchers' homes, which made it easier to make appointments and go to schools, and because the primary schools in those sub-cities work in very similar contexts. Furthermore, to get more data on the FA practices of the teachers, seven classes at three randomly chosen schools were observed in the classroom (three classes at each of the two schools and one class at one school). With the assistance of the principals of each school, the teachers were chosen based on their willingness to be observed. They were teaching different school subjects, including mathematics, environmental science, Afan Oromo, Geda, and Safu. Besides, to gather more data on the teachers' practices of FA and corresponding challenges, two groups of primary school students, each consisting of six members, were selected from one of the primary schools with the help of the school's principal to participate in the FGDs. Accordingly, twelve students participated in the FGD. Of those twelve students, 6 were

female students. More active and mature students who could better express their views on the teachers' FA practices were selected purposefully from among grades 6 to 8.

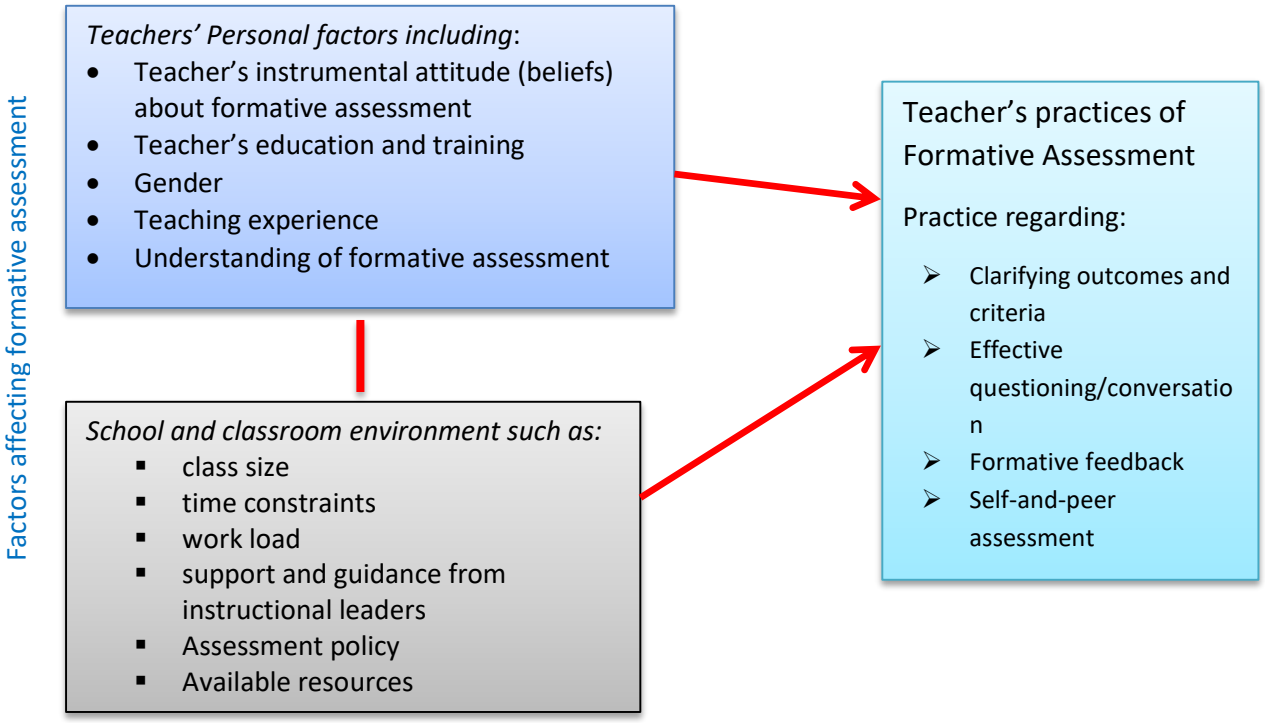
Variables of the Study

In this study, the following predictor and outcome variables were involved.

Predictors: teachers' understanding of FA, teaching experience, weekly workload, average number of students, assessment type required, usefulness of FA, internal school support, adequacy of instructional time.

Dependent Variable: Teachers' practice

Their interrelationships are indicated as follows:



Instruments

The instruments for gathering data for this study were a self-administered questionnaire, a guide for key informant semi-structured interviews, classroom observation checklist, and a focus group discussion guide.

Self-administered Questionnaire

The survey data was gathered via a self-administered questionnaire that contained items about teachers' socio-demographic characteristics, FA practice, and factors that may influence FA practice. The demographic and socio-economic part of the items within the questionnaire were developed based on a review of related literature, while the FA practice measuring items were adapted from scales, namely teachers' formative assessment literacy scale (TFALS) and teachers' FA practice scale (TFAPS).

Teachers' Formative Assessment Literacy Scale (TFALS)

Eight items from the Teachers' Formative Assessment Literacy Scale (TFALS) (Yan & Pastore, 2022a) were used to collect data on teachers' FA practices. This subscale was applied, combined with nine items from Yan and Pastore's teachers' formative assessment practice scale (TFAPS), which was developed in 2022(b).

A normative group of 585 elementary and secondary school teachers in Hong Kong participated in the development and validation of the overall TFALS scale (339 teachers from 9 primary schools and 246 teachers from 5 secondary schools) (Yan & Pastore, 2022a). Good internal consistency (a Cronbach alpha of .88) was reported for the practical dimension of the scale.

Teachers' Formative Assessment Practice Scale (TFAPS)

According to Yan and Pastore (2022b), there were two components of TFAPS: student-directed formative assessment (SdFA) and teacher-directed formative assessment (TdFA). All four of the SdFA items and five of the six TdFA items were employed in this study. Cronbach's alpha values of.75 and.70 for the TdFA and SdFA components, respectively, were reported, indicating satisfactory internal consistency measures (Yan & Pastore, 2022b). A five-point Likert scale was employed for all items, with 1 indicating never used, 2 indicating seldom used, 3 indicating occasionally used, 4 indicating regularly used, and 5 indicating very frequently used. The response levels or categories were also reduced from six to five to avoid overlap of some response options when translated into local languages.

Before collecting the survey data, these scales were translated into Afan Oromo (the language most participants speak). Two translators (an English language teacher from Sebeta College of Teacher Education and one of the researchers) translated the instruments from the source language (English) into Afan Oromo. Another college instructor who frequently taught teacher candidates measurement and evaluation courses conducted back translation. The content validity index (CVI), which was based on ratings by assessment specialists for items clarity and relevance to the issue under study, was used to verify the content validity of the scales.

Content Validity

First, the number of responses from 10 relevant experts who marked each item as "essential" was counted to determine the Content Validity Ratio (CVR) for each item using Lawshe's formula. Since none of the items had a CVR of less than 0.65, they were retained in the instrument in accordance with Lawshe's (1975) decision criteria. The self-report questionnaire had very good content validity in terms of relevance, as indicated by the range of observed CVR values, ranging from .80 to 1, with an overall content validity index (CVI) score of .92. However, in light of the experts' written comments, one of the two duplicate items was eliminated.

Reliability

Using Cronbach's alpha coefficient, the reliability of scales assessing the overall formative assessment practice, teacher-directed formative assessment (TdFA), and student-directed formative assessment (SdFA) was determined. Cronbach's alpha of.887 for the overall practice scale suggests that it has a high degree of internal consistency. The TdFA and SdFA sub-scales each had an alpha value of .826, showing high internal consistency among the items measuring the corresponding factors.

Confirmatory Factor Analysis (CFA)

A confirmatory factor analysis was conducted for the TdFA and SdFA sub-scales, in which the TdFA showed support for the proposed model while the SdFA showed discrepancies. In aggregate, the whole scale can be considered to have two factors applicable in the present study context.

For the TdFA sub-scale, all four fit measures supported the proposed model. The chi-square value was 4.094 (df = 5, N = 223), with p = .536, indicating an acceptable match between the model and observed data. The comparative fit index (CFI) and the normed fit index (NFI) yielded values of 1.00 and .991, respectively, suggesting an excellent fit. Additionally, the root mean square error of approximation (RMSEA) was.000, indicating an excellent fit (Loehlin, 2004).

In contrast, the results did not support the SdFA sub-scale model, highlighting the need for further exploration in future research). A chi square value of 21.301 (N = 223), with a p of =0.000 was obtained, that indicate a model-data non-fit. The CFI and NFI were 0.944 and 0.939, respectively, indicating a marginally poor model-data fit. Similarly, the RMSEA suggested a poor match with a value of 208.

The scoring and interpretation of the FA practice levels of teachers on the survey were conducted using the score categories and criteria proposed and used by Kanjee and Mthembu (2015), as presented in Table 1 below.

Table 1

Formative Assessment Practices: Performance levels, score categories and implications

Performance level	**Formative Assessment**	
	% Score	Implications for practice
Below basic	≤ 34	Teacher is unable to apply FA strategies in the class or use FA to identify learning gaps
Basic	35 – 64	Teacher is able to apply some FA strategies and identify gaps in learning, but is unable or unlikely to address these gaps
Proficient	65 – 79	Teacher is able to effectively apply all FA strategies and use FA to identify and address learning gaps
Advanced	80 -100	Teacher is able to effectively apply and use FA to improve learning and teaching practices

Source: Kanjee and Mthembu, 2015

All items measuring the DV were on a five-point Likert scale, where 1 meant never used, 2 meant seldom used, 3 meant occasionally used, 4 meant regularly used, and 5 meant very frequently used. Hence the scores on the DV ranged from 17 to 85.
The IVs were nominal, where most were dichotomous.

A Semi-structured Interview Guide

Four primary school principals participated in face-to-face, semi-structured interviews to gather data on the factors affecting teachers' FA practice. The purpose was to collect data that can supplement or help in explaining the quantitative data. Field

notes were taken, analysed and then translated to the English language. A minimum of one and a maximum of one hour and a half was spent on the interview. Interviews were held in the vice principals' or principals' offices. For this, an interview guide that addressed the research questions was developed and used. The interview guide specifically addressed if the teachers practised the FA practices in their classrooms and the challenges encountered in this case.

FGD Guide

A focus group discussion guide was developed based on the literature reviewed and was used to collect data from a group of students selected from more active and mature students in grades 6 to 8. A group of participants consisting of six members participated in the FGD. One FGD was conducted aiming at gathering students' views on their teachers' extent of use of FA. The FGD data was believed to supplement the data gathered through the quantitative tools. The student FGD took place for nearly one hour under the shade of a tree. Field notes were collected, analysed, and then translated into English. The guide with eight generic items was created with reference to the basic research questions.

The items in the FGD particularly focused on exploring students' views on the status of teachers' practices of FA.

Observation Checklist

A classroom observation checklist developed by Cagasan et al. (2020) was contextualized and used to collect data on participants' actual practices and experiences of FA. This tool had been developed and used to assess FA practices of teachers in the Philippines. It was thought to help in obtaining an in-depth understanding of teachers'

classroom FA practice. It focuses on exploring how teachers elicit information and use the elicited information to inform and improve student learning (Cagasan et.al, 2020). The Elicit (E) and Use (U) components of FA were the main focuses in developing the observation tool, the Classroom Observation of Formative Assessment (COFA). The elicit (E) component pertains to competencies in eliciting evidence of student learning to determine what students know and can do, while the use (U) component involves using evidence of student learning to move toward the learning goal (Cagasan et al., 2020).

Seven statements of indicative behaviour make up the COFA, each of which focuses on a different component of eliciting or using FA. Each indicative behaviour has a set of practices related to it. Observers indicate whether the indicative behaviours are present during class using COFA. They can also record supporting details for their evaluations or examples of practices in the tool's last column.

Method of Data Analysis

The study employed **descriptive statistics,** such as frequency, percentage, mean, and standard deviation, to describe the participants' background characteristics and the level of FA practices among the teachers.

Multiple regression analysis was applied to analyse relationships that could exist among a set of major factors, the independent variables (IVs) and the dependent variable (DV), as raised in research question 2.

In line with this, to address the effect of common method bias that could arise from the use of the same survey instrument to measure both the independent and the dependent variables, Harman's single factor test was used.

The qualitative data, on the other hand, were analysed using a thematic analysis approach to explore descriptive insights that complement findings from the quantitative data. To this end, the interview, classroom observation and FGD data were read and re-read to identify and label significant statements, structure and group the statements into certain categories or themes, cluster themes into broader categories, and finally assemble the detailed descriptions of the issues in the themes into clusters. Hence, the qualitative data analysis followed a deductive qualitative data analysis approach.

Ethical Considerations

Consent from institutions and individual participants was requested, and oral consents were acquired prior to data collection. Similarly, permission was obtained from the school principal and homeroom teachers regarding the students' FGD participation, in addition to a careful clarification of the purpose of the FGD for the students. The participants were told that they remain anonymous, that every piece of information is treated with the highest confidentiality, and that they have the option to decline participation at any time after data collection has begun. The researchers were also open about who they were and where they came from. In addition to this, participants were initially provided with a comprehensive explanation of the goals and procedures of the research.

Results

Data Screening and Tests of Statistical Assumptions

Before beginning the data analysis, all variables were screened for outliers, missing values, and other statistical assumption violations using SPSS frequencies, explore, and missing value analysis.

Firstly, six univariate outliers were identified and subsequently corrected. The univariate outlier detection was made through the frequency distribution analysis for each variable. Then, three variables—one continuous (FA practice) and two categorical (instrumental attitude toward FA and asking students to assess peers' work)—were found to be candidates for imputation during a screening process carried out to identify missing values. Since the sample mean likely to be the most accurate representation of the population mean, the mean substitution imputation technique was employed for the missing value analysis. Because the missing values in the current study's data were relatively small, this technique was chosen for missing value analysis. Values from the SPSS missing value analysis were used to replace 29 (13%) of the missing values on FA practice. The mean score for FA practice was found to be 69.499. Additionally, the SPSS analysis of missing values was used to replace the missing values for the following: the teacher's attitude toward FA that had 13 missing values (5.83% of the cases) and asking students to assess the work of their peers that had 11 missing values (4.93). The computed means for the attitude and asking students to assess their classmates' work variables were 1.799 and 3.563, respectively.

The FA practice, the scale variable, had a skewness value of .084, which was computed using the Kolmogorov-Smirnov and indicates that the distribution is approximately normal because it is within the allowed limits of +1 and -1. The Shapiro-

Wilk test of .959 for the FA practice also supported the same conclusion. Moreover, a non-significant homogeneity of variance test (P=.763) was observed, indicating the variances of the dependent variable are comparable across the levels of the independent variables.

Demographic, Personal and Contextual characteristics of respondents

Gender, teaching experience, instrumental attitude toward FA, class size, amount of time allocated for curriculum, workload, school policy about assessment, and internal school support were among the socio-demographic, personal and contextual factors considered, as presented in Table 2. Since the samples appear to be representative of the target population, the data in the table supported the possibility of making inferences or generalizations about the target population from the sample characteristics.

Table 2

Demographic, personal and contextual Characteristics of the Study Respondents

Variable	**N**	**%**
Sex		
Male	107	48
Female	113	51.4
Missing	3	1.3
Attitude towards FA		
Unfavourable	47	21.08
Favourable	176	78.92
Average Number of Students in a Class		
More than 50	180	80.7

30 to 50	35	15.7
Less than 30	7	3.1
Missing	1	0.4
Internal School Support		
Not sufficient	160	71.7
Sufficient	58	26.0
Missing	5	2.2
School internal policy		
Encourages Summative Assessment	66	29.6
Encourages Formative Asses	157	70.4
Weekly Workload		
Overloaded	94	42.2
Normal Load Range	126	56.5
Missing	3	1.3
Adequacy of Instructional Time		
Never Sufficient	84	37.7
Almost Sufficient	139	62.3

Teachers' Perceived Practice level of FA

This study used proficiency or competency levels of FA practice as determined by Kanjee and Mthembu (2015). They established four levels: below basic (0–34%), basic (35–64%), proficient (65-79%), and advanced (80–100%) based on FA practice scores. Table 3 presents an overview of FA practice as reported by teachers in the current study. Those in the below basic, basic, proficient, and advanced performance levels accounted for 1.84%, 20.63%, 30.49%, and 47.10%, respectively.

Table 3

Teachers' self-report result on their FA practice

Construct	% score	N of teachers	% of teachers	Implications
Level of practice of FA				
Below Basic	0-34	4	1.84	Failure to understand FA strategies & identify gaps
Basic	35-64	46	20.63	Partial understanding
Proficient	65-79	58	30.49	sufficient understanding
Advanced	80-100	105	47.10	comprehensive understanding

This indicates that the teachers greatly varied in their FA practices. The results also reveal that the majority of teachers have proficient to advanced levels of practice, although it needs caution in interpreting it, as the data used is self-response data, where the teachers may rate high values for their own practice, regardless of their actual FA practice status. Therefore, we used data from selected teachers' classroom observations to further understand their FA practice status.

Classroom observations conducted at selected schools revealed more of unsatisfactory practice of FA. At OPS1 (OPS-for observed primary school), for example, observations were made in Grade 1B for the subject Safu, Grade 2C for A/Oromo, and Grade 4B for Geda. In the Grade 1B Safu class, it was observed that the teacher had poor spelling skills in the medium of instruction, no lesson plan, and no clarification of the learning objectives. She gave no descriptive feedback to students. Eliciting evidence of learning from the whole class and peer- and self-assessment

strategies were also lacking. In grade 2C Afan Oromo and grade 4B Geda classes in the same school and grade 7 Mathematics and grade 8B Afan Oromo classes at OPS2, similar problems were observed: no clarification of learning objectives was made, no feedback was provided, and self- and peer assessment practices were lacking.

However, in the accelerated learning for Africa (ALfA) class observed at OPS2 and a grade 1B Afan Oromo class observed at OPS3, relatively better FA practices were observed, including clarifying the learning objectives, using various techniques (oral questioning, discussion, observation of students' work) to elicit evidence of students' learning, and giving some feedback to students compared to other classes, while there are still areas for improvement, for instance, eliciting evidence from the whole class and fully using the elicited evidence for improvement. The relatively better practice observed in the ALfA class may be due to the more practical teacher training given to facilitators of the ALfA classes by the Geneva Global, Ethiopia.

Influences of personal and contextual factors on FA practice

Standard multiple regression analysis was conducted to examine the predictive relationship between various independent variables and FA practice. The predictors were teaching experience, instrumental attitude towards FA, class size, internal school support, school policy on assessment, workload, adequacy of instructional time, and level of understanding of FA.

As the data for regression analysis were collected through a self-administered questionnaire, both procedural and statistical techniques were employed to avoid a common method bias. Firstly, the researcher assured the respondents that the procedural approach protects anonymity and maintains confidentiality to reducing social

desirability bias. Furthermore, it was emphasized in the instruction that there are no right or wrong answers to reduce acquiescence bias. Secondly, Harman's single factor test (a statistical technique) was conducted to check for the presence of common method bias (CMB). For this test, an exploratory factor analysis was conducted. The result, as indicated in Table 4, indicates that the first extracted factor accounted for only 18.14% of the variance, far less than the 50% or above cut-off contribution suggested for a CMB to exist, indicating the absence of a single factor accounting for a significant amount of variance and hence indicating the absence of a common method bias.

Table 4

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.814	18.141	18.141	1.225	12.249	12.249
2	1.571	15.715	33.856	1.025	10.250	22.499
3	1.246	12.458	46.314	.576	5.759	28.259
4	1.044	10.444	56.757	.378	3.784	32.042
5	.956	9.557	66.314			
6	.847	8.474	74.788			
7	.768	7.676	82.464			
8	.720	7.197	89.662			
9	.567	5.666	95.328			
10	.467	4.672	100.000			

Extraction Method: Principal Axis Factoring.

Results of Harman's single-factor test for common methods bias

As shown in Table 5, FA Understanding, internal school support, and assessment-related school policy (assessment type required) became significant predictors of FA Practice scores, while other variables (teaching experience, instrumental attitudes towards FA, class size, workload, and instructional time) showed non-significant

associations; however, as evidenced by the unstandardized coefficients (Table 5), FA understanding contributed the most to the prediction of FA practice (p<.05), while all the remaining predictors 'contributions were to a lesser extent (p>.05). The FA understanding had a partial correlation square value of .207, indicating that it uniquely contributed nearly 21% to the variance in the teachers' FA practice.

Table 5

Intercorreltions for FA practice and predictor variables (N=214)

Variable	1	2	3	4	5	6	7	8
Teaching experience (1)								
Attitude towards FA (2)	.153*							
Class size (3)	-.122	-.048						
Internal school support (4)	-.236*	.038	.143*					
Assessment type required (5)	.028	.017	-.043	.097				
Weekly workload (6)	-.054	.061	.001	.115	.016			
Adequacy of instructional time (7)	-.251**	-.022	.017	.130	.043	.238**		
T_Understanding (8)	-.031	.187**	.019	.036	.127	-.055	.063	
T_Practice (9)	-.082	.008	.089	.159*	.139*	-.045	.102	.456**

p<.05, * p<.01

Note: T_understanding= teachers' understanding, T_practice=teachers' FA practice

The collinearity diagnostics (Table 6) revealed acceptable levels of multicollinearity, with tolerance values ranging from .799 to .965 (values greater than .01) and conversely variance inflation factors (VIF) ranging from 1.036 to 1.252 (all less than 10).

Table 6

Coefficients and multicollinearity statistics for the regression model

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	36.808	5.728		6.426	.000		
	Teaching experience	-.083	.888	-.006	-.093	.926	.799	1.252
	Instrumental attitude towards FA	-2.439	2.132	-.073	-1.144	.254	.881	1.135
	Class size	1.671	2.037	.050	.820	.413	.964	1.037
	Internal school support	3.359	1.854	.114	1.812	.071	.906	1.104
	Assessment type required	1.502	1.734	.053	.866	.387	.965	1.036
	Weekly workload	-.676	1.650	-.026	-.410	.682	.912	1.097
	Adequacy of time	1.829	1.714	.068	1.067	.287	.881	1.136
	T_Understanding	1.113	.147	.473	7.582	.000	.925	1.081

a. Dependent Variable: T_Practice

Note: T_understanding= teachers' understanding; T_practice= teachers' practice

The R-squared value (shown in Table 7) was .264, signifying that 26.4% of the variance in FA practice was explained by the model. According to Cohen (1988), this constitutes a large effect. Regression results summarized in the ANOVA part of the same table (Table 7) revealed that the overall model was statistically significant, $F(9, 213) = 8.14$, $p < .001$.

Table 7

Regression Model Summary and ANOVA

R	R^2	Adjusted R^2	Std. E.E		Sum of Squares	df	Mean Square	F	Sig.
0.514	0.264	0.232	11.41	Regression	9533.428	9	1059.270	8.14	0.000b
				Residual	26557.773	204	130.185		
				Total	36091.201	213			

Predictors (Constant): teachers' understanding of FA, teaching experience, weekly workload, average number of students, assessment type required, usefulness of FA, internal school support, adequacy of instructional time.

Dependent Variable: Teachers' practice (T_Practice)

Findings from interviews conducted with key informants (with school principals and vice principals) to gather more data on teachers' FA practice and related challenges are summarized as follows.

Reflecting on the attempts to implement some FA techniques, such as oral questioning, work sample presentations, and supporting students in ability groupings, a vice principal from IPS1 (IPS=for interviewed primary school) mentioned factors affecting FA practices such as large class sizes, a lack of understanding of the principles and strategies of FA from the side of the teachers, a shortage of textbooks, and teaching school subjects not trained for (including teaching unrelated subjects). He further stressed that almost all teachers teaching in the Amharic as a medium of instruction program were not trained for that particular curriculum. The newly introduced school

subjects, such as Geda education, Safu education, technical, and career education, and visual and performing arts, did not have trained teachers and were taught by any randomly assigned teachers, he added.

A female vice principal from IPS2 outlined the challenges to FA practices as a large class size of up to 1:120 (which coincided with the observation data), an acute shortage of textbooks, and a shortage of in-service training for teachers. She also suggested ways out, including strengthening CPD, reducing class size, and strengthening internal school support and collaboration.

Similarly, IPS3's principal raised related challenges like a shortage of awareness, an acute shortage of instructional materials, especially textbooks (with an average book-to-student ratio of 1:5), and the presence of students who are unfamiliar with the medium of instruction.

Furthermore, a focus group discussion (FGD) conducted with selected 6^{th}, 7^{th}, and 8th-grade students from one primary school revealed that teachers used various assessment strategies and supported slow learners. Some teachers clarify learning objectives and use self- and peer-assessment methods. A recurring issue noted across data sources was that teachers were often assigned to subjects outside their area of expertise.Furthermore, FGD participants said they did not practically learn IT due to a lack of electric power service and computers.

Discussion

The study reveals significant diversity in teachers' FA techniques, with most teachers self-reporting proficient to advanced levels.

Classroom observation conducted in selected primary schools also revealed a considerable difference in teachers' FA practice, ranging from poor practice (no clarification of the learning intentions and success criteria to students, insufficient elicitation of evidence of learning, absence of feedback given to students, and no activation of students for self- and peer-assessment) to a relatively better practice of FA (implementation of some of the key strategies of FA, except the limitations in the use of elicited evidence to adjust the instruction).

In sum, classroom observations indicated predominantly unsatisfactory FA practices, including failure to clarify learning objectives, lack of formative feedback to students, and minimal use of peer/self-assessment. The present result is consistent with the majority of findings in earlier research, which showed a mixed picture of a) depending on traditional summative assessment practices (Chroinín & Cosgrave, 2013; Hailay & Abate, 2022; Poomoney & Govender, 2020; Sintayehu, 2016; Vlachou, 2018; Wong, 2014) and b) using some of the FA strategies infrequently (Kanjee, 2020; Askalemariam, 2015; Grob et al., 2019; Jambo et al., 2020; Johnson, 2019; Martin et al., 2022; Singh et al., 2022; Tuba & Yıldı, 2018; Vingsle, 2014;). Other research findings, such as those from Wang (2017) (from China) and Tolley, 2022 USA), reported praiseworthy FA practices, which ran counter to the current findings. Moreover, prediction of the teachers' FA practice from teachers' instrumental attitude towards FA, understanding of FA, pre-service training on assessment and evaluation, teaching experience, internal school support, adequacy of instructional time, class size,

assessment policy, and workload indicates a varying degree of contribution of the independent variables listed.

It was found that FA understanding is the most significant predictor of FA practice, while internal school support and adequacy of instructional time are also factors having a relatively higher association with FA practice. However, other variables such as teaching experience, attitude towards FA, and assessment type required showed non-significant associations. In general, 26.4% of the variance in FA practice was explained by the regression model, which indicates a large effect according to Cohen's criteria.

Interviews with school principals and vice principals revealed challenges to FA practices, consisting of large class sizes, in-service training shortages, teaching subjects not trained for, a lack of sufficient knowledge base of FA, and resources (including textbooks). Students' perspectives have also been added through focus group discussions (FGD), which reveals teachers' teaching of subjects they were not skilled in, and a lack of electricity and computers hindering practical IT classes. Therefore, in addition to the factors identified as significantly affecting FA practices (understanding, internal school support, and assessment related school policy) through the quantitative analysis, the qualitative exploration also disclosed further challenges to the implementation of FA.

Several previous study findings are consistent with the findings of the current study. For instance, in Zi Yan et al.'s (2021) systematic review, it was reported that teachers' implementation of FA may differ due to their different levels of understanding to apply FA techniques even with similar support and in the same environment.

Support and encouragement from principals, the school management team, and head teachers were found to be influential factors that motivate teachers to implement FA in previous studies (Brink & Bartz, 2017; Moss & Brookhart, 2019), consistent with the findings of the present study, which identified a considerable impact of internal school support for teachers. The non-significant impact of time constraints on FA implementation identified in the present study disagrees with the results of previous studies (for instance, Crichton & McDaid, 2016), which indicated a significant influence of time constraints on FA practice. Time is a less serious problem in the Sheger City schools, most probably because schools (i.e., teachers) in the city are working with the same learners both in the morning and the afternoon sessions (with no shift), unlike other schools in most parts of Ethiopia that serve students either in the morning or in the afternoon shifts due to a shortage of space, which in turn leads to time constraints.

The findings of the current study about the effect of assessment-related school policy on FA practice align with earlier research evidence which revealed the negative effects of traditional forms of summative (high-stakes) assessment on the teaching and learning process and especially on FA (Shepard, 2000; Wiliam et al., 2004).

Unlike the quantitative (self-response) data analysis findings, which indicated a relatively lower contribution of class size to the teachers' FA practice, the qualitative data analysis revealed that class size was one of the major challenges to FA practice. The finding from the qualitative data is consistent with Tebeje and Abiyu's (2015) and Brown and Gao's (2015), studies which revealed that large student-teacher ratios were practical constraints for teachers to the implementation of FA because of the difficulties

of class management and time. Also, findings from the quantitative self-response data analysis showed that school policy, teachers' instrumental attitude, and teaching experience, as mentioned above, had non-significant relationships with teachers' FA practice. Regarding the influence of teachers' teaching experience on their FA practice, previous studies showed varying findings. For instance, Bol et al. (1998, as cited in Alkharusi, 2011) reported that most experienced teachers indicated the use of some FA strategies more often than the least experienced teachers. On the other hand, Zi Yan et al. (2021) reported that teachers with fewer years of teaching experience had more FAP, explaining that such teachers were more likely to be trained in the latest FAP or more open to experimenting with novel assessment methods, such as FAP. Therefore, further studies need to be conducted to examine the effects that years of teaching experience have on FA practice.

The results of this study about the power of teachers' instrumental attitude towards FA on its implementation contrasted to most previous study reports, which revealed that the more positive instrumental attitude teachers held regarding the desirable consequences of practicing FA, the more willingly they were to implement FA (Brink & Bartz, 2017; Dixon & Haigh, 2009). Likewise, weekly workload was reported to have no impact on teachers' FA practices, consistent with a study by Askalemariam (2015).

Nonetheless, it was noted that teachers' FA practices were significantly influenced by resources (computers, books, and other facilities), which is supported by the findings of Askalemariam's (2015) study on science teachers in secondary schools.

Conclusion and Implications

The findings show that there is a variation among teachers regarding how they practice FA, with most self-reporting as proficient or advanced users. However, classroom observations indicated mainly unsatisfactory practices of FA, such as failure to explain learning objectives, lack of formative feedback to learners, and very minimal use of peer/self-assessment. Discrepancies between self-reported data and observed practices suggest potential overestimation in self-assessments. Some better FA practices (e.g., in ALfA class) were a result of specific teacher training provided by Geneva Global-Ethiopia, which demonstrated the need for teachers' professional development. Therefore, from self-reports, teachers seem to be performing well, but observational data underscore the need for improved training and implementation support to bridge the gap between perceived and actual FA competency.

The findings of this study further reveal that differences examined across socio-demographic factors on FA practices indicated significant differences in practice scores based on factors such as teachers' level of understanding of FA, assessment-related school policy, and support received from leaders. Further exploration of challenges to successful implementation of FA, through key informants' interviews, revealed teachers' low level of understanding of the strategies of FA resulted from shortage of in-service training, a very large class size, teachers were often assigned to subjects outside their training, including unrelated disciplines.

Therefore, the findings suggest that targeted professional development that focuses on improving FA understanding is of paramount importance. More specifically, a critical education and professional development program is of great need for teachers

with a low level of understanding of FA principles and strategies, teachers who have not participated in in-service training, female teachers, and those in schools who mainly value the traditional summative assessment over FA. The specific areas of FA requiring attention are clarification of learning intentions and success criteria; provision of descriptive feedback; peer- and self-assessment strategies; and use of elicited evidence.

Overall, teacher preparation programs ought to support the mental shift in teachers and provide them with the tools they need, enabling them to view FA as an integral part of their regular instruction rather than an extra task that takes up valuable teaching time. Creating significant links between formative and summative evaluation should be a primary priority of teacher education colleges. Furthermore, intensive internal support from the instructional leaders and collaboration among teachers are notably crucial.

Above all, all stakeholders (school principals, teachers, parents, respective educational offices, regional education bureau (REB), federal ministry of education (MoE), and development partners) must collaborate to create a conducive environment that is supportive of FA by addressing challenges to effective FA implementation identified in the study (issues of class size, teachers teaching subjects they were not trained for, the absence of instructional materials—including textbooks, and barriers in the instructional language for the learners) and thereby enhance students' learning.

Declarations of Conflict of Interest Statement

No competing interests were disclosed'

References

Alkharusi, H. (2011). Teachers' classroom assessment skills: Influence of gender, subject area, grade level, teaching experience and in-service assessment training. *Journal of Turkish Science Education*, *8*(2), 39-48. Retrieved from https://www.researchgate.net/publication/256353761

Askalemaiam, A. (2015). *Teachers' practices of assessment for learning in science education at East Gojjam preparatory schools, Amhara Regional State, Ethiopia* [Unpublished doctoral thesis, University of South Africa].

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy and Practice*, *5*(1), 7-74.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the Black Box: Assessment for learning in the classroom. *Phi Delta Kappan*, *86*(1), 8-21. https://doi.org/10.1177/003172170408600105

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, *21*(1), 5-31. https://doi.org/10.1007/s11092-008-9068-5

Bol, L., Stephenson, P. L., O'Connell, A. A., & Nunnery, J. A. (1998). Influence of experience, grade level, and subject area on teachers' assessment practices. *The Journal of Educational Research, 91*(6), 323-330. https://www.jstor.org/stable/27542176

Brink, M., & Bartz, D. E. (2017). Effective use of formative assessment by high school teachers. *Practical Assessment, Research and Evaluation, 22,* 1-10. https://doi.org/10.7275/p86s-zc41

Brookhart, S. M. (2007). Expanding views about formative classroom assessment: A review of the literature. *Educational Measurement: Issues and Practice, 26*(4), 3-13.

Brookhart, S. M. (2011). Educational Assessment Knowledge and Skills for Teachers. *Educational Measurement*: *Issues and Practice, 30* (1), 3-12. https://doi.org/10.1111/j.1745-3992.2010.00195.x

Brown, T., & Gao, L. (2015). Chinese teachers' conceptions of assessment for and of learning: Six competing and complementary purposes. *Cogent Education, 2*(1), 993836, 10.1080/2331186X.2014.993836

Cagasan, L., Care, E., Robertson, P., & Luo, R. (2020). Developing a formative assessment protocol to examine formative assessment practices in the

Philippines. *Educational Assessment, 25*(1), 1-15. https://doi.org/10.1080/10627197.2020.1766960

Carla, C., & Johnson, C. (2019). A Study of the Implementation of Formative Assessment in Three Large Urban Districts. *American Educational Research Journal*, (56)6, 2408-2438. https://doi.org/10.3102/0002831219842347

Chróinín, D., & Cosgrave, C. (2013). Implementing formative assessment in primary physical education: Teacher perspectives and experiences. *Physical Education and Sport Pedagogy, 18*(2), 219–233. https://doi.org/10.1080/17408989.2012.666787

Crichton, H., & Mcdaid, A. (2016) Learning intentions and success criteria: learners' and teachers' views. *Curriculum Journal, 27*(2), 190- 203.

DeLuca, C., Tupper, J., & LaPointe-McEwan, D. (2013). Pedagogies for pre-service assessment in education: Supporting teacher candidates' assessment literacy development. *The Teacher Educator, 48*(2), 128–142. https:// 10.1080/08878730.2012.760024

Dereje, B., Dereje, T., & Jeylan, W. (2022). Ethiopian Secondary School EFL Teachers'Classroom Assessment Conceptions and Practices from Activity Theory Perspectives. *East African Journal of Education Studies, 5*(1), 105-116. https://doi.org/10.37284/eajes.5.1.574

Dixon, H., & Haigh, M. (2009). Changing mathematics teachers' conceptions of assessment and feedback. *Teacher Development, 13*(2), 173-186.

Garfield, J., & Ben-Zvi, D. (2007). How students learn statistics revisited: A current review of research on teaching and learning statistics. *International Statistical Review, 75*(3), 372-396.

Grob, R., Holmeier K. & Labudde P. (2019). Analysing formal formative assessment activities in the context of inquiry at primary and upper secondary schools in Switzerland. *International Journal of Science Education, 43*(3). https://doi.org/10.1080/09500693.2019.1663453

Hailay, T., & Abate, D. (2022). Assessment for learning strategies: Amharic Language Teachers' Practice and Challenges in Ethiopia. *International Journal of Language Education, 6*(1), 42-50. https://doi.org/10.17507/jltr.0901.06

Hattie, J. & Timperely, H. (2007). The Power of Feedback. *Review of Educational Research, 77*(1), 81-112, https://doi.org/10.3102/003465430298487

Heritage, M. (2010). *Formative assessment and next-generation assessment systems: Are we losing an opportunity*? Council of Chief State School Officers. (pp1-23)

Irons, A. (2008). Enhancing learning through formative assessment and feedback. Routledge.

Janbo, G., Wudu M., & Mekuria A. (2020). The practice of formative assessment in Ethiopian secondary school curriculum implementation: The case of West Arsi zone secondary schools. *Educational Assessment, 25* (4), 262-279. *https://doi.org/10.1080/10627197.2020.1766958*

Kanjee, A., & Mthembu, T. (2015). Assessment literacy of foundation phase teachers: An exploratory study. *South African Journal of Childhood Education, 5*(1), 142-168.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology, 28*(4), 563-575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Leigh, M. T. (2022). *Valuing Teachers' Evaluative Thinking*: *The Role of Teacher Knowledge and Practice in Formative Assessment.* Research Issues in Contemporary Education, 4(1), 21-42. University of Louisiana at Lafayette. https://files.eric.ed.gov/fulltext/EJ1244681.pdf

Kozma, R. (2003). Technology and learning: Supporting the development of the knowledge society. In R. K. Sawyer (Ed.), *Cambridge handbook of the learning sciences* (pp. 77–91). Cambridge University Press.

Martin, A. B., Smith, C. D., & Johnson, E. F. (2022). Examining Elementary School Teachers' Perceptions of and Use of Formative Assessment in Mathematics. *International Electronic Journal of Elementary Education, 14*(3), 417-425. https://doi.org/10.26822/iejee.2022.253

Ministry of Education. (2020). *General education curriculum Framework..*

Moss, C. M., & Brookhart, S. M. (2019). *Advancing formative assessment in every classroom:* A guide for instructional leaders (2nd ed.). ASCD.

Ottevanger, W., Akker, J. v., & Feiter, L. d. (2007). *Developing Science, Mathematics and ICT Education in Sub-Saharan Africa: Patterns and Promising Practices.* World Bank.

Poomoney, S., & Govender, K. (2020). Insights into Grade 2 teachers' enactment of formative assessment in mathematics in selected priority schools in Gauteng. *South African Journal of Education, 40* (2), https://doi.org/10.15700/saje.v40ns2a1780

Popham, W. J. (2008). *Transformative assessment*. ASCD.

Ruiz-Primo, M.A. (2006). Informal formative assessment and scientific inquiry: Exploring teachers' practices and student learning. *Educational Assessment, 11*(3-4), 205-235.

Shepard, L. A. (2000). *The Role of Classroom Assessment in Teaching and Learning.* The Regents of the University of California.

Singh, C. K. S., Ahmad, R., & Thompson, L. (2022). Exploring ESL teachers' alternativeassessment strategies and practices in the classroom. *Journal of Language and Linguistic Studies, 18*(1), 411-426. https://doi.org/10.52462/jlls.191

Sintayehu, T. (2016). The Practice of Continuous Assessment in Primary Schools: The Case of Chagni, Ethiopia. *Journal of Education and Practice, 7*(31), 24-30.

Stiggins, R. (2002). Assessment Crisis: The Absence of Assessment for Learning. *Phi Delta Kappan Internationa, 83*(10), 758-765. https://doi.org/10.1177/003172170208301010

Tebeje, M., & Abiyu, A. (2015). Improving the Implementation of Formative Continuous Assessment at College of Agriculture, Wolaita Sodo University, Ethiopia. *Journal of Education and Practice,6* (19), 24-28.

Tuba, A. E., & Hülya Y. (2018). Classroom Assessment Practices of Teachers in Turkey. *International Journal of Instruction, 11*(3). 587-602. https://doi.org/10.12973/iji.2018.11340a

Vingsle, C. (2014). *Formative assessment: Teacher knowledge and skills to make it happen*. Umea University.

Vlachou, M. (2018). Classroom assessment practices in middle school science lessons: A study among Greek science teachers. *Cogent Education, 5*(1), Article 1455633. https://doi.org/10.1080/2331186X.2018.1455633

Wang, X. (2017). A Chinese EFL teacher's classroom assessment practices. *Language Assessment Quarterly, 14*(4), 312-327. https://doi.org/10.1080/15434303.2017.1393819

Wiliam, D. (2011). *Embedded formative assessment*. Bloomington, in: Solution Tree Press.

Wiliam, D., Lee, C., Harrison, C., & Black, P. (2004). Teachers Developing Assessment for Learning: Impact on Students achievement. *Assessment in Education: principles, policy and practice, 11*(1), 49-65.10.1080/0969594042000208994

Wong, M. W. Y. (2014). Assessment for learning, a decade on: Self-reported assessment practices of secondary school music teachers in Hong Kong. *International Journal of Music Education, 32*(1), 70–83. https://doi.org/10.1177/0255761413504706

Yan, Z., & Pastore, S. (2022a). Are teachers literate in formative assessment? The development and validation of the Teacher Formative Assessment Literacy Scale. *Studies in Educational Evaluation*, Article 101183. https://doi.org/10.1016/j.stueduc.2022.101183

Yan, Z., & Pastore, S. (2022a). Are teachers literate in formative assessment? The development and validation of the Teacher Formative Assessment Literacy Scale. *Studies in Educational Evaluation.* https://doi.org/10.1016/j.stueduc.2022.101183101183

Yan, Z., & Pastore, S. (2022b). Assessing teachers' strategies in formative assessment: The Teacher Formative Assessment Practice Scale. *Journal of Psychoeducational Assessment*. Advance online publication. https://doi.org/10.1177/07342829221075121

Yidenek, T. (2018). Exploring EFL Teachers' an Integrated Approach to Classroom Assessment Practices: A secondary School in Focus (Unpublished master's thesis). Debre Berhan University.

Zi, Y., Cheng, Y., & Wong, K. (2021). Assessment for learning in the Hong Kong assessment reform: A case of policy borrowing. *Studies in Educational valuation*, 68, 100985. *https://doi.org/10.1016/j.stueduc.2021.100985*

Zi, Y., Chiu, M., & Cheng, K. C. (2022). A systematic review on factors influencing teachers' intentions and implementations regarding formative assessment. *Assessment in Education: Principles, Policy & Practice*. Advance online publication. https://doi.org/10.1080/0969594X.2021.1884042

Ethiopian Journal of Behavioral Studies, October 2025, 8(2), 132-183

Exploring Challenges and Opportunities in Effective Curriculum Implementation Process at Ethiopian Defense University

Tesema[1] Mamo and Enguday Ademe[2]

DOI: https://doi.org/10.63990/ejobs.v8i2.12280

Received: 20 December 2024; Accepted: 11 June 2025

Abstract

This study explores the challenges and opportunities of curriculum implementation at Ethiopian Defense University (EDU). To this end, the article uses a qualitative case study design, collecting the primary data using semi-structured interviews from 4 commandants, 3 college deans, 1 education quality assurance director, and 6 participants in focus group discussions from department heads and quality assurance experts. We analyzed the data using both thematic and narrative approaches. We extracted three themes from the data. The themes were challenges, opportunities, and strategies of curriculum implementation. The findings showed that there were substantial challenges in the curriculum implementation, including a lack of continuous professional development, lack of resource, constraints on technology, lack of adequate and resistance to pedagogical change. Despite these primary challenges, the research identified substantial opportunity for EDU to implement the curriculum successfully. These prospects include practical training, military alliances that provide access to contemporary technology, advancements in areas such as drone technology, and focused education in leadership, military healthcare, and professional ethics. Using these opportunities, EDU can get a better chance to align its curriculum with the demands of the defense sector and enhance learners' keenness for military duties. Thus, it was possible to conclude that the EDU was doing a respectable job of implementing the curriculum at the time of this study. However, this study concludes that there is still room for improvement provided the challenges impeding the successful implementation of the curriculum in the EDU addressed. The study recommended individualized training programs, a conducive work environment, and staff engagement in the decision- making process to inspire the implementation of innovative teaching methods as strategies to solve these challenges. In addition, focusing on the importance of continuous professional development and upholding a culture of collaborating, especially in the field of military education, thus, this study reinforces strategies for changing how educational institutions operate. Therefore, it suggests that EDU needs to invest in new technologies, set explicit ICT policies, and involve military stakeholders to establish strategic partnerships.. By doing this, the institution can enhance the quality of education and ensure that its curriculum meets its needs.

Keywords: Challenges, curriculum, implementation, opportunities, defense

[1] PhD candidate in Curriculum and Instruction. AAU. Email-nebiytesema6@gmail.com
[2] Professor of Curriculum Studies, College of Education and Language Studies, AAU. Email- engudaya@yahoo.com

1.Introduction

Globally Higher education Institutions (HEIs) face challenges in relation to curriculum implementation due to the dynamic educational paradigm and the highly increasing demands of work force relevant skills (Gryson et al., 2019). To overcome these challenges, HEIs are reforming their curriculum to place skill based learning and digital literacy first, particularly in North America and Europe (Illahibaccus- Sona & Abdullah, 2024). The changes provide flexible curriculum frame work that include real world scenario enhancing students capabilities in critical thinking and problem solving.

Grayson et al. (2019) report that higher education institutions in Africa face significant challenges, such as inadequate professional training, severe resource limitations, and a failure to integrate indigenous systems of knowledge.

Scholars aim to address global challenges by integrating indigenous knowledge and developing contextually relevant curriculum (Lin et al., 2022). Inadequate funding and lack of technological infrastructure still hinder the effective implementation of curricula (Grayson et al., 2019).

The fastest growth of higher education in Ethiopia has impeded the implementation of curricula to address the requirements of increasing enrollments and national development objectives (Tadesse & Melese, 2016). Armed Forces curricula must align with national security objectives, necessitating a balance between theoretical education and practical training (Fekade, 2012; Haile & Mekonnen, 2024). To confirm curricula remain aligned with evolving defense needs, it is essential to engage important stakeholders, including military leaders, educators, legislators, and industry experts (Haile & Mekonnen, 2024).

Even with constant changes, problems like institutional resistance and lack of resources make it difficult to go forward. To resolve these issues, we need to put funds into things like working together in business, building up technological facilities, and educating teachers (Mirzakhmadovna, 2023). Ultimately, improving the curriculum at military institutions will enhance education and equip personnel with the tools necessary to achieve national security objectives.

A major concern in HEIs is students' academic preparedness, as many lack the foundational competencies required for advanced coursework (Tadesse & Melese, 2016).The decline of academic readiness, demonstrated through regular assessment, puts faculty members who want to try innovative teaching techniques at a disadvantage, and it is often worsened by a lack of professional development opportunities and thick workloads (Fasinro, 2024; Haque & David, 2022; Riad, 2022). A lack of instructional resources means programs do not develop spaces where curriculum can be experienced (Onyango & Rupia, 2022).

From a policy perspective, there is still concern about relevance and the gap between curriculum and implementation (MoE, 2018). Too often, programs are designed without regard for industry needs, resulting in an incongruence between what students are taught and the employment opportunities available. Among other constraints, institutions face financial constraints and a lack of infrastructure that hinder curriculum development and implementation (Tortola, 2024). Job-embedded professional development and technology can be used to enhance curriculum delivery and help make it relevant to students (Langrafe et al., 2020; Solikhah et al., 2021).

Curriculum implementation is important for officer training, leadership development, and readiness for national security (Haile and Mekonnen, 2024). If properly structured, a

curriculum will ensure soldiers possess the skills and proficiency to respond to modern security scenarios (Barreiros dos Santos et al., 2019). Further, military education develops tactical understanding and enables analytical decision-making, which drives operational effectiveness to address new defense challenges (Tortola, 2024). Hence, it is paramount that curricula reflect changing security challenges and how the military responds through operational concepts. To improve curriculum implementation at EDU, it is necessary to identify the challenges and opportunities that surround military education, in the hopes of enhancing both the academic program and the military training element as well (MoND, 2024). Effective curriculum reform hinges on faculty training, adequate resources, and institutional support. Without sufficient preparation and professional development, curriculum changes may be implemented inconsistently, reducing their effectiveness (Barreiros dos Santos et al., 2019; Haque & David, 2022; Ibeh, 2022). Implementing practical strategies to address these challenges is vital for strengthening educational competency.

Active engagement of stakeholders is crucial for military higher education institutions, like EDU, to ensure that curricula meet military demands and offer students the skills they need. (Bishaw & Melesse, 2019; Haile & Mekonnen, 2024). To achieve this goal, the Ministry of National Defense (MoND) provided training sessions as part of the recent changes to the curriculum at EDU (MoE, 2018; MoND, 2024). But instructors said they were not ready because of a lack of resources and unclear curricular objectives (Haile and Mekonnen 2024).

Lack of continuous professional development restricts instructors' capacity to implement innovative teaching methods in military higher education (Haile and Mekonnen 2024). According to Darling-Hammond et al. (2017), effective curriculum changes require

up-to- date resources and intensive training to equip instructors with the necessary skills. Staff getting ready and understanding how to teach are essential for effective implementation of military curriculum (Ibeh, 2022; Rudhumbu, 2018). Correcting the gaps in current training is vital for keeping the quality of education high and making sure that instructors can adapt to new pedagogical trends.

Many challenges hinder effective curriculum implementation at EDU, such as inadequate training for professionals, limited funding, and resistance toward change (Barreiros dos Santos et al., 2019; EDU, 2021; Haile & Mekonnen, 2024). Resistance to change among stakeholders frequently arises from their views, convictions, and apprehensions regarding potential increases in workload or decreases in efficiency (Ibeh, 2022). According to Yılmaz and Kılıçoğlu (2013), resistance to curriculum change may arise from insufficient support, uncertainty, or resistance to accepting established practices.

Limited funding, lack of infrastructure, and insufficient teaching materials significantly affect the implementation of the curriculum. Budget constraints and access to teaching materials minimize the quality of education (Fasinro, 2024; Haque & David, 2022).

Rudhumbu (2015). Rudhumbu (2015) A focused, effective curriculum requires adequate time, resources, and administrative support. Instructors must access up-to-date information and receive proper training to effectively teach in an engaging manner.
Addressing these gaps is essential for strengthening curriculum implementation and optimizing educational outcomes at EDU.

EDU's antiquated facilities often obstruct effective teaching and learning by failing to meet curricular standards. Trianziani (2020) cited inadequate training for educators, insufficient funding, and ineffective institutional support as the main impediments to

curriculum implementation. Siregar and Aziza (2021) suggest that infrastructure is crucial for establishing an ideal learning environment. EDU (2021) indicates that deficiencies in infrastructure and resources exacerbate the challenges of curriculum implementation. Insufficient financing and a lack of necessary equipment restrict possibilities for practical training and actual learning.

To adequately equip instructors for curricular modifications, educational institutions should offer peer support, mentoring, and ongoing professional development. Research indicates that educators are vital in implementing new curriculum, and continuous training is essential (Chapman, 2019; Karakuş, 2021). Competent educators are more prepared to address curriculum-related difficulties. EDU (2021) indicates that insufficient professional development significantly hinders curriculum implementation. Although faculty experience enhances instructional quality, obsolete teaching methodologies and insufficient understanding of advancements in military education may stem from poor training. Ongoing professional development strengthens instructional abilities and cultivates a culture of creativity and adaptation (Solikhah et al., 2022). By emphasizing faculty development, EDU can enhance the quality of its educational programs and provide more advantages to both teachers and students.

The challenges in implementing curricula in nonmilitary higher education have been the subject of numerous studies. Key challenges were noted by Shilling (2013), including the lack of necessary supplies, lab equipment, and instructional materials. Haque and David (2022) looked at obstacles in educational environments and offered administrators and teachers solutions. These studies highlighted how effective curriculum delivery requires well-resourced learning environments.

Previous studies, such as Fekede's (2012), have highlighted issues in Ethiopian military

education, including a lack of qualified faculty and minimal stakeholder involvement. Fekade's research does not, however, fully address more significant systemic issues at EDU. This study expands on the findings of Fekade (2012) and Haile and Mekonnen (2024) by looking at curriculum implementation from the viewpoints of several stakeholders, such as quality assurance specialists and university leadership. In contrast to earlier studies, it also highlighted how crucial industry collaborations and technology integration are to military education (Olamo et al., 2019; Tadese & Melese, 2016). To improve curriculum implementation and maximize educational outcomes at EDU, these gaps must be filled.

However, to the best of the researchers' knowledge, no studies have examined these challenges, like lack of professional development training, inadequate funding and resource constraints, excessive workload for administrative leaders, and resistance to change among educators in the context of EDU. The present study aims to fill the gap that hinders effective curriculum reform and alignment with contemporary military and academic standards by examining the challenges in curriculum implementation at EDU, seeking to answer the following questions:

1. What are the primary challenges encountered during the curriculum implementation process at EDU?
2. What opportunities exist within EDU's curriculum implementation framework?
3. How does EDU implement strategies to enhance the effectiveness of its curriculum delivery?

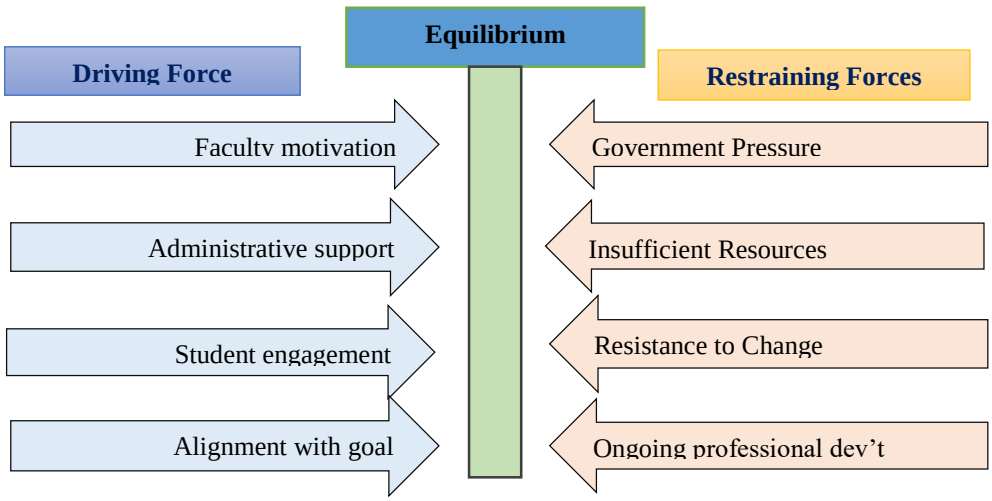
2. Theoretical Framework and Literature Review

The implementation of a curriculum is a multifaceted and dynamic process shaped by various internal and external factors. Effective curriculum implementation in military

higher education requires a balance among institutional demands, resource allocation, leadership engagement, and resistance to change (Fekade, 2012; Haile & Mekonnen, 2024). The study utilizes Kurt Lewin's (1947) Force- Field Theory as a theoretical framework to examine the driving and restraining factors affecting curricular execution. This theory asserted that organizational and human behavior is influenced by the interplay of driving and restraining factors, which can encourage or hinder change (Fasinro, 2024; Yılmaz & Kılıcoğlu, 2013). Driving factors enhance motivation and promote change, whereas restraining forces create opposition and hinder progress. Effective curriculum implementation requires an intricate approach that balances these conflicting factors, ultimately promoting lasting changes in education (Good, 2015). A structural diagram (Figure 1) illustrates the equilibrium between driving and restraining forces in the application of Lewin's Force-Field Theory within military higher education curriculum implementation. This visual tool elucidates how these conflicting components influence the curriculum change process and eventual transformation.

Figure 1.

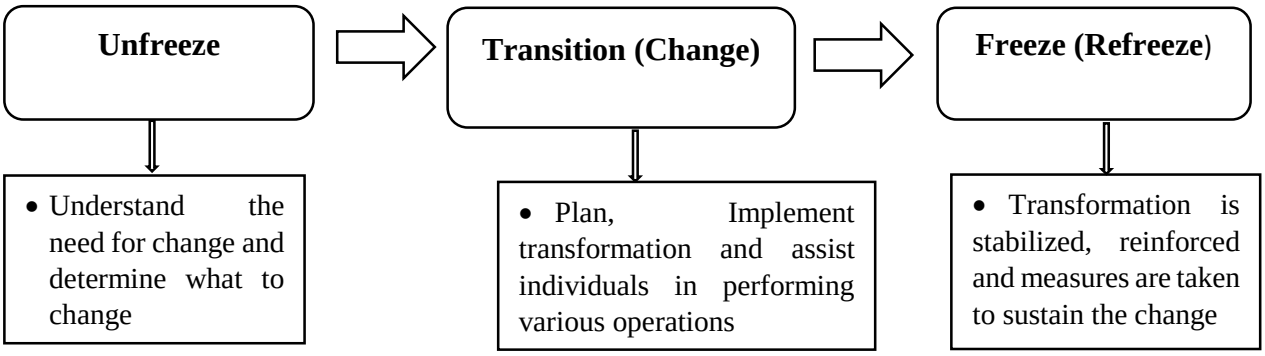
Forces driving and opposing change (Riley, 2015, pp. 1-3)



The Force-field theory of change demonstrates how crucial it is to have both motivating and limiting factors to get schools to implement better curricula; the Force-field theory of change demonstrates how crucial it is to have both motivating and limiting factors (Lewin, 1947; Tadesse & Melese, 2016). Student involvement, administrative support, teacher zeal, and alignment with learning objectives are motivating factors. Financial incentives, competition, and government pressure are examples of restraining forces. Implementing change or an effective curriculum can be hampered by restraining pressures like resistance to change, a lack of resources, and the need for continual professional development (Loveline, 2020). The Force-field theory (Cummings et al., 2016) drove home the importance of recognizing and resolving these pressures throughout the curriculum implementation process. Teachers and institutions may successfully manage challenges associated with change by taking into account both the motivating factors that promote it and the impediments that prevent it (Haile & Mekonnen, 2024). This strategy raises the likelihood that a new curriculum will be implemented and maintained successfully. Three distinct phases comprise the multi-stage process of change execution: unfreezing, change, and refreezing (Fullan, 2007; Lewin, 1947). The phases of transformation make it clear how to implement curriculum changes successfully at the EDU. Stakeholders can establish an environment that encourages adaptation and continuous development for teachers and students by methodically moving through these phases. Consequently, this methodical approach enhances the educational process and ensures that learning outcomes align with the evolving needs of the military industry.

Figure 2.

The 3-stage process of Lewin's Change Model Unfreezing Stage



Unfreezing Stage

This stage entails cultivating a willingness and readiness to embrace change to prepare the social structure for it (Cummings et al., 2016). At this stage, the organization and its members recognize the need for change and are willing to depart from long-standing customs, viewpoints, or procedures. To change these behaviors, people must first acknowledge that they need to change. This is only practical, according to Deborah (2018), if they comprehend the change (or curriculum implementation) and its operation completely. Dismantling preexisting mindsets, getting past resistance to change, and encouraging psychological safety and receptivity to novel approaches are all necessary for unfreezing. To make sure that everyone feels prepared and supported during the transition, this process frequently entails training and efficient communication. By encouraging innovation and adaptability, the organization can cultivate a culture of continuous improvement as people start adopting new practices.

Changing stage

According to Lewin (1947), unfreezing by itself is insufficient to bring about change and regulate its growth. A thorough evaluation of all the contributing elements and an iterative evaluation of all the options are necessary for the successful implementation and management of change (Esa et al., 2017). As implementers assess and pick up new techniques for the change process, this phase is marked by challenges. It frequently involves conducting experiments, gathering data, and making the necessary adjustments. Effective communication, in-depth training, and robust support networks are crucial during this time to enable and empower employees, according to Saleem et al. (2019). This stage deals with putting change into action after the status quo has been upset.

Refreezing Stage

Following the adoption of new strategies and the execution of modifications, the "refreezing" phase takes place (Saleem et al., 2019). At this point, both people and organizations create new routines, embrace an entirely different perspective, and start to revert to their prior comfort levels (Rudhumbu, 2015). To achieve a stable equilibrium and control motivating and restraining forces, the refreezing stage entails incorporating new behaviors, attitudes, knowledge, skills, and norms into daily routines (Loveline, 2020).

Based on this theory, we propose that the educational leaders involved in this study can identify challenges that impede the successful implementation of the curriculum, specifically resistance to change and resource constraints (Chuene & Teane, 2024). If educational leaders and their leadership teams lack a comprehensive grasp of the curriculum, they will be unable to successfully assist instructors in reaching the same objectives. Educational leaders serving as curriculum implementers may articulate the rationale for their successes or failures (NIET, 2020). This understanding is crucial for

fostering an environment that not only embraces change but also allocates the necessary resources for effective curriculum delivery. By recognizing and addressing these barriers, educational leaders can better support teachers in achieving their goals and ultimately enhance student outcomes. Employing this theoretical framework, the literature review examines significant barriers, challenges, and methodologies that influence curriculum implementation in military and non-military educational settings.

Curriculum Implementation Challenges in Military Higher Education

Curriculum implementation in higher education poses significant challenges for both military and non-military higher educations, as each seeks to provide high-quality education in order to enhance the results of students within their own contexts. Regardless of their distinctions, both categories of institutions strive to convey basic knowledge and skills. The literature review analyzes the current challenges, opportunities, and strategies in curriculum implementation, particularly within military higher education. Several challenges hamper the successful implementation of curriculum at military higher education institutions. The challenges include limitations in physical and human resources, an excessive workload, and resistance to change (Ibeh, 2022; Ng, 2018; Rudhumbu, 2015; Shilling, 2013).

i. Challenges Regarding Physical Resources

The implementation of curricula is often hindered by a lack of resources, such as inadequate funding, infrastructure, equipment, and instructional materials (Haque & David, 2022). Limited resources may negatively impact educational quality, impeding students' intellectual growth. To address this, institutions should ensure suitable resource allocation, pursue external financing, and prioritize resource distribution (Fasinro, 2024).

Furthermore, problems with higher education institutions' buildings and equipment, like not having enough classrooms, administrative offices, laboratories, libraries, and tech tools, pose significant challenges (Haque & David, 2022). The lack of modern facilities obstructs experiential learning, restricts the use of innovative teaching methods, and adversely affects educational results.

Budget limitations at the faculty and departmental tiers further impede academic leaders from acquiring vital educational resources and facilitating professional development initiatives. These limitations hinder faculty development, research endeavors, and the implementation of modern curricula (Karakuş, 2021).

ii. Challenges Relating to Human Resources

Challenges encountered by senior and mid-level managers

Insufficient professional training in curriculum creation and implementation often constrains the capacity of upper and middle management to effectively manage changes to the curriculum (Rudhumbu, 2015; Shilling, 2013). The leadership style of senior management and their interaction with intermediate managers significantly impact the effectiveness of curriculum implementation. Certain managerial leadership styles may obstruct communication across various hierarchical levels, thereby hindering the implementation of curricular changes (Fasinro, 2024; Ng, 2018).

Middle managers serve as intermediaries between administration and faculty, navigating through the technical and political dimensions of curriculum implementation (Ruto, 2022). Nonetheless, these responsibilities often lack clear authority, adequate training, and institutional support, hindering the effective implementation of curricular changes (Ng, 2018; Shilling, 2013).

Challenges regarding instructors

Instructor competence is essential for effective curriculum implementation (Fasinro, 2024). Studies show that inadequately qualified educators with limited subject expertise find it challenging to understand and implement curricular changes (Rudhumbu, 2015). The philosophical viewpoints of instructors profoundly influence curriculum implementation (Ibeh, 2022; Shilling, 2013). Resistance to curriculum reform is likely to endure without adequate investments in training, financing, and qualified staff (Ng, 2018).

Challenges Related to Workload

Administrative staff in higher education face considerable workload that could impede their capacity to efficiently execute curricula changes (Chuene & Teane, 2024). Middle managers often encounter overwhelming administrative duties, restricting their focus on instructional leadership (Rudhumbu, 2015; Ruto, 2022). This disparity reduces the time allocated for addressing curriculum-related challenges and driving for crucial changes with senior leadership (Ng, 2018).

Resistance to Change

Resistance to curriculum implementation arises from personal attitudes, organizational culture, and worries around higher workload and reduced effectiveness (Ibeh, 2022). Insufficient engagement of stakeholders and limited understanding of the proposed changes foster resistance (Karakuş, 2021; Yılmaz & Kılıçoğlu, 2013). Moreover, when schools exhibit favorable results with the current curriculum, staff members and instructors might resist changes perceived as unnecessary.

Opportunities of Curriculum Implementation in Military Higher Education

Military higher education plays a vital role in transforming armed service personnel into competent and disciplined professionals by integrating theoretical academic knowledge with practical military training. These educational institutions seek to enhance technical and operational skills while also fostering strategic, ethical, and leadership qualities essential for navigating through contemporary military landscapes. As military operations become more complex, the incorporation of modern educational frameworks and new curriculum is essential for sustaining preparedness and relevance (Barreiros dos Santos et al., 2019).

According to Barreiros dos Santos et al. (2019) the present trends in military higher education indicate a transition toward more multidisciplinary and internationally oriented programs. Contemporary military commanders must have expertise in several areas, including cyber security, international law, diplomacy, and logistics. This extensive intellectual basis is crucial for addressing the changing landscape of military concerns. Consequently, military institutions are integrating courses such as international relations, artificial intelligence, and crisis management with fundamental military training. These changes have been driven by overarching global educational transformations and the increasing need for military education to align with civilian academic standards (Mirzakhmadovna, 2023). Working together with civilian universities and getting approval from civilian organizations ensures that military degrees are recognized beyond the defense field, which helps veterans find jobs and gain academic credibility.

A significant opportunity for contemporary curriculum implementation in military higher education is the integration of new educational technologies. Simulation-based training, virtual reality, and artificial intelligence provide immersive educational

settings that emulate authentic military situations, allowing students to refine decision-making abilities without operational risks (Powell &Townley, 2025). These advancements are especially beneficial for leadership development, enabling cadets to engage with complex combat dynamics and strategic planning simulations.

Ethical leadership and strategic thinking have become essential elements of the military curriculum. Modern combat presents numerous ethical complexities, including the implementation of autonomous weaponry and the challenges presented by hybrid conflicts. Consequently, including ethics in leadership training is vital for equipping military leaders to address these difficulties. Incorporating ethical reasoning and strategic foresight into the curriculum enables military personnel to operate with integrity in high- pressure situations, whether during combat or peacekeeping operations (Dyer & Tucker, 2016). These abilities are essential not just in combat scenarios but also in humanitarian operations and collaborative international initiatives.

Collaborations with civilian academic institutions provide a significant potential to enhance military higher education. Joint degree programs, academic exchanges, and joint research initiatives facilitate the interchange of ideas between military and civilian academic domains. These interactions enhance the academic exposure of military students and enable civilian academics and students to have a greater understanding of defense and security issues, resulting in a more comprehensive educational system (Powell & Townley, 2025). Programs that integrate military studies with business administration or foreign politics could prepare military personnel for positions both inside and beyond the armed services.

In general, the changing dynamics of military higher education provide many opportunities for curricular advancement. The amalgamation of technological innovation, multidisciplinary methodologies, ethical leadership development, and civil-military

academic collaboration is transforming military education into a progressive and dynamic field. These innovations not only augment the proficiency and adaptability of military commanders but also ensure that military education remains relevant in an increasingly complex global security landscape.

Strategies to Improve the Implementation of the Curriculum in Military Higher Education

i. Professional Development

Effective teacher training is crucial for successful implementation of any curriculum. Fekade (2012) emphasized the importance of teachers in the learning process and the necessity of continual professional growth. Training sessions, seminars, and workshops support instructional strategies and guarantee alignment with curriculum objectives. Losing these opportunities could jeopardize the effectiveness of curriculum implementation.

Continuous professional development, peer collaboration, and mentoring are essential for addressing issues related to curriculum implementation. Research highlights that effective teacher training plays a vital role in the successful implementation of curriculum changes (Chapman, 2019; Karakuş, 2021). Teachers' subject-matter expertise and pedagogical abilities improve student learning outcomes. Comprehensive training fosters a stimulating learning atmosphere for students (Fasinro, 2024).

Loveline (2020) talks about the need to keep supporting instructors. Workshops on developing curriculums, working together across subjects, and allowing instructors to evaluate each other really help. These activities boost teachers' ability to adapt and solve problems, which in turn makes the way they implement curriculum better (Mabusela, 2018;

Rahman et al., 2018).

Furthermore, it's also key to tackle the training gaps for military leaders (Fasinro, 2024; Rudhumb, 2015). Studies show that this lack of training stops curriculum changes from happening smoothly. If administrators don't fully understand curriculum concepts, they struggle to make effective changes (Karakuş, 2021). Putting fund into training programs for military leaders could really help develop their leadership skills and make it easier for educational institutions to adapt to curriculum changes (Gouëdard et al., 2020; Moses et al., 2024).

ii. Enhancing Educators' Motivation

Boosting instructor motivation plays a crucial role in effectively implementing new curriculum across various educational institutions. Karakuş (2021) asserts that boosting educators' intrinsic motivation through skill improvement and conviction cultivation fosters remarkably effective teaching staff. Enthusiastic instructors play quite a crucial role in student achievement according to various studies conducted recently by (Sharma and Srivastava 2020)

Workload induced stress can result in exhaustion and lower effectiveness, requiring solutions to equilibrate duties and safeguard faculty well-being (Mabusela, 2018). Institutions need to incentivize educators to dedicate time to personal development and professional advancement, hence fostering sustained commitment to curriculum execution (Ibeh, 2022).

The study is fundamentally based on Kurt Lewin's Force-Field Theory of Change (1947). According to this theory, the way a curriculum is implemented in military higher education represents a dynamic balance between forces that support advancement and

those resist it. Committed leaders and well-coordinated policies (Fasinro, 2024); motivated teachers who receive recognition and professional development (Karakuş, 2021); and engaged students who employ interactive teaching techniques are the catalysts for change. Additionally, curricular reform cannot be implemented without adequate funding and access to necessary resources, including technology (Macchiarella & Mirot, 2018). On the other hand, several barriers prevent the program from being implemented successfully. Resistance to change remains a major problem, frequently stemming from stakeholder reluctance and institutional bureaucracy (Yılmaz & Kılıcoğlu, 2013).

Teachers cannot fully participate in changes to the curriculum since they have a lot of administrative and teaching work to do (Chuene & Teane, 2024). Lewin's Three-Step Change Model establishes an organized process to execute transformation which resolves obstacles in the system. During the first step of unfreezing stakeholders require educational efforts that help them understand the change and prepare for its implementation through the adoption of new teaching methods and faculty training and institutional support (Cummings et al., 2016). The final stage called refreezing enables the implementation of proven changes which organizations can maintain over extended periods (Loveline, 2020). Multiple strategies may improve curriculum implementation. According to Fekade (2012) and Haile and Mekonnen (2024), ongoing professional development, including training, seminars, and mentorship, enhances instructors' preparedness for change (Chapman, 2019). Institutional support through leadership involvement and policy modifications guarantees coherence with overarching educational goals (Ng, 2018). Efficient resource allocation, especially in financing and infrastructure, alleviates material limitations (Fasinro, 2024). Moreover, promoting cooperation among educators, administrators, and students leads to an overall commitment to improvement (Ibeh, 2022).

iii. Adopting Low-Cost Assessment Strategies

Inexpensive assessment techniques, like peer evaluations and project-based assessments, provide an efficient approach for educational institutions to monitor student advancement without incurring substantial financial burden (Karakuş, 2021). In contrast to the conventional assessments that need considerable resources for evaluation and management, these alternative methods provide cost-effective options that continue to provide significant insights into student development. Peer evaluations enable students to evaluate each other's work, fostering constructive criticism, self-reflection, and enhanced understanding, while reducing reliance on external evaluators.

Project-based evaluations demand that students use their expertise and skills to complete lengthy projects that address real-world issues (Moses et al., 2024). These assessments foster critical thinking, creativity, and a more thorough comprehension of students' abilities. By using readily available resources and digital tools, they also provide flexibility. These evaluation techniques preserve assessment quality even in environments with limited resources, claim Moses et al. (2024) and Karakuş (2021). While fostering critical abilities like teamwork and problem-solving, they lessen the financial burden on institutions. Particularly in settings with limited resources, these tactics maintain the efficacy and significance of student assessments without straining institutional budgets.

iv. Using Technology

Digital platforms and open-source educational materials are examples of cost-effective ways that institutions can improve the educational experience in resource-constrained environments (Arwen et al., 2024). Research articles, interactive videos, open-

access textbooks, and digital lectures are examples of free resources that educators can use in place of pricey textbooks and proprietary software (Bazzanella & Sandro, 2022). These resources offer excellent instructional content at no cost and are readily customizable to accommodate a range of student needs.

According to Bazzanella and Sandro (2022), Technology-driven resources, such as online learning modules and virtual simulations, give students dynamic, engaging learning experiences. Because they let students learn at their pace, these modules are particularly helpful when class time is limited. Without using expensive physical resources, students can investigate difficult subjects like historical events or scientific experiments through virtual simulations. These tools help get around physical constraints and provide flexible, scalable learning. By implementing these digital tools, universities can provide individualized and enhanced instruction without incurring significant costs.

3. Method

Research Design

To address research questions regarding the curriculum's implementation at EDU We used a qualitative case study method. This method allows for a thorough analysis of how academic and military training interact in this special educational environment (Quintão et al., 2020). This approach makes it easier to fully understand the unique challenges and opportunities present in this environment (Creswell, 2014). Three colleges within EDU were chosen using purposive sampling to gather significant and pertinent data. Creswell claims that this approach is particularly effective at gathering in-depth information from individuals or organizations that are most likely to supply significant, relevant data, such as the College of Engineering, the College of

Resource Management, and the College of Health Sciences. The colleges were selected due to their thorough alignment with EDU's core educational and training objectives, which include leadership development, health services, and technological proficiency. Focusing on these crucial facets of military education allows for a thorough examination of EDU's curriculum implementation procedures.

Study Participants

The study was carried out at the College of Engineering (CE), College of Health Science (CHS), and College of Resource Management (CRM) at Ethiopian Defense University. Interviews with participants were used to gather data. Four commandants, three college deans, one director of educational quality, three department heads, and three education quality assurance specialists participated in a focus group. We selected these 14 participants using a purposive sampling technique (Creswell, 2014). We selected these participants because we believed they could provide us with valuable insights into the opportunities, difficulties, and tactics of curriculum implementation at EDU. Priority was given to those whose roles were directly related to their academic responsibilities.

Table 1

Participant Demographics and Roles

Characteristic	**Categories**	**Counts (n = 14)**
Gender	Male	13
	Female	1
Age	45 - 55 years	6
	35 - 44 years	4
	Below 35 years	4
Qualification	PhD	2
	MA	6
	MSc	6
Leadership Experience	20 - 30 years	6
	10 - 15 years	4
	5 - 10 years	4
Institutional Representation	University Head Office	2
	Engineering College	4
	Human Resource College	4
	Health Science College	4
Institutional roles	Commandant	4
	Quality Assurance	4
	College Dean	3
	Department Head	3

Instruments and Procedure of Data Collection

We used mi-structured interviews and a focus group discussion, each directed by four basic questions, to collect data efficiently. The main concerns in the focus group

encouraged meaningful discussions, prompting participants to openly address the problems encountered in curriculum implementation. The individual interviews used a flexible, semi-structured methodology that included predetermined questions, while also allowing for the organic emergence of unforeseen themes. This combination was especially effective for qualitative research, as it provided stability yet still encouraged participants to introduce new ideas. Moreover, the interviews' versatility facilitated the posing of specific follow-up questions, which resulted in deeper and more thorough replies than expected. As the discussions progressed, individuals not only conveyed their personal experiences but also developed a deeper understanding of the diverse viewpoints of others. Consequently, we posed further targeted inquiries to explore the salient themes that had emerged.

How did you find the Ethiopian Defense University's program implementation?

- What are the primary obstacles Ethiopian Defense University faces while implementing its curriculum?
- What opportunities exist within the process of curriculum implementation at Ethiopian Defense University?

Before starting the fieldwork, we received ethical permission from the Ethics Committee of the College of Education at Addis Ababa University. We secured authorization from the EDU to conduct research at three designated colleges, and participants completed and signed consent forms. We adhered to the ethical norms of informed consent, voluntary participation, privacy, confidentiality, and anonymity (Creswell, 2014). We respected the participants' right to information and confidentiality by using pseudonyms to protect their identities (Creswell & Clark,

2017). We strengthened the study's credibility by using participants' actual quotations to mitigate researcher bias. Additionally, we ensured transparency in our data collection methods and informed participants about the study's objectives and potential impacts. This approach not only fostered trust but also encouraged open and honest dialogue, enriching the overall quality of the research findings.

Data Analysis Procedure

This study followed a thematic analysis approach to make sense of the data. As Nowell et al. (2017) explain, this kind of analysis involves organizing the data, breaking it down into manageable pieces, developing codes, and identifying recurring patterns. This process helped us uncover the key themes within the collected data and allowed us to confirm and expand on them (Stranges et al., 2014). First, we reviewed the data line by line, being sure to understand what each word, phrase, and concept meant (Creswell, 20). We wrote down every word of all the interviews and group discussions so that we could keep the whole meaning and subtleties of what people said. After that, we coded the transcripts in a methodical way. We first utilized open coding to find important parts of the text and to spot early trends. After that, we used axial coding to improve these codes, look at how they relate to each other, and put the data into larger, more cohesive groups. This systematic approach revealed three main themes: the problems that came up during the implementation of EDU's curriculum, the chances that came up throughout the process, and the methods employed to deal with these problems and make sure the implementation went well.

We used a number of methods to make sure our results were reliable, such as source triangulation, member verification, and peer debriefing. These strict methods

helped make sure that our results are true to what it was like to study and learn at EDU. (Creswell, 2014).

4. Results and Discussion

Discussions in this section centered on key issues related to process, and three main themes emerged from data guided by research questions. Primary challenges encountered during curriculum implementation include several obstacles, and opportunities available within the current framework suggest various strategies for overcoming them successfully. Responses from each participant are presented in relation to these themes quite thoroughly alongside other relevant factors.

Theme 1: Challenges Faced

Many participants emphasized that a lack of sufficient professional development training significantly hinders the proper implementation of the curriculum at EDU, despite various influencing factors. The College Commandant CC1 and College Dean CD1 emphasize that inadequate training for administrative personnel impedes their ability to assist lecturers and students at EDU effectively. This deficiency impedes their support role and generates a substantial gap in the knowledge and abilities necessary for successful curriculum implementation (Shilling, 2013). The College Dean (CD1) said that:

> In my experience, one of the biggest challenges we face in implementing the curriculum is the lack of professional development for our administrative staff. They need continuous training to stay informed and effectively support the process. Without ongoing training and skill

> enhancement programs, I may struggle to effectively support teachers and students in implementing the curriculum.

The department heads (DH1, DH2, and DH3) believed that the university administration's inadequate professional development training reveals a broader institutional challenge. They stated that:

> Our college's educators need professional development training to enhance their pedagogical skills, stay updated on current educational issues, and consistently improve the quality of their teaching. The limited emphasis on ongoing professional development training hinders our ability to integrate new teaching methodologies into our curriculum and adapt to changing educational practices.

The interview replies from administrative officials and department heads at EDU indicated a major barrier to curriculum implementation is insufficient professional development training. This issue corresponds directly with the "unfreezing" phase of Lewin's Change Management Model, whereby an organization must first ready its staff to acknowledge the need of change. Lewin believes that unfreezing requires confronting the status quo, mitigating uncertainties, and empowering people with the requisite information and desire to adopt new habits.

However, as emphasized by CC1 and CD1, the absence of regular training and skill improvement for administrative staff makes it difficult for them to support changes in teaching, leaving them unprepared for updates to the curriculum. Department heads (DH1, DH2, and DH3) noted that the lack of professional development opportunities

for educators inhibits pedagogical creativity and adaptability to contemporary educational trends. The shortcomings in training and institutional support indicate failure to fully dismantle outdated systems and mentalities. In the absence of this fundamental step, the institution faces challenges in progressing to the 'change' phase, during which new pedagogical tactics and curricular models are intended to be actively implemented. Therefore, strengthening professional development is not only a technical responsibility but a strategic need for overcoming institutional rigidity and advancing through Lewin's transformation model.

Other participants in this study said that insufficient financing for equipment and technology, along with the lack of policy guidelines for ICT usage, might hinder the incorporation of modern technologies into the curriculum. Haque and David (2022) examined the influence of budgetary limitations on the use of educational technology, while Karakuş (2021) underscored the need for explicit policy guidelines for effective ICT integration in education. This constraint adversely affects the accessibility of practical training opportunities for students and undermines the institution's capacity to be relevant and competitive in the educational sector.

CC1 emphasized the lack of access to current academic papers and the very deficient classroom facilities and laboratory equipment, considerably exacerbating obstacles in curriculum implementation. Deficiencies may significantly compromise educational quality and impede students' preparedness for the demands of the military sector, which often requires sophisticated, state-of-the-art technology. CC1 asserted that:

> *In my view, the major challenge in curriculum implementation stems from inadequate funding for tech and equipment and absence of policy guidelines for ICT utilization successfully. Practical training opportunities for students are hindered by this constraint and incorporation of innovative tech into curriculum suffers greatly.*

Adequate funding is crucial to solve the challenges related to curriculum implementation, particularly in technology-driven military sectors. According to Fasinro et al. (2024), insufficient financial resources hinder the procurement of vital equipment and technology, and this limitation restricts students' hands-on training opportunities. Consequently, it hampers the integration of modern technology into the curriculum and limits learners' experiences with real-world applications that are necessary for their future jobs. Therefore, investing in resources, technology, and infrastructure is essential for delivering a high-quality educational experience that meets industry requirements. In fact, to provide a quality education that aligns with industry demands, it is necessary to invest in both technology and infrastructure. According to Ibeh (2022), these elements are essential for equipping students with the skills they need to succeed in their field of study. In military education, such investment involves equipping learners with proficiency in the latest technology and methodologies pertinent to modern defense strategy. The deficiency of resources and institutional backing presents significant obstacles for educational institutions striving to provide curriculum that correspond with the changing requirements of the military sector. Moreover, insufficient funding could render educational programs outdated, thereby preventing the integration of new technologies and methodologies. This gap, in turn, could result in a workforce that is inadequately qualified to manage the complex

nature of modern military operations. As a result, both national security and operational effectiveness could be adversely affected. Consequently, it is crucial for educational institutions, politicians, and stakeholders to prioritize funding for military education programs to ensure that students receive comprehensive training, master advanced technologies, and are well-equipped to face future challenges in the military industry. Inadequate funding could make educational programs outdated, preventing the integration of developing technology and methodologies. This gap may result in a workforce inadequately qualified to cope with the complex nature of contemporary military operations, therefore impacting national security and operational efficacy. Consequently, it is essential for educational institutions, politicians, and stakeholders to prioritize financing that facilitate the ongoing improvement of military education programs. This dedication guarantees that students have thorough training, are proficient with contemporary technology, and are fully equipped to confront the difficulties of their future professions in the military sector.

According to Chuene and Teane (2024), administrative leaders in military higher education institutions often face challenges in implementation the curriculum, with workload being the main obstacle. The main impediment to implement curriculum effectively, as directed by most participants, is workload. For instance, department Heads (DH1, DH2, and DH3) and Educational Quality Assurance Experts (EQAE1, EQAE2, and EQAE3) stated their heavy workload frequently leads to time restraints, hindering their capacity to provide services punctually, address issues efficiently, and implement new projects successfully during their focus group discussion. Moreover, The University Commandant (UC) uttered a similar viewpoint, focusing on the challenges related with workload in curriculum the implementation as follows:

> I encountered challenges that stemmed from worries about the workload during the implementation of the curriculum, as resource and manpower limitations often result in an overwhelming allocation of responsibilities beyond my capacity. This, in turn, can lead to increased stress and potential difficulties in successfully managing curricular activities. Furthermore, managing regular administrative duties alongside strict time constraints for curriculum implementation drains my energy.

This shows that a heavy workload influences the general attitude and level of satisfaction among university administrative leaders, as it often affects their capacity to perform effectively. According to Ruto (2022), an extreme workload can lead to employee dissatisfaction, exhaustion, and anxiety, all of which could negatively impact their overall effectiveness at work.

Moreover, the participants asserted that resistance to change is the critical challenge for effective curriculum implementation. In support of this, Ibeh (2022) noted that staff members' views and plans for changes are crucial elements affecting how well the curriculum is implemented. For instance, CD3 explained that instructors show resistance to implementing new ideas when following established procedures. This unwillingness may be influenced by a perceived lack of learning outcomes for students as well as a general lack of interest in investing time and energy into implementing new curricula.

Furthermore, according to Cummings et al. (2016), lack of resource may exacerbate educators' feelings of insufficiency and dissatisfaction, thereby reducing

their willingness to accept change. During the focus group, department heads (EQAE1, QAE3, DH2, and DH3) along with experts in educational quality assurance brought up concerns about the new curriculum's implementation. One participant stated, "Changing them is not easy," pointing out that many teachers are used to the usual teaching methods and find it challenging to change them because they are comfortable with their existing knowledge (EQAE1). "Unless we see some clear improvement in student results, it is hard to convince teachers to try something new," explained another participant, who highlighted the absence of visible results as a barrier to change. "What is the benefit?" they inquire (QAE3).

In addition to resistance, participants indicated gaps in support and readiness. A few of the educators lack sufficient training, and as a result, they express frustration and uncertainty regarding the implementation of the new curriculum, as stated by (DH2). The issue of scarce resources was also raised; one person remarked, "Even resources are a challenge." Consequently, they become disinterested and unenthusiastic if they do not have the right resources (DH3).

The participants, during their focus group discussion, revealed several interrelated elements that influence teachers' readiness and ability to effectively implement curriculum changes. They acknowledged both psychological and institutional barriers to change, which aligns with Cummings et al. (2016), who argued that insufficient training and resources may worsen educators' feelings of inadequacy and dissatisfaction.

One of the main theme that emerged was resistance to change rooted from established teaching methods. EQAE1 indicated that teachers frequently grow weary of using new approaches because they have become familiar with their current ones. Such type of resistance, which is often driven by familiarity and a sense of self-efficacy, is consistent with earlier studies showing that resistance to change increases when it disrupts fixed patterns (Karakuş, 2021).

Additionally, (QAE3) highlighted that the new curriculum's perceived lack of immediate, tangible benefits discourages participation. Instructors may view the innovation as unnecessary or burdensome if they do not observe immediate improvements in student performance. This supports Ibeh's (2022) diffusion theory claim regarding the importance of apparent advantages in encouraging the acceptance of new activities.

Overall, the findings highlight significant challenges with training and resource distribution, alongside motivational barriers, all of which hinder effective curriculum implementation.DH2's conclusion that teachers experience frustration and a lack of preparedness owing to insufficient training highlights a substantial capacity deficiency. In the absence of focused professional development, instructors may be deficient in the confidence and competencies required for implementing curricular changes (Haque & David, 2022). Ultimately, DH3 emphasized that resource constraints serve as a demotivating element, indicating that inadequate resources and institutional support result in disengagement. This supports Rudhumbu's (2015) assertion that sustained curriculum change in poor countries often fails because of logistical and infrastructural limitations.

Theme 2: Opportunities in the Curriculum Implementation Process

Regarding opportunities in curriculum implementation, the majority of participants emphasized that it offers students actual tasks and enriches their educational experiences through practical learning and new study projects.

The department heads (DH 1, 2, 3), who participated in the focus group discussion, emphasized that the alliance with the military sector providers as an opportunity to give students access for advanced technology and training scenario in engineering challenges. These alliance augment students' educational experiences by introducing them to industry-relevant technology and situations, consistent with best practices in experiential learning (Main et al., 2019).

The head of the Aerospace Engineering Department explained this.

> We promote innovation in military aviation technology by implementing curriculum. For instance, students might explore the latest developments in unmanned aerial systems and their use in military operations via a research project on drone technological improvements.

In support of this, one participant (DH1) noted that program exposes students to latest advancements in unmanned aerial systems and offers them platform for exploring practical military applications. This program promotes a wildly innovative culture within department walls and boosts students' hands-on experience developing aviation tech pretty significantly. Students gain profound insight into modern military aviation opportunities and thorny challenges by interacting with drone tech and its various military operations (Cooper et al., 2016).

As a result, they are able to contribute significantly to the eventual development of military strategies and technologies.

Additionally, Education Quality Assurance Expert (EQAE1), another participant, also mentioned the university's commitment to giving students the abilities and knowledge needed to succeed in the military sector. He underlined this point by saying:

> As an education standards coordinator for the College of Engineering, I believe implementing curricula is crucial for providing students with practical experience. Through agreements with military suppliers, we offer students advanced equipment and training scenarios that simulate engineering issues in a professional setting. Hence, this enriches their education and develops critical thinking and problem-solving skills, preparing graduates for future industry needs and military contributions. This approach ensures mission-ready graduates.

According to the participant (EQAE1), the College of Engineering enhances hands-on learning through partnerships with military organizations, giving students access to advanced tools and real-world scenarios (Macchiarella & Mirot, 2018). These partnerships provide practical experience and enhance critical thinking abilities, equipping students for various industry issues. By conforming to industry norms, the institution guarantees that graduates are adequately prepared for contemporary engineering positions.

The University Commandant (UC) and Educational Quality Assurance Director (EQAD) emphasize substantial prospects for student advancement and preparedness for military positions via the execution of the curriculum at EDU.

The College of Human Resources customizes a leadership training program for military contexts, providing students with critical competencies for efficiently managing human resources in defense organizations. This program promotes essential leadership attributes and organizational skills necessary for prospective military leadership positions (Garcia, 2024).

The College of Health Sciences specializes in battle medicine and trauma care to tackle the unique healthcare difficulties encountered by military members. This emphasis provides students with particular competencies to manage medical crises in outdoor environments and improve the welfare of military personnel (Tortola, 2024). The University Commandant (UC) elucidated the possibility as follows:

> I agree that curriculum implementation offers an opportunity to instill discipline as well as professionalism in learners. To this end, the curriculum includes a course on military ethics and leadership principles to foster a culture of transparency and moral judgment among future military leaders. Besides, this course is designed to motivate students to reflect on their beliefs and decision-making processes, thereby preparing them to effectively handle the complexities of military duty. By embedding these principles early, we aim to produce leaders who are not only dedicated to maintaining the highest ethical standards but also proficient in strategic insight.

He asserted that, this develops a culture of integrity and ethical decision-making among future military leaders, while highlighting the importance of ethical leadership in preserving organizational integrity within the military. Furthermore, he added that curriculum implementation's role in fostering professionalism and ethics in students is consistent with modern teaching methods. To support this goal, the educational institution has included a specific course on military ethics and leadership principles in the curriculum, aiming to foster the moral character and integrity that future military leaders will need.

In addition, Studies by Karaku 2021 and Tortola 2024 highlight the importance of explicit ethical education in developing leaders who persistently advocate ethical standards in military organizations. Moreover, structured learning experiences focusing on military ethics equip students with essential knowledge for leadership and foster understanding of ethical conduct's significance in preserving organizational integrity.

Theme 3: Strategies for Mitigating Challenges

In higher education, the successful implementation of a curriculum may encounter various challenges that could potentially impede the achievement of the intended learning outcomes. To enhance the overall efficacy of curriculum implementation, it is essential to provide continuous professional development, boost teacher motivation, and mitigate resistance to change via strategic techniques (Mabusela, 2018; Rahman et al. 2018).

The majority of the participants agreed that one of the most important ways to address issues with curriculum implementation is to provide teachers and administrative personnel professional development training.

Participants (CC and CD 1-3), emphasized this point:

> For a curriculum to be effectively implemented, it is essential to have professional development training for the staff and instructors. Knowledge deficit limits the capability of administrative professionals in carrying out curriculum change effectively in their institution. In addition, professional development training competence improves both the instructional and substantive expertise of educators.

When talking about the issues that came up during the implementation of the curriculum at EDU, the participant (CD2) added*:*

> Undoubtedly, we should come up with a proper plan in order to be able to solve these problems in an effectually way. To overcome the obstacles of the curriculum implementation at our university, a personalized continuous staff development strategy should be created, a comprehensive induction process for fresh staff must be arranged, and the shortage of certified academic staff must be addressed, especially in Higher Diploma Programs (HDP).

The college Dean (CD2) has particularly highlighted that professional development training for both staff and teachers is very essential if the implementation of curriculum is to be improved in higher education. He further stated that this training greatly impacts the improvement of teaching skills and knowledge, which then enables teachers to efficiently handle curricular content and any changes. The College Dean (CD2) has quite heavily emphasized the necessity of a customized and continuous staff development strategy, pointing out that continuous training for staff is a critical issue

so that they get skills that will help them in the effective implementation of the curriculum and also that solving the problem of shortage of staff, especially in the higher diploma programs (HDP), is critical.

Institutions must make sure that they recruit and retain instructors who are competent and experts in the relevant disciplines so that they can successfully and effectively implement the curriculum across all programs.

The university commandant underscored a pragmatic strategy for tackling workload challenges throughout program implementation.

> To address challenges related to workloads during curriculum implementation, I may create a workload management system that prioritizes tasks according to their significance and urgency. This method may improve resource allocation, reduce staff pressure, and enable the swift execution of tasks.

The university commandant emphasized a practical approach to dealing with workload issues during program implementation.

> In addressing the problems of workload while implementing the curriculum, I might have created a system of workload management that distributes the tasks according to their importance and urgency. A system like that could result in a more efficient use of resources, reduced burden on the staff, and faster completion of the tasks.

The Educational Quality Assurance Director (EQAD) and University Commandant (UC) provide practical solutions to overcome challenges related with continuous professional development training during curriculum implementation. Specifically, EQAD's proposal for peer evaluation program aligns with recent research highlighting benefits of peer feedback in various educational settings thoroughly nowadays. Moreover, peer evaluation has the potential to greatly improve teaching strategies by encouraging staff collaboration and creating a culture of ongoing enhancement. Institutions could identify areas ripe for reform and successfully foster continuous professional development through often mystifying feedback loops and keenly perceptive observations. Meanwhile, the University commandant's proactive strategy has put in place a workload management system which emphasizes task prioritization in academic settings.

This, in turn, boosts productivity and alleviates stress on employees. Effectively implementing robust systems for managing workloads is crucial for boosting productivity and alleviating undue stress on employees fairly quickly nowadays. Institutions may implement curriculum-related responsibilities rather efficiently by prioritizing tasks according to their relative importance or sheer urgency nowadays. Enhancing teachers' motivation is another technique crucial for successful curriculum implementation apparently according to Karakuş in 2021. Department head and educational quality assurance expertise including QAE 3, DH2, DH3, and EQAE1 stressed the significance of instructors' motivation in mitigating curriculum implementation challenges fairly effectively.

They highlighted that:

> In our educational framework, acknowledging instructors' contributions and offering professional growth opportunities can enhance motivation by creating a conducive work environment. Furthermore, addressing instructors' motivation improves curriculum implementation and fosters training for continuous improvement, so that both instructors and students benefit greatly.

Participants emphasized the importance of recognizing instructors' efforts, creating opportunities for professional development, developing a conducive working environment, and providing opportunities for teachers to take ownership of their teaching practice, as these are key aspects affecting motivation. If educational institutions continue utilizing and enhancing teachers' motivation within the educational system, they may build a supportive culture that spurs the effective implementation of the curriculum (Fasinro, 2024). Hence, such an approach could lead to ongoing professional development in the future and continual growth by educators.

By making instructors' motivation an integral part of the education system, schools can improve curriculum implementation, encourage ongoing development, and enhance the overall experience for both educators and learners (Karakuş, 2021). Moreover, the motivation of instructors is paramount in fostering an optimal, research-based, and engaging learning environment for all active participants in education (Mutesasira & Marongwe, 2024).

To effectively address the issue of resistance to change in curriculum implementation, it becomes important to understand the dynamics involved in such

resistance and work toward developing evidence-based resolutions to minimize it. Resistance to change is defined as a set of attitudes or behaviors that demonstrate a willingness to accept or facilitate a desired change process, together with cognitions about the implications of that change (Rudhumbu, 2015; Yılmaz & Kılıçoğlu, 2013). Therefore, we also highlight the strategies adopted by the respondents to manage these challenges.

The University commandant (CU) in the same way underscore;

> It is important to encourage a culture of ongoing enhancement through participation and open communications in order to reduce resistance to change throughout curriculum implementation. Moreover, including instructors in the decision-making process while providing opportunities for feedback may enhance their feeling of responsibility and dedication to the improvements. Encouraging a growth mindset and emphasizing the benefits of adopting new educational approaches alleviates concerns and promotes a more adaptable attitude toward curriculum implementation.

The other participants College Dean (CD1and 3) Educational Quality Assurance (EQAE1 and 3), Department Head (DH1 and 3) in their focus group discussion added that:

> To alleviate resistance to change, we sought to address the fundamental issues that impede teachers from embracing new strategies. In addition, we present a convincing argument for the recommended changes, supported by data from successful implementations, and provide targeted assistance to help instructors adjust gradually, building confidence and trust. Therefore, fostering an

> environment that encourages play, views failure as a teaching opportunity, and values ongoing development may lessen resistance and foster an innovative culture.

Moreover, the participants stated that in order to mitigate aversion to curriculum implementation, it is important to provide extensive training and support for instructors. Educational Quality Assurance Directors (EQAD) stated that:

> We provide professional development training programs that highlight the benefits and practical applications of innovative teaching approaches, enabling educators to adapt to change. This method improves teaching strategies and promotes a collaborative learning atmosphere among peers. We aim to improve the overall quality of education students receive by equipping instructors with essential skills.

In order to appreciate effective educational changes and transitions, change resistance must be managed on a constructive basis throughout curriculum delivery. In support of this The (CD1), and (CU), contributors to the research study, specifically Ibeh (2022), concurred that stemming change resistance should involve understanding resistance causes and then addressing these causes. Ibeh (2022) emphasized the need for establishing a culture of continuous improvement, and for stakeholders to be part of the institution's decision-making bodies, in order to reduce resistance to change.

Moreover, by fostering open lines of communication, creating opportunities for feedback, and promoting awareness of the positives associated with new educational dispositions, institutions may provide a change-friendly environment to lead to more opportunities for adaptability and responsiveness. The techniques voiced by the college dean (CD1 and 3), the educational quality assurance professionals (EQAE1 and 3), and

department heads (DH1 and 3) in this study, put emphasis on determining the underlying causes of change resistance.

To effectively reduce reduce resistance, communicate the rationale for the changes, provide a plan that lays an actionable pathway for the person to pursue the targeted change, and reward a culture that recognizes trial, dialogue, and continuous improvement (Yılmaz & Kılıçoğlu, 2013). By establishing a supportive atmosphere that enables learning from failure as a priority, organizational environments may shape a risk-taking culture for innovation associated to create opportunities to reduce potential change resistance. It was noted, for example, that the educational quality assurance directors (EQAD) suggested significant training and support for teachers which is consistent with essential skills.

5. Conclusion and Implications

The researchers found that to tackle the challenges with curriculum implementation at the institution, it's important to offer regular training for both teachers and administrative staff. Moreover, to bridge the knowledge gaps and improve the effectiveness of education, continuous professional development training is crucial. Additionally, providing official recognition and creating a conducive work environment help improve engagement and dedication to their work. It is also crucial to overcome resistance to change in the institution. We have drawn conclusions from the findings of this study. Hence, there were substantial challenges in the curriculum implementation, including a lack of continuous professional development, lack of resources, constraints on technology, lack of adequate resistance, and resistance to pedagogical change. Despite these primary challenges, the research identified

substantial opportunity for EDU to implement the curriculum successfully. These prospects include practical training, military alliances that provide access to contemporary technology, advancements in areas such as drone technology, and focused education in leadership, military healthcare, and professional ethics. Overall, it was possible to conclude that the EDU was doing a respectable job of implementing the curriculum at the time of this study. However, this study concludes that there is still room for improvement provided the challenges impeding the successful implementation of the curriculum in the EDU are addressed. Based on the conclusions, the study recommended several strategies to address these challenges, including individualized training programs, creating a conducive work environment, and encouraging staff engagement in the decision-making process to inspire the implementation of innovative teaching methods. Moreover, by focusing on the value of continuous professional development and maintaining a culture of working together, particularly in military education, this study reinforces strategies for changing how educational institutions operate.

Hence, it recommends that EDU should invest in cutting-edge technology, set clear ICT regulations, and work with military stakeholders to develop strategic collaborations. By doing this, the institution can enhance the quality of education and ensure that its curriculum meets its needs.

5.1. Limitations

Certain limitations exist inherently within this particular study. Study findings rely heavily on qualitative data gathered via semi-structured interviews and focus groups thereby limiting generalizability of results somewhat oddly to other institutions.

Study prioritized institutional and administrative perspectives possibly neglecting learning difficulties identified through classroom observation at classroom level rather thoroughly. A mixed-methods approach with a larger and more diverse group of participants may make future studies better by making the results more in-depth and useful.

Declaration of Conflicting Interests and Ethics

No potential conflict of interest was reported by the author(s)

Acknowledgments

I would like to thank my thesis supervisor Prof. Enguday Ademe, for her invaluable contributions in reviewing, providing feedback, and guiding me throughout the process, which greatly contributed to the successful completion of this article.

References

Arwen, D., Siregar, N. C., Mulyanah, E. Y., & Gumilar, A. (2024). *Leveraging strategic human resource management to enhance English and mathematics education outcomes : Students ' perspective*. *8*(15), 1–19.

Barreiros dos Santos, M., Silva, J. P., & Oliveira, R. (2019). Military education and training: Challenges and opportunities. Journal of Defense Studies, 15(3), 45–60.

Bazzanella, S. (2022). *Digital education strategy and implementation plan*. African Union. https://au.int/sites/default/files/documents/42416-doc-1._DES_EN_-_2022_09_14.pdf

Bishaw, A., & Melesse, S. (2019). Historical analysis of the challenges and opportunities of higher education in Ethiopia. *International Journal of Educational Development, 2017*. https://doi.org/10.1177/2347631116681212

Chapman, S. (2019). Understanding, interpreting and enacting arts curriculum: A kaleidoscopic view of teacher experience in Western Australian primary schools (Doctoral dissertation, Murdoch University)

Chuene, D. M., & Teane, F. M. (2024). Resource inadequacy as a barrier to effective curriculum implementation by life sciences teachers in South Africa. *South African Journal of Education, 44(2),* 1–10. https://doi.org/10.15700/saje.v44n2a238

Onyango D. & Rupia, M. (2022). Effectiveness of resources mobilisation strategies and implementation of competency based curriculum in secondary schools : A case of Kilolo District , Tanzania. *Journal of Educational Research and Reviews*, *10*(October), 113–120. https://doi.org/10.33495/jerr

Cooper, R. A., Goldberg, M., Milleville, M., & Williams, R. (2016). The Experiential Learning for Veterans in Assistive Technology and Engineering (ELeVATE) program. *Journal of Military, Veteran and Family Health*, *2*(2), 96–100. https://doi.org/10.3138/jmvfh.38

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th Ed.). SAGE Publications.

Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research (3rd Ed.). Thousand Oaks, CA: SAGE Publications.

Cummings, S., Bridgman, T., & Brown, K. G. (2016). Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management. *Human Relations, 69(1),* 33–60. https://doi.org/10.1177/0018726715577707

Deborah, O. K. (2018). Lewin's theory of change: Applicability of its principles in a contemporary organization. *Stratford Journal of Strategic Management, 2(5),* 1–12.

Dyer, J. L., & Tucker, J. S. (2016). *The process of curriculum innovations in the Army Consortium of Universities of Washington* (Unpublished thesis).

Esa, N. bt. A., Muda, M. S. B., Ibrahim, M. Y. B., & Mansor, N. R. B. (2017). The application of Kurt Lewin's model of change in the implementation of higher-order thinking skills in school. *International Journal of Academic Research in Business and Social Sciences, 7(8)*109–115.https://doi.org/10.6007/ijarbss/v7-i8/3212

EDU (2021). Ethiopian Defense University Guidelines for Program Eval, rev & design.

Beshoftu.

Fasinro, K. (2024). Curriculum implementation: Challenges and the prospect of education resource centres to aid effective implementation. *African Educational Research Journal, 12(1),* 1–5. https://doi.org/10.30918/aerj.121.23.102

Fekade, A. (2012). *The practices of curriculum development, implementation, and evaluation in Ethiopian Defense Training Main Department* [Master's thesis, Addis Ababa University].

Fullan, M. (2007). *The new meaning of educational change* (4th ed.). Teachers College Press

Garcia, A. S. (2024). *The good, the bad, & the fortified: How the complex relationship between military bases and Mexican Americans shaped the Southwest, 1942-1975* [Doctoral dissertation, University of California, Merced]. Scholarship. https://escholarship.org/uc/item/5ks1d8ps

Gouëdard, P., Pont, B., Hyttinen, S., & Huang, P. (2020). Curriculum reform: A literature review to support effective implementation. *OECD Education Working Papers, 239,* 5–59.

Grayson, P. J., Côté, J., Chen, L., Kenedy, R., & Roberts, S. (2019). *A call to action: Academic skill deficiencies in four Ontario universities* [Report]. York University.

Good, G. (2015). Organization Development Models: A Critical Review and Implications for Creating Learning Organizations. *Angewandte Chemie International Edition, 6(11), 951–952.*, *1*(April), 29–43.

Haile, T. M. & Mokonnen, E.A (2024). Impacts of stakeholder engagement on curriculum implementation in Ethiopian Defense University. *Pedagogical Research, 9*(2). https://doi.org/10.29333/pr/14369

Haque, A., & David, S. A. (2022). Effective curriculum implementation for optimal teaching and learning experience: A study from a private school in Dubai. *International Journal of Curriculum and Instruction, 15(1),* 1–18.

Ibeh, A. I. (2022). Curriculum implementation and 21st-century skills in tertiary institutions as a tool for sustainable development. *AJEMATES African Journal of Educational Management, Teaching and Entrepreneurship Studies, 7(1).*

Illahibaccus-Sona, S. B., & Abdullah, M. R. (2024). Assessing curriculum integration in higher education through academics, undergraduates, and employers' feedback: The case of some countries from six continents. *Quality Assurance in Education.* https://doi.org/10.1108/QAE-06-2024-0105

Karakuş, G. (2021). Solutions for barriers in curriculum implementation. *African Educational Research Journal, 9(2),* 591–599. https://doi.org/10.30918/aerj.92.21.084

Langrafe, T. D. F., Barakat, S. R., Paulo, S., & Paulo, S. (2020). A stakeholder theory approach to creating value in higher education institutions.*33* (4), 297–313. https://doi.org/10.1108/BL-03-2020-0021

Lewin, K. (1947). *Frontiers in group dynamics: Concept, method and reality in social science; Social equilibrium and social change*. *Human Relations, 1*(1), 5–41. https://doi.org/10.1177/001872674700100103

Lewin, K. (1984). *Field theory in social science: Selected theoretical papers* (D. Cartwright, Ed.). University of Chicago Press.

Lin, H., Wan, S., Gan, W., Chen, J., & Chao, H. C. (2022). Metaverse in education: Vision, opportunities, and challenges. In *Proceedings of the 2022 IEEE International Conference on Big Data (Big Data 2022)* (pp. 2857–2866). Osaka, Japan: IEEE. https://doi.org/10.1109/BigData55660.2022.10021004

Loveline, Y. (2020). A conceptual framework analysis for implementing curriculum policy change in the Cameroon education system. *American Research Journal of Humanities and Social Sciences, 6,* 86–107.

Macchiarella, N., & Mirot, A. (2018). Scenario Development for Unmanned Aircraft System Simulation-Based Immersive Experiential Learning. *Journal of Aviation/Aerospace Education & Research*, *28*(1). https://doi.org/10.15394/jaaer.2018.1773[[

Mabusela, M. (2018). *The challenges of curriculum changes in teaching economic and management sciences in schools in the Umhlathuze Circuit* [Master's thesis, University of Zululand].

Main, J. B., Camacho, M. M., Mobley, C., Brawner, C. E., Lord, S. M., & Kesim, H. (2019). Technically and tactically proficient: How military leadership training and experiences are enacted in engineering education. *International Journal of Engineering Education*, *35*(2),

446–457.

Mirzakhmadovna, N. A. (2023). The role of military pedagogy in the training of military personnel. *JournalNX – A Multidisciplinary Peer Reviewed Journal*, 9(5), 114–117. https://doi.org/10.17605/OSF.IO/BTF2A

MoE. (2018). *Ethiopian education development roadmap: An integrated executive summary.*

MoND. (2024). *Ethiopian Defense Education and Training Policy.*

Moses, C., Nghipandulwa, L. L., & Abed, K. O. (2024). Exploring Curriculum Implementation Challenges in the Teaching of Subsidiary Mathematics in Oshakati Circuit, Oshana Region: A Phenomenological Study. *Open Journal of Social Sciences*, *12*(02), 604–622.

NIET.(2020).*High-quality curriculum implementation: Connecting what to teach with how to teach it*. https://www.niet.org/assets/Resources/NIET_High-Quality-Curriculum-Implementation.pdf.

Ng, S. B. (2018). Challenges to curriculum implementation: Reducing the gap between the aspired and its implementation through change management. *Asia Pacific Journal on Curriculum Studies, 1(1),* 14–19. https://doi.org/10.53420/apjcs.2018.3

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16(1),* 1–13. https://doi.org/10.1177/1609406917733847

Olamo, T. G., Mengistu, Y. B., & Dory, Y. A. (2019). Challenges Hindering the Effective Implementation of the Harmonized Modular Curriculum: The Case of Three Public Universities in Ethiopia. *Creative Education*, *10*(07), 1365–1382. https://doi.org/10.4236/ce.2019.107102

Powell, M., & Townley, D. (2025). The challenges and opportunities for academics in professional military education. *Defence Studies*, 25(1)1– https://doi.org/10.1080/14702436.2025.2467746

Quintão, C., Andrade, P., & Almeida, F. (2020). How to Improve the Validity and Reliability of a Case Study Approach. *Journal of Interdisciplinary Studies in Education*, *9*(2), 264–275. https://doi.org/10.32674/jise.v9i2.2026

Rahman, M. M., Pandian, A., & Kaur, M. (2018). Factors affecting teachers' implementation

of communicative language teaching curriculum in secondary schools in Bangladesh. *Qualitative Report*, *23*(5), 1104–1126. https://doi.org/10.46743/2160-3715/2018.3220

Rudhumbu, N. (2015). Enablers of and Barriers To Successful Curriculum in. *International Journal of Education Learning and Development*, *3*(1), 12–26.

[[[[

Riad, J. (2022). Obstacles to successful curriculum management in higher education and opportunities for improvement. *International Journal for Innovation Education and Research*, *10*(12), 89–93. https://doi.org/10.31686/ijier.vol10.iss12.4007

Saleem, S., Sehar, S., Afzal, M., Jamil, A., & Gilani, D. S. A. (2019). Accreditation: Application of Kurt Lewin's Theory on Private Health Care Organizationanl Change. *Saudi Journal of Nursing and Health Care*, *02*(12), 412–415. https://doi.org/10.36348/sjnhc.2019.v02i12.003

Sharma, L., & Srivastava, M. (2020). Teachers' motivation to adopt technology in higher education. *Journal of Applied Research in Higher Education*, *12*(4), 673–692. https://doi.org/10.1108/JARHE-07-2018-0156

[[

Siregar, N., & S, Aziza. (2021). Optimization of Facilities and Infrastructure Management in Improving the Quality of Learning. *Jurnal Tarbiyah*, *28*(1), 30. https://doi.org/10.30829/tar.v28i1.905 [

Shilling, T. (2013). Opportunities and challenges of curriculum mapping implementation in one school setting: Considerations for school leaders. *Journal of Curriculum and Instruction, 7(2)*, 19–37. https://doi.org/10.3776/joci.2013.v7n2p20-37]

Solikhah, P. I., Islam, U., Raden, N., & Said, M. (2022). *The Opportunity And Challenges Of Implementing*. *5*(2), 407–421.

Stranges, M. K. W., Ul Haq, S., & Dunn, D. G. (2014). Black-out test versus UV camera for corona inspection of HV motor stator endwindings. *IEEE Transactions on Industry Applications*, *50*(5), 3135–3140. https://doi.org/10.1109/TIA.2014.2306979

Tadesse, T., & Melese, W. (2016). The prevailing practices and challenges of curriculum reform in Ethiopian higher education: Views and responses from within. *Australian Journal of Teacher Education, 41*(10), 87–106. https://doi.org/10.14221/ajte.2016v41n10.6

Trianziani, S. (2020). *View metadata, citation and similar papers at core.ac.uk*. *4*(November), 274–282.

Tortola, R. L. (2024). Ethical decision-making in the context of education: A systematic literature review. *International Journal of Academic Multidisciplinary Research, 8(4),* 287–300.

Yılmaz, D., & Kılıçoğlu, G. (2013). Resistance to change and ways of reducing resistance in educational organizations. *European Journal of Research on Education, 1(c),* 14–21.

Ethiopian Journal of Behavioral Studies, October 2025, 8(2), 184-230

Social Capital as Cohesive Catalyst in Response to Children's Education in Emergencies: The Case of Two Host-IDP Communities in Ethiopia

Samuel Asnake[1], Teshome NeqaTibeb[2] and Alebachew Kemisso[3]

DOI: https://doi.org/10.63990/ejobs.v8i2.12281

Received: 2 February 2025; Accepted: 1 August 2025

Abstract

This study explores what and how host communities utilize social capital to integrate internally displaced persons (IDPs) in conflict-prone situations. Focusing on Ginjo-Jimma-Oromia and Quiha-Mekele in Tigray, Ethiopia, the qualitative research involved key informants (parents, village leaders, school directors, teachers, and students) who were recruited through purposive and snowball sampling. Field observations emphasized the collaborative efforts of host communities and IDPs in facilitating the reintegration of internally displaced children (IDCs) into education. The findings disclosed that host communities enhance their potential by transforming social assets into social capital through supportive networks and norms of reciprocity, crucial for IDC reintegration. Social capital emerged as a cohesive force for relief and recovery, despite challenges like limited resources and emotional strain. Resilience is demonstrated through collective action, with volunteerism and community networking playing vital roles in overcoming obstacles and promoting educational initiatives. This research highlights the importance of building social assets into social capital to foster cooperation and resilience, ultimately enhancing educational opportunities for conflict-affected children in Ethiopia. By exploring the relationship between social assets and community dynamics, the study offers valuable insights into effective strategies for supporting IDCs and rebuilding cohesive communities in crisis.

Keywords: Community engagement, cohesive catalyst, education in emergencies, social capital

[1] PhD Candidate, Center for Comparative Education and Policy Studies, CELS, AAU. Email-asanakesamuel85@gmail.com
[2] Associate professor at the Center for Comparative Education and Policy Studies, CELS,AAU
[3] Associate professor at the Center for Comparative Education and Policy Studies, CELS, AAU. Email-alebachew.kemisso@aau.edu.et

1. Introduction

In conflict-prone communities, women and children remain among the most victimized social groups against the right to survival and basic education. In emergency education response, where normalcy and functional local government weaken, villagers reactivate their local asset and networking into purposeful action, i.e., social capital which plays a fundamental role in facilitating recovery, access to education, and retention of students (Sharma et al, 2023). In this process, how the relationships, networks, and norms of reciprocity between the host communities and the IDPs are exercised seems pivotal to unleashing the vital resource in life-saving and sustenance (Iyengar, 2012). These days, several regions of Ethiopia host communities that absorb huge displaced populations and shoulder multiple responsibilities, including efforts of recovery and resilience (Ragassa & Lietaert, 2022).

Moreover, host communities, through their indigenous knowledge and skills, devote and restore peaceful interaction with IDPs to gain relief and recovery. Equally, reports indicated smooth internally displaced children reintegration and retentions. Amid such remarkable efforts, what made to such engagement and how assets and resources are built into social capital within multiethnic, multicultural communities is often of little attention. Furthermore, in Ethiopia, against economically poor situation, local communities, mobilize their social assets, stand up for and facilitate the effort to serve as a cohesive catalyst to improve social interaction between IDPs and host communities (Ahmad et al., 2024). Despite all these efforts of the communities, it remains with little evidence and recognition to step forward to integrated community

transformation. This study, therefore, aims to explore how community engagement applies and its cohesive catalyst role of social assets and capital in supporting conflict-affected children's reintegration and school attendance in districts hosting internally displaced persons (IDPs) in two selected locations of Ethiopia.

According to Ayenew (2023), a cohesive catalyst is an individual, organization, or resource that strengthens social bonds within groups of a community. This catalyst role fosters connections, trust, cooperation, and collaboration for intended purposes (Swindell et al., 2022). Depending on the context, it taps initiatives from within through volunteers, community leaders, social organizations, or focused initiatives to encourage engagement, participation, and networking (Purnaweni et al., 2024). By building a sense of belonging and collective identity, cohesive catalysts enhance the social ties between IDPs and the host community and contribute to emergency education response and a better social fabric (Drese & Marisennayya, 2023; Tyrer & Fazel, 2014). In so doing, host and IDP communities, withstanding the challenges, exercise optimized engagement among stakeholders, create inclusive environments, and support activities that promote dialogue and collaboration, leading to positive outcomes for individuals and the community (Tsegay & Gezahegne, 2023; Hanon, 2022).

In Ethiopia, since the mid-1990s, the impact of natural and manmade disasters has negatively impacted millions of parents from their homes and their children from accessing basic needs (UNICEF, 2023). Between 2018-2022, armed conflicts that escalated in many parts of the country have brought serious negative impacts on the right to basic education of over 4.3 million children and communities in seven regions of Ethiopia (MoE, 2021; UNESCO, 2022). Despite the huge concerns, attention given

to local community engagement practices to address children´s learning seems to be insubstantial. In this regard, there is insufficient understanding of the many ways in which host-IDPs mitigate conflict, which impacts children through, for example, malnutrition, disease, reduced educational opportunities, and heightened poverty (Bahgat etal., 2018; Birkeland, 2009). Moreover, within diversity, studies are lacking in answering the key common elements that serve in the nature and scope of community engagement practices on children´s learning, and the variations in mobilizing social assets and building cohesion between the host and displaced communities of various locations.

Community engagement in education, both at times of emergency and normalcy, is one of the long-standing policy pillars to many countries in the world including Ethiopia (Ministry of Education [MoE], 2015; 2021;2023). Several education leaders and educational institutions recognized the vital roles that communities play in children's learning, resource mobilization, educational assessment, and evaluation. Equally, during emergencies, communities' role in early interventions focusing on life-saving initiatives is crucial to mitigating the adverse influences following the crisis (Ali et al., 2022; Alter, 2017; Nicolai, 2003) . In recurrent crisis-affected locations, local communities in particular and parents' participation in supporting the global and local initiatives, such as "back children to school," ensure holistic recovery and resilience not only to gain hope in life but also to nurture normalcy (Bouvier,2024; Kagawa,2005; ; Russell, 2022; Swindell et al., 2022;UNESCO, 2015).

In the Ethiopian context, reports entail that community engagement coupled with school feeding programs improves academic performance (Assefa et al., 2020),

increase class attendance (Zenebe et al., 2018), decrease the dropout rate (Desalegn et al., 2023)and increase enrolment (Destaw et al., 2022). The majority of studies have reported favorable results on the importance of school feeding programs for educational outcomes (Mideksa et.al., 2024; Wall et al., 2022). Nevertheless, amid declining external resource support, studies lack evidence on how host and IDP communities exercise engagement practices to relief and emergency education responses using their social capital from within.

Rationale

Internally displaced people desperately seek safety and security in other host communities. While these host communities often bear significant social burdens, there is limited evidence of the state-of-the-art in this context. Burdy (2014) and Mutch (2023) discussed the significance and critical role of social capital as an essential resource in enhancing emergency education and maintaining school retention in areas affected by conflict. By utilizing existing social relationships, it facilitates educational access and encourages students to stay in school. Social capital provides emotional support, fosters community involvement, and nurtures trust and collaboration. These elements contribute to the long-term recovery and development of regions impacted by conflict (Cantor, 2024; Haybano, 2023).

Moreover, a study conducted by Tsegay and Gezahegne (2023) Alderman and Bundy (2012) underscored that social capital is instrumental in providing emotional support to students and families facing the trauma and strains of conflict. Strong community bonds and supportive relationships can alleviate the psychological effects of violence and displacement, foster resilience, and keep children engaged in their

studies despite the hardships they endure. When students feel a connection with their peers, teachers, and community members, they are more likely to establish a sense of belonging and purpose, which can help them navigate the challenges presented by conflict.

Consequently, social capital encourages community involvement and ownership in educational initiatives, improving the relevance and effectiveness of emergency education responses. Communities that exercise rich social capital are more inclined to engage in creating safe corners, healing the stress of the victims, which, amid heightened stress, allows creating smooth relations with social groups to initiate mutual interactions, collaborative decision-making processes, and advocate for their educational needs. This, in turn, helps to create locally applicable solutions to support conflict-affected children. Through such a process, community members apply their own ways in planning and executing educational programs, facilitating partners to ensure that the local initiatives align with local priorities, thereby enhancing recovery and children's retention (Lin, 2002; Putnam, 2000).

In the overall endeavor, as discussed by Ali et al., 2022; Girma, 2023; Komatsu, 2024 collective trust and cooperation are vital elements of social capital, facilitating collaboration among stakeholders engaged in emergency education efforts. Trustworthy relationships among community members, educators, NGOs, and government agencies enable efficient coordination, resource mobilization, and the execution of interventions aimed at enhancing school retention and educational outcomes in conflict-affected areas. When trust and cooperation are strong among stakeholders, mobilizing resources, sharing information, and devising effective

educational strategies in challenging environments becomes more manageable (Alter, 2017; Semegn et al., 2023).

2. Statement of the problem

Amid scaling conflict, internally displaced people are forced to move desperately to other host communities seeking safety and security. Although host communities typically shoulder substantial social responsibilities, the state of the art in this context is poorly documented and applied to further holistic community development.

Currently, according to the Disaster Prevention and Preparedness Commission (DPPC) of Ethiopia (2023), the magnitude of the emergency crisis is seriously affecting over nine million people in nine regions. Furthermore, reports indicated 55% of children and their parents are victims of rounds of displacements(IDMC, 2023). The emergency span is getting chronic and demanding huge resources, which are becoming burdens to the government and development partners. Despite the huge potential social assets to be applied, external solutions, including dependency on humanitarian aid, are increasing (Kebede, 2023; Mutch, 2023). This requires an urgent need to explore evidence-based insights on how to boost community engagement with available opportunities from within. This effort contributes to evidence-based responses to emergency programming strategies, and IDP communities' capacity-building initiatives to inform policy and practice. Equally, exploring the existing practices and setting improved pathways to build effective community engagement in Education in Emergencies EiE is critical to mitigate the escalating problem that the nation is facing in speedy community recovery and resilience during emergencies and beyond.

In the Ethiopian context, the role of social capital in fostering community engagement, particularly within emergency school feeding programs, is a critical yet underexplored area. While policy frameworks advocate robust community involvement in these initiatives, the integration of social capital into effective engagement strategies remains largely unexamined. Current literature lacks substantial evidence on how local social networks, trust, and collaborative practices can be leveraged to enhance the implementation and efficacy of school feeding pathways during emergencies. This oversight is concerning, as social capital significantly influences community resilience and children's learning outcomes in times of crisis. Neglecting to assess and incorporate social capital in these contexts limits opportunities to strengthen community support and improve educational initiatives. Consequently, addressing this gap is essential for optimizing emergency responses and ensuring that children receive the nutritional and educational resources necessary to thrive. This research agenda is crucial for developing strategies that harness community strengths, ultimately leading to more effective and sustainable interventions in emergency settings.

To this end, studies have highlighted the benefits of community participation in emergency school feeding programs, such as improved program effectiveness (Alegbeleye et al, 2019) Others have emphasized the need for clear guidelines and strengthened efforts of community engagement before and during emergencies (Sung & Chong-Sup, 2023). In addition, a few studies (Bray, 2003; Burde, 2004; Cantor & Woolley, 2020) have highlighted the need to strengthen community engagement efforts before and during emergencies to ensure that students have access to meals. Other studies have found that participation in emergency school meals is still low, meaning a large proportion of students may be at risk for food insecurity, and innovative

approaches are needed to mitigate increased food insecurity (Abdirahman, 2021). Little emphasis seems to have been given to what makes communities engage even in times of adversity.

Theoretically, Iyengar (2012) discussed that community engagement is a process both in normal and emergency situations; that holds several contexts and dimensions from within and outside. The engagement of affected population, which includes both active participation and commitment of the displaced, local host communities and partners, seems pivotal in planning, decision-making, resource mobilization and program implementation. Involving all actors, in particular local communities, local knowledge and social networks improved and leveraged to ensure the relevance, inclusivity, consistently proving to advance education, and sustainability of education interventions such as school feeding (Sung & Chong-Sup, 2023).

Putnam (2000, 2001) discussed that community engagement is a social enterprise that constitutes social assets and networking into organized purpose-oriented actions-social capital. The author further underscored social capital as a replenishable resource characterized by creativity and innovation to address challenges and gain solutions from within. Based on shared views and goals, it signified networks of community groups, trust, and cooperation between and among the groups, both at times of emergency and normalcy. On the other hand, in view of Lin (2002) with similar perspectives to Coleman (1990), three forms, namely: bonding, bridging, and linking social capital, may overall and pertain within the context and period of engagement. While Coleman's theory highlighted the mechanisms of social capital in enhancing community engagement and individual development, Putnam (2000) emphasized the

societal implications of social capital, including the need for diverse connections to promote civic engagement and democracy. Both theories revealed the critical role of social relationships in fostering community resilience and societal well-being.

In the process, the bonding social capital emphasizes identifying common shared values from within and boost horizontal supportive relationships within communities. On the other hand, bridging social capital focuses on connecting and hosting different groups including IDPs or refugees through smooth cooperation, resource sharing and mutual support to normalcy. The third category, which is linking social capital mainly anchors on power relations and privileges to individuals and groups toward easy access to resources. In context of protracted emergencies when external support is a challenge, exploring opportunities from within and mobilize the social capital toward relief, recovery and resilience seem vital to Ethiopia and similar other countries. In its application, the theory emphasized the importance of creating trust and collaboration among individuals and organizations in enhancing emergency response efforts. According to Putnam (2001), high levels of trust and a willingness to cooperate can lead to more effective actions addressing the needs of affected populations. In this regard, taking note of huge displacement, addressing the right to affected children including school feeding programs serve as a critical mechanism for cultivating social capital, as they create opportunities for meaningful engagement and relationship building between host and IDPs.

In the context of crisis, the significance of emergency responses is vital and require the engagement of communities is pivotal through mobilizing social assets and fostering social capital. Particularly, local community engagement through mobilizing

own intangible and tangible social resources remain crucial in the recovery of IDPs. This effort of host communities has been observed to have vital role in relief and recovery of parents and promote positive interventions in education displaced children. Despite the huge efforts of the host communities, however, little evidence is available on what and how local communities use to participate, interact, share roles and response to emergency education in adverse situations. Thus, it is timely and relevant to explore the role of social capital in the reintegration of internally displaced persons (IDPs), and how it contributed to access to educational services of displaced children across different communities of Ethiopia. Based on the above background, specifically, the research addresses the following basic questions:

1.How do host communities, specifically in Ginjo, Oromia, and Queha, Tigray exercise their social capital to the integration of internally displaced people?

2. What are the burdens of host and IDPs in facilitating the reintegration of internally displaced children (IDCs) back to schoolings?

3. What common social assets do the different host communities exhibited in the reintegration of IDCs children in Ginjo Oromia and Queha, Tigray, Ethiopia?

3. Method

The study accentuated social constructivist paradigm for two reasons. First, it emphasizes that communities have the wisdom to mobilize potential assets, generate their own context-specific knowledge to locally owned solutions. Secondly the social constructivist paradigm avails that communities embedded with immense capabilities, give meaning and value to their own practices in response to complex realities such as

conflict and displacement. The study emphasized a comparative case study design to explore the commonalities underlie engagement in two purposefully selected locations smoothly hosted IDPs for two years or more. Thus, the study was adopted to explore how internally displaced persons (IDPs) and host communities, despite differences in geographic locations, mobilize internal social assets into capital engaged in emergency education responses, particularly through back to schooling and school feeding programs in context.

The comparative study design focused on how host communities engage in creating harmony with internally displaced people, supported internally displaced children access to education, maintained emergency school feeding during IDPs remain settled for two or more years at the respective host communities. This design enabled an in-depth examination of real-life social dynamics and interactions between host and displaced community members, in line with established qualitative methodologies (Goodrick, 2020; Guba & Lincoln, 2005; Mariam, 1988; Yin, 2009).

The design followed certain procedures to identify the cases. Available data on the number of forced displaced population within the country was obtained (CSA, 2023). Next, regions with the highest number of internally displaced populations during the study period were listed. Thirdly, locations that recorded smooth harmony between host- IDPs for two or more years in Oromia and Tigray—were selected on purpose as study sites. Within each region, those host communities embraced displaced people to settle for two years and more and facilitated IDCs education were identified. Accordingly, the locations of Ginjo (Jimma Zone, Oromia) and Queha (Mekele, Tigray) were purposively chosen. Specific to the basic research questions, selection criteria included:

- Evidence of peaceful coexistence between host and displaced populations.
- Presence of formal primary schools implementing school feeding programs;
- Approval of relevant local authorities for the harmony and school retention of internally displaced children (IDCs).

Following the identification of locations through criteria, respective district education offices were consulted to identify those government primary schools reintegrated IDCs for two or more years. Accordingly, four primary schools (Mendera and Hirmata primary schools in Ginjo-Jimma and Kiros Gessese and Queha primary schools from Queha-Mekele) were selected based on their years of experience in integrating IDP and host community children and supporting school retention. To ensure access to authentic information from the relevant source, the purposive and snowball sampling techniques were used to identify key informants and participants from both IDP and host communities. Accordingly, a total of 84 (42 female and 42 male) informants constituting students, schoolteachers, school directors, representatives of parents of both host and IDPs, village leaders, woreda zonal and regional education experts, and federal level education authorities included in the study.

3.1. Tools and Procedures

A comparative case study utilized a qualitative approach to explore practices and identify similarities across multiple cases with a shared research agenda. Based on context, this endeavor produces experiential knowledge that is easier to appreciate and explore causal questions – how and why particular programs or policies work or fail to work (Goodrick, 2014). In the education system, comparative case studies can

potentially contribute to exploring actual practices and contribute to policy formulation (Creswell, 2018; Patton, 2002).

Considering the diverse informant groups, qualitative tools were designed to explore community engagement practices among IDPs and host communities. Qualitative interview protocols and observation items were developed to gather pilot data from key informants in both locations. This approach refined case study research by situating each case within a broader network of relationships (Cresswell, 2018). Additionally, the comparative case study aimed to address and adapt to the shifting contextual factors faced by both host and displaced communities.

Based on the rationale outlined above, a mixed-methods approach was employed to collect comprehensive data from the field. This involved a total of twelve key informant interviews (KIIs) with community leaders and stakeholders, six focus group discussions (FGDs) comprising diverse participants, and four field observations conducted over one week each in the case locations, guided by standardized checklists to ensure consistency and depth. Additionally, two local NGOs actively engaged in delivering basic humanitarian and educational services in these areas were included in the study to provide further insights into community dynamics and needs. This combination of qualitative methods allowed for a rich, nuanced understanding of community engagement practices among IDPs and host communities.

All data collection tools were developed, pilot-tested, and translated into local languages to ensure cultural relevance and comprehension. Interviews and discussions were audio-recorded, transcribed, and analyzed using ATLAS.ti, a qualitative data

analysis software. In addition, relevant federal and regional policy documents were reviewed to contextualize findings within institutional frameworks.

The analysis focused on how social capital—defined as assets, networks of trust, cooperation, and mutual support—was shaped to mobilize social assets, organized community involvement in school feeding programs during emergencies. The study, based on the field experiences, also triangulated existing comparative approaches, enhanced the validity and richness of the data, enabling the identification of best practices for strengthening community engagement in case locations included in the study.

3.2 Ethical Considerations

In the study, ethical clearance and due practices were applied throughout the rounds of the field work. Taking note of the distinct cultural and social values, including vulnerable conflict-affected IDPs, due considerations were made before, and after the conversations. This has been applied in the whole efforts of selecting informants and obtaining informed consent from everyone involved, through building trust and facilitating open communication. Additionally, audio and visual recording were only used with written permission. The research also stressed confidentiality and data validity, ensuring the accuracy and reliability of information collected through interviews and discussions. Finally, the researcher was careful to represent the data faithfully, striving to communicate the true meaning of the sources without bias, and all efforts were made to maintain integrity and direct to the purpose of the study.

3.3 Informants

The study engaged eighty- four participants through key informants and focus group members who represent all the local level stakeholders and partners. Based on scheduled timing, individual interviews and group discussions were employed with community leaders, school directors, host and displaced partners, district, regional, and federal level experts. In the research, both interview and focus group discussion (FGD) guides were utilized. These guides serve as structured frameworks for the expert interviewer and the FGD facilitator, ensuring that the discussions remain focused and relevant to the research objectives. By using these guides, the facilitators took advantage to have effectively facilitated the conversations, encouraging participants to share their experiences and insights. It's noteworthy that these interview and focus group discussion items were translated into two Afan Oromo and Tigrigna languages to effectively communicate parents/mother groups, students, and community leaders and elders. The process of taking note of the key glossary has contributed to assisting the trained professionals conducting the interviews and FGDs to ensure clear communication.

This approach seems to have not only facilitated accurate data collection but also contributed to the trust and respect to the cultural and linguistic contexts of the participants, enabling richer and more nuanced discussions On the other hand, teachers and school directors were approached through the focus group discussions, officers from the federal ad regional levels were approached through the language each preferred and conferrable most. Self-introduction and purpose of the interview were done before the main interview section. Audio recording was taken based on consent of the key informants. The actual field work took place between March and June 2024,

through two rounds of field stays for thirty working days at each location and followed by telephone communications with the key informants and the schools.

Table 1

Basic Characteristics of the Host and Displaced Communities included in the study

Study location	Age group	Host community		IDPs		% of IDP to Host community	
		Female	Male	Female	Male	Female	Male
Ginjo-Oromia	7-14	3,725	2,889	315	275	8.45	9.5
Ginjo-Oromia	15+	16,625	14,768	3,201	2,940	20.4	19.9
Queha-Tigray	7-14	1,475	1,505	262	214	17.7	14.2
Queha-Tigray	15+	12,732	11,709	4,211	3,001	33.1	25.6

A total of 13,353 IDPs (8,422 females and 5,941 males) and 5,930 IDP families were recorded across the two study sites. Of these, 1,066 IDP children (577 girls and 489 boys) aged 7 to 14 were enrolled in either formal schooling (ages 7–9) or accelerated learning programs (ages 10–14) at the study locations. Ginjo and Queha

host communities embraced over 20% and 25% of additional persons respectively to the local livelihoods and resource share daily since June 2020.

4. Findings and Discussion

This section presents findings obtained from the field study data collection organized into twelve key informant interviews (KII 01 to 12) and six FGDs (FGDs 01 to 06) conducted with host community members and internally displaced persons (IDPs), the parents of both host and internally displaced children (IDC), school staff, and local leaders and the woreda, regional and federal level education authorities. Data drawn from interviews with parents, regional and local officials, and focus group discussions (FGDs) were harmonized with key records providing a multidimensional understanding of the research context. In alignment with the basic research questions, a rigorous triangulation on thematic areas was done to ensure both validity and analytical depth.

In order to answer the core research questions, qualitative data underwent systematic coding by informant groups and regions, followed by thematic grouping of community social assets and social capital in engagement practices and internally displaced child retention. This organized information was rigorously analyzed across two locations, with thematic analysis identifying key social asset themes further refined through a comparative analysis of the Ginjo-Jimma and Queha-Mekele case studies. Rich interview notes were transcribed into narratives, emphasizing informant perspectives along the coded themes. Moreover, regional and federal-level documents that inform policy for displaced children's education were analyzed.

4.1 Social Assets as Catalysts for Community Cohesion Amidst Adversity

The findings revealed that in both study locations, communities exercised their social assets—primarily networks, trust, and reciprocity—in distinct ways. Community interactions and interconnections enhanced these social assets, facilitating organized responses to IDPs. This dynamic acted as a cohesive catalyst for social capital, fostering trust and mutual support between host and displaced communities. As shown in Table Two below, key informant interviews (KIIs 01 to 06) and focus group discussions (FGDs 01 to 03) indicated that, despite geographic differences, common types and elements of social assets played a crucial role in promoting cohesion during the adversities faced by both communities.

The study's findings, aligned with Coleman's theory of community engagement, highlight the crucial role of social capital in community development. Despite conflicts and challenges, strong social networks, trust, and reciprocal relationships were identified as essential for fostering cooperation and collective action. Trust among community members facilitated collaboration, while reciprocity reinforced communal bonds. The influence of social institutions, such as families and schools, in cultivating social capital was evident, supporting effective community engagement. Additionally, the findings illustrate how supportive networks enhance individual educational and economic outcomes, emphasizing the interconnectedness of individual actions and community resilience in fostering engaged communities

Table 2

Features and Social Capital Types in Ginjo and Queha Communities

Social Feature & Social Capital Types	Ginjo, Oromia A diverse socio cultural and linguistic community	Queha, Tigray Homogeneous socio-cultural and linguistic community
Bonding	Strong bond within the host community	Strong bond within the host community
Birding	Welcoming and peaceful interaction with IDPs	Tensions followed by interactions IDPs Youth voluntary services
Linking	Strong traditional social power link	Strong socio-religious power link
Source: Extracted by the researcher from KIIs and FGDs, June 2024		

A comparative analysis of the research cases in context depicts essential insights on elements of tangible and assets that constitute social capital. While Ginjo-Oromia represents a diverse socio-linguistic, religious, and community, Queha-Tigray sets a relatively homogeneous community with a dominant Orthodox Christian 98%) Tigrayan community. Nevertheless, several contextual similarities and differences emerge that are essential for understanding their social dynamics. Ginjo, with an estimated population of around one hundred thousand, is characterized by its rich diversity in terms of religions, ethnic groups, and languages. This diversity is counterbalanced by a strong interconnectivity fostered through various avenues such as marriage, neighborhood ties, social interactions, and mutual reciprocity. Despite differences, the community's bond and ability to harmonize its diversity essentially growing of social capital for cooperation and collective action, which may serve as a critical resource both in emergency and normalcy. In this case against potential risks, making Ginjo a significant case for further studying how diverse populations can come

together for mutual benefit toward harmonized community transformation. In this regard, the response of the participants explains the case better:

"... we are elders and parents of many children and families. There are several ethnic and religious groups and families in Ginjo, Jimma. We lived together, and we continued the same until the last day cherished our creator. Our diversity has so far not restricted us and nothing harmful to help each other and assist the IDPs at our disposal (FGD 03, April 2024).

In Queha-Tigray, the dominant Orthodox Christian faith (with nearly 98% of both host and IDPs as followers) has significantly influenced community dynamics through its core values. Principles like compassion and charity have fostered a supportive culture where members care for one another, especially in times of crisis, thereby strengthening social bonds through communal activities. Religious groups play a crucial role in conflict resolution, promoting harmony between host and displaced populations. This moral responsibility enhances trust, ethical behavior, and civic engagement. Youth volunteers and motivated community members help navigate difficult times, reinforcing social cohesion and demonstrating how Orthodox Christianity enhances interconnectedness and resilience in Queha-Tigray.

In both cases, the findings revealed that, regardless of religious and socio-linguistic diversity or homogeneity, commonality in trust and reciprocity is particularly observable and valuable capital in facilitating the support of internally displaced persons (IDPs) from various backgrounds seeking relief and recovery. According to the key informants (KII 04 and 05) both n Queha and Ginjo, amid the strong tensions during the adversities the praised doctrines underlie each religious domain was reported to

uphold the good practices not only in strengthen community bonds but also create a welcoming environment for the respective diverse IDP population. While Ginjo and Queha-Tigray differ in socioeconomic composition, both share strong elements of social interconnectedness, leveraging shared religious practices to foster cohesion and support for newcomers. This comparative analysis highlights how different forms of social capital, in particular strong existing bonds within the host, allow manifest positively to embrace diverse populations even at times of crisis. During the field study, groups of young volunteers and representatives of partner NGOs underscored, local villagers' creativity and ability to coexist and support one another in times of need. *"If communities get convinced, they have the power to generate resources. Despite the challenges, we are amazed by each household's to solicit resources and feed the mouths of children suffering from hunger. [imagine] we had nothing by then. We did not even have money to feed a few children for at least one day, but thanks to the people"* (KII 08, March 2024).

4.2. Host Communities': Burdens and responses in: Children's school retention

During a crisis, normal community social structures and assets are not only over utilized but also shoulder for an indefinite period. The host communities under the study also faced a similar experience, which is still in progress. The following table summarizes the key ones.

Table 3

Major burdens and responses in reintegrating IDCs into schooling

Burden/s	Key community engagement responses	
	Ginjo	Queha
Shelter for displaced families	Avail temporary space Allow religious compounds Allow private compounds	Absorbed into close family Take temporary shelter in open spaces
Work opportunity for IDPs	Facilitate daily labor work acknowledged by the local village admin	Arbitrary and occasional due to few economic activities
Relief and recovery	Build trust and mutual support Prayers of religious leaders	Build trust and mutual support Prayers of religious leaders
Learning space for IDCs	Reintegrate into public schools Alternative learning programs	Reintegrate into public schools Alternative learning programs
Children feeding	"Busa Gonofa"[4], charity NGOs, religious institutions	Youth lead initiatives "Hayra"[5] NGO, Diaspora support
Children safety	Both host and displaced families	Both host and displaced families
Children security	Both host and displaced families	Both host and displaced families

Source: compiled from KIIs (07-12) and FGDs (05 and 06), June 2024

As summarized in the table above, respective host communities faced notable burdens and equally played vital roles in responding to feasible community-owned solutions. In both Ginjo-Jimma and Queha-Mekele, the host communities have explored and actively created spaces for the relief and support of internally displaced persons (IDPs), particularly focusing on facilitating safe communication and planning for the reintegration and retention of children in educational settings. Through mobilizing local and institutions, both communities have demonstrated a strong commitment to to back-to-school of displaced children. Accordingly, organizing school linkages, resulting in the absorption of 1,066 (Ginjo 315 F/ 275 M; Queha 262 F/ 214

[4] *Bussa Gonofa is an indigenous socio-cultural practice of Oromos, initiated by the regional government, which literally mean mutual cooperation within the communities and actors to relief, recovery and resilience within Oromia.*
5 Hayra: an indigenous religious – socio-cultural ties of families and youth groups to celebrate religious days and support each other on social issues which usually happens on Saints days.

M) over-aged out-of-school children aged 9 to 14, highlights community-driven initiatives aimed at addressing educational gaps for internally displaced youth. In addition to facilitating their return to school, communities, in collaboration with partners, implemented flexible accelerated education programs tailored for these children. This reflects a strong commitment to ensuring the right to education, particularly for early adolescent girls and boys. Prioritizing education not only supports academic learning but also enhances stability within host communities by addressing essential needs such as feeding, safety, and security, thereby promoting resilience and social cohesion amidst challenges related to displacement.

In support to the above, the school leaders and surrounding community witnessed observable devotion and extra effort in the IDCs back to back-to-school and reintegration through community-based feeding (KII 11, April 2024).

The role of volunteers and social groups in both settings is noteworthy, as they have mobilized social assets characterized by strong relationships, collaborations, and mutual interactions with IDPs to enhance relief and recovery efforts. Individual, group, family, and neighborhood interactions have been pivotal in exchanging information and mobilizing necessary resources for IDPs. During the initial stages of these efforts, the volunteerism exhibited by young social groups facilitated regular interactions, helping to smooth relationships between the host community and IDPs. Collaboration with religious groups and schools has further bolstered efforts for children's reintegration and retention, particularly with the critical aspect of school feeding programs. Community groups, schools, and NGOs have collectively contributed to IDP children's re-enrollment in primary schools, guided by volunteerism, governmental directives, and humanitarian support, showcasing a model of community solidarity and resilience in

addressing the educational needs of displaced children … *with the help of Allah the Almighty, and thanks to the host community and all volunteers, we successfully implemented lifesaving and life-sustaining interventions."* FGD 02, May 2024).

4.2 Common Social assets to the successful reintegration and retention

The comparative analysis of the two local communities included in the study has also indicated an interesting communality on social assets and their practices.

Table 4

Core elements of social capital observed in practices at the different communities

Common elements of social capital	Ginjo- Diverse community	Queha-Homogeneous community)
Social groups' interaction practice	Frequent, peaceful	Occasional, peaceful
Mutual cooperation	Strong	Strong
Mobilize local resources	Very high	High
Voluntary contribution (cash in kind)	Very high	High
Resolve tensions with IDPs on spot	High	High
Support children schooling	High	High
Access external aid incl. diaspora	Low	High

Source: Extracted from KIIs and FGDs by the researcher's field study, March- June 2024

From the field study, despite the differences in social features and geographic environment, the findings of the study underscored that the community groups share common core elements of social capital. Depending on the context, smooth interaction, mutual support, and mitigating tensions on the spot seem critical determinants of a functioning social capital. During the four rounds of field observations, each lasting one week, and through triangulation with key informants, it was found that the magnitude of the response, primarily led by volunteers, religious leaders, and community elders,

played a critical role in providing support and facilitating the integration of internally displaced persons (IDPs). From the study, during the first arrival period, these grassroots organizations served as rescuers and intermediaries between host communities and IDPs, fostering understanding, empathy, and collaboration.

In both locations, despite the meager economic resources and tensions, the findings of the study witnessed that intangible and tangible social assets build up to a cohesive catalyst role to social capital. Despite the difference in geographic locations, in both locations voluntary social group compositions played exemplary roles in taking the courage to creating smooth interactions, healthy communications and responsive reactions that enable the respective IDP communities feel secure and to come together in times of crisis. … *Amid the stressful situation, had it not been for the relentless effort and altruism of the host community members, we would not be here today, let alone discussing our children's education".* FGD 06, April 2024,

In both study locations, young volunteers were found to have been the first initiatives indispensable in supporting internally displaced persons (IDPs). Composed of individuals who volunteer their time and skills, volunteers reported to have offered service provision and promoted grassroots initiatives, with religious institutions, families and elders. The schools, through directors and teachers created safe spaces for learning, creativity, and self-expression, empowering IDP youth to thrive academically and socially. Moreover, the youth social groups encouraged technology assisted networks of solidarity, empathy, and civic engagement. They also encouraged the religious institutions to take collective action, motivating individuals to contribute their time and resources towards common goals. *"We local communities including religious institutions have been motivated to take collective action, collaborating with youth*

groups on relief initiatives of IDPs. Courageous youth and local individuals were highly sacrificed their time and resources towards common goals, resulting in tangible achievements that enhance host community- IDP recovery and welfare." KII 08, May 2024

In both Ginjo and Queha host communities concrete mutual support and solidarity increased during the stressful period of initial displacement by allowing space and basic survival needs through organized local volunteers and elder groups. The respective host communities, revitalizing their own social assets, played a crucial role in the IDPs recovery and psychosocial support through regular visiting and supplying of basic needs until NGOs come into play. Both the host community members based on self-initiatives, pooled available resources, shared information, and coordinated local efforts to address the educational needs of children who were affected by conflict.

In both study areas, the traditional and technology assisted social networks within the community served as channels for disseminating information about available educational opportunities, support programs, and feeding resources. Through these networks, in both study areas IDP families obtained easy access to vital information about school enrollment procedures, and assistance programs, and eventually ensuring that their children can feed and reschooling despite the challenges posed by conflict.

The findings of the study indicated that the response of host communities took common elements of social capital explained by maturity and devotion to helping IDPs relief and recovery. In effect, the following key actions that characterize the cohesive catalyst role of social capital were demonstrated:

a. Social Networks: In both cases, during the first three months of IDP arrivals, members of the host communities, youth elders, religious leaders, and families volunteered through social networks and responded to basic facilities in IDP communities. These networks facilitated the exchange of information for support and collecting food and clothes to support. The villagers also revitalized their social connections to quickly disseminate information to others and coordinate rescue efforts. Once the relief is settled, host community members in both cases supported children to go back to schooling.

b. Mutual Trust and Support continued in both cases, social groups revitalized and fostered their networks for a common purpose of saving others' lives. Youth groups, together with the religious institutions and the elderly, took initiatives and continuously provided emotional and psychological support during arrivals and times of deep stress. The sense of solidarity and belonging fostered by strong social ties seems to have helped to alleviate stress, anxiety, and trauma experienced by individuals affected by the conflict and consequential crises.

c. Resource mobilization: Both communities, following their own strategies, have mobilized resources and supported the IDPs, including child retention. In this regard, while the Ginjo community heavily relied on local resources and indigenous traditional mechanisms, Queha focused on evidence, preparing compelling reports to access extra aid and communicating with the diaspora regularly to support the home.

Despite the difference in strategies, in both cases, the local communities took the courage to help IDPs with relief and recovery. While in Queha, youth groups to the

lead role, in Ginjo, the traditional social structures devoted to harmonizing relationships, strengthen mutual cooperation and support of children's retentions. The KIIs (08 and 09) and FGDs (05 and 06) triangulated with observations and document analysis, witnessed the following summary on local community capabilities to social cohesion.

a. Collaboration to reintegrate displaced children to school: the host and IDP communities shared collective norms to articulate their needs foster collaboration and inclusiveness in joint planning processes. The shared values and mutual trust among community members enhanced the willingness to engage with IDPs and work towards mutually beneficial outcomes of their children learning

b. Local resource mobilization: social networks encouraged nearly all community groups and enabled IDPs to smoothly absorbed and engage in daily work and mobilize local resources for their livelihoods and self-reliance. The host communities have played crucial roles in harnessing community solidarity and resourcefulness, IDP households were allowed to generate income, access basic services, and address their immediate needs.

c. Seeking resourcing from outside: local village leaders and resource persons sought NGOs and stakeholders to get informed and support the IDPs. Mutual trust and collaboration have strongly helped to further mobilize social assets like solidarity and collective action to place IDP communities to work and generate for their needs. By mobilizing social networks and community organizations, IDPs were also witnessed to have access to religious payers, financial, material, and human resources to support their rehabilitation. In this regard, in Ginjo,

Jimma host communities facilitated the allocation of resources for the integration of IDPs.

d. Fostering partnerships with other stakeholders: both IDPs and host communities were also observed to have exercised advocacy networks and community-based organizations enabled IDPs to engage with NGOs, local government agencies, and international organizations. By strengthening partnerships, IDP communities were also availed opportunities to amplify their voices to the zonal and regional governments on the future of their destiny.

In the study, the consolidated responses from key informants, focus group discussions, interviews, and field observations in both communities highlighted three key challenges that they faced, both internally and externally.

a. Resource constraints: both host communities encountered significant limitations in resources, which affected their capacity to assist internally displaced persons (IDPs). Informants reported that access to vital services like healthcare, education, and shelter was severely restricted. One community leader noted, "We want to help, but we simply don’t have the resources," underlining the critical shortages. Additionally, the obligation to contribute to standard government services without sufficient external support hampered their mobilization efforts.

b. Weak local institutional capacity: In both cases, local administrations struggled with competing priorities and limited capabilities, hindering effective emergency response coordination. Informants indicated that a "lack of accountability in local government has eroded our trust," making community

engagement more difficult. This sentiment was shared by many who expressed frustration with local institutions' inefficiencies.

c. Inadequate communication**:** Both communities faced challenges due to insufficient information regarding IDP needs and destinations. The lack of timely updates created confusion, impacting their ability to plan and engage effectively.

This study reveals a critical finding regarding the role of local government during the initial arrival and stay of internally displaced persons (IDPs) in host communities. In both cases, local governments were perceived as slow to respond and had a minimal impact, often prioritizing control over nurturing or facilitating community efforts. This controlling approach undermined the potential for effective support and integration of IDPs, highlighting a significant area for improvement in local governance during humanitarian crises. The following words of volunteers make the case strong:

"... it is sad that local village administrators, knowing us well, were hesitating and repeatedly inquired of the voluntary association members why we do all this sacrifice?" KII 04, May 2024.

This study anchors its deep insight and discussions on how tangible and intangible social assets the two different communities mobilized and applied for relief and recovery. These contextualized efforts refer to and are embedded within local social networks, such as trust, reciprocity, and norms of cooperation, although one community differs from the other in diversity. In this regard, despite the differences in social makeups, the value-adding benefits derived from these assets and networks prove social capital rewards during crisis. The results underpin and entail, even in poor and

challenging economic situations, how social assets and social capital play a crucial role in shaping the engagement of IDPs and host communities in joint planning, resourcing, partnerships with stakeholders, and local resource mobilization. By leveraging these social dynamics not only during emergencies, it can also serve hugely in promoting inclusivity, collaboration, and sustainability in responses to displacement crises, ultimately enhancing the resilience and cohesion of affected communities. Amid weak local government response, in emergency and crisis situations, social capital was found to have served as a vital cohesive catalyst in life-saving and life-sustaining efforts. Regardless of the economic capacities, villagers' interactions, relationships, networking, and trust with IDPs were observed as critical factors for harmony and social cohesion. "You *wouldn't have found the IDPs and their children without our social assets and voluntary interactions,* "schoolteachers, Queha, May 2024. This finding echoes the true nature of Ethiopian culture. For example, the culture of collaboration and mutual support within Ethiopian communities has long been rooted in the country's traditions. These practices, which emphasize collective responsibility and mutual aid, form the backbone of social cohesion and community resilience in Ethiopia (Girma, 2014; Tsegay & Gezahagn, 2023).

In both study locations, shared culture and language that allowed to increased trust seems to be the basis for brave reciprocity. The social networks and associations which otherwise were lost were reactivated to realize the mutual interests of IDP groups. In this regard, one of the village volunteers defined voluntary association as "we, regardless of our professional or economic background, are socially organized groups based on mutual trust between the members for lifesaving and sustaining during a crisis period" FGD 06, Queha, May 2024. In reference to notable social capital

theories and research endeavors including, Hatloy, et.al, 2017; Henery, 2017; Putman, 2000; Ryan, et.al., 2020 this field research also has explored the cross-cutting key theoretical argument underlying conditions of the tangible and intangible assets in context. In this regard, the findings of the study concurred that social assets and social capital are more valuable and viable than both economic and physical capital. Regardless of the level of economic affluence and democratic space for poor local communities have successfully demonstrated their social assets and capital. In both local communities, despite the meager natural and human resources, social facilities host communities embraced the IDPs and ensured relief, recovery, and resilience. In both contexts of Ethiopia, smooth networks, relationships and mutual reciprocity were found enhanced between host communities and IDPs and critical elements to restore peace and social cohesion, including school retention and striving for resilience. Amid community development challenges, these relevant social assets need to be the central idea for new community policy and practices.

One of the most significant contributions of community groups is their role in reschooling IDP children. By establishing informal schools, providing tutoring services, and advocating for inclusive educational policies, these groups ensure that displaced children have access to education. This not only helps to maintain educational continuity but also contributes to the long-term well-being and resilience of IDPs. Furthermore, community groups play a vital role in strengthening social capital within and between communities. By building trust, solidarity, and reciprocity, these groups foster a sense of belonging and collective identity. This, in turn, enhances social cohesion and resilience, enabling communities to better cope with the challenges associated with displacement.

However, it's important to recognize that social assets and social capital are not evenly distributed within all communities. Vulnerable populations, such as marginalized groups or those living in poverty, may have limited access to social networks and resources, exacerbating their vulnerability during emergencies. Addressing social inequalities and strengthening community resilience should be integral components of emergency preparedness and response efforts. The engagement of Internally Displaced People (IDPs) and Host communities (HCs) joint planning to reschooling, partnership with stakeholders and local resource mobilization is influenced by social assets and social capital. Community, religious, and volunteer social groups play pivotal roles in facilitating harmonized engagement between host communities and internally displaced people (IDPs), particularly in the context of smooth reschooling of IDP children and the enhancement of social capital.

The key actors within community, religious, and volunteer social groups seem to have played instrumental roles in facilitating harmonized engagement between host communities and IDPs, particularly in the context of reschooling initiatives and the enhancement of social capital. By leveraging their networks, resources, and values, these groups contribute to inclusive, resilient, and thriving communities amidst displacement and adversity. Social assets and social capital are indispensable in emergencies and crisis situations, serving as the foundation for effective response, resilience, and community well-being. Investing in the cultivation of these assets can enhance the ability of individuals and communities to cope with and recover from adversity, ultimately saving lives and promoting social cohesion.

Despite the economic limitations and tensions, the question of how multifaceted the nature of social capital, encompassing both tangible and intangible assets applied to uphold cohesion within economically poor communities, seems critical. While economic and physical resources are significant, social capital's true value lies in its facilitation of relationships, networking, and mutual reciprocity, particularly evident in times of adversity. Intangible assets such as moral duty, altruism, and indigenous bonds emerge as crucial in maintaining tangible resources, such as financial support, space, and technical knowledge, for effective community engagement practices. The proper use of social capital was observed to be instrumental in mitigating conflict between host and IDP communities, fostering social harmony. However, formal government policies and practices appear less effective in leveraging social capital to sustain mutual responsibility between these groups. In line with this perspective, the regional level initiatives emphasize the importance of community cohesion in enhancing the well-being of IDPs, despite the challenges faced by economically disadvantaged communities such as those in study location, Ethiopia.

Several social capital theories, dominated with Western orientation, posited by researchers share political stability and economic affluence to be critical conditions to functional social capital (Bourdieu, 1987; Coleman, 2001; Martinnelli & Martinnelli, 2024; Putnam, 1998; 2000 ;). Nevertheless, contrary to Western orientation, local communities seem to have significantly and successfully responded to the emergency education during adversity and crisis. In poor communities including Ethiopia, the response to education in emergency focuses on external aid including monetary and economic aspects than local social resources. In this regard, despite the economic problems, the term “social capital” seems to have its importance in the functioning of

local communities to look inward for solutions from within. On the other angle, Putnam's social capital theory which consists of the networks, norms, and trust seem a common essence that enable individuals to act together more effectively to pursue shared objectives in more stable situations**.** In the locations where the study took place, a similar value for social capital and social assets upholds true to build lifesaving and life sustaining of IDP communities. The findings emphasized that in times of emergency and crisis, social assets and social capital play a crucial role in ensuring the survival and well-being of individuals and communities.

Similar to the works of Dynes (2002) and Mashiko, et.al, (2018), this study also shows that social assets are integral parts of social capital. The resources embedded within social networks, such as trust, reciprocity, and norms of cooperation, constitute social capital which represents the benefits derived from these networks. Despite poor economic situation, social capital, beyond children reschooling and retentions, was observed to have huge potential to anchor on the long-standing significance, which is observed from the following angles. First the voluntary based networks to save life through allowing space and security observed the top priority. In times of crisis, social networks allow lifeline for individuals and communities. Second, these networks facilitated the exchange of critical information, resources, and support. For instance, villagers reactivated their social connections to quickly disseminate about newly arrived IDPs to coordinate rescue efforts. Equally, opportunities for equitable resources access have been found critical even when formal institutions may be overwhelmed or inaccessible.

The two cases that were observed to have relatively strong social ties within their communities were able to mobilize resources such as food, shelter, and medical

supplies more effectively, thus ensuring the survival of vulnerable populations like internally displaced persons (IDPs). Furthermore, social networks provided emotional and psychological support during times of distress. The sense of solidarity and belonging fostered by strong social ties helped to mitigate stress, anxiety, and trauma experienced by individuals affected by crises.

In both cases, shared socio cultural and language factors between respective hot and IDP communities, seem to have contributed to increased trust and cooperation among community members to facilitate coordinated responses, leading to recovery and reintegration. Furthermore, the study seems to have explored improved social cohesion and harmony arising because of the new challenge**.** The host communities of both cases seem to have been convinced to maintain social cohesion which is essential for rebuilding communities and restoring normalcy. In this regard, host communities were found to be visible in fostering trust, empathy, and cooperation among IDP groups, promoting harmony and unity in the face of adversity.

It's also important to recognize that social assets and social capital are not evenly distributed within all communities equally. The level of vulnerability, the scale of conflict on the IDP populations, as well as the scale of poverty, seem to have an influence on access to social networks and resources, exacerbating their vulnerability during emergencies of the respective communities. In this regard, addressing social inequalities and strengthening community resilience should be integral components of emergency preparedness and response efforts. Moreover, social assets and social capital are indispensable in emergencies and crisis situations, serving as the foundation for effective response, resilience, and community well-being. Investing in the cultivation

of these assets seems to be an important strategy to enhance the ability of individuals and communities to cope with and recover from adversity, ultimately saving lives and promoting social cohesion.

The IDPs who were affected by conflict-prone situations, were also observed to have shared their own social assets that played a vital role in cultivating solidarity among community members experiencing poverty. Despite financial hardships, the collective experience of their struggles to restore harmony through mutual cooperation, is exemplary even in tense environments. Such networks typically involve neighbors helping one another by sharing resources, or providing emotional support, which reinforces social bonds and enhances trust, essential for resilience in times of stress due to conflict. In the study, formal support systems, such as local government aid or social services, were slow, unreliable, or absent. In this regard, these communities together seem to have relied on social capital to survive and sustain.

Furthermore, despite the adversities, conflict and its consequential effects seem to have played a positive role in revitalizing community identity in both contexts. Individual volunteers seem to have developed a deeper connection to their neighbors or cultural groups, reinforcing a sense of belonging and unity amid external pressures. This strong community identity can lead to heightened collaboration and mutual support, empowering residents to effectively navigate challenges posed by both poverty and conflict. Overall, the results of the study seem to indicate that while poverty and conflict present significant obstacles, they can also foster strong community bonds and identities that enable individuals to collaborate, support one another, and work toward resilience and recovery in the face of adversity.

The study also identified the interconnectedness of the elements of social assets in action to constitute a functional social capital. Both the social capital theory and literature primarily consider social assets to focus on the tangible resources and infrastructure available within the host community. On the other hand, in this study, it seems that social capital is the sum of social relationships, networks, and norms that facilitate cooperation and mutual support. In particular, to children's schooling retention, while social assets changing emotions into empathy provided the necessary spiritual, physical, and material resources for education, social capital seems to have enhanced the utilization and effectiveness of these resources by fostering community engagement, trust, and collaboration. Hence, both social assets and social capital are interlinked and complementary in both communities. The social assets that were essential for initiating access to education and the social capital have played a critical role in promoting retention and academic success by addressing the rights to education of IDP children.

5. Conclusion

The research, conducted through a qualitative exploratory case study in Ginjo and Queha, involved a diverse range of participants, including local leaders, education experts, community representatives, partners and from both IDP and host communities.

While Ginjo represents a socio linguistic religious and cultural community Queha retains a relatively homogeneous dominantly Orthodox Christian community. Despite the differences in geographic location and social features, both host demonstrated exemplary hospitality to IDPs and children retention for two years and more. In doing this, share strong core social capital elements in common, namely:

strong social interaction, mutual cooperation, resolving tensions, and networking for life-saving and life sustaining. In due process, the study revealed both communities have had assets (both invisible and visible ones) reactivated into organized and purposeful interventions relieve and recover. Depending on the specific social context, differences were also observed in strategies and priorities in accessing, mobilizing leveraging resources.

Exploration has evident that social capital serves as a cohesive catalyst to engage internally displaced persons (IDPs) and host communities to resolve tensions, mitigate adversity, and support children's school retention. The study sheds light on vital local community potentials, the significance of reactivating intangible and tangible social assets. Furthermore, it witnessed a critical resource and the pivotal role of social capital emergency efforts toward community-owned relief and recovery responses.

6. Recommendations

The findings, analysis of results, and discussion made on the study draw the following recommendations for policy and practice:

i. **Leverage Social Capital for community engagement practices:** recognizing and valuing the assets within social capital, such as indigenous bonds, as vital components for sustaining tangible assets and fostering community resilience. Encourage and support community-led initiatives that leverage social capital for reschooling and student retention efforts in conflict-affected areas. This includes facilitating partnerships between stakeholders and promoting collaboration among IDPs, host communities, and relevant organizations.

ii. **Support indigenous networks and voluntary groups**: Invest in indigenous networks, religious attachments, and voluntary groups within communities to strengthen social capital and enhance their capacity to address educational challenges and promote social harmony.

iii. **Mitigate conflict through social capital**: Recognize the role of social capital in mitigating conflict between host and IDP communities. Promote dialogue, reconciliation, and mutual understanding to harness social capital as a tool for conflict resolution and peace building.

iv. **Align government policies with Indigenous community assets**: Ensure that government policies and practices align with the realities and needs of conflict-affected communities. Prioritize strategies that empower communities to mobilize their social capital effectively for sustainable development and education initiatives.

v. **Invest in community assets and social capital research:** Support further research and documentation efforts to deepen understanding of social capital dynamics in emergency education response and school retention. This includes ongoing monitoring and evaluation of community-based interventions to inform evidence-based policy and practice.

7. Limitations of the study

This study adopted a comparative exploratory qualitative case study approach to investigate localized dynamic experiences. While valuable, this method presented limitations in post-conflict host and displaced communities, including potential researcher bias and limited generalizability due to purposive and snowball sampling.

To mitigate these, the researchers employed rigorous fieldwork and triangulated data from interviews, focus groups, and field notes, also conducting multiple visits with key informants. Logistical challenges such as transportation issues and security threats hindered data collection, requiring strategies like networking with school leaders and building rapport with local and IDP leaders to maintain communication, secure access, and obtain informed consent. Official letters were used for communication and security clearances, and telephone interviews supplemented data collection to enhance reliability and validity.

Reference

Abdirahman, S. A. (2021). Risk Management and Success of School Feeding Programs in Garowe State Somalia: A Doctoral dissertation, Kampala International University, College of Humanities and social Science). Kampala, Uganda

Ahmad, S. M., & Saeed, M. K. (2024). Preparation for Education in Emergencies: Current Educational Reforms in Pakistan. In *Global Agendas and Education Reforms: A Comparative Study* (pp. 69-91). Singapore: Springer Nature Singapore.

Alderman, H., & Bundy, D. (2012). School Feeding Programs and Development: Are We Framing the Question Correctly? *The World Bank Research Observer*, *27*(2), 204-221.

Alegbeleye, A., Dada, J., Oresanya, O., Jiya, J., Counihan, H., Gimba, P., Ozor, L., & Maxwell, K. (2019). Community engagement and mobilization of local resources to support integrated community case management of childhood illnesses in Niger State, Nigeria. *Journal of Global Health*, *9*(1), 1–11.

Ali, M. A., Ukwuaba, L. C., & Eze, I. P. (2022). Social Capital: a Tool for Facilitating Community Development in Ebonyi State, Nigeria. *Journal of Continuing and Development Education*, *2*(1).

Alter, T., Driver, A., Frumento, P., Howard, T., Shuffstall, B., Thompson, L., & Whitmer, W. (2017). Community Engagement for Collective Action: A Handbook for Practitioner. In *Invasive animals CRC, Australia*.

Akpan, V. I., Igwe, U. A., Mpamah, I. B. I., & Okoro, C. O. (2020). Social constructivism: Implications on teaching and learning. *British Journal of Education*, *8*(8), 49-56.

Assefa, A., Kelbessa, Z., & Urga, A. (2020). Nutritional status of school children in Addis Ababa involved in school feeding program: A Comparative study. *Ethiopian Journal of Public Health and Nutrition (EJPHN)*, *3*(1), 54–60.

Ayenew, Y.Y (2023). The role of community engagement to help internal displaced people in Amhara Region (Seminar Paper). *Social Sciences*, *12*(5), 237–245.

Bahgat, K., Dupuy, K., Østby, G., Rustad, S. A., Strand, H., & Wig, T. (2018). Children and Armed Conflict: What Existing Data Can Tell Us. In *Peace research institute Oslo* (Vol. 1, Issue 1).

Birkeland, N. M. (2009). Internal displacement: global trends in conflict-induced displacement. *International Review of the Red Cross*, *91*(875), 491–508.

Bourdieu, P. (2011). The forms of capital. (1986). *Cultural theory: An anthology*, *1*(81-93), 949.

Bouvier, M. (2024). Policy Dialogue Tool: Inclusion of Refugees in National Education Systems. *Global Partnership for Education*.

Burde, D. (2004). Weak state, strong community: Promoting community participation in post-conflict countries. *Current Issues in Comparative Education*, *6*(2), 73–87.

Bundy, D. A. (2009). *Rethinking school feeding: social safety nets, child development, and the education sector*. world bank publications.

Cantor, D. J. (2024). Divergent dynamics: disasters and conflicts as 'drivers' of internal displacement?. *Disasters*, *48*(1), e12589.

Cazabat, C., & Desai, B. (2018). The ripple effect: economic impacts of internal displacement. *Intern Displac Monit Cent*, (October), 5.

Cantor, D. J., & Woolley, A. (2020). Internal Displacement and Responses at the Global Level: A Review of the Scholarship. In *IDRP Working Paper* (Issue 1).

Christens, B. D., & Speer, P. W. (2015). Community organizing: Practice, research, and policy implications. *Social Issues and Policy Review*, *9*(1), 193–222.

Coleman, J. S. (1990). Foundations of Social Theory. In *Choice Reviews Online* (Vol. 27, Issue 11, pp. 27–66). Harvard University.

Creswell, J. W., & Creswell, J. D. (2018). Mixed Methods Procedures. In *Research Defign: Qualitative, Quantitative, and Mixed Methods Approaches*.

CSA . (2023). Report on Land Utilization by Private Peasant Holdings in 2020/2021 Meher Cropping Season. In *Statistical Bulletin: Vol. IV*.

Derese, M., & Marisennayya, S. (2023). The effects of school feeding programs on students ' academic achievement in public primary schools of Wolaita Zone , Southern Ethiopia. *Advance Knowledge for Executives*, *2*(May), 1–19.

Desalegn, S., Kasseye, E., Gebeyaw, G., & Meshelemiah, J. C. A. (2023). The Challenges of Women Housed in Internally Displaced Persons (IDP) Camps During an Armed Conflict in Ethiopia. *Affilia - Feminist Inquiry in Social Work*, *38*(1), 55–74.

Destaw, Z., Wencheko, E., Kidane, S., Endale, M., Challa, Y., Tiruneh, M., Tamrat, M., Samson, H., Shaleka, D., & Ashenafi, M. (2022). Impact of school meals on educational outcomes in Addis Ababa, Ethiopia. *Public Health Nutrition*, *25*(9), 2614–2624.

Disaster Prevention and Preparedness Commission (DPPC) of The Government of Ethiopia (2023) Annual Report of Mobility Patterns and Requirement of IDPs , AA

Dynes, R. R. (2002). The importance of social capital in disaster response. *Preliminary Paper #327*, 60.

Ginsburg, M., Haugen, V., Lokong, F., & Ong'uti, S. (2017). Promoting community participation in improving education in South Sudan. *African Educational Research Journal*, *5*, 221–239.

Girma, B. (2023). The human rights protection of internally displaced persons in Ethiopia; Examining the international, regional and Ethiopian normative frameworks. *Jimma University Journal of Law*, *15*(Llm), 68–94.

Goodrick, D. (2020). *Comparative case studies* (Vol. 9). Thousand Oaks, CA, USA: SAGE Publications Limited.

Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies. and contradictions. In *The Sage Handbook of Qualitative Research* (pp. 193–215). Sage Publications Ltd.

Hanon, M. (2022). *Access to education in conflict crises: The impact of education in emergencies interventions in armed conflict*. Sage Publication Ltd.

Hatløy, A., & Sommerfelt, T. (2017). Rethinking emergency school feeding: A child-centred approach. *Faforeport.–2017–P*, *82*.

Haybano, A. K. (2023). The promises of Ethiopia's new policy for inclusion of refugees into the national education system and challenges for local implementation. In *Research Handbook on Migration and Education* (pp. 465-479). Edward Elgar Publishing.

Henry, B. T. (2017). *Sustainable Community-Based Natural Resources Management in Sub-Saharan Africa: Perspectives on Potable Water Supply in Northwest Cameroon*. University of the Witwatersrand, Johannesburg (South Africa).

International Displacement Monitoring Center (IDMC). (2023). Global Report on Internal Displacement: Internal Displacement and Food Security. In *Internal displacement and food security*. IDMC.

Iyengar, R. (2012). Social capital as the catalyst for school participation. *Compare: A Journal of Comparative and International Education ISSN:*, *42*(6), 839–862.

Kagawa, F. (2005). Emergency education: A critical review of the field. *Comparative Education*, *41*(4), 487–503.

Kebede, K. (2023) World Food Programme Addis Ababa, Ethiopia. Strengthening Capacity for Climate Change Adaptation in the Agriculture Sector in Ethiopia, 113.

Khen, H. M. E. (2023). Restoring children's right to education during and after War: The case of Ukraine. *The International Journal of Children's Rights*, *31*(1), 225-267.

Kinrz, G. (2011). *First Principles : Community Engagement in Education Programs* (Vol. 1).

Komatsu, T. (2024). *Education and Social Cohesion in a Post-conflict and Divided Nation: The Case of Bosnia and Herzegovina*. Springer Nature.

Lin, N. (2002). *Social capital: A theory of social structure and action* (Vol. 19). Cambridge university press.

Martinelli, Y. R., & Martinelli, B. M. (2024). 2030 Agenda for Indigenous Peoples and Local Communities (IPLCs): Representation, participation, and rights in global sustainability. In *The Quest for the Sustainable Development Goals: Living experiences in territorializing the 2030 Agenda in Brazil* (pp. 263-282). Cham: Springer International Publishing.

Mashiko, T., Guarino, M., Franz, G., & Satoh, S. (2018). Collaborative planning for post-disaster reconstruction in Italy: Community participation in four small towns, focusing on Novi di Modena. *The 18th International Planning History Society Conference - Yokohama*.

Merriam, S. B. (1998). *Qualitative research and case study application in education. Sanfrancisco:Jossey Bass*.

Mideksa, S., Getachew, T., Bogale, F., Woldie, E., Ararso, D., Samuel, A., Girma, M., Tessema, M., & Hadis, M. (2024). School feeding in Ethiopia : a scoping review. *BMC Public Health*, 1–14.

Ministry of Education. (2020). Education Sector Development ProgrammeVI. In *2021-11-Education-Sector-Development-Plan-Ethiopia* (Issue Esdp Vi).

Ministry of Education. (2021). *National School Feeding Program and Strategies*. AA.

Ministry of Education. (2022). *The Federal Democratic Republic of Ethiopia, Ministry of Education Statistics Annual Abstract (ESAA). 2014 E.C/2021/22*.

Ministry of Education (2023). *National School Health and Nutrition Strategy. The Federal Democratic Republic of Ethiopia* (Issue October).

Mutch, C. (2023). How schools build community resilience capacity and social capital in disaster preparedness, response and recovery. *International Journal of Disaster Risk Reduction*, *92*, 103735.

Nicolai, S., Hine, S., & Wales, J. (2016). A common platform for education in emergencies and protracted crises: Evidence paper. *London: Overseas Development Institute*.

Nicolai, S. (2023). *Education in emergencies: A tool kit for starting and managing education in emergencies*. Save the Children UK.

Patton, M. Q. (2002). *Qualitative research and evaluation methods (3rd ed.)* (3rd ed., Issue 2). sage.

Purnaweni, H., Djumiarti, T., Roziqin, A., & Santoso, B. (2024). How do local government strategies advance social accountability? The challenges from environmental management of Slaughterhouse in Semarang City, Indonesia. *Local Environment*, *29*(2), 245-261.

Putnam, R. (2000). Bowling Alone: The Collapse and Revival of American Community. In *New Republic* (Vol. 231, Issues 22–23). Simon & Schuster.

Putnam, R.(2001). Social capital: Measurement and consequences. *Canadian journal of policy research, 2*(1), 41-51.

Regasa, D., & Lietaert, I. (2022). In search of the invisible people: revisiting the concept of "internally displaced persons" in light of an Ethiopian Case Study. *Refugee Survey Quarterly, 41*(2), 320-341.

Russell, K. A. (2009). Community Participation in Schools in Developing Countries: Characteristics, Methods and Outcomes. *Online Submission*.

Ryan, B., Johnston, K. A., Taylor, M., & McAndrew, R. (2020). Community engagement for disaster preparedness: A systematic literature review. *International journal of disaster risk reduction, 49*.

Seifu, Y., & ZÁHOŘÍK (2017). Jimma Town: Foundation and Early Growth from ca. 1830 to 19361. *ETHNOLOGIA ACTUALIS, 17*(2).

Sharma, N., Palo, S. K., Bhimarasetty, D. M., Kandipudi, K. L. P., Purty, A. J., Kumar, T., ... & Taneja Malik, S. (2023). Community dynamics and engagement strategies in establishing demographic development and environmental surveillance systems: a multi-site report from India. In *Healthcare* (Vol. 11, No. 3, p. 411). MDPI.

Swindell, A., McCommons, B., & Elliott, K. (2022). Civic and social engagement outcomes of education in emergencies: Perspectives from varied contexts. In *Handbook of Civic Engagement and Education* (pp. 266-279). Edward Elgar Publishing.

Semegn, Y. T., Gebreselassie, S. G., & Bezabih, A. M. (2023). Perceived benefits and challenges of school feeding programs in Addis Ababa , Ethiopia : A qualitative study. *MedRxiv*, 1–34.

Sung, L. J., & Chong-Sup, K. (2023). Community Participation in Nonformal Education Systems in Senegal and Tanzania: A Comparative Analysis Based on Social Capital Theory. *Journal of International and Area Studies*, *30*(1), 107-127.

Tsegay, B., & Gezahegne, K. (2023). *Internal Displacement in Ethiopia: Towards a New Policy and Legal Framework for Durable Solutions* (Issue July).Addis Ababa

Tyrer, R. A., & Fazel, M. (2014). School and community-based interventions for refugee and asylum seeking children: A systematic review. *PLoS ONE, 9*(2).

Union, A. (2018). Sustainable school feeding across the African Union. *Addis Ababa: African Union*.

UNESCO. (2002). *Guidelines for Education in Situations of Emergency and Crisis: EFA strategic planning; 2002*.

UNESCO. (2011). The Hidden Crisis: Armed Conflict and Education. In *Education and Internally Displaced Persons: Education as Humanitarian Response*.

UNESCO. (2015). *Investing against evidence*. UNESCO. https://unesdoc.unesco.org

UNESCO.(2021). Non-state Actors in Education. In *Global Education Monitoring Report*. https://en.unesco.org/gem-report/non-state_actors

UNESCO. (2023). *Education in Emergencies (EiE) Scoping Note for Ethiopia : National Priorities for Action and System Strengthening*. 1–36.

UNICEF. (2017). *Education in Emergencies Toolkit*.

UNICEF (2018). Feeding Minds, Fighting Hunger: A Toolbox for Improving School Feeding Programmes. UNICEF.

Wall, C., Tolar-Peterson, T., Reeder, N., Roberts, M., Reynolds, A., & Mendez, G. R. (2022). The impact of school meal programs on educational outcomes in African school children: A Systematic Review. *International Journal of Environmental Research and Public Health*, *19*(6).

Yigzaw, G. S., & Abitew, E. B. (2019). Causes and impacts of internal displacement in Ethiopia. *African Journal of Social Work*, *9*(2), 32-41.

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). sage.

Zenebe, M., Gebremedhin, S., Henry, C. J., & Regassa, N. (2018). School feeding program has resulted in improved dietary diversity, nutritional status and class attendance of school children. *Italian Journal of Pediatrics*, *44*(1),1–7.

Ethiopian Journal of Behavioral Studies, October 2025, 8(2), 231-240

Challenges of Using ICT to Improve Quality Education for Sustainable Development: Some Remarks*

Darge Wole[1]

DOI: https://doi.org/10.63990/ejobs.v8i2.12282

Received: 3 April 2025; Accepted: 18 June 2025

Given the wide conception of the term "technology," in the interest of focus and efficiency, I would like to limit my remarks to selected challenges of using ICT to improve quality education and to contribute to steady development. Quite befittingly, my remarks mostly refer to Ethiopian conditions, with public educational institutions in focus.

I choose to concentrate on challenges, not because there are no opportunities to exploit ICT for enhancing educational provision, but because I would like to set the stage for the upcoming deliberations by readers to first give considerable attention to the overwhelming nature of the issues at hand and then inspect the available opportunities in search of answers to the issues raised. I believe that the deliberations should go beyond academic wrestling, which is so characteristic of many university-initiated discussion forums, and shed some light on directions for practical measures that can help to address the issues under consideration.

* Keynote Speech delivered at the Hawassa University with the theme "Quality Education for Sustainable Development: The Role of Technology ", April 18, 2024

[1] Professor at School of Psychology, CELS, AAU. Email-dargewolem@gmail.com

I will first make a few observations about the key terms in the overarching topic of the Conference, namely "quality education," "technology," and "sustainable development". Then I will mention some of the challenges in employing ICT to improve quality education. Finally, I will throw in a few ideas by way of opening the way for discussion regarding future action.

Regarding quality education, in the views of many, it comprises competence of different kinds, relevance and a standard that does justice to the coverage and depth or level of a subject matter, skill, and ethics. There are also those who derive the meaning of quality from the nature of the three commonly cited components of teaching and learning; i.e., input, process and outcome. Although all these kinds of views hold a good deal of substance in them, I personally find the UNESCO Four Pillars of Learning (Delors, 1998) more comprehensive and instructive.

The four pillars are products of a study commissioned by UNESCO and consist of *Learning to Know*, *Learning to Do, Learning to Be*, and *Learning to Live Together*. Learning to know is not simply acquisition of information; it also involves learning to learn and engaging in lifelong learning. *Learning to do* is not simply developing vocational and other forms of skills, but also learning how to innovate and take initiatives for action. *Learning to Be* refers not just to forming an identity, but also to be self-regulating and capable of solving one's problems. Lastly, Learning to Live Together captures the ideas of working for a common goal, fulfilling one's civic responsibility and recognizing and respecting the diversity of cultures. To me, these four intertwined mainstays of learning are essential for understanding the quality of education across time and space, including cross-cultural contexts. They are also indicative of human capability to transcend itself.

Concerning technology, to me it is basically a human-made tool created in order to promote quality, quantity, efficiency and dependability in the tasks we undertake to achieve a satisfying life. But technology is susceptible to abuse, which can result in serious harm to its creator. Some kinds of technology, like the cell phone, are also alluringly attractive such that the user can be overawed by their glossy appearance and eye-catching icons and become addicted to them to the extent that he fails to exercise his/her own mental faculties in solving the simplest of tasks. The user could also be indiscreetly servile to solutions that may be generated by technology, without weighing the assumptions behind them. Technology is also a fast-developing phenomenon that requires constant self-updating or follow-up.

Pertaining to sustainable development, I feel that it is a phenomenon that is very sensitive to interferences and disruptions - political, economic, social, etc. and can easily lose momentum under such conditions or even show regression. A case in point is the repercussion of COVID-19 on educational participation which in many cases resulted in learning loss – a loss from which it is difficult to adequately recover through online learning (Cruz et al., 2024). Similar results are most likely to occur in situations of civil war or other forms of instability and conflict.

In addition, I feel that sustained development requires both foresight and hindsight. To wit, there was a time during the Dergue era when comprehensive high schools became the order of the day, but it turned out that many of the so-called "comprehensive" schools seriously lacked the ICT and other equipment they needed for teaching and learning. In hindsight, although the idea behind reforming the high schools was sound, it was based on unwarranted and unforgiving assumptions, and the

lesson so derived should alert us to anticipate possible risks in such ventures and to prepare for them ahead of time.

I would now like to highlight some of the challenges in using ICT in educational service in ordinary classrooms as well as virtual situations. For the sake of convenience, I have classified the challenges into: (1) Resources (including infrastructure and equipment), (2) Strategy (comprising initiative and implementation), and (3) Professional/personal factors.

Concerning resources, the oft-cited issue, particularly in relation to low-income countries, is the shortage of equipment like computers, the difficulty of getting internet access, and power shortages or interruptions. To me, such problems cannot be totally ascribed to financial or resource limitations. In some cases, they are exacerbated by lack of maintenance and deficiencies in management. A related, intractable issue regarding resources is the digital divide between the various regions of the country, urban versus rural areas, the non-disabled and the disabled users, etc. It is hard to conceive of sustainable national development without inclusion. Evidently, there is a need to take the issue more seriously.

The political and administrative aspects of the resource issue are important to consider in discussing the limitations in their availability. It is true that there have been efforts to address the problem, but it appears that competing resource requirements from other sectors have made it difficult to find sufficient resources for effective ICT use in education, despite the fact that education remains the basis of all development endeavors.

Decision-makers may also be in a quandary as to what is better to focus on: the preparation of better-qualified teachers and better textbooks or providing better ICT services. But it should not be forgotten that ICT can positively and noticeably address the needs of both teachers and students. International assistance is often taken as a crutch. Donors may occasionally offer some resources, but such donations are often scanty and tied to research or other types of projects. What is worse, they are sometimes a means of clearing out-of-date equipment under the guise of cooperation or support.

The awareness level and the views of the leadership in educational institutions, including schools, and universities, regarding the use of ICT in educational provision also set a limit to what they can do to make a case for the necessary facilities. In this connection, it appears that in some education bureaus, schools and similar institutions, interest in equipping administrative offices with computers outweighs the interest in equipping teachers with the facilities.

Let me now briefly address the strategy issues in terms of taking initiatives and implementing them. In this regard, the effort by different countries, including Ethiopia, has generally been unsatisfactory. The Satellite Plasma TV project in Ethiopia, which aimed at improving the quality of high school education, has had limited success for a variety of reasons, including deficiency of students in the medium of instruction (i.e. English), frequent power interruptions, the delivery method which was too fast for students and lack of interaction between the virtual teacher and the students (see, for example, Berhanu, 2016).

The Ethiopian National School Net Initiative, the National ICTs in Higher Education Initiative, and the National ICT Education, Training, and Awareness

program also fell short of their intended goals. Tesfaye & Anteneh (2020) have underscored various gaps, including limited capacity building for school teachers in the utilization of information technology.

According to the Ethiopian Ministry of Education (MOE), in 2018/19 for example, 78.7% of high schools in Ethiopia had computers but the computers were not functioning properly in 23% of the schools (MOE, 2019). Notably, the number of computers in each region and each school is left to the imagination of the reader, but there is probably wide variation from region to region and from school to school. The report also indicated that only 21.5% of high schools have internet access. It seems that the availability of the facilities is better in universities but even there internet access remains to be a problem. The condition with respect to university students with special needs looks especially worrisome. One of the First-Generation Universities, for example, could manage to provide visually impaired students only a few computers devoid of screen readers.

Similar experiences concerning projects designed to adopt ICT for improving quality education have been reported in the case of the 1998 Nigerian Computer Policy (Agbetuyi & Oluwatayo, 2012). Ghana's 2011 Basic School Computerization Policy achieved a little better (Natia & Al-Hassen, 2015), but not much. Depending on the particular country under consideration, limitations in resources, inadequate awareness and appreciation of the initiatives, ineffective coordination, and misappropriation of funds probably contributed to the results mentioned earlier. In my opinion, there could also be cultural factors impacting the implementation process such as low sensitivity to time frame in handling plan of action, inadequate appreciation of frequent and fact-

based consultations through electronic or other means, and lack of readiness to amend one's malpractices and decision-making procedures to better suit the initiatives.

Proceeding to the third and last problem area of my interest, namely, professional and personal factors that contribute to inadequate utilization of ICT for enhancing quality education, one main factor relates to beliefs about the powers of ICT and attitudes toward their use. In some cases, students and even teachers assign ICT the status of a deity that is to be revered and trusted in all the functions it performs, and in what it produces. As a result, there is often indiscriminate use of it as in the case of the famous (and some would say notorious) PowerPoint classroom practice that pervades our campuses. In teaching and learning, power point can be useful only to the extent that it is based on proper application of principles of multimedia use (Mayer, 2009; Waxman & Goldie, 2023). Aside from stifling reflective thinking, technical shortcomings in its utilization may induce a loss of interest in the subject of engagement which has been hyperbolically known as "Death by PowerPoint" (Felder & Brent, 2005). To take another perspective, many ICT users in education may be knowledgeable of the basics of the tools they use but may not be sufficiently proficient in utilizing them for learning and discourse as in the case of online learning or Zoom teleconferencing.

The ethical issue in assessing databases is also a prime concern. Today AI generator can produce a dissertation directly drawing on sources available on the Internet which means that academic integrity and scientific advancement are at stake. Misinformation via electronic media can damage quality of education. Indeed, at a time when AI can come up with a sonnet not unlike those of Shakespeare, the individual learner may easily trade his brain for a machine.

In conclusion, I would like to put forward a few ideas which readers may entertain or develop in discussing actions that could be undertaken in the face of the overwhelming challenges of using technology, particularly ICT, to enhance quality education for sustainable development. In this regard, I feel that a re-evaluation of past efforts not just by the Ministry of Education but the Ministry jointly with other stakeholders, including universities, could be useful to correct past oversights and errors.

There is also a need to expand computer literacy and create the proper attitude towards its use. Developing a model for ICT use in education – a model which involves, among others, the pedagogical aspects is important. Educational institutions must systematically respond to the calls of the Four Pillars of Learning which I mentioned earlier and possibly to the fifth one of my own creations, namely *Learning how to Survive under Turbulences*, through the use of appropriate technology, including the development or responsible adaption of context-relevant courseware. Inclusiveness in practical terms should be high on the agenda of not only educational institutions of all levels and the higher echelons of government.

Whatever fruitful efforts made by the government, although utterly inadequate, should be given due credit. However, the involvement of the private sector in supporting the effort to advance the use of ICT and educational technology in general can be beneficial. An up-to-date, stringent, and context-relevant regulation comprising ethical standards and requirements is also desirable. Above all, there is a need for strengthening political will that is concretely translated into action on the ground to advance quality education. Circumspection and the unfettering of bureaucracy should go hand in hand with such political will. On their part, universities should give leverage

to efforts aimed at integrating the use of ICT in education, not just in terms of enabling users to be tech-literate and tech-critical but also for the purposes of improving project design and evaluation, and for system development. It makes a good deal of sense to think of such engagements as multi-disciplinary, involving such areas as information science, psychology, and neuroscience.

To pick up another decisive issue, social strife is inimical to quality education and, by corollary, to sustainable socio-economic progress. Sagacity on the part of those who wield political power and the general community is essential for averting or dealing with such aberrations. Under traumatic conditions, ICT and, more broadly, educational technology will have limited or even deleterious impact on quality education and sustainable development.

To sum up, the task at hand is daunting, and the solutions are complicated involving political, economic, governance, and social dimensions. As such, they require commitment and partnership by all concerned – with the higher echelons of government paving the way.

References

Agbetuyi, P. A., Oluwatayo, J. A. (2012). Information and communication technology (ICT) in Nigerian educational system. *Mediterranean Journal of Social Sciences*, *3*(3), 41.

Berhanu Abera. (2016). *Some latent problems of utilizing the plasma-based instruction in Ethiopia*. Retrieved from

https://www.researchgate.net/publication/312552228_Some_Latent_Problems_for_Utilizing_the_Plasma-Based_Instruction_in_Ethiopia

Dela Cruz, N.A., Adona, A. J., Molato- Gayares, R., & Park, A. (2024, March). *Learning loss and recovery from the COVID-19 pandemic: A systematic review of evidence*. In Working Paper Series (No. 717).

Retrieved from https://www.adb.org/sites/default/files/publication/951456/ewp-717-learning-loss-recovery-covid19.pdfelors

Delors, J. (1998). *Learning: The treasure within.* UNESCO publishing.

Tesfaye Bayu, & Anteneh Wasyhun. (2020). Evaluating integrated use of information technologies in secondary schools of Ethiopia using design-reality gap analysis: A school-level study. *The Electronic Journal of Information Systems in Developing Countries*. Vol. 87.DOI: 10.1002/isd2.12148

Felder, R. M., & Brent, R. (2005). Death by power point. *Chemical Engineering Education 39*(1), 28-29.

Mayer, R. E. (2009) *Multimedia learning* (2nd Edition) Cambridge University Press.

MOE. (2019). *Education statistics annual abstract* (2018/2019).Retrieved from https://ecde.aau.edu.et/jspui/bitstream/123456789/274/1/MoE%2016%20ESAA%202011%20E.C.%20%282018-2019%20G.C%29.pdf

Natia, J.A., & Al-hassen, S. (2015). Promoting teaching and learning in Ghanian basic schools through ICT. *International Journal of Education and Development using Information and Communication Technology*, *11*(2), 113-125.

Waxman, J. B., & Goldie, S. J. (2023). *Cognitive theory of multimedia learning - Applying cognitive load theory to the design of educational multimedia*. Retrieved from

https://media.repository.chds.hsph.harvard.edu/static/filer_public/ca/62/ca625803-3d73-4855-b3e1-765870ce3772/2023_jwaxman_monograph_cogtheory_multimed.pdf

NOTES TO THE CONTRIBUTORS

1. Ethiopian Journal of Behavioral Studies (EJoBS) is a bi-annual print Journal of the CEBS, AAU. Original research articles, meta-analytic studies, desk reviews and short communications of important theoretical and practical contributions in the area of behavioral studies are welcomed.
2. Articles published in non-peer reviewed proceedings, and books can also be submitted provided the recency of manuscripts is maintained.
3. Major components of the article include title and author/s, abstract (210 words), key words (a maximum of 7 words/ phrases), Introduction section presenting genesis of the problem, review of literature and research gap, and objectives of the research, methods containing design, research sites, participants (population, sample size, and technique), instruments, procedures, and ethicality, results, discussion, conclusion, recommendation and references.
4. The size of the manuscript should be 20-25 pages, computerized, 1.5 line spacing on one side of A4 paper. However, longer articles are also acceptable if the length is necessitated by richness of monolithic content, which cannot be presented in separate articles.
5. EJoBS follows the 7th APA Publication Manual for all citations, referencing and formats.
6. Language of publication is English. Use one form of spelling, preferably the UK English throughout the text. This should either be American (i.e. according to, for example, Merriam WEBESTER's dictionary) or British spelling (i.e. according to OXFORD dictionary).Do not mix or switch between the two forms. However, works written in Amharic may also be published under special conditions. The texts submitted must be clear and understandable, and be in line with scientific criteria in terms of language and expression. All authors must avoid gender-insensitive and racist language. Use of discriminatory, inflammatory, and unethical expression (derogatory, inciting, defamatory, etc. languages) is unacceptable.
7. Upon submission of the article, the author shall attach a signed letter of acceptance of the following terms of publication:
    - That data and citations are authentic and not fabricated;
    - That data and ideas in the article are not plagiarized;
    - That pictures of humans are consented;
    - That the article has never been published in any other journal so far; and
    - That the article shall not be sent to any other journal once considered for publication in EJoBS.
8. Submit hard copy or soft copy to the following address:

Ethiopian Journal of Behavioral Studies (EJoBS)
Email-ejobs@aau.edu.et
Tel:+251-984948512/+251-911405837
Website:www.aau.ed
u.et/ejobs, Nelson
Mandela, NBR 026,
ground Floor, Main
campus, Addis Ababa
University,
P.O. Box 33617, Addis Ababa, Ethiopia

9. You must get acknowledgement of receipt duly signed by the Editor-in-Chief upon submission of your manuscript so that EJoBS can only hold accountability for it.

The Ethiopian Journal of Behavioral Studies is a bi-annual publication of the College of Education and Language Studies of the Addis Ababa University

Design: Mickael Deprez