

EDUCATIONAL PLANNING

Summer 2026

Vol. 33 No. 3

The Journal of the International Society for Educational Planning

PROMOTING THE STUDY AND PRACTICE OF EDUCATIONAL PLANNING





International Society for Educational Planning

Editor-in-Chief

Selahattin Turan,

Bursa Uludağ University, Türkiye

Associate Editors

Walter Polka

Niagara University, USA

&

Hamit Özen

Eskişehir Osmangazi University, Türkiye

Assistant Editor

Micheal Hylan

Anderson University, USA

Online Manager

Caitlin Riegel

Daemen University, USA

EDITORIAL REVIEW BOARD (Updated July, 2026)

Alsaeed Saad Alshamy <i>Sultan Qaboos University, Oman</i>	Arvin Johnson <i>Kennesaw State University, USA</i>
Roselle C. Aranha <i>Niagara University, USA</i>	Lori Jonas <i>Niagara University, USA</i>
Easaw Alemayehu Assefa <i>Amigonian International School, Ethiopia</i>	Ebru Karataş <i>Ghent University, Belgium</i>
Marcia Baldanza <i>Marymount University, USA</i>	Sushma Marwaha <i>Niagara University, Canada</i>
Abdourahmane Barry <i>Taibah University, Saudi Arabia</i>	John McKenna <i>Niagara University, USA</i>
Jodie Brinkmann <i>Virginia Tech and State University, USA</i>	John A. McTavish <i>Niagara College, Canada</i>
Carol Cash <i>Virginia Tech and State University, USA</i>	Agostino Menna <i>Bishop's University, Canada</i>
Tak Cheung Chan <i>Kennesaw State University, USA</i>	Noran L. Moffett <i>Fayetteville State University, USA</i>
Kristine Clark <i>Niagara College, Canada</i>	Maruff Oladejo <i>University of Lagos, Nigeria</i>
Nicholas Clegorne <i>Kennesaw State University, USA</i>	Zehra Keser Özmantar <i>Gaziantep University, Türkiye</i>
Caroline Crawford <i>University of Houston-Clear Lake, USA</i>	Isela Pena <i>University of Texas at El Paso, USA</i>
Mike Douse <i>Independent Scholar, UK</i>	Ardene Reid-Virtue <i>Church Teachers' College, Jamaica</i>
Edward Duncanson <i>Western Connecticut State University, USA</i>	Caitlin Riegel <i>Daemen University, USA</i>
Khaled W. El-Nemr <i>Culpeper County Public Schools, USA</i>	Abebayehu Tekleselassie <i>The George Washington University, USA</i>
Angel Y. Ford <i>University at Albany, USA</i>	Canute S. Thompson <i>The University of the West Indies, Jamaica</i>
Ori Eyal <i>Hebrew University of Jerusalem, Israel</i>	Maartje Eva Damiate Van den Bogaard <i>Missouri State University, USA</i>
Ming Tak Hue <i>Hong Kong Shue Yan University, China</i>	Ting Wang <i>Huzhou Normal University, China</i>
John Hunt <i>Southern Illinois University Edwardsville, USA</i>	Ann-Marie Wilmot <i>The University of the West Indies, Jamaica</i>
Binbin Jiang <i>Kennesaw State University, USA</i>	T. DeVere Wolsey <i>The National Coalition of Independent Researchers, Spain</i>

©2026 International Society for Educational Planning (ISEP). All Rights Reserved.

Educational Planning is the peer-reviewed refereed journal of the International Society for Educational Planning (ISEP). *Educational Planning*, published quarterly by ISEP, is available in both paper copies and online on the ISEP website. The Journal is assigned ISSN 2998-7067 (digital) and ISSN 1537-873X (paper) by the National Serials Data Program of the Library of Congress. The journal has been published online since January 2025. All materials in the Journal are the property of ISEP and are copyrighted. No part of this publication may be reproduced or transmitted in any form by any means, electronically or mechanically, including photocopy, recording, or any information storage or retrieval system, without written permission from the publisher. Permission to use material generally will be made available by the editor to students and educational institutions upon written request. For manuscript submission and membership information, please see the submission of manuscripts. *The Journal is indexed in the H. W. Wilson Education Index. The articles are part of the EBSCO and the ERIC Database.*

EDUCATIONAL PLANNING

*An International Journal Dedicated to Planning, Change, Reform, and
the Sustainable Improvement of Education*

Volume 33

Number 3

Summer 2026

From the Editors	5
Planning for Consistent Empathy Education: Lessons Learned in Denmark <i>Christine Woodcock</i>	7
Transforming Lives: The Impact of School Meals Programs in Addis Ababa, Ethiopia: Insights from Selected Schools <i>Easaw Alemayehu Assefa</i>	27
The Status of Preschools in the Sidama Regional State in Meeting the Minimum Standards Set for Ethiopian Preschools <i>Birhanu S. Alemu, Befekadu Zeleke Kidane, and Seleshi Zeleke</i>	47
Between Structural Constraints and Educational Opportunities: Girls' Education in Pastoralist Communities of Dollo Ado Woreda, Ethiopia <i>Manaye Abera Shamalo, Jeilu Oumer Hassen, and Kenenisa Dabbi Furi</i>	62
Aspiring and Early Career Principals' Perceptions of One-on-One Coaching and Its Relationship to Instructional Leadership Self-Efficacy: A Virginia, U.S., Case Study <i>Danielle E. Colucci and Jodie L. Brinkmann</i>	87
Invitation to Submit Manuscripts.....	108
Invitation to Submit Book Reviews.....	109
Membership Application.....	110

From The Editors

At a time when education and school systems around the world are confronted with unprecedented social, economic, technological, and political challenges, the need for thoughtful, reflective and equitable educational planning and evidence-informed policymaking has never been greater. It is within this context that *Educational Planning Journal* (EPJ) is pleased to present the Summer 2026 issue, reaffirming its long-standing commitment to advancing scholarship that bridges research, policy, and practice in educational planning and policy. Since its founding in 1973, *Educational Planning* has occupied a distinctive place in the field. Published through the unwavering support of members of the *International Society for Educational Planning* (ISEP) and sustained by the voluntary dedication of scholars from around the world, the journal has now entered its 53rd year. Throughout its history, it has remained independent of commercial interests and steadfast in its mission to promote rigorous scholarship that contributes to the improvement of educational systems and the realization of quality education as a fundamental right for every child on earth.

Educational planning is far more than a technical exercise in resource allocation or policy design. It is a moral and intellectual endeavor that shapes opportunities, addresses inequalities, injustices, and influences the human life and future of societies. The articles presented in this issue reflect this broader understanding by examining pressing educational challenges through diverse theoretical perspectives and practical experiences drawn from different national and local contexts. Readers will encounter contributions that highlight the transformative potential of empathetic education, explore how school meal programs can enhance children's physical, mental, and emotional well-being, examine essential standards for early childhood education, address persistent barriers to girls' education, and propose innovative models for supporting newly appointed school leaders. Although these studies emerge from local contexts, the questions they raise and the lessons they offer resonate far beyond national boundaries, reminding us that many educational challenges are shared while effective solutions often begin locally.

As educational systems continue to navigate uncertainty and rapid change, journals such as *Educational Planning* play a vital role in fostering informed dialogue among researchers, policymakers, and practitioners. By disseminating high-quality research that is both theoretically grounded and practically relevant, we hope to contribute to educational policies that are more equitable, more inclusive, and more responsive to the needs of learners and communities across the globe. We extend our deepest appreciation to the authors who entrusted us with their work and to our reviewers, whose generosity, expertise, and commitment uphold the scholarly integrity of this journal. Their careful and constructive evaluations not only strengthen individual manuscripts

but also sustain the quality and credibility of academic publishing. Their invaluable service remains one of the cornerstones of *Educational Planning*. We invite scholars, researchers, and practitioners to submit their research, theoretical contributions, and case-based studies for consideration in forthcoming issues of the journal.

Editor:

Selahattin Turan

Associate Editors:

Walt Polka & Hamit Özen

Assistant Editor:

Michael Hylan

Planning for Consistent Empathy Education: Lessons Learned in Denmark

Christine Woodcock

State University of New York at New Paltz
School of Education, USA

Abstract

Denmark is the only country in the world with mandatory empathy education at the primary and secondary levels. Denmark is highly regarded for its unique 'klassens tid', which translates to 'class time'. This ethnographic study shares intricacies of how Danish educators approach klassens tid, providing tangible suggestions for educational planners worldwide to implement regular time devoted to empathy education. Klassens tid is defined and then situated theoretically in the ways it differs from international social-emotional learning, and how it plays a role in deep comprehension and social sustainability. Findings revealed that klassens tid naturally integrated many literacy activities, explored identity development, and cultivated sincere relationships and community. Implications include practical ways for educational planners to consider the relational construction of knowledge, the role of play and the outdoors in learning, and the bridges between literal and inferential comprehension for students to examine multiple perspectives.

Keywords: klassens tid, social sustainability, inferential comprehension, social-emotional learning

Introduction

In the early months of 2026 in the United States, there were numerous protests demonstrating disapproval of the Trump administration and the U.S. Immigration and Customs Enforcement's violence. During a Bruce Springsteen concert in Minneapolis, Minnesota, where much of the violence had occurred, stood a notable sign about empathy, which may be seen in Figure 1 below. This photograph depicts the empathy sign that stood high above the concert as Springsteen sang. The sign provides a definition of empathy, described as, "The ability to share someone else's feelings or experiences by imagining what it would be like to be in that person's situation."

Figure 1

Empathy sign



In the United States, empathy levels among college students have declined by 40 percent in recent decades, despite the efforts of many American schools to place more emphasis on social-emotional learning (SEL) (Stoltzfus, 2016). Many American educators report a need for students to better understand one another in a globalized world, citing the specific need for global competence to be empathic citizens in their jobs and lives (Tichnor-Wagner, 2016). Ninety percent of American educators are significantly more concerned about student mental health than in the past, citing it as a crisis in their schools. This recent, intensified focus is driven by a rise in student behavioral issues, anxiety, and depression—with a minimum of 80% of teachers reporting student behavior challenges at least a few times a week (Long, 2025). Although 83% of American schools report that they have SEL, SEL is far-reaching and treated as its own siloed subject, with empathy being only one of several possible concepts that might be covered. Only 44% of teachers say SEL efforts are being implemented systematically in their schools (Bushweller, 2025).

By contrast, Denmark is the only country in the world with mandatory empathy education at the primary and secondary levels. Denmark is highly regarded for its unique ‘klassens tid’, which translates to ‘class time’. Klassens tid typically looks like an engaged, intimate, reflective conversation among all peers, facilitated by the teacher, often taking place in a circle. In 1990, klassens tid became a nationally established pedagogical practice in Denmark, and it is considered a valued part of Danish culture and a means by which they build a positive and inclusive classroom environment that promotes democracy and the emotional wellbeing of students (Let’s Care Project, 2026). Many attributes define the objectives of klassens tid sessions, such as team building, role playing, and problem solving, and ultimately, fostering dialogue. Many times, literacy activities are naturally integrated; however, klassens tid is considered a safe time separate from academic subjects, often referred to as ‘an oasis’ and a time to share cake with one another. Danish educators believe that the advancement of academic skills cannot exist without the overall wellbeing of the student intact.

Purpose of the Study

This study aimed to understand klassens tid and examine links between empathy and comprehension (e.g., understanding perspective, making inferences), as well as links between empathy and social benefits, such as the propensity for equality. Ultimately, the goal was to create empathy, klassens tid-inspired ideas for educational planners around the world to collaborate and institute their own, socially sustainable versions of it.

Research Questions

The research was grounded in the following questions:

1. How do various Danish educators approach klassens tid?
2. How is klassens tid linked to vocabulary development, perspective taking, and emotional inferencing?
3. What are some ways that klassens tid could be structured and taught in classrooms all over the world? What planning strategies would be most helpful to complement this endeavor?

Literature Review

Understanding Klassens Tid as it Relates to SEL

In Danish schools, one hour per week is devoted to klassens tid, an empathy lesson for students aged 6-16. It is a central part of the Danish curriculum, as well as their culture. Klassens tid is a space for students to discuss their problems and to find a solution based on listening and understanding (Organization for Economic Co-operation and Development, 2004). The topics vary in type and severity. Sometimes, students are simply coming together to discuss a universally agreed-upon solution to a question such as how to spend earned classroom funds for a field trip. Other times, students may be discussing upsetting relational occurrences in the classroom and how best to resolve them. At times, teachers have predetermined activities or materials in mind, such as resources for mental health, such as a national teen help line center. In the end, klassens tid treats empathy as a pragmatic, actionable skill that is practiced regularly, rather than classified as a theoretical concept (Adecco, 2020).

While klassens tid falls under the broad, international umbrella of SEL, it differs from conventional, international SEL models in its structured, mandatory implementation as part of the national Danish curriculum and its specific focus on group-level problem-solving (Lalomia & Cascales-Martinez, 2023). Fundamental differences between klassens tid and typical SEL include the way it is regarded as compulsory curriculum tied to culture, and not an optional or “extra” program. In klassens tid, the focus is on the group and the collective good of the group. Students discuss issues that are real to them (e.g., loneliness, friendship, bullying), and that may affect the entire class. In this way, students build a cohesive community as they support one another. This differs from many SEL curricula and approaches that tend to focus on individual social-emotional competencies like self-awareness, self-management, or personal decision-making (CASEL, 2026). The Collaborative for Academic, Social, and Emotional Learning (CASEL) defines SEL as:

(T)he processes through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. (CASEL, 2026, p. 1)

During klassens tid, there may be academic components that naturally occur, such as reading and writing, yet no academic assessment nor measurable goals are attached to klassens tid. It is considered a safe space for dialogue and sharing. By contrast, SEL frequently incorporates measurable indicators to evaluate a student’s emotional growth and social skills. It is common to see Danish students excitedly sharing cake during klassens tid. This cultural practice further exemplifies the low stress, practical application of their special time together as a community. Fundamentally, klassens tid is a protected, treasured part of the Danish week, whereas international SEL approaches vary widely depending on the school district, often lacking uniformity in implementation (Bushweller, 2025; CASEL, 2026).

Research illustrates that empathy is the root of all pro-social behaviors and can be improved through specific education (Sala et al., 2020). The LifeComp Framework maintains that empathy is comprised of three aspects: the ability to recognize emotions in others; to cognitively take the perspective of others and share emotional states with them; and the ability to offer an appropriate response to others’ emotions (Sala et al., 2020). In a large American survey of SEL implementation (Bushweller, 2025), many teachers indicated that they wished for an approach that

resembled *klassens tid*, although it was not named as such. American teachers asked to let SEL occur in the regular classroom naturally. Teachers wished SEL skills could be naturally embedded into the school day the way that it was done before naming it SEL and formalizing it. Nearly 40% of respondents said that they had little or no funding for SEL. Of those who did have prefabricated curricula, they indicated that the pre-packaged material often feels misaligned to their students' needs. "I find that sitting down, encouraging conversation, and actually listening to kids helps more than anything. We need to listen more and talk less.... Students do not want to participate in the canned curriculum for SEL that we have to teach" (Bushweller, 2025, bottom quotes). Teachers cited inconsistent implementation of SEL as problematic, along with lack of teacher education, support, and professional development.

Empathy and its Role in Comprehension

Although there are no academic demands connected to *klassens tid* in Denmark, academic concepts naturally emerge during *klassens tid* and are often literacy-based and play a role in students' ability to comprehend and infer. Examples include the exploration of vocabulary for discussion, reflection on digital literacies such as pertinent videos or social media prompts, creating written responses to prompts that will later be shared in discussions, and a range of brief reading assignments that correspond with the topic of *klassens tid*. During *klassens tid*, Danish students explore personal and social justice issues through discussion, reading, writing, drama, and artwork as a means of reflecting upon real life scenarios, while making sense of their own emotional responses and concerns. Danish teachers guide students through structured reflection techniques and learn how to target emotional responses to their learning to establish more targeted inferential comprehension. As Danish students engage in "full identification" with others, drawing more sophisticated inferences, they allow themselves to make emotional connections deep enough to understand the profound, and to envision how they can make a sincere difference in their own communities and the shared social world (Alexander, 2016; Lalomia & Cascles-Martinez, 2023).

Empathy and critical literacy are intertwined in the ways that critical literacy encourages a deep understanding of texts, perspectives, and power structures, which in turn cultivates empathy. Critical literacy involves questioning and analyzing information, including identifying biases and power dynamics, cultivating a more comprehensive understanding of various perspectives. Critical analysis can lead to greater empathy as individuals become more aware of the experiences and perspectives of others, especially those who may be marginalized or oppressed (Schneider, 2020). Critical thinking, especially critical thinking that leads to compassionate action, requires a seedbed of empathy. As a result, in school, students must have dedicated time and structures for listening deeply to one another. The development of cognitive empathy, promoted by reading literary texts, has been associated with creative writing, decreased anxiety (Betzael & Shechtman, 2010; Hibbin, 2016), a higher level of understanding of social justice, and decreased prejudice and discriminatory behavior toward different opinions (Lysaker & Sedberry, 2015; Newstreet et al., 2018). As educators and students engage in the work of identifying, labeling, and discussing emotions in the classroom, it has the potential to become a new form of empathy that is dedicated to addressing the inequities in school and public life, and a way to engage with democratic power structures (Mirra, 2018). Inferential comprehension is an imperative step that allows students to go beyond literal meanings. Critical literacy is one method to question, analyze, and evaluate multiple viewpoints and power dynamics. Empathy may be one of the major outcomes of this work (Schneider, 2020).

Relationship to the Self, the Community, and the World: Democracy, Bildung, and Social Sustainability

Democracy

The Organization for Economic Cooperation and Development (OECD) is an international organization of 38 democracies. The primary goal of the OECD is to advance policies that ameliorate economic and social well-being worldwide (U.S. Mission to the OECD, 2026). In 2023, the OECD performed a survey on SEL skills, recognized as the largest global initiative to gather comparable data on the development of those skills. They measured creativity, empathy, achievement, motivation, responsibility, and collaboration skills among 10- and 15-year-old students (OECD, 2024). The results revealed marked disparities (both within and between participating countries and subnational entities) in how SEL skills are fostered in schools, homes, and society, accenting the critical need for improvements. Danish educators have written about aspects of building democracy in their classrooms through the practice of *klassens tid* (Sandahl, 2017). They believe that *klassens tid* plays a role in promoting equality, social and emotional skills development, student participation and autonomy, and an overall improved school climate. *Klassens tid* is effective in fostering democracy, dialogue, and problem-solving in the classroom (Sandahl, 2017). Research demonstrates that Danish schools are underpinnings for democracy and that students in Denmark are amongst the most competent in the world when it comes to democracy, as well as in relation to being able to structure, organize, and effectively carry out tasks independently, and perhaps more importantly, in groups (Johnsen, 2024).

In a democracy, there are both individual and societal rights and responsibilities (Malory & Trust, 2020). While Denmark recognizes and respects individual liberties, there is an emphasis on the collective good in their culture, evident in their educational culture and pedagogy, including *klassens tid*. Danish writer Hal Koch argued that democracy is not just a system of government. It is a way of life. Democracy is the conversation and mutual understanding between us. “Democracy can never be secured - because it is not a system just to be implemented, but a way of life to be pursued” (Frederiksen, 2021). Democracy is ever evolving and largely sustained by consistent social interactions for the collective well-being of society.

Bildung

While the emphasis is often on the classroom community as a whole, there is certainly attention on the development of individuality as well. In Danish schools, *Bildung* (or *dannelse* in Danish) is how Denmark attends to the holistic development of the individual, yet a whole, empathetic person. *Bildung* is a German concept combining education, self-cultivation, and moral maturation, representing a lifelong process of personal growth, character development, and acquiring a broader understanding of the world. It focuses on nurturing individual potential, fostering civic responsibility, and developing the ability to apply knowledge for the common good. In this way, students do not just memorize and regurgitate academic facts. *Bildung* synthesizes the acquisition of knowledge with emotional maturity, moral development, critical thinking, and civic empowerment to create responsible and empathetic democratic citizens (Beck, 2023). When considered this way, *Bildung/dannelse* shows the relationship between individual growth and the contribution to the ongoing growth of community and the wellbeing of democracy. The *dannelse* approach in Denmark empowers individuals to take responsibility for themselves, their community, and the world.

Social Sustainability

When considering sustainability practices, people often think of environmental sustainability. Yet, sustainability is comprised of environmental, economic, and social factors. Social sustainability focuses on the human side of sustainability as it relates to the planet. Without social sustainability, environmental and economic initiatives have the potential to fail due to lack of public support, social unrest, or inequalities that destabilize communities. Social sustainability is a component of sustainable development that focuses on establishing equitable, healthy, and adaptable communities that promote long-term wellbeing. Aiming towards social sustainability helps to ensure that current and future generations have access to basic needs, a better quality of life, basic human rights, and the acquisition of social justice. Central tenets of social sustainability include equity, diversity, safety, and democratic participation (McGuinn et al., 2020). Danish scholars believe that *klassens tid* is one way that educators and students contribute to and cultivate social sustainability (Levitt, 2020). Denmark falls into the top group internationally (rank 2) with regard to social sustainability (Sustainable Governance Indicators, 2026). Franklin (2022) points out that scholarship within the sustainability sciences fails to engage with the political core of sustainability. In efforts to confront political cores, especially in cross-cultural, tangible ways, it is proposed that researchers do so in ways that unpack dialogical practices that acknowledge the political underpinnings of sustainable development. A cross-cultural ethnography contributes to this understanding.

Methodology

An American researcher spent two weeks in Denmark through a partnership with a Danish university. A registered ethnography was conducted, including a detailed investigation of individual teaching cases and a systematic study of Danish teaching culture. An ethnography is a study about relationships between people and several aspects of their life, such as socio-political and cultural aspects (Harwati, 2019). The main objective of an ethnographic approach is to understand the relationship between people and their social environment (Hallet & Barber, 2014). The unique characteristic of the ethnographic approach is the close relationship between the researcher and the researched (Harwati, 2019).

Setting and Participants

The setting was a city in south-central Denmark. Two schools participated. One school was public, and one school was private. Both schools served students aged approximately 5 – 16. The schools were both ethnically diverse, serving not only native Danish students, but also students from all over the world, including recent immigrants. The private school contained an international wing, serving students from all over the world. At each school, several teachers volunteered to participate, resulting in eight distinct observations of *klassens tid* and five separate, informal interviews. The participants were teachers of grades 5 – 7.

Data Sources and Analysis

Data sources included observations of teachers and students during *klassens tid*, informal interviews with educators, curriculum notes, field notes, and photography. Each observation lasted 45 minutes. There were no pre-written interview questions, and interviews were unplanned and spontaneous. The interviews were unstructured and informal (Merriam, 2001), consisting of open-ended questions (Marshall & Rossman, 1999), which created a discourse that was collaboratively constructed by the participant and the researcher (Mishler, 1986). This approach lent itself to a conversational context that was conducive to the flow of personal stories (Borland, 1991), often referred to by qualitative

researchers as “conversations, but conversations with a purpose” (Merriam, 2001, p. 71). There are decades of research to support the merits and benefits of unstructured interviews (some of which are not obtainable with a structured interview approach), including greater face-validity, positive interviewee and interviewer reactions, and greater practicality in a real setting (Chauhan, 2019).

Observations, field notes, and anecdotal records were preserved in the form of a researcher’s handwritten journal. The anecdotal records focused on objective, detailed descriptions of specific behaviors and interactions, including context like date, time, and setting, and used specific, factual language rather than interpretations or judgments. For analysis, the anecdotal records were reviewed regularly to identify patterns and to categorize recurring themes, in combination with other triangulation methods. Trends were analyzed using the constant comparative method using axial and selective coding methods (Glaser & Strauss, 1967; Strauss & Corbin, 1998). It was a nonlinear, recursive, dialogical process, and as patterns were detected in the data, they were color-coded. The process began with open coding, when the researcher broke down raw data (transcripts, field notes) into smaller, meaningful segments. After the initial open coding was complete, the process moved to axial coding, when the researcher refined and connected the established categories. The constant comparative method continued to determine this step. Selective coding is the final phase. During selective coding, the researcher integrated the major categories around a central variable to create a coherent framework. Constant comparison is vital (Glaser & Strauss, 1967; Strauss & Corbin, 1998).

Validity

To ensure validity, member checks were performed. Directly following each interview or observation, the researcher wrote about the experience and any reactions to it. This process helped to ensure validity and helped to document any contextual circumstances not discussed during the interview/observation in the form of field notes. During analysis, the researcher was also a member of an interpretive community (Tappan, 2001; Taylor, et al., 1995). This community was a collaboration of other educators sensitive to the issues involved in the study, who met regularly to offer support and suggestions for interpretations of data. The interpretive community played a key role in identifying triangulation of data, cultural interpretations, and potential for bias.

Results

Natural Integration of Literacy and Comprehension

Although *klassens tid* is described by Danish educators as a special time separate from academic subjects, literacy was always observed as a naturally integrated element in every *klassens tid* session during the present study. This may not necessarily be surprising, however, since oral language and literacy are remarkably interwoven, playing a distinct role in comprehension and communication. While oral language provides an avenue to express thoughts and emotions, literacy is a modality to make sense of written information, deepening knowledge and the ability to empathize. Both spoken language and literacy are skills fundamental to individual and societal development, promoting academic success and fostering informed citizenship (Voyager Sopris Learning, 2023). There were no explicit literacy lessons embedded in *klassens tid*, such as how to punctuate an essay or ways to navigate a tough reading passage. Instead, the time was preserved for traditional aspects of *klassens tid*, such as conversations, debate, problem solving, and role play. By contrast, there were always literacy-related tasks associated with *klassens tid*, such as watching a brief video and writing a reflection on it to share with the group, or a playful digital quiz related to the topic of that session of *klassens tid* to invigorate the discussion, or even language production projects, such as creating one’s

own poster in response to a klassens tid topic. For example, in one 7th grade class, the klassens tid topic pertained to the use of social media and its pros and cons. Students were asked to create their own Instagram post. First, as a class, everyone looked at examples to examine what qualities make an Instagram post positive and affirming, rather than shaming or negative. The teacher introduced the concept with examples of posts, and a lively, engaged conversation ensued. Then the teacher asked students to work in small groups at their circular tables to collaborate to come up with a post that they found positive and affirming. Students openly discussed taking and/or posting a photo without permission because that had happened earlier that week in their school. They were able to explore multiple perspectives and infer the upset feelings a peer would feel at having their privacy violated.

This was a clear example of the bridge between literal and inferential comprehension. From the concrete nature of the Instagram post and their recent experiences, students were able to infer complex emotions and imagine how others were feeling, hence empathizing. There were also clear benefits of being able to create their own positive and affirming Instagram posts, critically reflecting upon what elements would make a post complimentary and supportive. The students' generation of their own posts was an example of a language production project. Language production projects are content-based, purpose-driven opportunities to generate an oral or written product. They can take many forms, providing opportunities to promote students' comprehension and knowledge (Lesaux & Galloway, 2017). During another 7th grade class observation of klassens tid, the teacher brought the students outside. It was a beautiful spring day, and it provided an opportunity for students to use their outside circle. In Denmark, circular spaces in parks are intentionally placed to promote democratic discussions (Budds, 2017). Figure 2 below is an example of a common ring-shaped environment in Denmark, designed to facilitate community engagement, consensus-building, and public debate by stimulating face-to-face equality and open communication.

Figure 2

Democracy Circle



Outdoor democracy circles are common in Denmark, as is regular, frequent outdoor time for students throughout the Danish school day. When this particular klassens tid session began, the teacher read aloud from a fictional script. The script and its accompanying questions served as an anchor for the discussion. The story presented a dilemma about an ‘anti-fear pill’ and the pros and cons of these fictional pills. Students had time to talk in partners and later share with the whole group whether or not they thought the fictional character in the script should take the anti-fear pills. The teacher gradually guided the students to tackle quandaries in segments with various questions. All students were provided with opportunities to speak, and the entire discussion was scaffolded and facilitated by the teacher. A little stuffed animal was tossed around the circle to signify whose turn it was to speak. Students appeared passionate and engaged about the scenario, sharing varied perspectives for nearly 45 minutes. The character in the story was afraid of everything. Students empathized with his fear and discussed the pros and cons of taking an anti-fear pill. Inferences included that perhaps the pills could be beneficial because the character would be able to experience more in his life. Students went on to debate that maybe he should not take the pills because we all need some fear in our lives, in moderation. After all, there is a balance necessary. Inferential questions included items such as, “Is he truly brave if he takes the pills?” Klassens tid concluded with the students all playing a game of strategic cooperation. Students clearly exhibited joy at just being outside and playing together.

In an observation of 6th grade, the main topic was a free, country-wide Danish teen hotline available for help to adolescents around the clock, and with caller anonymity. The teacher had several slides and videos prepared as a way of engaging students in several naturally embedded literacy tasks such as reading the slides, watching the videos, and then turning to talk to the peers sitting next to them to discuss and write about various dilemmas presented in the materials. All the dilemmas explored in the teen hotline slides/videos were big issues that are important and meaningful to tweens and teens, such as popularity, phone usage, social media usage, and feeling excluded. Students collaborated in a whole group activity, sharing content to create one concept map together on the board to brainstorm how the teen hotline helped. A concept map is a visual diagram that organizes and represents relationships between ideas (Cornell University, 2026). Figure 3 below shows the concept map that the 6th grade created about Bornetelefonen, the teen hotline (Bornetelefonen, 2026).

Figure 3
Concept Map



There were many examples of literacy evident in this session of *klassens tid*, including the slides, the videos, writing, the concept map, and explicit vocabulary instruction, such as with the word ‘anonymous’. The teacher scaffolded inference with reflective questions, such as “Why do you think this boy is afraid to call the hotline?” Then the class explored together the different tools and perspectives for him to solve the problem. Literacy was naturally linked to taking perspectives and sharing perspectives, both orally and in writing. In another observation of 6th grade, the teacher and her students discussed cyberbullying and digital abuse. As in the case of the 7th grade, 6th grade students had also been concerned about photo sharing without permission, which had recently been a problem in their school. In interviews, both the 6th and 7th grade teachers shared their intent to cover this important topic during *klassens tid*, because they strive, whenever possible, to have each session timely and with topics pertinent to the students’ lives. The 6th grade students began this session of *klassens tid* by making a pro/con list of reporting cyberbullying. As students collaborated with their teacher to make this list, there was much critical literacy apparent. Students were able to infer and hypothesize several outcomes and were able to take many perspectives during the list-making. For example, it can feel scary and vulnerable to report abuse, seeming like a snitch, or allowing oneself to be open to further victimization. On the other hand, it can be empowering to bring forth justice.

The teacher then showed two very realistic, high-quality videos on digital abuse/cyberbullying. Students were very attentive and engaged. The videos demonstrated peer pressure to engage in social media, and to take and share inappropriate images. Both videos illustrated the concept of grooming, the deliberate, calculated process by which a predator builds a relationship, trust, and emotional connection with a vulnerable person (often a child) to manipulate, exploit, and eventually abuse them (Children’s Advocacy Project, 2026). One of the videos depicts how a teen is bullied and blackmailed with a nude photo. The teacher and students discuss how the bullies gain teens’ confidence and trust. Students in the 6th grade class were able to empathize with the teen in the video and how the teen might have felt shame when they were violated online. Interestingly, the characters in videos demonstrate empathy towards their friends who have been victimized, as did the actual students in the 6th grade classroom. The teacher took time to pause the video and zoomed in on the face of the victimized character in the video to capture the moment and to encourage students to imagine how she is feeling. There was plenty of partner sharing, whole group discussion, multimedia, collaborative charting, and students were able to summarize the video verbally. When interviewing a 6th-grade teacher at the private school, she shared how students sit in a circle regularly to ask and discuss a specific set of questions called “Questions of Star Quality” (Skole Lærer Life, 2026). In their school, these questions, which can be printed on special cardstock, are used at all grade levels for *klassens tid*. That way, students’ reflections can evolve as they mature. Students use this question collection for several grades, so they are accustomed to the genre and grow with it. Examples include, “How do you greet your classmates in the morning?” “How do you know your teacher is a good teacher?” Although *klassens tid* is considered a safe space for questions, students may request a time out if they need a pause to collect their thoughts. Teachers say, “Time out. Look at each other. Try again,” if students disagree or feel at a loss for words.

When students in the private school reach 6th grade, they write their own questions to contribute to the pile of Questions of Star Quality. All of the students’ contributions are anonymous. Students often describe the act of writing their own questions as close to their hearts, especially after so many years of participating in *klassens tid*. When teachers facilitate *klassens tid*, they use prompts such as, “Raise your hand if you have a story for that question.” Each question ends with a reflection. “I think...” In an interview with the vice principal of the private school, she explained how the private school has more freedom in the execution of their curriculum than the public school.

stage of exploration and transition when teens can actively evaluate, synthesize, and commit to the core values, beliefs, and roles that form their unique identities (Branje et al., 2021). In a related interview with a 6th-grade teacher, she shared how her class was engaged in a unit on clothing. They were using clothing styles as a way to study culture and identity. Clothing became a topic during some of their *klassens tid* sessions as a way of discussing the nuances and dynamics of dressing in punk clothing versus preppy clothing, etc., and how that plays a role in exemplifying and understanding identity. The teacher pointed out how teens care about clothing styles, and since clothing is very concrete and relatable to students, it helps to bridge their literal and inferential comprehension. With these discussions, she was able to support and witness their empathy in the ways students understand and respect the various styles of clothing, and the meaning it plays in others' lives as they grow and express themselves through fashion. At the private school, they also discussed how they integrated tangible clothing and specific topics into entire days of *klassens tid*. For example, each year, they celebrate Pink Shirt Day, which is a global movement held annually as a stand against school bullying. Pink Shirt Day began several years ago in Canada after students rallied to support a peer who was targeted for wearing a pink shirt (Day of Pink, 2026). In these ways, students are provided with powerful, concrete indicators of the role of identity development and the need for empathy and support.

Community, Belonging, and Relationships

When interviewing all the teachers in the study, everyone cited the role of building community and establishing relationships as a central role of *klassens tid*. Each teacher emphasized the need for belonging that every human deserves in the school community, and teachers made deliberate efforts to ensure that every student had a voice during *klassens tid*. One unique feature of Danish *klassens tid* is how cake is often served and enjoyed together. It is a time to bond over a shared treat, and there was an undeniable pride when a cake was homemade, and students were overjoyed to share it. Students take turns signing up to share a cake throughout the school year. As students enter the adolescent years, teachers occasionally separate the genders to discuss certain topics, yet do not shy away from discussing sensitive topics altogether as well. Teachers contend that both the separate and whole group discussions cultivate community. During an observation of a 7th grade *klassens tid* session, students enjoyed their cake, and then all the girls went into a separate classroom with the female teacher and the female researcher to share together about an upsetting occurrence of when a female student had shared a photo on social media without permission. The girls discussed the photo situation and exhibited empathy when they recognized how that particular peer might feel that she does not always fit in, due to some language and cultural barriers, having just recently immigrated from another country. The teacher listened and facilitated, while all girls contributed to the conversation and several constructive resolutions were explored.

In an interview with a 6th grade teacher, she explained how she takes her students outside as frequently as possible, including during *klassens tid*. She highlighted how they need fresh air, and the pure joy they experience in playing cooperative games together that foster community. This teacher explained that in 6th grade, they use a mixture of approaches to *klassens tid*, including discussing behaviors, social skills, body/puberty, some predetermined materials and topics, and some more organic/naturally occurring topics. Sometimes she keeps the genders together, and sometimes they separate, depending on the topics. During an observation of this 6th grade class, students expressed collective feelings of sadness and empathy for teens in fictional dilemmas during a session of *klassens tid*. The teacher shared slides and videos of various relatable social dilemmas. Examples of the dilemmas included a teen not included in a Snapchat group, and a teen not feeling

a sense of belonging due to clothing. With these tangible, realistic scenarios, students were able to openly and explicitly discuss being uncomfortable and ways of inviting a person into a social circle for a sense of belonging. In a later session of *klassens tid*, this same 6th grade class used small and whole group discussion to brainstorm qualities of what a safe community consists of, so that they could later contribute to one poster. Their responses included that a safe community is: where you can be yourself, where you can be happy for each other, welcoming, positive, having friendship (knowing you have my back). A key feature of their *klassens tid* session was how they concluded with a conversation about how their findings apply to their classroom community, using the poster as an anchor.

At the conclusion of their *klassens tid* session, the 6th grade students went outside to play a game. They were deliberate in playing the game in a circle, because it is a key feature of their culture and democracy. The game embodied and demonstrated this concept of community and wellbeing. In a circle, students were each asked to name something they are good at, a favorite food, a ‘next level’ adjective to describe themselves, and ways in which they are helpful to others (e.g. babysitting, giving gifts). They concluded by playing an amped-up version of ‘hide and seek’ in which they had to demonstrate teamwork, trust, and there was a sense of safety with a home base. During an interview at the private school, the vice principal and a 6th grade teacher talked about how they embed the mission of *klassens tid* into their daily life, rather than just once a week. They have a full-time Wellbeing Teacher for more support. The vice principal described their community as an overall cultural emphasis on wellbeing. “It is engrained in this culture that wellbeing affects learning, and that relationships are as important as academics. We all want to belong to a community.”

Discussion

This study sought to shed light on the intricacies of Denmark’s mandatory empathy education, *klassens tid*, and ways it could be implemented all over the globe. In examining and sharing elements of *klassens tid*, the hope is for educational planners in many contexts to consider ways to integrate features of *klassens tid* into their schools regularly as a way to holistically support students. Findings suggest that there are benefits of consistently planned time. Danish students enjoy specifically carved-out time dedicated to empathy (sharing cake and going outdoors) and can steadily practice tangible skills, such as discussion, role play, and problem solving. Findings also revealed that a supportive wider culture (and school culture) that prioritizes empathy education can be linked to healthy democracy and the overall wellbeing of students. *Klassens tid* was found to foster collective empathy, versus skills that were targeted at individual growth only. To guide educational planners in their collaborations to institute features of *klassens tid* in their curricula, the three following features of *klassens tid* will be examined, with tangible implementation strategies for educational planners to consider: the relational construction knowledge, the role of play and being in the outdoors, and bridging literal and inferential comprehension with literacy (and art) as an anchor to provide concrete ways for students to explore perspectives.

The Relational Construction of Knowledge

With weekly (and sometimes even daily) dedication to *klassens tid*, Danish educators and students have specific time to converse, examine social topics of interest for deeper understanding, and view it as an ongoing construction of knowledge based in their relationships with one another and the world. According to the LifeComp European Framework (Sala et al., 2020), there are direct benefits to reflecting on and assessing the purposes, processes, and outcomes of knowledge construction, especially as it relates to establishing relationships. Relations with others are central

to knowing, composing and acting (Bakhtin, 1981). Vygotsky (1978) upheld that all knowledge is constructed in the context of social interaction. Rogoff (1990) extended Vygotsky's ideas to emphasize and elaborate on the two-way exchange of creating knowledge and sharing meaning. Taking in knowledge is not a one-way street, or simply an individual endeavor, even in a social context. Offering fresh reflections on the social construction of knowledge, Malaguzzi (1993), of the Reggio Emilia approach to education, highlighted the affective domain in learning, which previous scholars, for example Piaget, had simply mentioned but had not emphasized. Affective and relational dimensions should not just be emphasized in the education of young children, but should instead be considered in the education of each individual, regardless of age. In the vision of both Malaguzzi (1993) and Gilligan (1996), all knowledge is based in relationships, and an active relationship with one's self is embedded in the social construction of knowledge.

The term relational is of paramount importance because the findings of this study support that knowledge is constructed within the context of relationships. The relational construction of knowledge does not in any way dismiss the social construction of knowledge (Vygotsky, 1978), but instead adds emphasis on the dimension of the relational dynamic between one's self and others that contributes to the knowledge gained in socializing an experience (Gilligan, 1996; Malaguzzi, 1993). Within the relational construction of knowledge, attention is paid to the textures of quality and trust in relationships (Raider-Roth, 2017). Since knowledge is shaped through socializing experiences with others, it is often necessary to have trusting, comfortable relationships with one's self and others to effectively socialize experiences. In order for individuals to trust what they know (Raider-Roth, 2017), and to trust others to help them socially construct what they know into new knowledge, it is helpful to have supportive relational contexts in which to express ideas and questions. In relationship with others, communication can potentially be adapted and harmonized to ensure understanding in a two-way exchange, rather than a one-way, solitary event.

In this study, findings revealed that students benefit from consistently planned time to discuss emotional, relational topics in a trusted environment, resulting in deeper empathy and deeper comprehension. The emphasis on interpersonal relations and empathy, along with doing what is best for the common good is key, rather than simply focusing on intrapersonal development and siloed approaches. Pedagogical suggestions learned from Denmark include sharing cake together, being in a circle formation for democratic conversations, and fostering speaking in focused ways such as debate, role play, and a range of partner, small group, and whole group conversations. There is a keen emphasis on cultivating classroom community in Denmark and how belonging plays a role in identity formation.

The Role of Play in Learning and Being Outdoors

When referring to developmental psychology from a feminist perspective (Code, 2000), as a child learns to name objects, the child also learns how to be, know, and feel in relation to others. As educators, in thinking not just about young children, but adolescents and adults as well, the findings in Denmark can help educational planners question whether there is enough emphasis placed upon the cultural and affective specificity of even the most basic concepts. In studying the intricacies of *klassens tid*, it was clear that Danish pedagogy emphasizes the relational and affective dimensions of knowing, and they frequently engaged students of all ages in a version of play. Even though the roles of play, imagination and affective development are frequently associated with young children, the Danish encourage an emphasis on these affective qualities when discussing the healthy development of adolescents and adults. Danish schools are careful to integrate time for play and being outdoors in their average school days.

Regardless of age, playing and being in nature serve as essential components for learning. Play serves as a cognitive way for individuals to test boundaries, solve problems, and build emotional resilience. Being outdoors for play is even better in the way it enhances this process by providing fresh air and a multisensory environment that has the potential to ignite curiosity, lower stress, and radically boost cognitive function (Purdue Global, 2025). Pedagogical suggestions learned from Denmark include dedicated times throughout the day for students of all ages to play outside in both structured and unstructured ways. *Klassens tid* was frequently observed outside, and with the use of circle formations and incorporating cooperative games to build trust and rapport. Outside time and time devoted to *klassens tid* are not optional for Danes. It is suggested that educational planners consider ways to integrate mandatory outdoor play and empathy-inspired discussions of topics that truly matter to students as a way to foster community. In these ways, it creates a safe space, free of grades, and low in stress.

Bridging Literal and Inferential Comprehension with Literacy to Explore Perspectives

Findings revealed that Danish educators approached *klassens tid* as an ongoing, practical part of their week, rather than as a theoretical concept. Even though no academic demands are connected to *klassens tid*, literacy skills were found to be naturally embedded in all observations. Since oral language and open discussions are a valued part of sharing in the classroom community during *klassens tid*, literacy activities appeared to support those endeavors. Open dialogue was observed consistently, and approaches varied, including debate, role play, partner discussion, small group discussion, and whole group discussion. Students were often in a circle. There is no official, formal curriculum to guide teachers in Denmark. Instead, educators were observed as autonomous, utilizing various anchors to ground lessons, such as scripts, pre-written questions/slides, and explicit vocabulary instruction so that students had words at their disposal to converse about topics. Teachers used many concrete objects as props or foundations to encourage students to infer meaning and to see multiple perspectives. Examples included using a stuffed animal to denote whose turn it was to speak, participating in digital quizzes, reflecting on videos and images, and studying clothing as a tangible example of identity.

Pedagogical suggestions learned from Denmark include opportunities for students to apply skills through language production projects, such as writing their own questions for discussion, integrating writing and art as products to share (e.g., a poster), creating their own social media posts to demonstrate an empathetic connection, and generating their own concept maps and pro/con lists. Recent research has illustrated that only 10% of our empathy is genetic, with therefore up to 90% of our empathy derived from social factors such as education (Demetriou & Nicholl, 2022). In this way, there are links between empathy and creativity. It can help to have some sort of creative project at the end of an empathy lesson, no matter how large or small, so that students feel they are making an impact. “Creativity and empathy possess similar traits where one is needed for the other to flourish” (Demetriou & Nicholl, 2022, p. 6). Educational planners can design ongoing professional development to support teachers’ exploration of creative approaches to their own empathy education, including the curation of multimedia, reflection questions, and imaginative, engaging, communal projects on topics that truly matter to students.

Conclusions

The current study suggests that regularly planned, dedicated empathy education has significant benefits. Many educators across the globe are concerned with the overall wellbeing of students, as well as the collective wellbeing of school culture and the wider community in how students relate to the world and will grow to become dedicated, caring citizens. Although *klassens tid* is compulsory in Denmark, there is no mandatory curriculum. Teachers have freedom in how they approach *klassens tid*, and of those observed, all used naturally occurring topics and free resources. It is recommended that educational leaders provide teachers with time and autonomy to implement consistent empathy education that has roots in reading, writing, listening, and speaking. Europe's conceptual framework called LifeComp was established to support initiatives to ensure that life skills (such as empathy) are acquired as much as possible by all individuals through education, from primary school to university (Sala et al., 2020). LifeComp is helpful in how it provides educational planners with flexible guidelines for teachers, with a focus on teaching methodologies for different age groups and different levels of learning, while allowing for context-specific adaptations of the different framework components, which (besides empathy) include: self-regulation, flexibility, wellbeing, communication, collaboration, growth mindset, critical thinking, and managing learning (Sala et al., 2020). It is recommended that practical solutions and scenarios for each of those subject areas be designed. This may be done in teacher preparation programs, as well as through ongoing professional development for teachers.

It is suggested that the implementation process of empathy education, such as *klassens tid* be seen as spiral, not linear, with each step informing subsequent steps (Sala et al., 2020). LifeComp competences may be helpful as educational planners envision how empathy can be embedded in the curriculum, whether on a cross-curricular basis or on its own, but also in lifelong learning and ways it can be generalized across contexts outside of school. LifeComp also calls upon the clear need to share examples of policy in this area, as well as examples of innovative educational practices and tools that teachers and lifelong learners can use (Sala et al., 2020). Carefully integrating empathy education and critical literacy can have extremely positive effects. Mirra (2018) calls for a new form of empathy called 'critical civic empathy'. Critical civic empathy asks students to analyze social position, power, and privilege of all parties involved. It encourages students to focus on ways that their personal experiences matter in the public context of life. Teachers, students, and entire school communities can cultivate democratic dialogue and civic action dedicated to equity and justice.

A robust vocabulary is vital for distinguishing and regulating emotions. This means that students with a wider vocabulary can use various words to depict more specific emotional experiences, which helps them regulate their emotions. Since language processing and comprehension difficulties can sometimes occur for some students, having teaching strategies in place that are specific to inferential comprehension can be of great benefit. Providing succinct, explicit vocabulary instruction to assist with language processing can be of tremendous benefit to ameliorate the process of mental mapping, and enriching background knowledge to promote more global inferences. When students are discussing emotional matters during *klassens tid*, those global inferences may heavily rely on mental models, which draw on background knowledge (Jensen & Elbro, 2022). Collaboratively, teachers and students sometimes mentally map empathy using simulation (walking in another's shoes) as a pathway. This establishes pathways of enriching context from which students can draw to generate inferences and enhance empathy (Elbro & Buch-Iversen, 2013). In the rare empirical studies of *klassens tid* that exist (Lalomia & Cascales-Martinez, 2023), the research supports that the ability to identify, label, and talk about emotions is an imperative component.

There are only a few empirical studies of *klassens tid* (Lalomia & Cascales-Martinez, 2023). An obvious limitation of the current study is the relatively small sample size. It would be advisable to obtain much more data on *klassens tid* by carrying out analyses with the participation of several Danish schools. As more schools adopt these *klassens tid* models on a global scale, studies of their effectiveness would be an asset to the field, demonstrating what models are most effective when implementing regularly planned empathy education. Beyond academic achievement, perhaps what matters most at the end of each school day is that schools are raising good people. There are inherent benefits when students learn how to converse with one another in constructive ways, comprehend multiple perspectives, and produce creative projects to gain a deeper understanding of themselves and to develop empathy for the world around them. The reading, writing, listening, and speaking in which we engage are imperative when it encourages students to think critically and empathetically about themselves, others, and global perspectives. In a sense, empathy might be the highest level of critical thinking (Schneider, 2020). Educational planners worldwide can take lessons learned from Denmark's *klassens tid* to provide opportunities for schools to explore real-world problems with conversations and lessons, create safe spaces for everyone to speak and to be truly heard, and to transform emotion into understanding and into projects of action to change the world.

Correspondence

Christine Woodcock: woodcocc@newpaltz.edu

Disclosure Statement and Funding

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Adecco, (2020). Empathy? In Denmark, They're Learning It In School. *The Adecco Group*.
<https://www.adeccoigroup.com/our-thinking/articles-and-editorials/empathy-in-denmark>
- Alexander, J. (2016). America's Insensitive Children? *The Atlantic*. <https://www.theatlantic.com/education/?after=MjAxNi0wOC0xMiAwNzozNT00NXw0OTU2MDI%3D>
- Bakhtin, M. M. (1981). *The dialogic imagination*. University of Texas Press.
- Beck, S. (2023). Dannelsen – A Danish Concept in Historical and Contemporary Perspectives. In M. Blom & A. Schultz (Eds.), *Global Citizenship Education in Praxis: Pathways for Schools* (pp. 9-16). Multilingual Matters.
- Betzalel, N., & Shechtman, Z. (2010). The impact of bibliotherapy superheroes on youth who experience parental absence. *School Psychology International*, 38(5), 473-490.
<https://doi.org/10.1177/0143034317719943>
- Borland, K. (1991). "That's not what I said:" Interpretive conflict in oral narrative research. In S. B. Gluck & D. Patai (Eds.), *Women's words: The feminist practice of oral history* (pp. 63-76). Routledge.
- Bornetelefonen (2026). *Danish Children's 24/7 Hotline*. <https://bornetelefonen.dk/>
- Branje, S., de Moor, E. L., Spitzer, J., & Becht, A. I. (2021). Dynamics of Identity Development in Adolescence: A Decade in Review. *Journal of Research on Adolescence*, 31(4), 908-927.
doi: 10.1111/jora.12678

- Budds, D. (2017). This Circular Park Bench is the Most Scandinavian Thing Ever. *Fast Company*. <https://www.fastcompany.com/90127700/this-circular-park-bench-is-the-most-scandinavian-thing-ever>
- Bushweller, K. (2025). Does Social-Emotional Learning Really Work?: Educators Had a Lot to Say. *EdWeek*. <https://www.edweek.org/leadership/does-social-emotional-learning-really-work-educators-had-a-lot-to-say/2025/01>
- CASEL. (2026). *Fundamentals of SEL*. <https://casel.org/fundamentals-of-sel/>
- Chauhan, R. S. (2019). Unstructured interviews: Are they really all that bad? *Human Resource Development International*, 25(4), 474–487. <https://doi.org/10.1080/13678868.2019.1603019>
- Children’s Advocacy Project. (2026). *Grooming: What is it?* <https://www.childrensadvocacyproject.org/blog/73-grooming>
- Code, L. (2000). Naming, naturalizing, normalizing: “The child” as fact and arte-fact. In P. H. Miller and E. K. Scolnick (Eds.), *Toward a feminist developmental psychology* (pp. 215-237). Routledge.
- Cornell University (2026). *Concept Mapping*. <https://lsc.cornell.edu/how-to-study/concept-maps/>
- Day of Pink (2026). *International Day of Pink*. <https://www.dayofpink.org/en/home>
- Demetriou, H. & Nicholl, B. (2022). Empathy is the mother of invention: Emotion and cognition for creativity in the classroom. *Improving Schools*, 25(1), 4-21.
- Elbro, C. & Buch-Iversen, I. (2013). Activation of background knowledge for inference making: Effects on reading comprehension. *Scientific Studies of Reading*, 17(6), 435–452. <https://doi.org/10.1080/10888438.2013.774005>
- Franklin, A. (2022). *Co-Creativity and Engaged Scholarship Transformative Methods in Social Sustainability Research*. Springer Nature.
- Frederiksen, M. (2021). Speech at the Summit for Democracy on December 9, 2021. *Danish Prime Minister’s Office*. <https://stm.dk/statsministeren/taler/tale-til-summit-for-democracy-den-9-december-2021/>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- Gilligan, C. (1996). The centrality of relationships in human development: A puzzle, some evidence, and a theory. In G. G. Noam & K. W. Fischer (Eds.), *Development and vulnerability in close relationships* (pp. 237-261). Erlbaum.
- Hallet, R. E., & Barber, K. (2014). Ethnographic Research in a Cyber Era. *Journal of Contemporary Ethnography*, 43(3) 306-330.
- Harwait, L. N. (2019). Ethnographic and Case Study Approaches: Philosophical and Methodological Analysis. *International Journal of Education & Literacy Studies*, 7(2), 150-155. <https://files.eric.ed.gov/fulltext/EJ1219529.pdf>
- Hibbin, R. (2016). The psychosocial benefits of oral storytelling in school: Developing identity and empathy through narrative. *Pastoral Care in Education*, 34(4), 218-231. <https://doi.org/10.1080/02643944.2016.1225315>
- Lalomia, A., Cascales-Martinez, A. (2023). Social-emotional skills development, the design of a project in a Danish school. *Revista Românească pentru Educație Multidimensională*, 15(2), 146-163. <https://doi.org/10.18662/rrem/14.4/627>
- Let’s Care Project. (2026). *Class time: The Danish Way “Klassens tid”, Aspects of Building Democracy in Danish Schools*. <https://letscareproject.eu/jprogramme/the-danish-way-klassens-tid-aspects-of-building-democracy-in-danish-schools/>

- Levitt, A. (2020). Klassens Tid, and How Our School Communities Help Meet Students' Social and Emotional Needs. *The Lutheran Schools Partnership*. <https://thelutheranschools.org/blog/klassens-tid-and-how-our-school-communities-help-meet-students-social-and-emotional-needs>
- Jensen, K. L. & Elbro, C. (2022). Clozing in on reading comprehension: A deep cloze test of global inference making. *Reading and Writing*, 35, 1221–1237. <https://doi.org/10.1007/s11145-021-10230-w>
- Johnsen, H. (2024). A guide to Danish school life!. *The Good Expat Life*. <https://www.thegoodexpatlife.com/post/a-guide-to-danish-school-life-cultural-intelligence>
- Lesaux, N. K., & Galloway, E. P. (2017). Advanced Literacies Instruction: Spotlight on Language Production Projects. *New York State Education Department*. https://www.nysed.gov/sites/default/files/nov-8-nys_brief-8-of-8_summer_2017_lang_production_projects-final_2.pdf-a.pdf
- Long, C. (2025). The Survey Says: 'We're at a Crisis Point. *neaToday*. <https://www.nea.org/nea-today/all-news-articles/survey-says-were-crisis-point>
- Lysaker, J., & Sedberry, T. (2015). Reading difference: Picture book retellings as context for exploring personal meanings of race and culture. *Literacy*, 49(2), 105-111. <https://doi.org/10.1111/lit.12055>
- Malaguzzi, L. (1993). For an education based on relationships. *Young Children*, 49(1), 9-12.
- Maloy, R. W. & Trust, T. (2020). *Building Democracy for All Interactive Explorations of Government and Civic Life*. Ed Tech Books.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research*. Sage.
- Merriam, S. B. (2001). *Qualitative research and case study applications in education*. Jossey-Bass.
- McGuinn, J., Fries-Tersch, E., Jones, M., Crepaldi, C., Masso, M., Kadarik, I., Samek Lodovici, M., Drufuca, S., Gancheva, M., & Geny, B. (2020). Social Sustainability – Concepts and Benchmarks. *Policy Department for Economic, Scientific and Quality of Life Policies*. [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648782/IPOL_STU\(2020\)648782_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648782/IPOL_STU(2020)648782_EN.pdf)
- Mirra, N. (2018). *Educating for empathy: Literacy learning and civic engagement*. Teachers College Press.
- Mishler, E. G. (1986). *Research interviewing: Context and narrative*. Harvard University Press.
- Newstreet, C., Sarker, A., & Sheare, R. (2018). Teaching empathy: Exploring multiple perspectives to address islamophobia through children's literature. *The Reading Teacher*, 72(5), 559-568. <https://doi.org/10.1002/trtr.1764>
- Organization for Economic Co-operation and Development. (2004). *Pilot Review of the Quality and Equity of Schooling Outcomes In Denmark*. Organization for Economic Co-operation and Development. <http://www.uvm.dk2004>
- OECD, (2024). *Nurturing Social and Emotional Learning Across the Globe: Findings from the OECD Survey on Social and Emotional Skills 2023*. https://www.oecd.org/en/publications/nurturing-social-and-emotional-learning-across-the-globe_32b647d0-en.html
- Purdue Global, (2025). *The Importance of Outdoor Play in Early Childhood*. <https://www.purdueglobal.edu/blog/education/benefits-outdoor-play/>
- Raider-Roth, M. B. (2017). *Professional Development in Relational Learning Communities: Teachers in Connection*. Teachers College Press.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. Oxford University Press.

- Sala, A., Punie, Y., Garkov, V., Cabrera, M. (2020). *LifeComp: The European Framework for Personal, Social and Learning to Learn Key Competence*. European Commission Joint Research Centre. <https://publications.jrc.ec.europa.eu/repository/handle/JRC120911>
- Sandahl, I. D. (2017). *The Danish Way: Klassens Tid, Aspects of Building Democracy in Danish Schools*. Eurhorn Hummerston.
- Schneider, L. (2020). Empathy Is the Highest Level of Critical Thinking. *National Council of Teachers of English*. <https://ncte.org/blog/2020/01/empathy-highest-level-critical-thinking/>
- Skole Lærer Life. (2026). *Questions of Star Quality*. <https://xn--skolelærerlife-8fb.dk/wp-content/uploads/2022/08/STJERNE-gode-sp%C3%B8rgsm%C3%A5l-2.pdf>
- Stoltzfus, K. (2016). Lessons From Denmark: Teachers Can Incorporate Empathy in the Curriculum. *EdWeek*. <https://www.edweek.org/policy-politics/lessons-from-denmark-teachers-can-incorporate-empathy-in-the-curriculum/2016/08>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.
- Sustainable Governance Indicators (2026). *United States Social Sustainability*. https://www.sgi-network.org/2024/United_States/Social_Sustainability
- Tappan, M. B. (2001). Interpretive psychology: Stories, circles, and understanding lived experience. In D. L. Tolman & M. Brydon-Miller (Eds.), *From subjects to subjectivities: A handbook of interpretive and participatory methods* (pp. 45—56). New York University Press.
- Taylor, J. M., Gilligan, C., & Sullivan, A. M. (1995). *Between voice and silence: Women and girls, race, and relationship*. Harvard University Press.
- Tichnor-Wagner, A. (2016). A Global Perspective: Bringing the World Into Classrooms. *EdWeek*. <https://www.edweek.org/policy-politics/opinion-a-global-perspective-bringing-the-world-into-classrooms/2016/08>
- U. S. Mission to the Organization for Economic Cooperation and Development. (2026). *About the OECD*. <https://usoeed.usmission.gov/about-the-oecd/>
- Voyager Sopris Learning. (2023). *The Link Between Language and Literacy*. <https://www.voyagersopris.com/vsl/blog/language-to-literacy>
- Vygotsky, L. (1962). *Thought and language*. (E. Hanfmann & G. Vakar, Eds.). Boston Review. <https://doi.org/10.1037/11193-000>
- Vygotsky, L. (1978). *Mind in society*. Harvard University Press.

Transforming Lives: The Impact of School Meals Programs in Addis Ababa, Ethiopia: Insights from Selected Schools

Easaw Alemayehu Assefa
Displaced International Scholar, USA
ORCID iD: 0000-0002-3780-9749

Abstract

This study aimed to investigate the multifaceted impact of school meals programs in Addis Ababa, Ethiopia, focusing on their direct effects on student attendance, cognitive engagement, academic performance, and psychosocial well-being. Given the significant malnutrition rates among children in Ethiopia, understanding how these structural programs can transform educational outcomes is essential for long-term policy development. Utilizing a mixed-methods research design, the study included quantitative surveys with 500 participants (teachers, school directors, students, and parents) and qualitative interviews to gather in-depth insights. The analysis employed descriptive statistics and thematic analysis to explore the impacts of school meals programs within the framework of Social Cognitive Theory. The quantitative results revealed a very strong consensus regarding the positive impacts of these programs across all measured educational and psychological metrics, with overall average means exceeding 4.15 on a 5-point Likert scale. The findings indicated that school meals programs significantly enhance student attendance, cognitive engagement, and academic performance, with improvements in average test scores and participation rates. Additionally, these programs contributed positively to students' emotional stability, self-esteem, and social interactions, creating a supportive learning environment. Crucially, the qualitative interviews uncovered that sharing meals together transformed lunchtimes into positive social events, though notable variability in individual experiences highlighted the need for targeted interventions to address socio-economic barriers and feelings of exclusion among non-participating students. This research provides a comprehensive understanding of the interplay between nutrition, education, and psychosocial factors in the context of school meals programs in urban Ethiopia. It emphasizes the importance of integrating nutritional support with effective educational practices, fostering inclusive environments, and conducting longitudinal studies to assess sustained impacts, thereby contributing to the ongoing discourse on educational equity and child development.

Keywords: educational outcomes, malnutrition, school meals programs, psychosocial well-being, urban education

Introduction

In Ethiopia, where approximately 25% of children under five experience stunted growth due to chronic malnutrition (Abate & Belachew, 2019), the intersection of nutrition and education presents a formidable challenge that demands urgent attention. (Assefa, 2025, a). School meals programs have emerged as a pivotal intervention strategy designed not only to combat malnutrition but also to enhance educational outcomes (Lawson, 2012). In urban centers like Addis Ababa, where socio-economic disparities are pronounced, these programs hold the potential to transform the lives of vulnerable populations, fostering both academic success and holistic child development (Takele, 2023). The relationship between early childhood nutrition and subsequent cognitive development is deeply established in biomedical and educational literature. Research has consistently shown that adequate nutrition is fundamentally linked to cognitive function, influencing crucial aspects such

as memory, attention, and problem-solving abilities (Bryan et al., 2004). For children in resource-constrained environments, where educational opportunities are often limited, the provision of nutritious meals can significantly alter their capacity to learn (Botha, 2022). In Addis Ababa, where many students face severe household food insecurity, school meals programs ensure that children arrive in the classroom ready to engage and learn, rather than distracted by hunger (Assefa, 2023). The long-term cognitive benefits of improved nutrition extend far beyond immediate academic performance, potentially fostering an entire generation of learners who are cognitively capable of contributing to national development and breaking the intergenerational cycle of poverty (Sorhaindo & Feinstein, 2006).

School meals programs also have a demonstrable, quantifiable impact on attendance rates, which serves as a foundational factor in educational success (Niyibizi et al., 2024). Recent studies have indicated that regions implementing these initiatives often see attendance increases of 20% to 30% (Assefa, 2025, b; Zenebe et al., 2018). For children from low-income families, the promise of a daily meal can be a compelling reason to attend school, particularly in urban settings where economic pressures can lead families to prioritize immediate survival over long-term educational aspirations (Bundy, 2009). In many cases, the availability of meals at school alleviates some of the financial burdens on families, thereby encouraging greater participation in educational activities (Story et al., 2009). Cognitive engagement is another pivotal aspect influenced by school meals programs. Research indicates that students who receive regular meals exhibit higher levels of classroom engagement, demonstrating a 30% increase in participation compared to their peers who do not benefit from such initiatives (Hecht et al., 2023). This increased engagement is vital for fostering a productive learning environment and enhancing overall academic performance. Hungry children often struggle to concentrate, leading to disengagement, behavioral outbursts, and lower academic achievement (Cameron, 2024). Conversely, when students are well-nourished, they are more likely to actively participate in lessons, collaborate with peers, and absorb information effectively (Assefa, & Zenebe, 2024; Iddrisu, 2018).

Academic performance serves as a concrete measure of the effectiveness of school meals programs. Preliminary findings suggest that schools with active feeding initiatives report significant improvements in average test scores, with increases of up to 15% in standardized assessments (Adinew, 2021). Such improvements have far-reaching implications, not only for individual students but also for the broader educational landscape (Tamiru et al., 2024). Enhanced academic performance can lead to higher graduation rates, increased enrollment in secondary education, and ultimately, a more skilled workforce, contributing to national economic development (Hanushek & Woessmann, 2012). Despite the compelling quantitative data supporting the benefits of school meals programs, critical gaps remain in the existing literature. Most studies have focused primarily on easily measurable outcomes such as attendance and test scores, often neglecting the qualitative, human aspects of these structural changes. There is a significant lack of exploration into the exact mechanisms through which nutrition impacts cognitive functions, emotional well-being, and daily social interactions among students. Understanding the psychosocial dimensions of school meals programs is essential for a comprehensive evaluation of their effectiveness. For instance, how do students perceive the role of meals in alleviating stress or anxiety related to food insecurity? Qualitative insights into these experiences can enrich our understanding of the broader implications of school meals programs, going beyond mere academic metrics to capture the holistic effects on students' lives.

The unique urban context of Addis Ababa presents additional institutional and systemic challenges that may influence the efficacy of school meals programs (Tamiru et al., 2024). High rates

of poverty, internal migration, and rapid urbanization create a complex backdrop against which these initiatives operate (Assefa, 2026; Mezgebo, 2020). The interplay between socioeconomic factors and educational outcomes necessitates a critical examination of how school meals can be optimized to meet the specific needs of urban populations (Lawson, 2012). While improved attendance is a positive outcome, it is crucial to assess whether the quality of education provided keeps pace with the rising number of students. Quality education is not solely about access; it also involves the capacity of the educational system to deliver meaningful learning experiences. Moreover, the long-term sustainability of school meals programs warrants deeper investigation. While existing studies demonstrate short-term benefits, longitudinal research examining the sustained effects on academic performance and social development remains scarce. This study aims to fill that gap by exploring how school meals programs affect not only immediate educational outcomes but also long-term academic trajectories. Understanding whether the benefits of these programs endure as students' progress through their educational journeys is crucial for evaluating their overall efficacy and justifying ongoing investment in such initiatives. Furthermore, the potential impact of school meals programs on psychosocial well-being represents an important dimension of their effectiveness. Increased access to nutritious meals can alleviate stress related to food insecurity, thereby improving students' mental health and emotional stability. Research has shown that hunger can lead to behavioral issues, increased absenteeism, and diminished academic performance (Shankar et al., 2017). By addressing these issues, school meals programs can contribute to a more positive school climate, fostering an environment where students feel safe, supported, and ready to learn.

In addition to quantitative assessments, there is a pressing need for qualitative insights into the experiences of students and educators within the framework of school meals programs. Existing studies often prioritize numerical data, overlooking the voices of those directly impacted by these initiatives. By integrating qualitative methodologies, this research seeks to provide a more comprehensive understanding of the lived experiences of students and educators, offering insights that can inform future program design and implementation. Understanding how students perceive the value of school meals, how they interact with their peers in the context of these programs, and how they believe it affects their educational journey will provide critical context for the quantitative findings. As Ethiopia strives to achieve the Sustainable Development Goals related to health and education, understanding the transformative potential of school meals programs is essential. This study aims to contribute to the growing body of evidence that supports the integration of nutrition into educational policy, providing insights that are critical for optimizing the design and implementation of school meals initiatives. By examining the impact of these programs on attendance, cognitive engagement, academic performance, and psychosocial well-being, this research endeavors to illuminate the complexities of the relationship between nutrition and education.

Theoretical Foundation & Literature Review

Abraham Maslow's Hierarchy of Needs and Educational Readiness

To deeply understand the structural impact of school meals programs, this study first draws upon Abraham Maslow's foundational Hierarchy of Needs theory. Maslow (1943) posited that human needs are arranged in a strict hierarchy, where basic physiological requirements—such as food, water, shelter, and sleep—must be sufficiently met before an individual can focus on higher-level psychological and self-actualization needs. In an educational context, this theory carries profound implications for student readiness and learning capacity. When a child arrives at school suffering from severe nutritional deficiencies or chronic hunger, their cognitive apparatus is entirely consumed by the physiological drive for survival. Consequently, higher-order functions required for

academic success, such as sustained concentration, logical reasoning, and creative problem-solving, are effectively inaccessible. Historically, global literature on school meal programs confirms that when institutional structures provide regular, stable access to food, they systematically fulfill these baseline physiological needs, thereby allowing students to progress up the hierarchy. Once food insecurity is alleviated, students can experience a sense of physical safety and psychological stability within the classroom. This transition unlocks their capacity for social belonging and cognitive growth. Fulfilling basic physiological needs functions as an essential prerequisite for any successful pedagogical intervention; without it, even the most advanced curricula and highly trained educators will fail to produce meaningful learning experiences. Therefore, school meals do not merely serve as dietary charity; they are fundamental pedagogical tools that prepare the biological substrate of the student for cognitive development and classroom engagement.

Social Cognitive Theory in School Meals Research

Social Cognitive Theory (SCT), developed by Albert Bandura, provides a robust framework for understanding the multifaceted impacts of school meals programs in Addis Ababa, Ethiopia. This theory posits that learning occurs in a highly dynamic social context and is continuously influenced by the triadic reciprocal interaction of personal, behavioral, and environmental factors (Bandura, 1991). By applying SCT, this study aims to explore how school meals programs not only enhance direct educational outcomes but also foster holistic psychosocial development among students. The integration of Bandura's theory allows us to unpack the specific socio-behavioral mechanisms triggered by the introduction of regular meals. Instead of viewing food purely as biological input, SCT allows us to examine how the educational environment, personal psychological beliefs, and student behaviors dynamically shape one another.

- **Observational Learning:** School meals programs create a collective environmental space where students can observe their peers consistently benefiting from nutritious meals. This observational learning can motivate children to attend school regularly, as they witness the positive, tangible outcomes associated with participation, such as improved physical focus and active engagement in lessons. When students see their classmates thriving academically and socially due to the provision of meals, they internalize these positive behavioral patterns and are more likely to emulate that behavior themselves.
- **Self-Efficacy:** A core aspect of SCT is the concept of self-efficacy, or an individual's subjective belief in their own capability to execute behaviors necessary to perform successfully. School meals programs can radically enhance students' academic self-efficacy by providing the necessary physiological nutrition for optimized cognitive functioning, thereby improving daily academic performance. When students experience improved focus, active participation, and higher grades as a direct result of regular meals, their internal confidence in their academic abilities increases. This heightened self-efficacy can lead to a deeper commitment to education and a positive, reinforcing cycle of achievement.
- **Reciprocal Determinism:** SCT emphasizes the dynamic, continuous interplay between personal factors (such as internal motivation and self-belief), behavioral factors (like consistent attendance and active engagement), and environmental factors (such as the structural availability of school meals). School meals programs act as a critical environmental intervention that fundamentally alters students' behaviors and personal attitudes towards education. Improved nutrition leads to better behavioral attendance and cognitive engagement, which in turn positively impacts academic performance. This

reciprocal relationship suggests that as students perform better academically, they also become more motivated to attend school regularly, creating a sustainable feedback loop that reinforces positive behaviors.

- **Outcome Expectations:** Students develop specific internal expectations about the long-term results of their actions based on past experiences and structured observations. When school meals programs lead to tangible, visible improvements in attendance, classroom engagement, and academic performance, students form highly positive outcome expectations regarding the value of education itself. This belief system motivates them to invest significantly more effort into their studies, knowing that their participation in school activities correlates with future success. Understanding these expectations is crucial for evaluating the long-term impact of these programs on students' academic trajectories.
- **Social Support:** SCT highlights the vital importance of social interactions and institutional support systems in shaping human behavior. School meals programs often foster a powerful sense of community and social cohesion among students, teachers, and families. When students receive meals together in a structured communal setting, they engage in positive social interactions that can enhance their communication skills and emotional well-being. Positive reinforcement from teachers and peers regarding the benefits of participation in school meals programs can further bolster students' internal motivation and engagement, leading to improved academic outcomes.

By explicitly linking Maslow's foundational hierarchy with Bandura's triadic interactions, we can address our core research questions more effectively. Fulfilling biological needs (Maslow) alters the personal and environmental variables within the reciprocal determinism model (Bandura), leading to transformed behavioral outcomes.

Methodology

To ensure the empirical rigor of this study, a comprehensive, highly structured methodology was deployed. The operationalization of this research required transitioning from abstract theoretical frameworks into concrete data collection tools, maintaining strict alignment with mixed-methods best practices.

Research Design

This study utilized a sequential explanatory mixed-methods research design, combining both quantitative and qualitative approaches to provide a comprehensive, deep understanding of the impact of school meals programs on students in Addis Ababa, Ethiopia. The mixed-methods approach allows for the triangulation of data, enhancing the structural validity of findings by integrating numerical data with in-depth qualitative insights. This design is particularly suitable for exploring complex socio-educational issues like nutrition and education, where both macro-level statistical outcomes and micro-level personal experiences are crucial for a holistic understanding.

Participants & Target Population

The research engaged exactly 500 respondents from four key stakeholder groups within the urban educational ecosystem. This diverse sample was essential to capture a wide range of administrative, pedagogical, and familial perspectives regarding school meals programs:

- **Teachers (200 participants):** Selected from various primary schools across Addis Ababa, these educators represented different primary grade levels (1st up to 8th grades) and diverse subjects (mathematics, natural sciences, languages, social studies). Their daily classroom insights were vital in assessing real-time cognitive engagement and educational practices influenced by school meals initiatives.
- **School Directors (100 participants):** These individuals provided vital administrative and operational perspectives on the structural implementation, institutional challenges, and perceived systemic impact of school meals programs within their respective institutions.
- **Students (150 participants):** Selected from primary schools that actively participate in the government-sponsored meal programs, these students varied in age, gender, and baseline academic performance. Their first-hand experiences and subjective perceptions regarding the meals provided were crucial for understanding the programs' immediate effectiveness and impact on learning.
- **Parents (50 participants):** Parents of students involved in the meal programs were included to gather insights into the familial and community-level economic perspective on the significance of these initiatives. Their views on how school meals affect their household budgets, children's education, and overall well-being were essential for contextualizing the quantitative findings.

Sampling Method

A stratified random sampling technique was rigorously employed to ensure that each stakeholder group and school type was adequately and proportionally represented in the study. The process involved two distinct operational steps:

1. **Stratification:** The target population was divided into distinct strata based on specific characteristics such as role in the educational system (teachers, directors, students, parents) and school characteristics (sub-city location).
2. **Random Selection:** Within each distinct stratum, individual respondents were randomly selected using school roster numbers to participate in the study. This method ensured that the final sample was highly representative of the broader population of Addis Ababa, allowing for more reliable and valid conclusions.

Data Collection Methods

Surveys

- **Design:** A comprehensive structured questionnaire was developed, comprising both closed-ended and open-ended questions. Closed-ended questions were utilized to gather quantitative data via a 5-point Likert scale, while open-ended questions allowed for descriptive qualitative insights.
- **Questionnaire Content:** The survey included sections on:
 - **Demographic Information:** Age, gender, role (teacher, student, parent, director), socioeconomic status.
 - **Perceptions of School Meals Programs:** Knowledge of the programs, perceived nutritional value, and institutional challenges encountered.
 - **Educational Outcomes:** Questions assessing attendance rates, classroom engagement, and academic performance indicators such as test scores and participation in school activities.
 - **Psychosocial Aspects:** Questions related to emotional well-being, stress levels, and social interactions among students receiving school meals.

- **Administration:** Surveys were administered in both online and printed formats to maximize accessibility. Online surveys were distributed via a secure platform, while printed surveys were provided to participants who preferred this method. Clear instructions accompanied each survey to facilitate completion.
- **Duration:** The survey collection phase lasted four weeks, during which follow-up reminders were sent weekly to maximize response rates.

Semi-Structured Interviews

- **Format:** Semi-structured interviews were conducted to allow for flexibility while ensuring that key theoretical themes were systematically explored. This format facilitated deeper exploration of participants' unique views and lived experiences.
- **Participant Selection:** A purposive sampling method was used to select interviewees from among the survey respondents, ensuring a diverse range of perspectives. For instance, interviews included teachers from various subjects, directors from different school types, and students from various grades.
- **Interview Protocol:** An interview guide was created, consisting of open-ended questions designed to elicit rich qualitative data about experiences with the school meals programs. Key topics included personal experiences with school meals, perceived impact on attendance and engagement, observations regarding changes in academic performance, and emotional and social effects of the programs.
- **Duration:** Each interview lasted approximately 30-45 minutes and was conducted either in person or via video conferencing, depending on participant preferences and availability.
- **Recording and Transcription:** Interviews were audio-recorded with participants' written consent, and verbatim transcripts were created for analysis. This ensured accuracy in capturing participants' responses and allowed for detailed thematic analysis.

Pilot Testing and Instrument Reliability

To ensure maximum transparency, structural validity, and instrumental reliability before full-scale deployment, a formal pilot study was conducted with a representative stakeholder sample. This introductory phase allowed for comprehensive testing of question clarity, language accessibility, and formatting flow, resulting in minor structural modifications to clear up ambiguities. The internal consistency of the multi-item survey scales was evaluated using Cronbach's Alpha coefficient metrics. International standards for survey validation dictate that an alpha score exceeding 0.70 represents an acceptable level of reliability, while values nearing or surpassing 0.90 signal excellent internal consistency across items. The psychometric outcomes of this testing are formally articulated in Table 1 below.

Table 1*The Reliability of the Scales*

Instrument Scale	Cronbach's Alpha	Number of Items	Acceptability
Effects of School Meals Programs on Student Outcomes	0.89	6	Acceptable
Psychosocial Effects of School Meals Programs and Academic Outcomes	0.91	6	Acceptable

As presented in Table 1 above, the Cronbach's Alpha values for both variables exceeded the psychometric threshold of 0.7, with specific values of 0.89 and 0.91. These statistical results indicate a very good level of internal consistency for the measurement instrument used in this study. A Cronbach's Alpha above 0.7 is generally considered acceptable, while values closer to 1.0 suggest excellent reliability. Therefore, the high alpha values in this instance reinforce the instrument's effectiveness in consistently measuring the intended theoretical constructs across diverse student populations.

Data Analysis

- **Quantitative Analysis:** The quantitative data collected from the surveys were analyzed using statistical software called SPSS. The analysis process included calculation of descriptive statistics, specifically means and standard deviations, to summarize demographic information and key survey responses. This provided an overview of the sample characteristics and general trends in the data.
- **Qualitative Analysis:** The qualitative data from the interviews were analyzed using thematic analysis, which involved several key steps:
 1. **Familiarization:** Researchers read through the transcripts multiple times to gain an overall understanding.
 2. **Coding:** Significant features of the data were identified and labeled using a systematic coding framework. Initial codes were generated based on recurring themes and the core research questions.
 3. **Theme Development:** Codes were grouped into broader themes that captured the essence of participants' experiences regarding school meals.
 4. **Reviewing Themes:** Themes were reviewed and refined to ensure they accurately represented the raw data.
 5. **Defining and Naming Themes:** Each theme was clearly defined and named to reflect its content, ensuring descriptive and relevant alignment with the research questions.

Ethical Considerations

- **Informed Consent:** All participants were provided with comprehensive information regarding the study's purpose, procedures, potential risks, and benefits. Written consent was obtained prior to participation, ensuring that respondents understood their rights and voluntarily agreed to participate.
- **Confidentiality:** Participants' identities were completely anonymized in all reporting and analysis. Data was stored securely, with access limited to the primary research team. All identifying information was removed during analysis to protect participants' privacy.

- **Right to Withdraw:** Participants were explicitly informed of their right to withdraw from the study at any time without any negative repercussions, ensuring ethical compliance and respect for participant autonomy.

Findings

Descriptive Statistical Overview

The quantitative data collected from the 500 stakeholders was processed using SPSS to compute mean scores and standard deviations for each survey item. To maintain a systematic structure, the results are organized into distinct empirical indicators that directly address the core educational and psychological variables of the study. Before breaking down the specific categories, Table 2 presents a comprehensive summary of the quantitative items measuring the perceived effects of school meals programs on student attendance, cognitive engagement, participation, and the overall classroom learning environment.

Table 2

Effects of School Meals Programs on Student Outcomes in Addis Ababa

No	Items	N	Mean	SD
1	School meals programs have increased student attendance in my school.	500	4.02	0.87
2	Students participating in school meals programs show higher levels of cognitive engagement.	500	4.32	0.77
3	Academic performance (e.g., test scores) has improved for students involved in meal programs.	500	4.11	0.88
4	The availability of meals at school motivates students to participate more actively in class.	500	4.44	0.78
5	School meals programs contribute to a positive learning environment in my classroom.	500	4.22	0.76
6	I believe that school meals programs enhance the overall educational experience for students.	500	4.33	0.92
	Overall Average	500	4.24	0.83

Theme 1: Structural Impacts on Attendance, Cognitive Engagement, and Academic Achievement

The findings for item number 1 in Table 2 show that school meals programs have a mean score of 4.02, with a standard deviation of 0.87, highlighting a significant consensus among respondents regarding the positive impact of these programs on student attendance. This strong agreement suggests that school meals initiatives are perceived as highly effective motivators for regular school attendance. As one teacher noted in an interview, *“Since the school meal program started, I’ve seen many more students coming to class every day. They seem more focused and engaged, which makes a big difference in their learning.”* This statement reinforces the quantitative findings, highlighting the perceived benefits of the program on student attendance and academic engagement.

The finding for item number 2 in Table 2 indicates that students participating in school meals programs have a mean score of 4.32, with a standard deviation of 0.77, demonstrating a strong belief that these initiatives enhance cognitive engagement among students. This high mean suggests that

respondents perceive a clear link between access to nutritious meals and increased attentiveness and active involvement in daily learning activities. The standard deviation of 0.77 indicates relatively low variability in responses, suggesting a widespread consensus among participants about the benefits of school meals programs on cognitive engagement. However, it is still important to consider that some individual differences may exist, which could impact how effectively these programs promote engagement for every student. A teacher shared, *“Since the implementation of school meals, I’ve noticed that students are not only showing up more often, but they’re also participating actively in class discussions.”* This observation reinforces the quantitative findings, emphasizing the positive correlation between school meals programs and heightened cognitive engagement.

The data for item number 3 in Table 2 indicates that academic performance, as reflected in test scores, has a mean score of 4.11 among students participating in meal programs, with a standard deviation of 0.88. This suggests a strong consensus that these programs positively influence academic outcomes. The standard deviation of 0.88 reveals some variability in responses, indicating that while many students benefit, individual circumstances and household socio-economic backgrounds may affect the extent of these improvements. This invites further exploration into why some students may not experience the same level of academic enhancement. A teacher remarked, *“Since the feeding program began, we’ve observed a noticeable uptick in student test scores. It’s evident that proper nutrition plays a crucial role in their academic success.”* This reinforces the quantitative findings, highlighting the connection between school meals programs and improved academic performance.

Theme 2: Behavioral Reinforcement and Classroom Environment Transformation

The analysis of item number 4 in Table 2 reveals that the availability of meals at school has a mean score of 4.44, accompanied by a standard deviation of 0.78. This exceptionally high mean score strongly indicates that there is a widespread belief among respondents that access to nutritious meals significantly enhances student participation in classroom activities. The standard deviation of 0.78 indicates a moderate level of consensus among respondents, reflecting some variability in individual experiences. This highlights the importance of investigating these individual differences to fully understand the nuances of student engagement. A teacher’s observation further underscores this connection: *“Since the meal program started, I’ve noticed that students are much more engaged and eager to participate. It’s clear that having food available makes a significant difference.”* This statement not only aligns with the quantitative findings but also reinforces the qualitative aspect of the experience, illustrating the tangible effects of school meals programs on student behavior.

The data for item number 5 in Table 2 reveals that school meals programs contribute to a positive learning environment, with a mean score of 4.22 and a standard deviation of 0.76. This high mean indicates a strong consensus among respondents that these programs play a significant role in fostering a conducive atmosphere for learning. The standard deviation of 0.76 indicates a moderate level of agreement, suggesting that while many teachers and students perceive the structural benefits of school meals programs, individual experiences may vary based on specific classroom dynamics. This variability emphasizes the need to explore further the elements that contribute to or detract from a positive learning environment in relation to these programs. A Principal noted, *“Since we implemented the meal program, I’ve seen a noticeable improvement in classroom dynamics. Students are more focused and cooperative, which fosters a better learning atmosphere.”* This statement aligns with the quantitative findings, underscoring the link between school meals and an enhanced educational environment.

The findings for item number 6 in Table 2 reveal that school meals programs are perceived to enhance the overall educational experience for students, with a mean score of 4.33 and a standard

deviation of 0.92. This result signifies a strong consensus among respondents, indicating that many believe these programs play a crucial role in enriching the educational environment. The standard deviation of 0.92 indicates a higher level of variability in respondents' opinions, suggesting that individual experiences may differ based on various socio-economic factors or specific school environments. For instance, students from different backgrounds may experience varying degrees of impact from these programs, highlighting the need for further research into how these factors influence perceptions of educational enhancement. A teacher's observation emphasizes this connection: *"I truly believe that since we started the feeding program, students are more present, both physically and mentally. It adds a valuable dimension to their educational experience."* This statement not only reinforces the quantitative data but also illustrates the qualitative aspects of student engagement that are influenced by school meals. The increased focus and participation noted by educators can lead to a more dynamic and interactive learning environment, further enriching the educational experience.

Psychosocial Survey Contextualization

In addition to purely academic metrics, a critical objective of this research was to examine the psychosocial dimensions of school meal interventions. Table 3 presents the quantitative results from the survey instrument regarding how regular school meals impact food insecurity stress, emotional stability, peer social interactions, internal motivation, self-esteem, and their secondary relationship to academic outcomes.

Table 3

Psychosocial Effects of School Meals Programs and Academic Outcomes in Addis Ababa

No	Items	N	Mean	SD
1	School meals programs reduce stress related to food insecurity among students.	500	4.11	0.67
2	Students receiving meals at school report feeling more emotionally stable.	500	3.92	0.86
3	Participation in school meals programs enhances social interactions among students.	500	4.42	0.91
4	Students involved in meal programs demonstrate greater motivation to learn.	500	4.20	0.88
5	I believe that school meals programs positively influence students' self-esteem and confidence.	500	4.13	0.66
6	The psychosocial benefits of school meals programs lead to improved academic performance.	500	4.19	0.77
	Overall Average	500	4.16	0.79

Theme 3: Psychosocial Well-being and Food Security Stress Alleviation

The findings from item number 1 in Table 3 indicate that school meals programs significantly reduce stress related to food insecurity among students in Addis Ababa. With a mean score of 4.11 and a standard deviation of 0.67, these results reflect a strong consensus among respondents regarding the positive effects of these programs on student psychological well-being. The standard deviation of 0.67 indicates a very low level of variability in responses, suggesting a general agreement among

students about the stress-reducing effects of school meals programs. However, it is essential to consider that individual experiences may still differ. Some students may face more severe food insecurity than others, which could affect their perceptions of how much these programs alleviate their stress. This nuance indicates the need for targeted interventions that address the specific needs of the most vulnerable students. A noteworthy comment from a local educator highlights this connection: *“Students who participate in the school meals program often tell me they feel less anxious about food. This allows them to concentrate better on their studies.”* This statement reinforces the quantitative findings, illustrating how the availability of meals can create a more stable and supportive learning environment, thereby enhancing students’ focus and engagement.

The findings from item number 2 of Table 3 indicate that school meals programs significantly contribute to the emotional stability of students. With a mean score of 3.92 and a standard deviation of 0.86, these results highlight a positive perception among respondents regarding the impact of these programs on student emotional health. The standard deviation of 0.86 indicates some variability in responses, suggesting that while many students benefit, individual experiences may differ based on external household trauma or severe poverty. Some students may still struggle with emotional issues that go beyond food security, indicating the necessity for comprehensive support systems that address various aspects of student well-being. A local teacher noted, *“Students often express that having meals at school makes them feel more secure and calm, which directly impacts their ability to learn.”* This statement reinforces the quantitative findings, illustrating how the provision of meals creates a more stable and supportive learning environment, enhancing students’ focus and overall engagement in school activities.

Theme 4: Community Building, Social Cohesion, and Academic Motivation

The findings from item number 3 in Table 3 indicate that participation in school meals programs significantly enhances social interactions among students. With a high mean score of 4.42 and a standard deviation of 0.91, these results reflect a strong consensus among respondents regarding the positive effects of these programs on peer-to-peer social engagement. The standard deviation of 0.91 indicates a moderate level of variability in responses, showing that while many students agree on the positive impact, some may experience different levels of social integration. This variability highlights the need to understand individual circumstances that might affect social engagement, such as personal backgrounds or existing social networks. A local educator remarked, *“The school meals program has transformed lunchtime into a social event where students connect and collaborate.”* This statement underscores the quantitative findings, illustrating how access to meals not only nourishes students physically but also creates opportunities for meaningful social interactions, thereby enriching their overall school experience.

The findings from item number 4 in Table 3 indicate that students involved in school meals programs demonstrate greater internal motivation to learn. With a mean score of 4.20 and a standard deviation of 0.88, these results suggest a significant positive perception among respondents regarding the motivational effects of these initiatives. The standard deviation of 0.88 suggests some variability in responses, indicating that while a majority experience increased motivation, individual factors may influence this perception. Some students may face challenges that affect their overall motivation, underscoring the need for targeted support to address diverse needs. A local teacher noted, *“Students who participate in the feeding program are more engaged in class and eager to learn.”* This statement reinforces the quantitative findings, illustrating how the provision of meals not only addresses nutritional needs but also fosters an environment where students feel motivated and ready to participate actively in their education.

The findings from Table 3 in item number 5 indicate that respondents strongly believe school meals programs positively influence students' self-esteem and confidence. With a mean score of 4.13 and a standard deviation of 0.66, these results reflect a strong consensus regarding the beneficial effects of these programs on students' self-perception. The standard deviation of 0.66 indicates a relatively low level of variability in responses, suggesting a general agreement among students about the positive impact on self-esteem. However, it's important to recognize that individual experiences may still vary, and some students may face different challenges that affect their self-confidence. A local educator commented, *"When students feel well-nourished, they often carry themselves with more confidence and engage more in school activities."* This statement supports the quantitative findings, illustrating how school feeding programs can create a more supportive environment that enhances students' self-esteem and confidence, ultimately contributing to their overall personal development.

Finally, the findings from Table 3 regarding item number 6 indicate that the psychosocial benefits of school meals programs contribute directly to improved academic performance. With a mean score of 4.19 and a standard deviation of 0.77, these results suggest a strong belief among respondents that these psychosocial gains positively influence students' concrete academic outcomes. The standard deviation of 0.77 signifies a moderate level of agreement, suggesting that while many recognize the connection between psychosocial benefits and academic performance, individual experiences may vary. Some students may still face barriers to academic success that are not solely related to nutrition. A local teacher noted, *"When students are well-fed and feel supported, they tend to perform better in class."* This statement reinforces the quantitative findings, illustrating how the psychosocial benefits of school meals programs can create a conducive learning environment, ultimately leading to improved academic performance and student success.

Discussion

Theoretical Reinterpretation and Alignment with Maslow and Bandura

The empirical results from this study provide strong validation for the integrated theoretical framework established at the outset. By separating the Findings from this narrative Discussion, we can critically analyze how the data answers our foundational research questions. Research Question 1 investigated how school meals programs impact attendance, engagement, and academic performance. Interpreting item 1 (Mean = 4.02) through Social Cognitive Theory, the high mean reflects not only the immediate biological benefits of nutrition but also the broader psychosocial dynamics of observational learning. Students who witness their peers consistently benefiting from school meals are motivated to attend school regularly themselves, demonstrating that positive behavioral patterns are emulated within a collective social context (Bandura, 1991). Furthermore, the concept of self-efficacy is highly critical in explaining the cognitive engagement scores (Mean = 4.32). Fulfilling basic physiological needs (Maslow, 1943) directly alters the personal variables within Bandura's triadic model. The structural availability of meals enhances students' biological focus and cognitive functioning. As students experience daily success related to their active participation and rising test scores (Mean = 4.11), their internal self-belief in their academic capabilities grows exponentially. This creates a powerful virtuous cycle where increased attendance leads to higher cognitive confidence, which subsequently drives deeper behavioral engagement. Research Question 2 examined the psychosocial effects and their relation to academic outcomes. The exceptionally high score for peer social interactions (Mean = 4.42) highlights the role of social support systems in SCT. Sharing meals transforms lunchtime into a structural space for community building. However, the moderate standard deviation (SD = 0.91) reminds us of reciprocal determinism: while school meals

provide a supportive environmental factor, individual personal backgrounds and external socio-economic challenges still heavily influence student responses. The data proves that the psychosocial benefits (Mean = 4.19) are not isolated psychological phenomena; rather, they serve as the crucial causal mechanism that translates physiological nutrition into elevated standardized test scores.

Comparative Literature Review

The findings from this study on school meals programs in Addis Ababa indicate significant positive impacts on student attendance, cognitive engagement, academic performance, and psychosocial well-being. This discussion critically examines selected findings, contrasting them with relevant international literature to uncover deeper institutional implications and systemic areas for improvement. The research highlights that school meals programs serve as a critical motivator for student attendance. This empirical observation is highly consistent with international studies like those by Bartfeld et al. (2020), which emphasize that universal access to free meals can significantly reduce absenteeism, particularly in low-income urban communities. However, the relationship between nutrition and attendance is not entirely straightforward. Schwabish (2020) pointed out that while feeding initiatives provide an immediate incentive to attend, they do not eliminate structural barriers such as severe transportation challenges, lack of school infrastructure, or heavy family care responsibilities. This disparity suggests that while the immediate incentive of food is highly effective, policymakers must not let it distract from addressing systemic, structural issues that prevent consistent school attendance. Moreover, the qualitative data from our interviews revealed highly varied and nuanced experiences among students. Some reported massive increases in internal motivation due to the availability of meals, while others indicated that deep socio-economic factors and household poverty continued to impede their regular attendance. This variability underscores the critical importance of a multifaceted approach that integrates institutional school meals with broader socio-economic support initiatives. Without addressing these underlying structural inequalities, the long-term sustainability of attendance improvements may be severely compromised.

The findings also strongly suggest that students participating in these programs demonstrate enhanced cognitive engagement. This aligns perfectly with the established pedagogical literature, such as Walker (2020), which argues that proper nutrition leads directly to better biochemical focus and active participation in class activities. However, it is crucial to critically examine the precise mechanisms at play. While nutrition is a necessary biological factor, the structural quality of the learning environment and daily teaching practices cannot be overlooked. Ximenes (2025) noted that over-reliance on school feeding initiatives might dangerously detract from necessary capital investments in pedagogical strategies and classroom resources. Effective, modern teaching methods could vastly amplify the benefits of nutritional support, creating a much more holistic educational experience. Interviews with educators also revealed a profound perception that while meals provide vital immediate physical energy, they alone do not guarantee academic success. Some educators strongly emphasized the systemic necessity of integrating nutrition with highly engaging, modern teaching practices to maximize cognitive engagement. This suggests that while school meals programs are highly beneficial, they must be intentionally deployed as part of a broader educational strategy that includes specialized training for primary teachers to effectively utilize the heightened engagement among well-nourished students.

The findings indicate that school meals programs contribute positively to students' emotional stability and self-esteem. This aligns with Cameron's (2024) assertion that consistent access to institutional meals directly alleviates psychological anxiety related to severe food insecurity. However, the qualitative data also revealed critical nuances in students' lived experiences. While many

felt significantly more secure and confident, some expressed complex feelings of social exclusion or stigmatization, particularly those who did not participate in the program or attended schools with poorly managed distribution systems. This highlights a major gap in the existing literature where the psychosocial impacts are often described in overly broad terms without addressing individual experiences that vary significantly. Pastorino et al. (2023) argued that hidden social stratification may inadvertently arise from institutional meal programs, where those who benefit feel socially included, while others feel marginalized or publicly labeled as impoverished. This suggests that school meals initiatives must be accompanied by highly sensitive, inclusive administrative policies that ensure all students feel valued and supported, regardless of their direct participation in the program. The qualitative interviews provided incredible insight into how a genuine sense of community can be successfully fostered, but also highlighted the urgent need for proactive administrative measures to completely mitigate feelings of peer exclusion.

The strong perception that school meals programs enhance the overall educational experience is noteworthy. This finding closely resonates with McLoughlin et al. (2025), who noted that universal school meals can create a deeply positive school climate and institutional trust. However, the qualitative interview data revealed mixed experiences regarding this enhancement. While many primary students reported feeling much more engaged, others articulated that the benefits were not uniformly felt across different classrooms and social groups. This suggests that the practical effectiveness of meal programs can be highly context-dependent, heavily influenced by localized classroom dynamics and peer relationships. Niyibizi et al. (2024) strongly cautioned against blindly assuming that all students experience identical educational benefits from feeding programs. Our qualitative interviews highlighted that some students felt socially isolated despite the communal aspect of meals. This discrepancy points to the clear need for further descriptive research into how school meals can be tailored to better address the diverse psychological experiences of students. Creating a genuinely inclusive educational environment requires a deep understanding of the unique psychological needs and social dynamics within each urban school.

In conclusion, the study thoroughly illustrates the positive impacts of school meals programs on various aspects of student life, but it also reveals critical gaps and areas for operational improvement. A comprehensive administrative approach that integrates nutritional initiatives with broader socio-economic support, inclusive policies, and effective teaching strategies is essential for maximizing the societal benefits of such programs. Future research should focus heavily on the complex interplay between nutrition, educational practices, and psychosocial support to create a more holistic framework for student success.

Study Limitations

While the methodology was designed to maximize validity, this study acknowledges several potential limitations that should be carefully considered when interpreting the results:

- **Response Bias:** The self-reported survey data may be subject to inherent participant biases, such as social desirability bias, where teachers, directors, or students provide responses they believe are administratively favorable or expected rather than their true, unvarnished feelings or daily experiences.
- **Generalizability:** While the stratified sampling method aimed to enhance representativeness across Addis Ababa, the findings may not be fully generalizable to all educational contexts in Ethiopia, particularly rural agricultural regions. The unique socio-economic conditions, concentrated poverty, and infrastructure of capital cities may limit the direct applicability of results to rural school feeding contexts.

- **Temporal Limitations:** The study captures stakeholder perceptions at a specific cross-sectional point in time, which may not account for future macro-level changes in educational practices, shifting social dynamics, or changing economic environments. Longitudinal studies would be highly beneficial for examining the multi-year sustainability of school meals impacts on student graduation rates and long-term academic trajectories.

Implications for School Leaders & Educational Administrators

Based on the unique empirical and qualitative findings of this study, school leaders, directors, and educational administrators cannot treat school meals programs as isolated auxiliary services. Instead, they must proactively integrate these programs into the core instructional and social design of their institutions. The following concrete, actionable strategies are recommended for immediate implementation by school leaders:

1. **Integration of Nutritional Support with Active Educational Strategies:** School leaders and academic directors must collaborate directly to ensure that school meals programs are systematically integrated with daily classroom teaching practices. Administrators should provide specialized professional development and training to teachers, instructing them on how to intentionally leverage the heightened cognitive engagement and physical energy levels resulting from improved nutrition. For example, teachers should schedule core, cognitively demanding subjects—such as mathematics and natural sciences—immediately following meal times when student concentration and focus are statistically optimized (Mean = 4.44). This structural alignment ensures that the physical benefits of school meals translate directly into elevated academic achievement and a more dynamic, interactive classroom environment.
2. **Mitigation of Stigma and Enforcement of Inclusive Operational Policies:** Given that the qualitative data revealed critical nuances regarding feelings of peer exclusion and social stratification (Pastorino et al., 2023), school directors must implement targeted administrative interventions to protect vulnerable students. Leaders should establish strict inclusive operational policies that eliminate any visual or structural separation between participating and non-participating students. Meals should be distributed in an entirely universal, communal setting where all students sit together, reducing feelings of stigmatization. Schools should actively develop peer support systems and structured lunchtime activities that foster a deep sense of community and social belonging, which our data proves is essential for enhancing student self-esteem (Mean = 4.13) and overall academic engagement.
3. **Establishment of Cross-Sectoral Socio-Economic Alliances:** Because the data revealed that external socio-economic barriers can continue to impede attendance despite the availability of food (Schwabish, 2020), school administrators must adopt a broader, multi-faceted approach. School leaders should forge active structural alliances with local non-governmental organizations (NGOs), municipal transport authorities, and health clinics. By combining school meals with supplementary support initiatives—such as subsidized school transport or community-based livelihood programs for parents—administrators can comprehensively dismantle the compound barriers that prevent highly vulnerable children from consistently attending school.

4. Institutionalization of Continuous Digital Feedback Mechanisms:

To ensure the long-term operational sustainability and nutritional quality of meal programs, educational leaders must establish institutionalized feedback channels involving students, parents, and educators. Administrators should deploy simple, periodic mobile-based or paper-based surveys to monitor real-time satisfaction, operational bottlenecks, and changing student needs. This continuous stream of localized empirical data will allow school leaders to make rapid, iterative enhancements to meal distribution, menu diversity, and classroom management, ensuring that the structural framework of the program dynamically evolves alongside the diverse socio-economic context of the student body.

Conclusion

In conclusion, school meals programs in Addis Ababa significantly and undeniably enhance student attendance, cognitive engagement, academic performance, and psychosocial well-being. The quantitative findings indicate that these vital initiatives provide essential nutritional support, helping to alleviate household food insecurity and foster a deeply positive, supportive school climate. However, critical gaps remain in fully understanding the highly nuanced, individual experiences of primary students, particularly regarding long-term emotional stability and peer-to-peer social interactions. While a vast majority of students benefit immensely from these programs, some continue to face complex institutional challenges, such as hidden feelings of social exclusion, stigmatization, or ongoing socio-economic barriers that must be aggressively addressed by school leaders. Future educational researchers should universally adopt a mixed-methods approach to deepen the scholarly understanding of these programs' systemic impacts, placing equal emphasis on macro-level quantitative outcomes and micro-level qualitative lived experiences. Longitudinal studies are essential to rigorously assess the sustained effects of school meals initiatives over multiple years, particularly in relation to secondary school graduation rates, long-term academic trajectories, and late-stage psychosocial development. Moreover, future research should explore the exact biological and psychological mechanisms by which nutrition influences deep classroom learning and active participation, alongside the broader social dynamics within public schools. Additionally, empirical investigations into how to successfully design highly inclusive school environments—ensuring that all students feel deeply valued regardless of their economic participation in feeding programs—are crucial. By focusing heavily on these critical areas, future studies can contribute to refining, optimizing, and scaling school meals programs, ultimately leading to improved educational equity, child development, and social justice in Ethiopia and similar developing urban contexts.

Implications for Educational Planning

The findings of this study underscore the critical need for educational planners to transition from viewing school meals as isolated social welfare initiatives to integrating them as core components of systemic educational planning. Given the strong evidence that nutritional support directly drives student attendance, cognitive engagement, and academic performance, planners must strategically align school feeding programs with broader curriculum delivery and equity goals. This requires establishing robust, sustainable funding models and institutional structures within educational budgets to guarantee program continuity. Furthermore, since the study highlights that nutritional stability fosters emotional resilience and social cohesion, planners should leverage these programs to design a more supportive, holistic learning environment that addresses both the physical and psychological readiness of students to learn.

Concurrently, the study's insights into individual variability and feelings of exclusion present a pressing demand for inclusive policy design in educational planning. Planners must move away from rigid, one-size-fits-all implementation models and instead develop targeted intervention frameworks that identify and mitigate hidden socio-economic barriers among non-participating students. To eliminate the risk of marginalization during school lunchtimes, educational administrators should establish explicit institutional guidelines that foster social inclusion and equitable access. Ultimately, this necessitates the institutionalization of continuous monitoring, evaluation, and longitudinal data-collection mechanisms to ensure that school meals programs sustainably advance educational equity and child development across diverse urban student populations.

Correspondence

Easaw Alemayehu Assefa: easaw2000@gmail.com

Disclosure Statement and Funding

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Abate, K. H., & Belachew, T. (2019). Chronic malnutrition among under-five children of Ethiopia may not be economic. A systematic review and meta-analysis. *Ethiopian Journal of Health Sciences*, 29(2).
- Adinew, A. (2021). *Assessment of the Role of School Feeding Program on Students' enrollment and Academic Performance: The Case of Kolfe Keranyo Sub-City in Addis Ababa* (Doctoral dissertation, ST. MARY'S UNIVERSITY).
- Assefa, E. A. (2026). Infrastructure matters: How school facilities influence Quality Education. *The Journal of Quality in Education*, 16(27), 73-95.
- Assefa, E. A. (2023). Do Students' Academic Performance and Participation Get Better through School Feeding in Ethiopia? *Educational Planning*, 30(1), 7-23.
- Assefa, E. A. (2025, a). From nutrition to education: the contributions of school feeding programs on the UN 2030 Agenda and AU 2063 goals. *British Food Journal*, 1-18.
- Assefa, E. A. (2025, b). How Do School Feeding Programs Support the United Nations 2030 Agenda and the African Union's 2063 Goals? Online Submission.
- Assefa, E. A., & Zenebe, C. K. (2024). Exploring Continuous Professional Development: Insights from Public Primary School Leaders in Addis Ababa, Ethiopia. *Educational Planning*, 31(4), 31-50.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248-287.
- Bartfeld, J. S., Berger, L., & Men, F. (2020). Universal access to free school meals through the community eligibility provision is associated with better attendance for low-income elementary school students in Wisconsin. *Journal of the Academy of Nutrition and Dietetics*, 120(2), 210-218.
- Botha, C. J. (2022). *Development and implementation of a school-based health promotion intervention in a resource-constrained community* (Doctoral dissertation, University of Pretoria (South Africa)).

- Bryan, J., Osendarp, S., Hughes, D., Calvaresi, E., Baghurst, K., & Van Klinken, J. W. (2004). Nutrients for cognitive development in school-aged children. *Nutrition Reviews*, 62(8), 295-306.
- Bundy, D. A. (2009). *Rethinking school feeding: social safety nets, child development, and the education sector*. World Bank Publications.
- Cameron, A. (2024). *Hungry to Learn: A Qualitative Exploration of Food Insecurity's Influence on College Students' Sense of Belonging and Academic Achievement* (Doctoral dissertation, Northern Kentucky University).
- Hanushek, E. A., & Woessmann, L. (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth*, 17(4), 267-321.
- Hecht, A. A., Olarte, D. A., McLoughlin, G. M., & Cohen, J. F. (2023). Strategies to increase student participation in school meals in the United States: a systematic review. *Journal of the Academy of Nutrition and Dietetics*, 123(7), 1075-1096.
- Iddrisu, I. (2018). Improving school feeding through participation: should the teacher be actively involved? *International Journal of Educational Management*, 32(1), 141-154.
- Lawson, T. M. (2012). Impact of school feeding programs on educational, nutritional, and agricultural development goals: a systematic review of literature.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- McLoughlin, G. M., Kerstetter, M., Yohannes, Y., Martinez, O., Jones, R. M., Brownson, R. C., & Fisher, J. O. (2025). Understanding implementation determinants of universal school meals through an equity-driven mixed methods approach. *Implementation Science Communications*, 6(1), 44.
- Mezgebo, T. G. (2020). Urbanization and development in Ethiopia: Policy issues, trends and prospects. *State of the Ethiopian Economy*, 2021.
- Niyibizi, O., Micomyiza, A., Bibakumana, G., Uwitatse, M. C., & Mutarutinya, V. (2024). Teachers' Perceptions of Influence of Daily School Feeding Programs on Student Participation and Dropout Rates. *Journal of Classroom Practices*, 3(1), 26-39.
- Pastorino, S., Hughes, D., Schultz, L., Owen, S., Morris, K., Backlund, U., ... & Milani, P. (2023). School meals and food systems: Rethinking the consequences for climate, environment, biodiversity, and food sovereignty.
- Schwabish, J., Joo, N., Waxman, E., & Spievack, N. (2020). Strategies and challenges in feeding out-of-school students. *Washington, DC: Urban Institute*, 500.
- Shankar, P., Chung, R., & Frank, D. A. (2017). Association of food insecurity with children's behavioral, emotional, and academic outcomes: a systematic review. *Journal of Developmental & Behavioral Pediatrics*, 38(2), 135-150.
- Sorhaindo, A., & Feinstein, L. (2006). *What is the relationship between child nutrition and school outcomes? [Wider Benefits of Learning Research Report No. 18]*. Centre for Research on the Wider Benefits of Learning, Institute of Education, University of London.
- Story, M., Nannery, M. S., & Schwartz, M. B. (2009). Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. *The Milbank Quarterly*, 87(1), 71-100.
- Takele, Z. (2023). *The resilience of Ethiopian children: The role of psychosocial competences in mediating the relationships between risk factors and developmental outcomes* (Doctoral dissertation, Yeshiva University).

- Tamiru, Y., Mulugeta, A., Ayelign, A., Jara, D., Melaku, E., & Gebremedhin, S. (2024). Perceived benefits and challenges of school feeding program in Addis Ababa, Ethiopia: a qualitative study. *Journal of Nutritional Science*, 13, e32.
- Walker, A. D. M. (2020). *Perceptions of Nutrition and Academic Performance in College Freshmen: A Phenomenological Qualitative Study* (Doctoral dissertation, Texas A&M University-Commerce).
- Ximenes, S. M. (2025). School feeding program and Sustainable Development Goals (SDGs) in education: Linking food security to learning outcomes in Timor-Leste. *ASEAN Journal for Science Education*, 4(2), 155-168.
- 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), 16.

The Status of Preschools in the Sidama Regional State in Meeting the Minimum Standards Set for Ethiopian Preschools

Birhanu S. Alemu

*Department of Educational Planning and Management
Haramaya University, Dire Dawa, Ethiopia*

Befekadu Zeleke Kidane

*Department of Educational Planning and Management
Addis Ababa University, Addis Ababa, Ethiopia*

Seleshi Zeleke

*School of Psychology
Addis Ababa University, Addis Ababa, Ethiopia*

Abstract

This study examines the extent to which preschools in the Sidama Regional State meet the minimum standards set by Ethiopia's national education policy. Specifically, it assessed the status of 15 preschools across four zones and one city administration against 7 areas, 15 standards for early childhood education, and 18 general preschool quality standards. The sample of preschools was selected using a stratified sampling technique to ensure equal representation by school setting (rural-urban). Data were collected through direct observation and through checklists completed by school principals and teachers, and were analysed using descriptive statistics and thematic analysis. The findings indicate that all 15 preschools met only one minimum standard; 13 met 3 minimum standards, 11 met 4, and none met 3 of the 15 minimum standards stipulated in the policy. Overall, resources are limited, facilities are scarce, and infrastructure is inadequate, making it difficult to adequately address gaps in access, equity, and quality in the region. Regarding teachers' certification status, the great majority (87.7%) hold a diploma and are thus considered qualified. Overall, 51% of preschools in the Sidama Regional State meet the minimum standards, whereas 49% do not. The Ethiopian Ministry of Education and other key stakeholders should therefore review the current policy and initiate reforms in educational planning to ensure that preschools meet the minimum requirements in terms of resources, facilities, and infrastructure.

Keywords: educational planning, education policy, preschool, school location, school readiness

Introduction

Children's future success in school is significantly influenced by early education. According to Oduolowu (2010), this stage can be beneficial and risky for a child's future; it may either make or spoil a child permanently. Aristotle expressed, "Give me a child until he is seven, and I will show you the man" (Thomas & Cooke, 2013, 11). In addition, UNICEF (2019) argues that preschool programs bridge gaps between home and school, leading to better adjustment to primary school and higher achievement levels. Thus, preschool education may significantly influence children's entire future. Many variables can influence the success of a preschool program and children's success in early learning. Among these variables is a country's education policy. As the World Bank Group's (2022)

report indicated, there has been an emerging “learning poverty” in which school-aged children are found unable to read and comprehend a simple text by age 10, a common problem in developing countries like Ethiopia, affecting 90% of children. Primary reasons for this are the education policy and the problems associated with the policy.

According to UNICEF (2012), the success of a preschool program can be expressed by three entwined features: a) ready children, b) ready schools, and c) ready parents. Therefore, preschools must meet minimum standards set by either national or international authorities to be ready for children. In addition, the success of a preschool program is largely determined by the school environment (UNICEF, 2019). This may include having enough resources, facilities, and infrastructure. Thus, this study tried to assess preschool policy and its related issues, determining whether they meet the standard set or not.

The Ethiopian government improved the pre-existing education and training policy (MoE, 2023) and has restructured the education system. For example, pre-primary education is levels I and II for ages 5-6, primary school covers grades 1-6 for ages 7-12, middle school includes grades 7-8 for ages 13-14, and secondary school encompasses grades 9-12 for ages 15-18. Additionally, children aged four are provided preschool education through alternative bases (p. 7). Thus, preschool education programs are generally designed for children ages 4 to 6, preparing them for primary school. Officially, children enter grade one at age seven. To implement and monitor this, the MoE formulated the *Strategic Operational Plan and Guidelines for Early Childhood Care and Education in Ethiopia* (2010) and set the minimum standard in seven major areas with sub-sections that preschools are expected to meet. Thus, this study aims to examine the status of preschools in meeting the minimum standards set for Ethiopian preschools in the Sidama region. The study further tries to fill existing gaps in children’s readiness for school at preschool age and identify better policy options for timely intervention to build the future of children.

Problem Statement

Research findings by Tefera (2018) indicated that Ethiopia’s education policies inadequately prepare children for primary education. The new Education Training and Policy (MoE, 2023) states that the government should provide free and compulsory preschool for children aged five and six. However, how practical is this? In a practical scenario, for example, in Ethiopia, for the 2023/24 academic year, approximately only 8 million children were enrolled in a preschool program, and 50% of children remained out of preschool (MoE, 2023). UNICEF (2019) states that over half of Ethiopian children are excluded from ECE. So, Ethiopia found itself in an infant stage of making preschool education program compulsory for every child despite the poor infrastructure and scarcity of resources.

Another gap is the implementation of the formulated education policy. Designing the best education policy is one thing, but putting it into action is another, so both can affect the preschool program negatively if they are not properly implemented. The study by Denboba et al. (2015), entitled “Early Childhood Education and Development,” was conducted in Indonesia by the World Bank. Its results indicated that policies can be fully implemented, partially implemented, not implemented, ineffectively implemented, or suspended. A World Bank study evaluated early childhood development (ECD) policies in 28 countries, scoring them on a four-point scale from latent to advanced level. The average scores for key policy goals—enabling environment, widespread implementation, and quality assurance—were 2.1, 2.4, and 2.1, respectively. These scores indicate an “emerging” status, highlighting ongoing challenges in delivering high-quality ECE and achieving the intended learning outcomes (Mungai, 2016). Hence, this study seeks to identify any implementation gaps and propose policy alternatives to improve achievement.

Research Questions

1. Do preschools in the Sidama region meet the minimum standards set in the policy for Ethiopian preschools?
2. Do preschools in the Sidama region meet the general preschool quality standards in terms of resources, facilities, and infrastructure?

Methodology

This study was conducted in the Sidama regional state, which is 274 km away from Addis Ababa, the capital city of Ethiopia, and is one of 12 regional states. The Sidama regional state consists of four zones, namely Bensa-Eastern, Aleta Wondo-Southern, Yirgalem-Central, and Hawassa-Northern, and one city administration, the Hawassa city administration itself. The region has 38 districts and 643 kebeles. According to the Sidama Region Education Bureau report, public preschool education has been offered in primary schools for the last few years (MoE, 2023). The region has 1,051 primary schools, most of which host preschool programs. Among these, 1,039 primary schools provide preschool education programs. Accordingly, the gross enrolment rate (GER) of preschool children in the region in 2025/26 was 107,732 boys and 101,466 girls, with a total of 209,198.

As a result, a few preschools operate their preschool programs independently, while others collaborate with primary schools. Given that only independently operated preschools are included in this study, these preschools are considered to qualify only under the definition provided by USAID (2023) and the policy set by Ethiopia (MoE, 2010). Thus, among the remaining preschools, 26 of them, which run their programs independently, are selected as the population of this study. However, the newly established 8 preschools are not included in this study. This is because these pre-schools do not have children in level II classes (the upper level), as these schools are only one year old. This study is part of a larger study that aimed to examine the extent to which preschool children are ready for grade 1. Therefore, this study is meant to examine whether preschools themselves are ready to prepare preschool-level I and II children for grade 1.

Access to public preschool programs in the Sidama region is low; it is in its infancy stage, and its expansion is slow. According to our personal observation, this is due to significant gaps in access, equity, quality, and resources in rural and remote areas. Thus, the study aims to examine the status of preschools in relation to meeting the minimum standards set for Ethiopian preschools. Each preschool was thus examined against the minimum standards set by the national government.

Research Method

This study employed a convergent parallel triangulation mixed design. So, both quantitative and qualitative data were collected side by side concurrently to observe preschools against the minimum standards set by the policy of the national government to examine the status of preschools. The observation checklist measurements are classified into two broad categories. The first one is the minimum standard for early childhood education set by the policy. It has 7 general major areas and 15 minimum standards, which are derived from these 7 major areas. Thus, the policy stipulates that each preschool must at least meet minimum standards. The second category of standards is general preschool quality standards, which are broad and 18 in number.

The checklist of observation of preschools is used to determine whether schools meet the minimum standards of early childhood education in Ethiopia set by the ECE policy (MoE, 2010). To answer question #1, to observe whether preschools meet the minimum standards or not, “Yes” or “No,” a binary measurement was used. In addition, to summarize the extent to which the minimum standards in the seven Areas of standards, a percentage is provided, which shows the extent to which each main meet the minimum standards. Moreover, to answer question # 2, to observe preschools to see whether they meet the general preschool quality standards or not, “Yes”, “Partially,” or “No” were ordinal measurements with a three-point scale. Observation checklist data are structured into binary and ordinal forms based on the minimum standards set by the Ethiopian ECE policy (MoE, 2010), which organizes these criteria in such a way that they are binary and ordinal. Finally, data were collected based on direct observation, through asking school principals, teachers, and school records. It took an average of 30 minutes to complete the observation. The following are the steps taken to draw a sample of schools.

First, all preschools in the Sidama Regional State were classified by zone and city administration into five clusters. Then, a systematic random sampling technique was used to select three preschools from each of the five clusters or zones (i.e., four zones and the Hawassa city administration), eastern and the Hawassa city administration. However, central, northern, and southern zones all include existing schools. The basic rationale for selecting an equal number of sampled preschools despite differences in the population size of preschools is that all five zones or clusters are found in one region, and the setting and administration of all schools are similar, with no such differences. As shown in Table 1 below, this procedure yielded 15 preschools from which data were collected. Thus, the results were generalized to all preschools in the Sidama region.

Table 1

Number of preschools selected from each zone

SN	Zones	Population preschools (N)	Sample preschools (n)	Remark
1	Central Zone	3	3	
2	Eastern Zone	4	3	
3	Northern Zone	3	3	
4	Southern Zone	3	3	
5	Hawassa (city)	5	3	
	Total	18	15	

Improvements on the Checklists before the Commencement of Data Collection

Face and content validity of the observation checklists were checked by two preschool principals, two teachers, and two curriculum experts from the Sidama region education bureau. Following their comments and suggestions on the checklists, we changed or modified unclear and vague terminology that needed to be clearer in preparation for the main data collection. Then, the final data were collected from the 15 preschools.

Data Analysis

Quantitative data were analysed using descriptive statistics (frequency count and percentage). For qualitative data analysis, thematic analysis was employed to identify and analyse recurring themes and patterns in the qualitative data to unfold the status of preschools in meeting the minimum standards set for Ethiopian preschools. Finally, based on the results of both types of data, research findings were presented to determine the status of preschools against the minimum standards of the preschools set in the policy by the government.

Ethical considerations

To begin, the first author communicated to each preschool principal about the objective of the study. Then, the school principals permitted him to conduct the observations. The researcher also assured the school administration that their school identities would be protected and confidentiality would be maintained. Furthermore, the researcher informed the principals and teachers that all data gathered for this study will be used solely for the study and would not be disclosed to any third party.

Findings

In the Sidama regional state, there are more than 48 public preschools that are funded and run independently by the government. Among these preschools, 15 were observed and assessed against the standards set by the national government policy. During observation, data were collected based on direct observation of preschools by researchers, asking school principals and teachers (*see attached observation checklists*). This study aims to assess the status of preschools in relation to meeting the minimum standards set for Ethiopian preschools in the Sidama region. For this purpose, two basic research questions were posed, and the findings of this study are organized into these questions.

Question #1: Do preschools in the Sidama region meet the minimum standards of the national policy set for preschools?

A summary of the data collected through observation and asking the principals and teachers in the 15 preschools is presented in Table 2 below.

Table 2.*Do preschools meet the minimum standards?*

Areas of standards	SN	Standard Description	Do Pre-schools Meet Minimum Standard?			
			Yes		No	
			Number of preschools	%	Number of preschools	%
I. Age of children	1.	Children must not be younger than 4 years and not older than 7 years	11	73.3	4	26.7
II. Environment and physical space	2.	School has Child-to-Child locally available materials (crayons, paper, etc.).	1	6.7	14	93.3
	3.	No more than 40 children per teacher and assistant in a classroom	0	0	15	100
III. Learning environment	4.	School has a fenced place, safe for children to learn, run and play games with other children.	3	20	12	80
	5.	The space in the room/building allows for at least one and half square meter for each child.	13	86.7	2	13.3
	6.	School room/building has windows.	13	86.7	2	13.3
	7.	School has clean drinking water, hand washing facilities and one latrine are available.	0	0	15	100
IV. Preschool curriculum	8.	The teachers use the curriculum as a guide	11	73.3	4	26.7
	9.	Teachers prepare teaching and play materials from locally available materials.	10	66.7	5	33.3
V. Scheduling & structure	10.	Teachers develop a structured weekly day-to-day programme.	11	73.3	4	26.7
VI. Teachers and assistant teachers	11.	The preschool teacher has completed grade 10.	15	100	0	0
	12.	The caregiver or assistant teacher has completed grade 8.	13	86.7	2	13.3
	13.	Teacher-child ratio is 1: 30 for 4–5-year-olds and 1:40 for 5- to 6-year-olds.	0	0	15	100
VII. Teaching & learning methods	14.	Teacher-child interaction that focuses on the child.	2	13.3	13	86.7
	15.	Teachers used local available materials for active learning.	11	73.3	4	26.7

One can see from the data in Table 2 that all 15 preschools meet only one standard out of the 15 standards. That is, all 15 preschools met the standard set for teachers' qualifications. In other words, the teachers working in the 15 preschools have completed grade 10. The next positive finding pertains to the 13 preschools that met three standards. These include the space in the room/building allowing for at least one and a half square meters for each child, the school room/building has windows, and the caregiver or assistant teacher has completed grade 8. Then come 11 schools that met 4 of the 15 standards. These include that children must not be younger than 4 years and not older than 7 years, the teachers use the curriculum as a guide, teachers develop a structured weekly day-to-day programme, and teachers use locally available materials for active learning. Furthermore, 3 schools meet standard # 4, which pertains to a school that has a fenced place, safe for children to learn, run, and play games with other children.

Moreover, the worst findings pertain to standards 3, 7, and 13, followed by 2, 14, and 4. None of the 15 schools meets 3 of the minimum standards. These are children who should not be more than 40 per teacher and assistant in a classroom. However, observation results show that in urban schools the maximum number of children is 61, whereas in rural 72. Other worst findings pertain to standard #7; none of the 15 schools have clean drinking water, hand washing facilities, or a latrine available. Finally, none of the 15 schools has a teacher-child ratio of 1: 30 for 4–5-year-olds and 1:40 for the 5- to 6-year-olds. Additionally, in Table 3, we present a summary of the percentage of preschools that meet the seven major standards, as shown in Table 1.

Table 3

Percentage of preschools that meet the seven areas of standards

S.N.	Areas of standards	Percentage (%)
I.	Age of children	73
II.	Environment and physical space	10
III.	Learning environment	48.3
IV.	Preschool curriculum	70
V.	Scheduling and structure	73
VI.	Teachers and assistant teachers	62
VII.	Teaching and learning methodology	48.3

Table 3 presents the percentage of schools that meet each of the seven standards. Accordingly, preschool meets 73% of the two standards of the seven, i.e., #1 and 5, which are the age of children and scheduling and structure, respectively. Likewise, preschool meets 70% of the standard #4 of the preschool curricula, and next to the standard # 6, teachers and assistant teachers' meets 62%/. Additionally, preschools meet 48.3% of the two standards of the seven, i.e., #3 and 7, which are the learning environment and teaching and learning methodology, respectively. Furthermore, the worst findings pertain to standard # 2, on environment and physical space; preschools meet only 10% of the minimum standards.

Question #2: Do preschools in the Sidama region meet the general preschool quality standards?

Table 4 below presents a summary of the data collected through observation and asking the principals and teachers to assess whether schools meet general preschool quality standards across all preschools. The responses are categorized as “Yes fulfilled,” “Partially fulfilled,” and “Not fulfilled” at all 15 schools based on the assessment data of observation and conversation with principals and teachers, and personal judgment of the first author as an eyewitness.

Table 4*Do preschools meet general preschool quality standards?*

SN	Standards	Yes			Partially			No		
		Tick mark	Number of schools	%	Tick mark	Number of schools	%	Tick mark	Number of schools	%
1.	Does the class size fit the standard?	-	0	0	-	0	0	✓	15	100
2.	Do the preschools have a fence?	-	0	0	✓	10	66.7	✓	5	33.3
3.	Does the space in the classroom have 1.5 m ² for each child?	-	0	0	✓	13	86.7	✓	2	13.3
4.	Do the preschools' rooms or buildings have windows?	✓	15	100	-	0	0	-	0	0
5.	Do the preschools have access to clean water?	-	0	0	-	0	0	✓	15	100
6.	Do the preschools have hand-washing stations?	-	0	0	✓	6	40	✓	9	60
7.	Do the preschools have at least separate girls', boys and staff toilets?	-	0	0	✓	7	46.7	✓	8	53.3
8.	Do the preschools' classrooms have a desk with its chair?	-	0	0	✓	11	73.3	✓	4	26.7
9.	Do the preschools' classrooms have whiteboards or blackboards?	-	0	0	✓	14	93.3	✓	1	6.7
10.	Do the preschools have a mini library?	-	0	0	-	0	0	✓	15	100
11.	Do the preschools have a mini computer laboratory?	-	0	0	-	0	0	✓	15	100
12.	Do the preschools have a notice board?	-	0	0	✓	9	60	✓	6	40
13.	Do the preschools have a teachers' lounge or a staff waiting room?	-	0	0	-	0	0	✓	15	100
14.	Do the preschools have enough office equipment or facilities?	-	0	0	✓	8	53.3	✓	7	46.7
15.	Do the preschools have safe and clean play areas?	-	0	0	✓	9	60	✓	6	40
16.	Are the preschools' classrooms visually attractive for learning?	-	0	0	✓	8	53.3	✓	7	46.7
17.	Are the preschools equipped with basic first aid supplies for emergencies?	-	0	0	-	0	0	✓	15	100
18.	Do the preschools have adequate indoor and outdoor space?	-	0	0	✓	7	46.7	✓	8	53.3

Table 4 presents whether schools meet general preschool quality standards or not. The results indicate that schools fully meet only 1 standard out of the 18 standards, i.e., the preschools' rooms or buildings have windows. In addition, preschools have partially fulfilled 10 standards (55.6%) out of the 18 standards. These include that some schools have a fence, a space of the classroom has 1.5 m² for each child, separate girls', boys', and staff's toilets, hand-washing stations, a whiteboard or blackboard, a notice board, office equipment or facilities, safe and clean play areas, classrooms visually stimulating and attractive to learn, and adequate indoor and outdoor space.

Moreover, the third category is the 6 general preschool quality standards (33.3%) out of the 18 standards that were not met. These include schools that do not have access to clean water, class size is more than 40 children, schools do not have a mini library, schools do not have a mini computer laboratory, schools do not have a teachers' lounge or staff waiting room, and schools are not equipped with basic first aid supplies for emergencies.

Table 5

Preschool classroom characteristics by urban-rural setting

Description	Urban	Rural
The number of children in the classroom	61	72
Teacher-child ratio	2:61	1:72

Table 5 displays preschool classroom characteristics by urban-rural setting, which indicates that class size is larger in rural than urban settings, and urban schools have more teachers and assistants in a classroom.

Table 6

Certification status and qualification of preschool teachers

Descriptions	Certification Status	Number of Teachers	Percentage (%)
Certification Status of Preschool Teacher	Certified by preschool education	1800	87.7
	Not certified by preschool education	251	12.2
	Total	2,051	100
Qualification level	Grade 8 to 10 completed	122	6
	Certificate	220	10.7
	Diploma	1688	82.3
	Degree	21	1
	Total	2,051	100

Table 6 presents the certification status of teachers, showing the number and percentage of teachers certified in preschool education. As shown, the great majority (87.7%) of them are qualified with a diploma.

Discussion

All 15 preschools meet only one standard out of the 15 standards. That is, all 15 preschools met the standard set for teachers' qualifications. In addition, 13 schools met three standards, 11 schools met 4 standards, and none of the 15 schools met 3 standards out of the 15 minimum standards. It is said that the last, the worst findings pertain to standards 3, 7, and 13, as none of the 15 schools meet all 3 of the minimum standards. These are the standard stipulates children should not be more than 40 per teacher and assistant in a classroom. However, the actual situation is much far away from reality. In urban school maximum number of children in a classroom is 61, whereas in rural 72 children in a classroom. Other worst findings pertain to standard #7: none of the 15 schools have clean drinking water, hand washing facilities, or a latrine available. This can obviously affect the health of children and the teaching-learning process at large. Finally, the standard #7 stipulates that the teacher-child ratio is 1: 30 for 4–5-year-olds and 1:40 for the 5- to 6-year-olds. Likewise, none of the 15 schools meet these standards. The evidence from observation revealed that the number of children per classroom is three times higher than the standard set in the policy. This also challenges teachers and assistants to assist and address the needs of each child due to unmanageable class size. Additionally, some schools met standards partially; accordingly, preschools in the Sidama region that meet the standard are 50.67%, and schools that do not meet the Ethiopian preschools' minimum standards are 49.33%.

The findings further showed that presents the percentage of schools that meet each of the seven area standards. Schools meet 73% of the two standards, 70% meet one standard, 62% meet one standard, schools meet 48.3% of the two standards, and schools meet one standard of 10%. The last one is the worst finding about standard # 2, on environment and physical space. That is, preschools meet only 10% of the minimum standards. Thus, schools have a serious problem with the school environment and physical space, which is far apart from the minimum standards. Other findings revealed how many of the preschools had the general preschool quality standards across all preschools, whether meet or not. The result showed that schools fully meet only 1 standard, schools have partially fulfilled 10 standards (55.6%), and schools do not meet 6 general preschool quality standards (33.3%) out of the 18 standards. The last 6 general preschool quality standards that schools do not meet at all are identified as the worst ones. These include schools that do not have access to clean water, class size is more than 40 children, schools do not have a mini library, schools do not have a mini computer laboratory, schools do not have a teachers' lounge or staff waiting room, and schools are not equipped with basic first aid supplies for emergencies.

We may ask why these schools have not met the standard. The reasons are that resources are limited, facilities are scarce, and infrastructure is inadequate, which makes it difficult for them to adequately address gaps in quality, equity, and access. For example, preschool education program access in sub-Saharan countries is escalating, with minimal quality; equity gaps exist between urban and rural areas and between boys and girls (Giese et.al. 2023). Study results conducted in Kenya indicated that most preschools lack facilities such as adequate space, clean water, toilets, lighting, fencing, attractive classrooms, and facilities that meet national policy standards (Begi et al. 2023). The government of Kenya set guidelines and minimum standards for preschools; the findings showed that most of the schools do not meet these standards (Begi et al. 2023). Most public preschools meet basic safety standards, but there is a gap in classroom infrastructure, accessibility, and quality (Dike & Otu, 2024).

When it comes to Ethiopia, Haile and Mohammed (2017) studied preschools in Addis Ababa, Ethiopia, to determine how well preschools meet quality standards; their findings showed that both private and public preschools fell below the standards of quality. Public preschools are

facing challenges such as a lack of attractive school environments, suitable curricula, and a shortage of qualified teachers in early learning (Haile & Mohammed, 2017). Thus, these findings support the result of this study. In addition, one of the gaps of the Ethiopian preschool education program is the lack of collaboration among key stakeholders such as ministry of education to school level who are responsible for teaching learning process of schools; as a result, most of the schools faced quality problems (Diale & Sewagegn, 2021). Moreover, researchers Haile and Mohammed (2017) studied practices and challenges of preschools in Jigjiga, Ethiopia; their findings showed that preschools are below standard, with inadequate classroom spaces and traditional teaching methods (Haile & Mohammed, 2017).

Moreover, classroom characteristics of preschools when disaggregated by urban-rural setting indicate that class size is larger in rural than in urban settings. In addition, the urban schools have more teachers and assistants in a classroom than rural schools. About the certification status of teachers, the great majority (87.7%) are qualified with a diploma. In brief, preschools not meeting the minimum standards are not a problem only in the Sidama region, Ethiopia, but it is also a common problem in most African countries. Therefore, to bring quality to preschools, the Ethiopian government should work on revitalizing its educational planning, bringing it back on the right track of policy and practice gaps.

Implications for Educational Planning

The *Strategic Operational Plan and Guidelines for Early Childhood Care and Education in Ethiopia* (2018) set the minimum standard that preschools should meet. However, the results showed that the policy is not properly implemented. The Ethiopian government should consider two things for this. Either improve the existing standards or improve schools' resources, facilities, and infrastructure. If most preschools fail to meet at least the minimum standard, they would lose quality education and lose the future new generation. To explain this more, the following message originally said by Nelson Mandela was posted for contemplation at the entrance gate of South Africa.

“Destroying any nation does not require the use of atomic bombs or the use of long-range missiles. It only requires lowering the quality of education. Patients die at the hands of such doctors; buildings collapse at the hands of such engineers; money is lost at the hands of such economists and accountants; and humanity dies at the hands of such religious scholars. Justice is lost at the hands of such judges ... the collapse of education is the collapse of the nation.” (Ndaguba et al., 2018; Sintayehu & Ahmed, 2021)

Expecting quality manpower is nothing without building a base of children in their early years. To improve preschools, it is crucial for each preschool to at least meet minimum standards. Therefore, the Ethiopian Ministry of Education and key stakeholders must review their policy and call for reforms in educational planning so that preschools meet minimum requirements in terms of resources, facilities, and infrastructure.

Future Research Directions

Why most preschools do not meet at least the minimum standards of preschools in most of the criteria needs to be studied in detail and breadth at the national level. In addition, a comparative study of urban and rural preschools across the 15 minimum standards and the 18 general preschool quality standards that need to be studied could provide further insight into whether differences exist between these groups, which may not be evident in this study, as these findings are analysed collectively for the Sidama region.

Conclusion and Recommendation

All 15 public preschools in the Sidama region meet only one standard out of the 15 standards. Schools fail to meet standards such as environment and physical space, a conducive learning environment, scheduling and structure, and teaching and learning methodology. Preschools in the region lacking a mini library, a laboratory, a staff lounge, and other supplies can affect the children's teaching and learning process. The outcome of lacking these basic resources and infrastructure has a long-term effect on the future schooling of children. Though some preschools meet minimum standards partially in the same areas, like having a school fence, enough space in the classroom, toilets, hand washing stations, blackboards and a notice board, office facilities, safe and clean play areas, classrooms that are visually stimulating and attractive to learn, and adequate indoor and outdoor spaces, they still need further improvement. The national government, the Ministry of Education, Sidama Regional State Education Bureau recommended working to improve preschools at least to meet the minimum standards set for Ethiopian preschools by policy. The Sidama regional government suggested mobilizing and outsourcing resources, facilities, and infrastructure to advance preschools' access, equity, and quality for children to scale up early learning to build a better future for children's lives.

Correspondence

Birhanu Sintayehu Alemu. Email: biruhamah@gmail.com

Disclosure Statement and Funding

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Akinbote, O., Oduolowu, E., & Lawal, B. (2010). Creating a learner-friendly school environment in Nigeria: A veritable means to sustainable growth and development. In *The African symposium* (p. 42). https://d1wqtxts1xzle7.cloudfront.net/65705140/Art_Visual_Literac.
- Begi, N., Mwoma, T., & Murungi, C. (2023). Quality of physical environment in preschools in informal settlements in Nairobi City County in Kenya: Implications on children's development and education. *Magistra Iadertina*, 18(1), 71-92.
- Denboba, A., Hasan, A., & Wodon, Q. (Eds.). (2015). *Early childhood education and development in Indonesia: An assessment of policies using SABER*. World Bank Publications.
- Diale, B. M., & Sewagegn, A. A. (2021). Early childhood care and education in Ethiopia: A quest for quality. *Journal of Early Childhood Research*, 19(4), 516-529.
- Dike, I. C., & Otu, M. S. (2024). Safety and protection practices in the early childhood education centres.

- Giese, S., Dawes, A., Biersteker, L., Girdwood, E., & Henry, J. (2023). Using data tools and systems to drive change in early childhood education for disadvantaged children in South Africa. *Children*, 10(9), 1470.
- Haile, Y., & Mohammed, A. (2017). Practices and challenges of public and private preschools of Jigjiga city administration. *International Journal of Research: Granthaalayah*, 5(12), 17-32.
- Moige, O. N. (2018). *Determinants of Children's Readiness for Grade One, in Kisii Central Sub-county, Kenya* (Doctoral dissertation, Kenyatta University).
- Ministry of Education (2010). *Strategic Operational Plan and Guidelines for Early Childhood Care and Education in Ethiopia*. Addis Ababa, Ethiopia.
- Ministry of Education (2023). Education Statistics Annual Abstract (2022/23). Addis Ababa, Ethiopia.
- Ministry of Education (2023). *The Education and Training Policy*. Addis Ababa, Ethiopia.
- Ndaguba, E., Ijeoma, E. O. C., Nebo, G. I., Chungag, A. C., & Ndaguba, J. D. (2018). Assessing the effect of inadequate service provision on the quality of life of the poor: A focus on justice and education in Nigeria. *Cogent Social Sciences*, 4(1), 1526437. <https://www.tandfonline.com/doi/full/10.1080/23311886.2018.1526437>
- Sintayehu, B., & Hussien, A. A. (2021). Living standard of academic staff at haramaya university. *Education Research International*, 2021(1), 7956736. https://www.researchgate.net/publication/353062111_Living_Standard_of_Academic
- Tefera, B. (2018). Early childhood care and education (ECCE) in Ethiopia: Developments, research, and implications. *Eastern Africa Social Science Research Review*, 34(1), 171-206.
- Thomas, R., & Cooke, G. (2013). A is for aphorism: 'Give me a child until they are seven and will show you the man'. *Australian Family Physician*, 42(10), 744-745.
- UNICEF. (2012). *School Readiness. A Conceptual Framework*. United Nations Children's Fund. New York. <https://resources.leicestershire.gov.uk/sites/resource/files/field/pdf/>
- UNICEF. (2012). *School readiness: A conceptual framework*. United Nations Children's Fund

Appendix A

Preschool Observation Checklist Minimum Standard for Preschool Program

S.N.	Areas of standards	Standard Description	Does this school meet a minimum standard?	
			Yes	No
1.	Age of children	1. Children must not be younger than 4 years or older than 7 years		
2.	Environment and physical space	2. School has Child-to-Child locally available materials (crayons, paper, etc.).		
		3. No more than 40 children per teacher and assistant in a classroom		
3.	Learning environment	4. The school has a fenced place, safe for children to learn, run, and play games with other children.		
		5. The space in the room/building allows for at least one and a half square meters for each child.		
		6. The school room/building has windows.		
		7. School has clean drinking water, hand-washing facilities, and one latrine available.		
4.	Preschool curriculum	8. The teachers use the curriculum as a guide		
		9. Teachers prepare teaching and play materials from locally available materials.		
5.	Scheduling and structure	10. Teachers develop a structured weekly day-to-day programme.		
6.	Teachers and assistant teachers	11. The preschool teacher has completed grade 10.		
		12. The caregiver or assistant teacher has completed grade 8.		
		13. The teacher-child ratio is 1: 30 for 4–5-year-olds and 1:40 for 5 to 6-year-olds.		
7.	Teaching and learning methodology	14. Teacher-child interaction that focuses on the child.		
		15. Teachers used locally available materials for active learning.		

General comments and remarks about observed preschool: ...

Appendix B

Preschool Observation Checklist General Preschool Quality Standards

SN	Standards	Yes	Partially	No
1.	Does the class size fit the standard?			
2.	Do the preschools have a fence?			
3.	Does the space in the classroom have 1.5 m ² for each child?			
4.	Do the preschools' rooms or buildings have windows?			
5.	Do the preschools have access to clean water?			
6.	Do the preschools have hand-washing stations?			
7.	Do the preschools have at least separate girls', boys', and staff toilets?			
8.	Do the preschools' classrooms have a desk with its chair?			
9.	Do the preschools' classrooms have whiteboards or blackboards?			
10.	Do the preschools have a mini library?			
11.	Do the preschools have a mini computer laboratory?			
12.	Do the preschools have a notice board?			
13.	Do the preschools have a teachers' lounge or a staff waiting room?			
14.	Do the preschools have enough office equipment or facilities?			
15.	Do the preschools have safe and clean play areas?			
16.	Are the preschools' classrooms visually attractive for learning?			
17.	Are the preschools equipped with basic first aid supplies for emergencies?			
18.	Do the preschools have adequate indoor and outdoor space?			

Between Structural Constraints and Educational Opportunities: Girls' Education in Pastoralist Communities of Dollo Ado Woreda, Ethiopia

Manaye Abera Shamalo

Addis Ababa University

College of Education and Languages Studies, Ethiopia

Jeilu Oumer Hassen

Addis Ababa University

College of Education and Languages Studies, Ethiopia

Kenenisa Dabbi Furi

Addis Ababa University

College of Education and Languages Studies, Ethiopia

Abstract

This study examines girls' educational participation in Dollo Ado Woreda, Somali Regional State, Ethiopia, through the lens of structural constraints and access to education. A sequential explanatory mixed-methods design (QUAN → QUAL) was employed, combining simple random and purposive sampling to include school-aged girls, households, and religious and community leaders. Data were collected from 309 participants using questionnaires, interviews, and focus group discussions. Descriptive statistics and Structural Equation Modeling were used to analyze the effects of socio-cultural, economic, environmental, and institutional constraints on girls' education. The study further investigates time poverty as a mediating mechanism linking these constraints to educational outcomes, while institutional support is treated as a moderating factor. The results indicate that structural constraints significantly hinder girls' educational participation both directly and indirectly by increasing time burdens related to domestic and livelihood responsibilities. However, accessible, flexible, and gender-responsive institutional support helps mitigate these negative effects. The study offers a context-sensitive and integrative framework that captures the interconnected barriers affecting girls' education in pastoralist communities. Its findings provide important implications for policymakers and practitioners to design inclusive and adaptive educational strategies that address structural inequalities and improve access for marginalized girls.

Keywords: girls' education, pastoralist communities, socio-cultural, economic, institutional

Introduction

Pastoralist communities are characterized by mobility, dependence on livestock, and male-dominated social structures that shape household decision-making and resource allocation (Ferrero, 2001; Rotich, 2005). Mobility in search of water and pasture disrupts school attendance, while socio-cultural norms assign girls a disproportionate share of domestic responsibilities such as childcare, water fetching, and household management (Carr, 2005). These roles, combined with the economic importance of child labor and the limited relevance of formal curricula to pastoralist livelihoods, contribute to low enrollment and irregular attendance (Swift et al., 1990; Ferrero, 2001). Consequently, girls face compounded disadvantages stemming from gender norms, poverty, and livelihood demands. These challenges are not isolated but operate as interconnected structural constraints encompassing socio-cultural, economic, institutional, and environmental dimensions.

Rather than acting independently, these factors reinforce one another to restrict girls' access to, retention in, and progression through education. A key mechanism linking these constraints is time poverty, whereby competing household and livelihood responsibilities significantly reduce the time available for schooling and academic engagement. Ensuring equitable access to education for girls remains a global priority, as reflected in the Sustainable Development Goals (SDG 4), which call for inclusive and quality education for all (United Nations, 2015). Despite this commitment, disparities persist in marginalized and hard-to-reach contexts such as pastoralist communities, where structural inequalities continue to limit girls' educational opportunities.

Although Ethiopia did not explicitly enshrine education as a fundamental right in its 1995 Constitution, the current working constitutional framework, the 1994 Education and Training Policy, related policy instruments, and international commitments such as the SDGs collectively demonstrate the country's commitment to ensuring the right to education for all children. The 1994 Education and Training Policy (Article 2.1.1) set a target of achieving universal basic education within 20 years, while the 1995 Constitution of the FDRE guarantees citizens equal access to public social services, thereby reinforcing the principle of equal educational opportunity. Nevertheless, in Ethiopia's Somali Regional State, particularly in Dollo Ado, girls' education continues to face significant challenges, including low enrollment, high dropout rates, and limited progression. Empirical evidence shows that only 8,047 (32.8%) of school-age girls aged 7–14 were enrolled in primary education (MoE, 2024), underscoring the persistence of gender-based disparities despite sustained national efforts to expand access. Even though policy interventions, including pastoral education strategies introduced by the MoE and regional authorities, have aimed to improve access, persistent gaps remain in pastoralist settings. This study therefore conceptualizes girls' educational disadvantage as a product of interacting structural constraints, arguing that meaningful improvements require integrated, context-sensitive interventions that address gender norms, reduce time poverty, and strengthen institutional support to enhance girls' participation in education.

Statement of the Problem

Despite global and national commitments to gender equality in education, girls' participation in pastoralist regions of Ethiopia remains significantly low. This situation is evident in the Somali Region, particularly in Dollo Ado, where educational disparities persist in terms of enrollment, retention, and completion. At the national level, Ethiopia has expanded access through various policy interventions; however, gender and regional inequalities remain pronounced. For instance, in Dollo Ado, the primary Gross Enrollment Rate (GER) for girls is 39.2%, with a Net Enrollment Rate (NER) of 32.8%, while 16,461 (67.2%) school-age girls remain out of school (MoE, 2024). In comparison, the national female GER and NER are 90.6% and 82.6%, respectively, while the Somali Regional State records a female GER of 75.3% and an NER of 59.7% (MoE, 2024). The Gender Parity Index (GPI) in Dollo Ado stands at 0.63, below both the national average of 0.91 and the regional average of 0.76 (MoE, 2024). These figures highlight persistent and significant inequalities that undermine progress toward Sustainable Development Goal 4, which calls for inclusive and equitable quality education for all (United Nations, 2015). The low participation of girls in pastoralist contexts is driven by multiple interrelated structural factors. Pastoralist communities are characterized by mobility, dependence on livestock, and socio-cultural norms that reinforce gender inequality and prioritize boys' education (Carr, 2005; Ferrero, 2001). Girls are often assigned domestic responsibilities and face early marriage practices, which reduce their chances of enrolling and remaining in school (UNICEF, 2020; UNESCO, 2022). Economic constraints, including poverty and reliance on child labor, further limit households' ability to invest in girls' education

(World Bank, 2018). In addition, institutional challenges such as limited school availability, inadequate infrastructure, and lack of gender-sensitive facilities reduce both access and retention in remote areas (UNESCO, 2022). Environmental factors, including drought, seasonal mobility, and geographic isolation, also disrupt continuous schooling and exacerbate dropout rates (World Bank, 2018). Although Ethiopia has introduced alternative education modalities and aligned its policies with international commitments such as SDG 4 and SDG 5, significant gaps remain in pastoralist areas. Existing studies have largely examined barriers in isolation, without adequately capturing the combined and interacting effects of socio-cultural, economic, institutional, and environmental constraints. This fragmentation limits the effectiveness of interventions and leaves the underlying structural causes of girls' educational exclusion insufficiently addressed. Therefore, the persistently low enrollment and high dropout rates among girls in Dollo Ado highlight a critical empirical and policy gap that necessitates an integrated and context-specific analysis to inform more effective and inclusive educational strategies.

Research Gaps: This study addresses critical gaps in the literature on girls' education in pastoralist contexts, particularly in Dollo Ado, Somali Region of Ethiopia. Theoretically, existing studies have examined socio-cultural, economic, institutional, and environmental determinants in isolation, with limited integration into a unified framework. This study contributes by synthesizing gender theory and the capability approach to explain the combined and interrelated effects of these factors on girls' educational outcomes. Methodologically, prior research has largely relied on descriptive, qualitative, or basic regression techniques that are insufficient for analyzing complex relationships among latent variables. This study employs Structural Equation Modeling (SEM) to assess both measurement validity and structural relationships, including direct and indirect effects. Practically, there is limited context-specific evidence from marginalized pastoralist settings, and existing policies often overlook local realities. It provides localized empirical insights to inform targeted interventions and stakeholder-driven policy responses. This study addresses these gaps by generating context-specific evidence that can inform more effective, culturally sensitive, and coordinated policy and program interventions aimed at improving girls' access to and participation in education. Based on the above perspectives, the following research questions were addressed.

1. How do socio-cultural factors influence girls' education in pastoralist communities of Dollo Ado, Somali Region, and Ethiopia?
2. What is the effect of economic factors on girls' education in pastoralist communities of Dollo Ado?
3. To what extent do institutional factors affect girls' education in the study area?
4. How do environmental factors influence girls' education in pastoralist communities of Dollo Ado?

Research Hypotheses: Based on the conceptual framework and SEM model, the following hypotheses were proposed.

H1: Socio-cultural factors have a significant negative effect on girls' education in pastoralist communities.

H2: Economic factors have a significant positive effect on girls' education in pastoralist communities.

H3: Institutional factors have a significant positive effect on girls' education in pastoralist communities.

H4: Environmental factors have a significant negative effect on girls' education in pastoralist communities.

H5: Socio-cultural, economic, institutional, and environmental factors jointly have a significant effect on girls' education in pastoralist communities.

Research Objectives: The general objective of this study is to examine the effects of socio-cultural, economic, institutional, and environmental factors on girls' education in pastoralist communities of Dollo Ado, Somali Region, Ethiopia.

Significance of the Study: This study offers theoretical, methodological, and practical contributions. Theoretically, it enriches limited literature on girls' education in pastoralist contexts by integrating socio-cultural, economic, institutional, and environmental factors within a unified framework, advancing gender and capability perspectives. Methodologically, the application of Structural Equation Modeling (SEM) enhances analytical rigor by examining complex relationships among latent variables, improving reliability and validity. Practically, the study provides context-specific evidence to inform policymakers, educators, and development partners in designing targeted, culturally responsive interventions to improve girls' educational access and participation in pastoralist areas such as Dollo Ado.

Theoretical Foundations of the Study

This study is grounded in four complementary theoretical perspectives: Gender and Development (GAD), Resource-Based View (RBV), Social Learning Theory (SLT), and the Capability Approach, which together provide a multidimensional framework for analyzing girls' education in pastoralist contexts.

Gender and Development (GAD) Theory: focuses on how socially constructed gender roles and power relations shape access to resources and opportunities. It moves beyond individual-level explanations to examine structural inequalities embedded in social systems. In this study, GAD explains how socio-cultural norms such as early marriage, gendered division of labor, and prioritization of boys' education limit girls' access to schooling. It frames gender inequality as a structural issue that requires systemic change (Moser, 1993; Kabeer, 1994).

Resource-Based View (RBV): RBV emphasizes that access to and allocations of valuable resources determine outcomes. Originally developed in organizational studies, it highlights the role of tangible and intangible resources in performance and development (Barney, 1991). In this study, RBV is used to conceptualize economic and institutional factors such as household income, school infrastructure, teacher availability, and learning materials as key resources that influence girls' educational participation.

Social Learning Theory (SLT): SLT explains how individuals learn behaviors through observation, imitation, and social interaction. It is relevant in understanding how girls' attitudes toward education are shaped by family members, peers, and community role models. In pastoralist settings, strong social norms and influential community actors shape behavioral expectations, thereby affecting girls' educational participation (Bandura, 1977).

Capability Approach: The Capability Approach emphasizes individuals' real freedoms to achieve valued outcomes. It shifts focus from access to resources to actual opportunities and functioning. In this study, it conceptualizes girls' education as a capability shaped by intersecting socio-cultural, economic, institutional, and environmental constraints affecting their ability to access and benefit from education (Sen, 1999; Nussbaum, 2011). Together, these theories provide

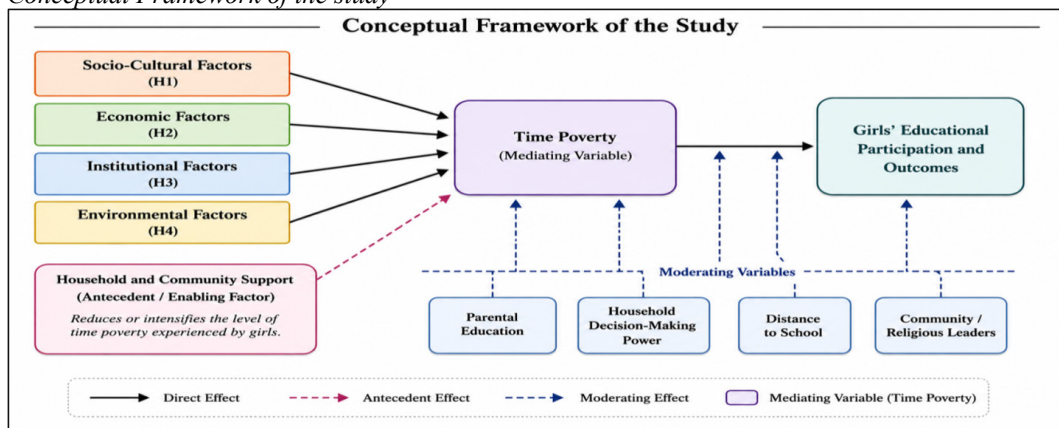
an integrated lens for examining the structural, social, and resource-based determinants of girls' education in pastoralist communities. As a result, this study employs an integrated theoretical framework drawing on the Capability Approach, Gender and Development (GAD) theory, Social Learning Theory (SLT), and the Resource-Based View (RBV) to examine girls' educational access in pastoralist communities. The Capability Approach serves as the primary framework by conceptualizing education as an essential capability that expands individuals' freedoms and life opportunities. GAD theory complements this perspective by explaining how patriarchal structures, gender norms, and unequal power relations constrain girls' educational participation. SLT further explains how educational attitudes and behaviors are socially learned and reinforced through family, peer, and community interactions. RBV is applied as a supportive institutional lens to analyze how the availability and management of educational resources and organizational capacities influence access to schooling in resource-constrained pastoralist settings. Together, these theories provide complementary explanations operating at structural, social, institutional, and human development levels.

Conceptual Framework of the Study

The conceptual framework of this study posits that girls' educational participation and outcomes are shaped through a pathway in which socio-cultural, economic, institutional, and environmental factors (H1–H4) exert their influence primarily through a central mediating mechanism: time poverty. These contextual factors are hypothesized to increase or reduce the extent to which girls experience time poverty, which in turn directly affects their level of educational participation and outcomes. In addition, household and community support is conceptualized as an antecedent enabling factor that can either mitigate or intensify time poverty depending on its strength and availability. The model further incorporates moderating influences, including parental education, household decision-making power, distance to school, and the role of community or religious leaders, which are expected to shape the strength and direction of the relationships between time poverty and girls' educational participation and outcomes. Overall, the framework explains girls' education as an interaction between structural conditions, household/community dynamics, and time-use constraints.

Figure 1

Conceptual Framework of the study



Empirical Evidence on Factors Influencing Girls' Education in Pastoralist Communities

Socio-Cultural and Household Gender Dynamics Influencing Girls' Education in Pastoralist Communities

Socio-cultural norms and household gender relations strongly shape girls' educational participation in pastoralist communities. Traditional belief systems often define girls primarily in terms of domestic and reproductive responsibilities, leading families to assign them extensive household duties such as fetching water, collecting firewood, caring for siblings, and supporting livestock-related activities. These responsibilities reduce the time and energy available for school attendance, homework, and continued participation in formal education (Devonald et al., 2020). In many pastoralist communities, gender expectations also emphasize modesty, obedience, and preparation for marriage, which limits girls' mobility and educational aspirations. Closely linked to these norms is the persistence of early marriage practices, which continue to undermine girls' educational continuity. Marriage is often valued as a means of strengthening kinship relations, protecting family honor, and securing economic benefits through bride wealth. Consequently, some families prioritize marriage over schooling, particularly when education is perceived as having limited cultural or economic relevance for girls. Once married, girls are generally expected to assume adult domestic and caregiving roles, resulting in school dropout and reduced future opportunities. Similar findings have been reported in studies examining gender inequality and pastoral women's vulnerability in Ethiopia (Balehey et al., 2018). Community perceptions toward formal education further influence educational decisions. In some pastoralist settings, schooling is viewed as incompatible with traditional pastoral livelihoods and cultural identity. Families may fear that educated girls could challenge customary gender roles or become less committed to traditional expectations. Such perceptions often lead households to invest more heavily in boys' education while limiting opportunities for girls. These socio-cultural attitudes, combined with gender-based stereotypes regarding girls' capabilities and social roles, contribute to lower enrollment, irregular attendance, reduced classroom participation, and higher dropout rates among girls (Boru, 2020). Overall, socio-cultural norms, gendered household labor divisions, early marriage practices, and discriminatory attitudes interact to create interconnected barriers that limit girls' educational access and progression in pastoralist communities. These challenges highlight the need for culturally responsive interventions that promote community awareness, gender equity, and positive attitudes toward girls' education.

Economic and Livelihood-Related Factors Influencing Girls' Education in Pastoralist Communities

Economic vulnerability and pastoral livelihood conditions significantly affect girls' access to and retention in education. Most pastoralist households depend heavily on livestock-based livelihoods that are highly sensitive to environmental and market fluctuations. Under such conditions, limited household income constrains families' ability to meet educational expenses, including uniforms, learning materials, transportation, meals, and other indirect schooling costs. When resources are scarce, families often prioritize immediate household survival needs over long-term educational investment, with girls disproportionately affected due to prevailing gender preferences (Devonald et al., 2020). In addition to financial limitations, the opportunity cost of girls' labor represents a major challenge. Girls contribute substantially to household survival through domestic and productive activities such as herding, water collection, firewood gathering, food preparation, and childcare. Their labor is therefore considered economically valuable within the household economy. Sending

girls to school may reduce the labor available for sustaining daily family livelihoods, encouraging parents to keep daughters at home rather than in school (Boru, 2020). The perceived economic relevance of formal education also influences educational participation. Since pastoral livelihoods traditionally rely on practical indigenous knowledge and livestock management skills, some households view formal schooling as offering limited immediate returns, particularly for girls whose roles are socially associated with domestic responsibilities. This perception weakens parental motivation to invest in girls' education and contributes to low enrollment, absenteeism, and early withdrawal from school. Overall, household poverty, dependence on girls' labor, hidden educational costs, and perceptions regarding the limited economic value of schooling collectively restrict girls' educational opportunities in pastoralist communities. These findings suggest that improving girls' education requires both economic support mechanisms and livelihood-sensitive educational approaches.

Institutional and Educational System Factors Influencing Girls' Education in Pastoralist Communities

Institutional conditions within the education system significantly shape girls' educational experiences in pastoralist areas. One of the most persistent challenges is limited physical access to schools. Because pastoralist settlements are geographically dispersed, children often travel long distances to reach educational institutions. For girls, these journeys may involve safety concerns, physical exhaustion, and cultural restrictions related to mobility, all of which negatively affect attendance and retention (Balehey et.al., 2018). The quality and adequacy of school infrastructure also influence girls' participation. Many schools in pastoralist regions operate with inadequate classrooms, limited teaching materials, poor water supply, and insufficient sanitation facilities. The absence of separate and gender-sensitive sanitation services particularly affects adolescent girls, especially during menstruation, contributing to absenteeism and school dropout. Poor learning environments may further reduce students' motivation and engagement. Teacher-related factors present additional institutional barriers. Remote pastoralist areas frequently experience shortages of qualified teachers and high staff turnover. The limited availability of female teachers reduces opportunities for mentorship and gender-sensitive support for girls. Moreover, teachers may lack adequate preparation to address the social and educational needs of pastoralist learners, which can reinforce gender bias and reduce girls' active participation in classroom activities. Although national education policies increasingly emphasize gender equality and universal access to education, implementation gaps remain evident in marginalized pastoralist contexts. Weak institutional coordination, inadequate resource allocation, and limited monitoring mechanisms often constrain the effectiveness of educational interventions. As a result, policy commitments do not always translate into meaningful improvements in girls' educational access, participation, and achievement (Devonald et al., 2021). In general, institutional barriers related to school accessibility, inadequate infrastructure, teacher shortages, and weak policy implementation continue to limit the effectiveness and inclusiveness of education systems in pastoralist communities.

Environmental and Mobility-Related Factors Influencing Girls' Education in Pastoralist Communities

Environmental conditions and pastoral mobility patterns significantly affect the continuity of girls' education in pastoralist regions. Mobility is a defining feature of pastoral livelihoods, as families frequently migrate in search of water and grazing land. Such movement often conflicts with formal schooling systems that depend on regular attendance and fixed school locations. Consequently, girls

may experience interrupted schooling, irregular attendance, or complete withdrawal from education during periods of migration (Fenta et al., 2019). Climate variability and recurrent drought further intensify educational challenges. Environmental shocks frequently reduce livestock productivity and household income, increasing economic stress on families. During periods of drought or resource scarcity, girls are often required to devote more time to domestic responsibilities such as water collection, livestock care, and household support activities. These pressures reduce opportunities for regular school participation and academic engagement. Recent studies in Ethiopia indicate that climate variability and recurrent drought continue to threaten pastoral livelihoods and social wellbeing (Mekuyie & Mulu, 2021). Geographical remoteness also contributes to educational marginalization. Many pastoralist communities are located in isolated areas with limited roads, transportation systems, and public services. Such isolation restricts access not only to schools but also to educational resources, trained personnel, and institutional support mechanisms. In addition, persistent water scarcity increases the domestic workload placed on girls, as they may travel long distances to secure water for household use. These demands consume substantial time and energy that could otherwise support learning and school attendance. Recent evidence further suggests that climate-induced resource competition, displacement, and regional conflict have intensified vulnerabilities among pastoralist populations in Ethiopia, particularly in marginalized regions (Moyo, 2024). Such dynamics increasingly disrupt educational access and continuity for girls in pastoralist communities. Overall, environmental vulnerability, mobility patterns, remoteness, and resource scarcity interact to disrupt educational continuity and deepen existing inequalities affecting girls in pastoralist communities. Overall, the reviewed literature indicates that girls' education in pastoralist communities is shaped by interconnected socio-cultural, economic, institutional, and environmental factors rather than isolated barriers. Household labor demands, gender norms, livelihood insecurity, limited educational infrastructure, mobility patterns, climate variability, and environmental stress collectively influence girls' access to, participation in, and completion of schooling. This integrated understanding provides a stronger analytical foundation for examining how household chores and structural constraints interact to affect girls' educational experiences in Dollo Ado Woreda.

Methodology

Research Paradigm

The study adopts a pragmatic research paradigm, appropriate for examining girls' education in pastoralist contexts. It emphasizes "what works," enabling integration of quantitative and qualitative methods (Creswell & Creswell, 2018). A mixed-methods (QUAN–QUAL) design is employed: quantitative data test relationships between socio-cultural, economic, institutional, and environmental factors and educational outcomes (access, equity, retention, and progression), while qualitative data provide contextual explanations. This complementarity captures both measurable patterns and lived experiences, enhancing the validity and depth of understanding of factors influencing girls' education in Dollo Ado Woreda.

Research Design

The study employed a sequential explanatory mixed-methods design (QUAN → QUAL) to examine structural constraints and girls' education in pastoralist contexts. The quantitative phase uses cross-sectional survey data from girls, parents/guardians, and teachers to measure socio-cultural, economic, institutional, and environmental factors and outcomes (enrollment, attendance, retention, and progression), analyzed using descriptive statistics and SEM (Creswell & Creswell, 2018;

Hair et al., 2019). The qualitative phase follows, using interviews with key informants to explain and contextualize findings (Kvale & Brinkmann, 2015). Integration at interpretation enhances triangulation and comprehensive understanding (Creswell & Plano Clark, 2018). The study is conducted in Dollo Ado Woreda, located in the Somali Regional State of Ethiopia. The area is predominantly inhabited by pastoralist and agro-pastoralist communities whose livelihoods depend on livestock herding and mobility. The region is characterized by sparse population distribution, limited educational infrastructure, high levels of poverty and vulnerability, and strong adherence to traditional socio-cultural norms. These contextual features make Dollo Ado Woreda an appropriate setting for examining barriers to girls' education in pastoralist environments (UNICEF, 2021; World Bank, 2020; UNESCO, 2019). The study employs both primary and secondary data sources within a mixed-methods research design. Primary data are collected directly from respondents through structured questionnaires administered to girls enrolled in upper primary schools and teachers, semi-structured interviews with community/clan leaders, religious leaders, school directors, and woreda education office senior experts, as well as focus group discussions with households' school-age girls and parents/guardians. These sources provide both quantitative measurements and qualitative insights into the factors influencing girls' education. Secondary data are drawn from relevant documents, including government reports, education statistics, policy documents, and prior academic studies, to complement the primary data, provide contextual background, and support the interpretation and triangulation of findings.

Target Population: The target population of the study consisted of upper primary school-age girls, parents/guardians, teachers, school leaders, community leaders, and woreda education experts residing in pastoralist communities of Dollo Ado Woreda, Somali Regional State, Ethiopia. In this study, upper primary school-age girls were defined as girls aged 11–14 years, consistent with the official upper primary education age range in Ethiopia. Both enrolled and out-of-school girls were included to capture diverse educational experiences and barriers to participation. Community leaders comprised clan elders, religious leaders, and other influential local actors involved in shaping community norms, decision-making processes, and attitudes toward girls' education. The inclusion of these participant groups enabled the study to examine multi-level influences on girls' educational access and participation. Parents and households influence decisions related to enrollment, attendance, and retention (Herz & Sperling, 2004; UNESCO, 2020), while girls provide firsthand accounts of their educational experiences (UNICEF, 2021). Community and religious leaders shape sociocultural expectations and norms affecting girls' schooling (Krätli & Dyer, 2009; Unterhalter, 2013), whereas teachers, school administrators, and education experts contribute institutional and policy perspectives (World Bank, 2018). In total, 309 participants were involved in the study, including out-of-school-age girls (70), upper primary school age girls (70), parents (83), community and religious leaders (8), teachers (70), school directors (4), and woreda education experts (4).

Sampling Techniques and Sample Size: The study employed a multi-stage sampling technique to ensure relevance and representativeness. Dollo Ado Woreda was purposively selected due to its pastoralist context. Purposive sampling was also used to select key informants, including community/clan and religious leaders, school directors, and woreda education experts, based on their specialized knowledge (Creswell & Creswell, 2018; Patton, 2015). Within each stratum, simple random sampling was applied to select households with school-age girls, enrolled and non-enrolled girls, parents/guardians, and teachers, ensuring equal selection probability and reducing bias (Kothari, 2004; Bryman, 2016). The sample size was determined using Cochran's formula and the Krejcie and Morgan (1970) table for a known population to ensure representativeness.

In addition, SEM requirements were considered by following the guideline of a minimum of 200 respondents or an adequate observation-to-variable ratio to ensure statistical power, stable estimates, and reliable model fit (Hair et al., 2019).

Data Collection Tools: The study employed structured questionnaires, semi-structured interviews, and focus group discussions as primary data collection tools. The questionnaire, developed from relevant literature and theoretical frameworks, used 5-point Likert-scale items (strongly disagree to strongly agree) to measure socio-cultural, economic, institutional, and environmental factors, as well as girls' education outcomes (enrollment, attendance, retention, and progression). It was adapted from validated instruments and modified to fit the local context. Semi-structured interviews were conducted with community/clan leaders, religious leaders, school directors, and woreda education experts to obtain in-depth insights into norms, institutional practices, and policy issues. The open-ended format allowed probing of complex perspectives (Creswell & Creswell, 2018; Kvale & Brinkmann, 2015). Data collection involved administering questionnaires, ensuring completeness, translating into local languages, and coding responses for analysis.

Research Design and Data Integration: The study employed an explanatory sequential mixed-methods design, integrating quantitative and qualitative approaches in two consecutive phases. In the first phase, quantitative data were collected and analyzed using Structural Equation Modeling (SEM) to examine the direct, mediating, and moderating effects of socio-cultural, economic, institutional, and environmental factors on girls' educational participation and outcomes. In the second phase, qualitative data were collected to further explain and contextualize the statistical results obtained from the SEM analysis. The integration of the two strands occurred at the interpretation stage through triangulation, where qualitative findings were used to validate and enrich quantitative results rather than to modify or re-specify the structural model. Specifically, qualitative evidence from key informant interviews and community perspectives was employed to provide deeper explanations for observed relationships and to illuminate contextual mechanisms underlying the statistical associations identified in the SEM model. This approach ensured methodological complementarity, strengthened the credibility of findings, and provided a more comprehensive and context-sensitive understanding of the determinants of girls' education in pastoralist settings.

Ensuring Data Quality: To ensure the reliability and validity of the data, several procedures were employed. Content validity was established through expert review of the questionnaire to confirm that the items adequately represented the intended constructs, while construct validity was assessed using factor analysis to verify appropriate item loadings on their respective variables. Internal consistency reliability was evaluated using Cronbach's alpha coefficient, with a threshold of 0.70 or higher considered acceptable (Hair et al., 2019). In addition, a pilot study was conducted on a small sample before the main data collection to assess the clarity, wording, and timing of the questionnaire, and the feedback obtained was used to refine the instrument. The questionnaire administered to school-aged girls was simplified to ensure age-appropriate comprehension and was pre-tested before the main data collection. It was translated into the local Somali language and back-translated into English to ensure semantic accuracy and consistency. During data collection, trained enumerators provided clarification in the local language when necessary without influencing respondents' answers. These procedures were undertaken to enhance understanding, ensure ethical appropriateness for minor participants, and improve the reliability and validity of the data collected.

Data Analysis Techniques: Data analysis was conducted using both quantitative and qualitative approaches. Descriptive statistics (frequency, percentage, mean, and standard deviation) were used to summarize respondents' demographic characteristics and key variables, providing an overall picture of the data. Inferential analysis employed Structural Equation Modeling (SEM) to test hypothesized relationships and assess both measurement and structural models, allowing simultaneous estimation of multiple relationships while accounting for measurement error (Hair et al., 2019). Qualitative data from semi-structured interviews were analyzed thematically through coding and identification of recurring patterns and themes, complementing and enriching the quantitative results. Moderating effects were tested within the Structural Equation Modeling (SEM) framework using interaction terms. Specifically, parental education, household decision-making power, distance to school, and community/religious leadership are modeled as moderators by creating interaction effects with the main independent variables (socio-cultural, economic, institutional, and environmental factors). The significance of moderation is determined by the statistical significance of the interaction path coefficients (standardized estimates and p-values). A significant interaction indicates that the relationship between the predictors and girls' educational participation and outcomes varies depending on the level of the moderator. This approach enables simultaneous estimation of direct and conditional effects within a single structural model, ensuring a robust and context-sensitive assessment of the determinants of girls' education.

Triangulation: Triangulation was employed to enhance the credibility and robustness of the findings. Methodological triangulation was achieved by combining quantitative survey data with secondary data sources, while data triangulation involved collecting information from multiple respondent groups, including households, students, and educators. In addition, theoretical triangulation was applied by integrating multiple perspectives, such as Gender Theory, Resource-Based View (RBV), and the Capability Approach. This approach strengthens the study by cross-verifying evidence from different sources and perspectives, thereby improving the validity of the results.

Operationalization of the Variables: The study operationalizes girls' educational participation and outcomes as the dependent variable, measured through access, enrollment, attendance, retention, completion, and academic performance in formal schooling. The independent variables comprise socio-cultural, economic, institutional, and environmental factors. Socio-cultural factors include norms and practices such as early marriage, domestic workload, and community attitudes toward girls' education. Economic factors capture household resources and constraints, including income, education costs, poverty, and child labor. Institutional factors refer to school-related conditions such as availability of facilities, female teachers, sanitation, scholarships, and safety. Environmental factors encompass geographic and contextual barriers, including distance to school, transport challenges, drought, insecurity, and seasonal migration. Environmental factors were measured using both perception-based Likert-scale items and contextual indicators, including mobility patterns, Climate variables, geographical remoteness, and resource scarcity affecting girls' school participation. Time poverty is the mediating variable, reflecting limited time for schooling due to domestic and caregiving responsibilities, measured by time use patterns and school absenteeism. Household and community support is an antecedent factor shaping time poverty, while parental education, decision-making power, distance to school, and community/religious leadership serve as moderators. Most variables are measured using five-point Likert scales, with selected objective indicators measured continuously or categorically.

Ethical Considerations: Ethical standards were strictly observed throughout the study in line with institutional and cultural norms and values in line pastoralist contexts. Ethical clearance was obtained from the Ministry of Education research ethics department before data collection, alongside formal authorization from the Somali Regional Education Bureau and Dollo Ado district education office. Informed consent was secured from religious and community/ethnic leaders, who are critical in pastoralist contexts, and adult participants, while for minors, parental or guardian consent and student assent were obtained before participation. Participation was fully voluntary, and respondents were informed of their right to withdraw at any time without any penalty or consequence. Confidentiality and anonymity were safeguarded through the use of identification codes instead of personal identifiers, and all data were used exclusively for academic purposes. Data collection was conducted by trained enumerators in a safe and culturally appropriate environment, with special attention to minimizing any potential risk to vulnerable participants.

Results and Discussions

To achieve the study objectives, 150 structured questionnaires were distributed: 75 to girls enrolled in upper primary schools and 75 to teachers. Of these, 140 were completed and returned (70 from each group), yielding a 93.4% response rate, while 10 (6.66%) were not returned. This rate exceeds the commonly accepted threshold of 70%, indicating strong reliability and adequacy of the data (Wilson et al., 2024). In addition, 153 participants (70 out-of-school age girls and 83 parents/guardians) were involved in FGDs, and 4 key informants (community/clan leaders, religious leaders, as well as 12 school directors and woreda education experts) participated in semi-structured interviews, providing in-depth qualitative insights to complement the quantitative findings. Frequency and percentage distributions were used to describe respondents' demographic characteristics, including gender, position, educational background, and work experience. Of the 309 respondents, 132 (42.7%) were male, and 172 (57.3%) were female, indicating a slight female majority and ensuring adequate representation of women's perspectives in understanding barriers to girls' education in pastoralist contexts. Regarding educational background, 161 respondents (52.1%) were unable to read and write, reflecting a high level of illiteracy among community participants, while 70(22.7%) of them had an educational level of upper primary school. The remaining 78(25.2%) respondents were professionals (teachers, school directors, and woreda education experts). Among teachers, school directors, and woreda education experts, 51 (65.4%) were male, and 27 (34.6%) were female. In terms of qualifications, 12 (9.36%) held diplomas, 62 (79.5%) held first degrees, and 4 (5.12%) held master's degrees, indicating that most professionals possessed first-degree level education, which supports their capacity to analyze structural constraints affecting girls' education. With respect to work experience, 31 respondents (39.7%) had 5–7 years of experience, 36 (46.2%) had 8–10 years, and 11 (14.1%) had more than 10 years of experience. The predominance of experienced respondents enhances the reliability of insights, as their prolonged engagement enables informed perspectives on socio-cultural, economic, institutional, and environmental challenges influencing girls' education in pastoralist settings.

Between Structural Constraints and Educational Access: Girls' Education in Pastoralist Communities

Building on the descriptive analysis of socio-cultural, economic, institutional, and environmental factors, the study now proceeds to examine the overall factors influencing girls' education in pastoralist communities of Dollo Ado Woreda. This section integrates the key variables to identify their relative contributions and combined effect on girls' educational participation.

Table 1*Socio-cultural factors influencing girls' Education in Pastoralist Communities*

Items	Socio-cultural factors influence girls' education in pastoralist communities	Respondents Rating/Agreement							
		No	M	SD	Str. disagree	Disagree	Neutral	Agree	Str. Agree
SC1	Gender norms& moral expectations	140	4.74	0.35	0.01	0.19	2.2	11.1	86.5
SC2	Early marriage practices	140	4.65	0.7	2.3	3.65	5.45	18.6	70
SC3	Cultural perspectives & attitude towards education	140	4.7	0.4	0.65	4.6	4.25	18.4	72.1
SC4	Gender-based discrimination& stereotypes	140	4.77	0.37	1.1	2	2.6	19.2	75.1
	Aggregate mean score		4.71	0.45					

Source: Own field survey (2026)

The findings indicate strong agreement that socio-cultural factors influence girls' education, with an aggregate mean of 4.71 (SD = 0.455). Among the items, gender-based discrimination (M = 4.77, SD = 0.37) and gender norms (M = 4.74, SD = 0.35) show the strongest influence, followed by cultural attitudes (M = 4.70, SD = 0.40) and early marriage (M = 4.65, SD = 0.70). Agreement levels exceed 88% across all items. Overall, the high mean scores and low variability indicate a strong and consistent perception that socio-cultural barriers significantly hinder girls' education. These findings are consistent with Sen's (1999) capability approach view, which emphasizes that restrictive social norms limit individuals' freedoms, including girls' access to education. Similarly, Kabeer (1994) highlights how gender norms and intra-household inequalities disadvantage girls in educational opportunities.

Table 2*Economic Factors influencing girls' Education in Pastoralist Communities*

Items	Economic factors influence girls' education in pastoralist communities	Respondents Rating/Agreement							
		No	M	SD	Str. disagree	Disagree	Neutral	Agree	Str. Agree
EC1	House hold income level	140	4.71	0.37	0.01	0.19	2.2	10.1	87.5
EC2	Opportunity cost of girls labor	140	4.45	0.49	0.3	2.65	4.6	16.6	76.5
EC3	Cost of education	140	4.5	0.59	0.65	1.8	2.25	18.2	77.1
EC4	Poverty(asset ownership	140	4.57	0.6	0.1	1	3.6	17.3	78
	Aggregate Mean score		0.47	0.51					

Source: Own field survey (2026)

The findings indicate that economic factors significantly influence girls' education in pastoralist communities, with an aggregate mean of 4.47 (SD = 0.51), reflecting high agreement. Household income (M = 4.71) is the most influential factor, followed by poverty and asset ownership (M = 4.57), cost of education (M = 4.50), and opportunity cost of girls' labor (M = 4.45), highlighting financial constraints and competing household priorities. These results align with UNESCO (2019), which identifies poverty, direct schooling costs, and opportunity costs as major barriers. Overall, economic constraints are a key determinant of girls' educational participation.

Table 3

Institutional factors influencing girls' Education in Pastoralist Communities

Items	Institutional factors influence girls' education in pastoralist communities.	Respondents Rating/Agreement							
		No	M	SD	Str. disagree	Disagree	Neutral	Agree	Str. Agree
IS1	School accessibility (distance & availability)	140	4.78	0.38	0.01	0.01	2.38	9.1	88.5
IS2	School infrastructures & facilities	140	4.75	0.4	0.3	1.7	2.6	16.6	78.8
IS3	Teachers' availability, quality & gender sensitivity	140	4.6	0.54	0.65	1.6	2.25	18.4	77.1
IS4	Education policy & implementation	140	4.67	0.57	0.1	1.9	1.6	16.3	80.1
	Aggregate Mean score		4.7	0.47					

Source: Own field survey (2026)

The findings show that institutional factors strongly influence girls' education in pastoralist communities, with an aggregate mean of 4.70 (SD = 0.47), indicating high agreement and low variability. School accessibility (M = 4.78) is the most influential factor, followed by infrastructure (M = 4.75), policy implementation (M = 4.67), and teachers' availability, quality, and gender sensitivity (M = 4.60). These results align with UNESCO (2015), which identifies limited access, poor infrastructure, teacher shortages, and weak policy implementation as key barriers. Similarly, Sen (1999) argues that institutional constraints limit real educational opportunities. Overall, institutional deficiencies significantly hinder girls' participation in education.

Table 4*Environmental factors influencing girls' Education in Pastoralist Communities*

Items	Environmental factors influencing girls' education in pastoralist communities.	Respondents Rating/Agreement							
		No	M	SD	Str. disagree	Disagree	Neutral	Agree	Str. Agree
EN1	Mobility patterns of pastoralist community & lifestyle	140	4.74	0.35	0.01	0.01	2.2	11.28	86.5
EN2	Climate variables (Drought & Seasonality)	140	4.65	0.68	1.3	1.65	5.6	15.45	76
EN3	Geographical remoteness	140	4.5	0.59	0.65	1.8	2.25	18.2	77.1
EN4	Resource scarcity (water, grazing land)	140	4.67	0.57	0.1	1	1.6	16.3	81
	Aggregate Mean score		4.64	0.55					

Source: Own field survey (2025)

The findings indicate that environmental factors significantly influence girls' education in pastoralist communities, with an aggregate mean of 4.64 (SD = 0.55), reflecting high agreement. Mobility patterns and pastoralist lifestyle (M = 4.74) are the most influential factors, disrupting school attendance. This is followed by resource scarcity (M = 4.67), climate variability such as drought (M = 4.65), and geographical remoteness (M = 4.50), all of which limit access to schooling. These findings align with UNESCO (2019), which highlights environmental constraints as major barriers in rural and pastoralist contexts. Similarly, Amartya Sen (1999) emphasizes that such constraints limit real educational opportunities. Overall, environmental conditions are key barriers to girls' education.

Following the descriptive analysis, the study presents Structural Equation Modeling (SEM) to examine the relationships among socio-cultural, economic, institutional, and environmental factors and their combined influence on girls' education in pastoralist communities.

Structural Equation Modeling (SEM) Analysis of Factors Influencing Girls' Education in Pastoralist Communities

This section presents the Structural Equation Modeling (SEM) analysis examining the relationships among socio-cultural, economic, institutional, and environmental factors and their influence on girls' education. It assesses both the measurement model and structural paths to determine the significance and strength of the hypothesized relationships.

Measurement Model Analysis: Measurement Model Analysis is conducted in SEM to verify that the observed indicators properly measure the underlying latent constructs before testing relationships in the structural model.

Reliability Analysis: Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR) to evaluate the internal consistency of the constructs.

Table 5*Reliability Results*

Construct	Cronbach alpha	AVE	CR	Remarks
Socio-cultural Factors	0.82	0.58	0.86	Reliable
Economic Factors	0.80	0.56	0.84	Reliable
Institutional Factors	0.85	0.60	0.88	Reliable
Environmental Factors	0.78	0.55	0.83	Reliable
Girls' Education (Overall model hypothesis)	0.81	0.62	0.85	Reliable

Table 5 indicates that all constructs demonstrate satisfactory reliability and validity. Cronbach's alpha values (0.78–0.85) and composite reliability (0.83–0.88) exceed the recommended threshold of 0.70, confirming strong internal consistency and reliability. The average Cronbach's alpha ($\alpha = 0.81$) and composite reliability (CR = 0.85) further reinforce the overall reliability of the measurement model. Additionally, the AVE values (0.55–0.62) are above the acceptable level of 0.50, indicating adequate convergent validity. Overall, the results suggest that the measurement items reliably capture their respective constructs and are suitable for further analysis.

Confirmatory Factor Analysis (CFA): CFA was conducted to assess the measurement model in terms of standardized factor loadings, convergent validity, and model fit.

Table 6*Factor Loadings*

Construct	Indicators	Factor loading range	Acceptable Threshold
Socio-cultural	SC1–SC4	0.79 – 0.84	≥ 0.50 (preferably ≥ 0.70)
Economic	EC1–EC4	0.75 – 0.82	≥ 0.50 (preferably ≥ 0.70)
Institutional	IS1–IS4	0.77 – 0.85	≥ 0.50 (preferably ≥ 0.70)
Environmental	EN1–EN4	0.76 – 0.81	≥ 0.50 (preferably ≥ 0.70)

Table 6 shows that all indicator loadings range from 0.75 to 0.85, exceeding the minimum acceptable threshold of 0.50 and meeting the preferred level of 0.70. This indicates that all items have strong loadings on their respective constructs. Overall, the results confirm good indicator reliability and support the adequacy of the measurement model.

Table 7*CFA Model Fit*

Fit Index	Value	Threshold	Interpretation
Chi-square/df	2.45	< 3	Good fit
CFI	0.93	≥ 0.90	Acceptable
TLI	0.91	≥ 0.90	Acceptable
RMSEA	0.055	≤ 0.08	Good fit
SRMR	0.048	≤ 0.08	Good fit

Table 7 indicates that the CFA model demonstrates a good overall fit. The Chi-square/df (2.45) is below 3, while RMSEA (0.055) and SRMR (0.048) are within the recommended ≤ 0.08 , indicating good fit. Additionally, CFI (0.93) and TLI (0.91) exceed the acceptable threshold of 0.90. Overall, these results confirm that the measurement model fits the data well and is suitable for further analysis.

Structural Equation Modeling (SEM) Results: SEM was used to examine the relationships between independent variables and girls' education.

Structural Model Path Coefficients: Structural Model Path Coefficients are assessed in SEM to examine the hypothesized relationships between latent variables and to determine whether the proposed model is supported by the data.

Table 8

Structural Model Results

Hypothesis	Path	Estimate (β)	S.E	C.R (t-value)	R ²	P-value
H1	SC→GE	-0.42	0.08	-5.25	no R ²	Supported
H2	EC → GE	-0.35	0.07	-4.85	no R ²	Supported
H3	IS →GE	0.48	0.09	5.33	no R ²	Supported
H4	EN → GE	-0.30	0.06	-4.50	no R ²	Supported
H5	GE	-----	-----	-----	0.68	Strong explanatory power

Table 8 shows that all hypothesized relationships are statistically significant ($p < 0.05$). Socio-cultural ($\beta = -0.42$), economic ($\beta = -0.35$), and environmental factors ($\beta = -0.30$) have significant negative effects on girls' education, while institutional factors ($\beta = 0.48$) have a significant positive effect. The model explains 68% of the variance in girls' education ($R^2 = 0.68$), indicating strong explanatory power. Overall, the results confirm that structural constraints hinder girls' education, while institutional support enhances it.

Hypothesis Testing

Table 9

Hypothesis Testing Summary

	Hypothesis Statement	Result	Conclusion
H1	Socio-cultural factors → Girls' education	Significant negative effect	Supported
H2	Economic factors → Girls' education	Significant negative effect	Supported
H3	Institutional factors → Girls' education	Significant positive effect	Supported
H4	Environmental factors → Girls' education	Significant negative effect	Supported

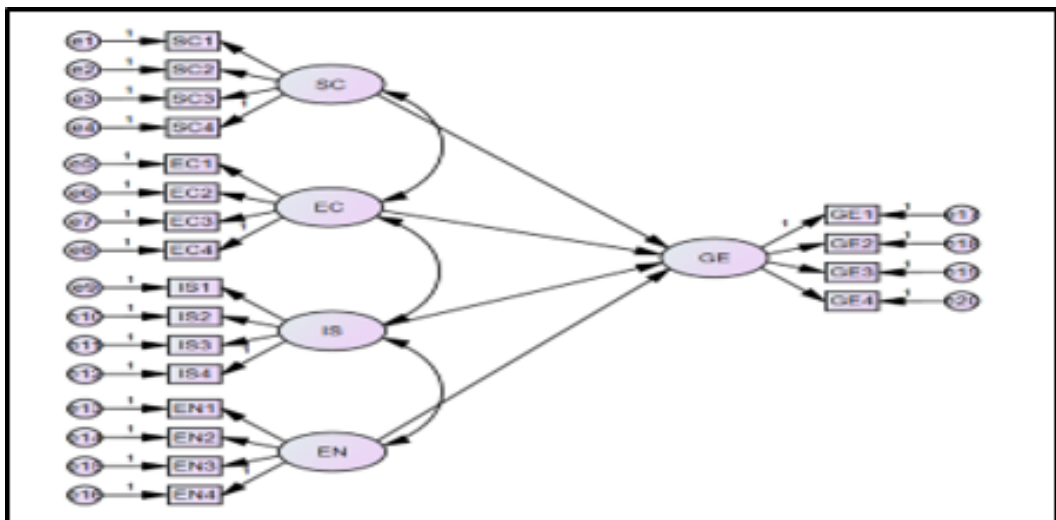
Table 9 summarizes the hypothesis testing results, indicating that all proposed hypotheses are supported at $p < 0.05$. Socio-cultural, economic, and environmental factors have significant negative effects on girls' education, while institutional factors have a significant positive effect. This suggests that socio-cultural, economic, and environmental constraints hinder girls' educational participation, whereas stronger institutional support enhances it. Overall, the findings confirm the hypothesized relationships and highlight the importance of institutional factors in promoting girls' education while addressing the adverse effects of the other influencing factors.

Path Diagram (SEM Model Description)

The structural model offers a theoretically grounded account of how multiple contextual constraints shape girls' education. It shows that socio-cultural, economic, and environmental factors exert significant negative effects, reflecting the limiting influence of gender norms, household resource constraints, and geographic and climatic challenges on girls' access, retention, and progression. In contrast, institutional factors have a positive effect, emphasizing the enabling role of supportive policies, school availability, and gender-responsive practices. All latent constructs are directly linked to girls' education, with directional paths indicating causal relationships. The inclusion of error terms captures unobserved influences, while strong measurement loadings confirm that the constructs are reliably represented. Overall, the model underscores that improving girls' education requires a coordinated, multidimensional approach that simultaneously addresses socio-cultural, economic, institutional, and environmental barriers.

Figure 2

Path Diagram SEM Model



Building on the findings from the Structural Equation Modeling (SEM) analysis, which identified the significant effects of socio-cultural, economic, institutional, and environmental factors on girls' education, the following section presents qualitative insights from interviews and focus group discussions to provide deeper contextual understanding and triangulation of the quantitative results.

Qualitative Findings and Thematic Analysis

This section presents qualitative insights from interviews and focus group discussions that complement the quantitative SEM findings by providing contextual explanations of how socio-cultural, economic, institutional, and environmental factors influence girls' education in Dollo Ado. For instance, a community leader from Dollo Ado highlighted key socio-cultural factors affecting girls' education.

"I observe that traditional norms and early marriage often limit girls' opportunities to attend school. Many families still prioritize domestic roles for girls over education. However, awareness is gradually improving, and with community engagement, we can encourage families to support girls' schooling for a better future."

Similarly, Religious leaders revealed that:

"Socio-cultural beliefs and community traditions strongly influence attitudes toward girls' education. I understand that in most cases, misconceptions about the role of girls and early marriage practices limit their educational opportunities. However, our teachings emphasize the importance of knowledge for both girls and boys, and we encourage the community to support girls' education as part of social and moral development."

Additionally, one primary School director also stated that:

"I have 8 years' experience in this school. During my stay as school director, I detect that socio-cultural norms, such as early marriage, gender role expectations, and parental attitudes, significantly affect girls' participation in education. Many families still prioritize household responsibilities over schooling for girls, which leads to absenteeism and dropout. Strengthening community awareness and engagement is essential to change these perceptions and support girls' continued education."

Moreover, FGDs were conducted with out-of- school age girls and parents/guardians to get their views on socio-economic factors affecting girl's education in their community. One of out-of- school age girls who participated in FGDs responded that:

"In our community, many girls face pressure from families to help with household chores, and some are encouraged to marry early instead of continuing school. These expectations make it difficult to attend classes regularly, and sometimes girls drop out. Although some parents are becoming more supportive, traditional beliefs still strongly influence girls' education."

Moreover, FGDs were conducted with out-of- school age girls and parents/guardians to get their views on economic factors affecting girl's education in their community. One of parents who participated in FGDs responded that:

“As parents, we face economic challenges such as low and unstable income, which makes it difficult to afford school-related costs like uniforms, books, and transportation. In some cases, we also rely on our daughters to contribute to household income or labor, which affects their attendance and continuity in school. These financial constraints often limit our ability to fully support girls’ education, even when we value its importance.”

Also, Interview was held with woreda education office senior expert, and revealed that:

“As a senior expert at the woreda education office, we recognize that economic constraints are a major barrier to girls’ education in this area. Many households cannot afford direct and indirect schooling costs, and poverty often compels families to prioritize short-term economic survival over education. As a result, girls may be withdrawn from school to support household livelihoods. Addressing these challenges requires coordinated support through targeted financial assistance, school feeding programs, and broader poverty-reduction interventions.”

Furthermore, school director who participated on interview revealed that:

“As a school director, institutional challenges such as inadequate school facilities, limited availability of female teachers, lack of gender-sensitive sanitation services, and insufficient learning materials negatively affect girls’ education. In some cases, weak enforcement of school policies and limited support systems for vulnerable students contributes to absenteeism and dropout. Strengthening school infrastructure, improving institutional capacity, and implementing gender-responsive policies are essential to create a supportive learning environment for girls.”

Also, Woreda education office senior expert depict that

“As a senior expert, institutional factors such as limited school infrastructure, insufficient teaching and learning resources, shortage of qualified teachers, and weak implementation of education policies affect girls’ access and retention. In addition, inadequate coordination among stakeholders and limited gender-responsive services constrain efforts to support girls’ education. Strengthening institutional capacity, improving resource allocation, and ensuring effective policy enforcement are essential to enhance equitable educational opportunities for girls.”

Likewise, one of parent who participated on Focus group discussion said that:

“We face environmental challenges such as long distances to schools, insecurity in some areas, and harsh weather conditions, which make it difficult for girls to attend school regularly. During rainy seasons or periods of mobility, access to schools becomes even more limited. These environmental factors often discourage consistent attendance and, in some cases, lead to dropout.”

Girls viewed education as a means to support their parents in the future, pursue desired career paths, and avoid certain restrictive cultural practices, with many expressing gratitude for the opportunity to attend school and considering them fortunate to be enrolled. These girls said:

"I am lucky that I am going to school; I will not marry while young. On the other side of the village a little girl like this one (pointing to one little girl) is married. I don't know what they do there; I just thank God I am not at home."

Interview also held for schoolgirl about her perception towards education, and she revealed that:

"It is good to be educated. I thank Allah that my father has not forced me out of school. I want to be a nurse because I want to help my mother and siblings in future. They live a very difficult life and I don't want them to continue living this kind of life."

Finally, Out-of-school girl also asked about her perception towards education, and she revealed that:

"I want to continue schooling, but I have no way, my father does not want me to go. If I would get someone to support me to attend boarding school, I would really thank him/her. They have chosen a husband for me. I will just accept to marry because it is my father's order otherwise I would not do it on my own will."

Overall, the qualitative findings indicate that girls' education in Dollo Ado is constrained by the combined effects of socio-cultural norms, economic hardship, environmental challenges, and institutional weaknesses, which together limit access, reduce attendance, and increase dropout rates, despite emerging shifts in attitudes and recognition of the value of education; this underscores the need for integrated, multi-sectorial, and context-sensitive interventions that address cultural practices, alleviate poverty, improve school accessibility and safety, and strengthen institutional capacity to enhance girls' educational participation.

Integrated Findings on Determinants of Girls' Education

Across the descriptive statistics, reliability and validity tests, SEM results, and qualitative findings, the study demonstrates strong and consistent evidence on factors influencing girls' education in Dollo Ado. Descriptive results show high mean scores (above 4.5) with low standard deviations, indicating strong respondent agreement. Reliability analysis confirms internal consistency, with Cronbach's alpha values ranging from 0.78 to 0.85, and Composite Reliability above 0.80 for all constructs. SEM analysis confirms their statistical significance, with socio-cultural ($\beta = -0.42$), economic ($\beta = -0.35$), and environmental ($\beta = -0.30$) factors negatively affecting girls' education, and institutional factors ($\beta = 0.48$) exerting a positive effect, explaining 68% of the variance. CFA results further validate the measurement model, with factor loadings between 0.75 and 0.85 and good model fit indices (CFI = 0.93, RMSEA = 0.055). Hypothesis testing supports all proposed relationships at $p < 0.05$. Qualitative findings triangulate these results by illustrating how contextual realities such as early marriage, poverty, institutional limitations, and environmental barriers shape girls' educational participation.

Key Findings: Integrated Interpretation of Determinants of Girls' Education

The integrated results consistently demonstrate that girls' education in pastoralist communities of Dollo Ado is shaped by the combined and interacting effects of socio-cultural, economic, institutional, and environmental factors. *Socio-cultural factors* exert a significant negative influence, as entrenched practices such as early marriage, gender role expectations, and discriminatory norms continue to restrict girls' access, participation, and retention in education. These findings reinforce gender theory, which emphasizes how socially constructed norms systematically disadvantage girls, limiting their educational opportunities. *Economic factors* also have a significant negative effect, with household poverty, opportunity costs, and the inability to meet direct and indirect schooling expenses constraining families' capacity to invest in girls' education. The reliance on girls for domestic and income-generating activities further reduces their schooling participation, aligning with the resource-based view that limited household resources hinder human capital development. In contrast, *institutional factors* demonstrate a significant positive influence, indicating that improved school accessibility, adequate infrastructure, availability of qualified teachers, and effective policy implementation enhance girls' enrollment and retention. This highlights the critical role of institutional support in offsetting structural barriers and creating an enabling learning environment. *Environmental factors* similarly present significant constraints, as geographical remoteness, climate variability, mobility of pastoralist lifestyles, and resource scarcity disrupt schooling continuity. Frequent movement in search of livelihoods leads to interruptions in attendance and increased dropout risks. Overall, the findings confirm that while socio-cultural, economic, and environmental factors act as structural constraints, institutional strengthening serves as a key enabling mechanism to improve girls' educational outcomes in pastoralist settings.

Conclusion

This study demonstrates that girls' education in pastoralist communities of Dollo Ado Woreda is largely shaped by the interaction between structural constraints and enabling institutional conditions. Socio-cultural norms, economic hardship, and environmental challenges continue to restrict girls' access, participation, and retention in education, reflecting deeply rooted barriers within the community context. At the same time, institutional factors such as school accessibility, resource availability, teacher quality, and effective policy implementation play a crucial role in improving educational opportunities. Overall, the findings highlight that enhancing girls' education requires integrated, multi-sectoral interventions that address structural constraints while strengthening institutional support systems to ensure equitable and sustained educational access.

Recommendations

In line with the study's findings and conclusions, improving girls' education in Dollo Ado requires integrated and context-sensitive interventions that address structural constraints while strengthening institutional support. Policymakers, education authorities, and parents teachers association (PTA) should reinforce and enforce gender-responsive policies, particularly those aimed at eliminating harmful socio-cultural practices such as early marriage and gender discrimination, while expanding flexible and mobile schooling options suited to pastoralist mobility patterns. Institutionally, efforts should focus on improving school infrastructure, increasing the availability of qualified and gender-sensitive teachers, and strengthening monitoring and evaluation systems to ensure effective policy implementation. Socio-cultural barriers can be addressed through sustained community awareness programs and the active engagement of community and religious leaders to shift norms and promote positive attitudes toward girls' education. Economically, targeted support mechanisms

such as scholarships, school feeding programs, and livelihood interventions are essential to reduce the burden on households and minimize reliance on girls' labor. Environmentally, investments in accessible schooling options, including mobile schools, boarding schools, and alternative basic education (ABE) alongside improvements in basic infrastructure and climate-resilient planning, are critical to mitigate the effects of remoteness, mobility, and climatic challenges. Overall, coordinated multi-sectoral action is necessary to enhance equitable access and sustained participation of girls in education.

Implications of the Study and Areas of Future Research

Theoretically, this study extends gender theory and the resource-based view by demonstrating how socio-cultural and economic constraints shape girls' educational outcomes, while institutional support can help mitigate these limitations. It also reinforces the value of an integrated multi-theoretical framework in explaining complex educational challenges in pastoralist contexts. Practically, the findings suggest that policymakers, educators, and development partners should adopt holistic and multi-dimensional interventions that simultaneously address socio-cultural, economic, institutional, and environmental barriers rather than focusing on isolated factors. Future studies may consider longitudinal studies to examine changes over time, along with the inclusion of additional variables such as parental education and household decision-making dynamics. Comparative studies between pastoralist and non-pastoralist communities, as well as in-depth qualitative approaches, would further enrich understanding of the lived experiences underlying girls' educational participation.

Acknowledgements: The authors would like to thank the Federal Ministry of Education, Ethiopia, and the Dollo Ado woreda education office for their overall support and commitment to the study, as well as study participants for providing data for the study.

Correspondence

Manaye Abera Shamelu: Manayecabera2@gmail.com
ORCID iD: 0000-0002-3401-609x

Disclosure Statement and Funding

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article.

Declarations Ethics Approval

The protocol was approved by the Addis Ababa University Research Committee (AAURC) in accordance with the university's research guidelines and regulations.

References

- Balehey, S., Tesfay, G., & Balehegn, M. (2018). Traditional gender inequalities limit pastoral women's opportunities for adaptation to climate change: Evidence from the Afar pastoralists of Ethiopia. *Pastoralism*, 8(1), 23. <https://doi.org/10.1186/s13570-018-0129-1>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>

- Boru, A. K. (2020). Education for Borena pastoralist community children in Ethiopia: Practices and challenges. *Ethiopian Journal of Education and Sciences*, 15(2), 19–32. <https://journals.ju.edu.et/index.php/ejes/article/view/2405>
- Bourdillon, M., & Boydell, V. (2019). *Child marriage and education*.
- Bryman, A. (2016). *Social Research Methods* (5th ed.). London: Oxford University Press
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. Routledge.
- Carr-Hill, R. & Peart, E. (2005). The education of nomadic peoples in East Africa: Review of relevant literature. Paris. UNESCO-IIEP
- Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century*. Institute of Development Studies.
- Connell, R. W. (2002). *Gender*. Polity Press.
- Connell, R. W. (2009). *Gender in world perspective* (2nd ed.). Polity Press.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.
- Devonald, M., Jones, N., & Yadete, W. (2020). Addressing educational attainment inequities in rural Ethiopia: Leave no adolescent behind. *Development Policy Review*. <https://doi.org/10.1111/dpr.12523>
- Devonald, M., Jones, N., Hamory, J., & Yadete, W. (2021). Betwixt and between: Adolescent transitions and social policy lacunae in Ethiopia. *Childhood Vulnerability Journal*, 3, 1–21. <https://doi.org/10.1007/s41255-021-00016-1>
- Erulkar, A., & Ferede, A. (2009). *Social exclusion and early marriage in Ethiopia*.
- Federal Democratic Government of Ethiopia Ministry of Education, (2024/2025). Education statistics annual abstract 2016 E.C. Addis Ababa.
- Fenta, M., et.al. (2019). Vulnerability of Southern Afar pastoralists to climate variability and change, Ethiopia. *Journal of Disaster Risk Studies*, 11(1). <https://pmc.ncbi.nlm.nih.gov/articles/PMC6521592/>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Herz, B., & Sperling, G. B. (2004). *What works in girls' education: Evidence and policies from the developing world*. Council on Foreign Relations.
- Kabeer, N. (1994). *Reversed realities: Gender hierarchies in development thought*. Verso.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd rev. ed.). New Age International (P) Limited
- Krätli, S., & Dyer, C. (2009). *Mobile pastoralists and education: Strategic options*. International Institute for Environment and Development.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Kvale, S., & Brinkmann, S. (2015). *Interviews: Learning the craft of qualitative research interviewing* (3rd ed.). Sage Publications.
- Levine, R., Lloyd, C., Greene, M., & Grown, C. (2009). *Girls count: A global investment & action agenda*. Center for Global Development.
- Mekuyie, M., & Mulu, B. (2021). Climate variability and pastoral livelihood vulnerability in Ethiopia. *Pastoralism*.

- Ministry of Education (1994). Education and Training policy. Addis Ababa: Graphics Printers
- Ministry of Education (2008b). Strategies for promoting primary and secondary education in Pastoralist areas. Addis Ababa: Graphics Printers.
- Moser, C. O. N. (1993). *Gender planning and development: Theory, practice and training*. Routledge.
- Moyo, T. (2024). Climate-induced vulnerability, displacement and conflict among pastoralist communities in Ethiopia (Doctoral dissertation, University of Pretoria). <https://repository.up.ac.za/handle/2263/97154>
- Mulugeta, T., & Ayele, A. (2018). Factors affecting girls' education in pastoralist communities in Ethiopia.
- Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Harvard University Press.
- Patton, M. Q. (2015). Sampling, Qualitative (Purposeful). The Blackwell Encyclopedia of Sociology. <https://doi.org/10.1002/9781405165518.wbeoss012.pub2>
- Presler-Marshall, E., Jones, N., & Lyytikäinen, M. (2022). *Girls' education in pastoralist communities*. Overseas Development Institute.
- Scoones, I. (1998). Sustainable rural livelihoods: A framework for analysis. *IDS Working Paper 72*. Institute of Development Studies..
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- Tafere, Y., & Woldehanna, T. (2012). *Rural livelihoods and child wellbeing in Ethiopia*. Young Lives.
- UNESCO. (2014). *Teaching and learning: Achieving quality for all (EFA Global Monitoring Report)*.
- UNESCO. (2019). *Global education monitoring report: Migration, displacement and education*.
- UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education*. UNESCO.
- UNESCO. (2022). *Global education monitoring report 2022: Gender report Deepening the debate on those left behind*. UNESCO.
- UNESCO. (2023). *Global education monitoring report 2023*. UNESCO Publishing.
- UNICEF. (2020). *ending child marriage: A profile of progress in Ethiopia and beyond*. .
- UNICEF. (2021). *Education in pastoralist communities: Challenges and opportunities*
- UNICEF. (2021). *Girls' education and gender equality*. United Nations Children's Fund.
- UNICEF. (2023). *Girls' education and gender equality report*. UNICEF.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations.
- Unterhalter, E. (2017). *Gender equality and education*
- World Bank. (2018). *World development report: Learning to realize education's promise*
- World Bank. (2020). *Education service delivery in fragile and pastoralist regions*.
- World Bank. (2022). *Education in Ethiopia: Improving access and equity*. World Bank Publications.

Aspiring and Early Career Principals' Perceptions of One-on-One Coaching and Its Relationship to Instructional Leadership Self-Efficacy: A Virginia, U.S., Case Study

Danielle E. Colucci

East Tennessee State University, U.S.A.

&

Jodie L. Brinkmann

Virginia Tech, U.S.A.

Abstract

This case study examined how one-on-one coaching influenced the instructional leadership self-efficacy (ILSE) of an aspiring and early career principal (AEC) cohort following completion of a one-year leadership program in a Virginia school division in the United States. Archival survey data, including Likert-type and open-response items aligned with ten state-level instructional leadership performance indicators, were analyzed using descriptive statistics and inductive qualitative coding. The case represented a diverse cohort across race, gender, and 14 school settings. The coaching model featured a distinct structure that paired AECs with experienced principals from other schools whose expertise aligned with each AEC's identified areas for growth and a retired central office school leadership director, who together provided non-directive one-on-one coaching informed by school- and system-level perspectives. Quantitative results indicated participants perceived coaching as contributing to increased ILSE, with an overall mean of 4.54 and mode of 5 on a five-point scale. Qualitative findings further illuminated these results, indicating individualized time and collaboration with coaches contributed to AECs' perceived increases in ILSE. This study contributes to the growing research on principal professional learning through coaching, emphasizing the value of structured one-on-one models enriched by multiple leadership perspectives in developing instructional leadership capacity.

Keywords: early career principals, instructional leadership, self-efficacy, one-on-one coaching

Introduction

As leaders responsible for the success of teachers and students, principals benefit from continuous support and professional learning (PL) to strengthen their leadership skills and successfully address the challenges and needs of today's schools (Gümüş & Bellibaş, 2020). This study was designed to explore the extent one-on-one coaching increased the instructional leadership self-efficacy (ILSE) of 14 AECs who participated in a one-year leadership program within a large public-school division in Virginia. The program was designed to deepen expertise in instructional leadership, organizational management, and people skills. In the context of this study, one-on-one coaching refers to collaborative sessions between a coach and AEC aimed at developing essential leadership skills, supporting reflection, and growing self-efficacy (Aguilar, 2013; Campbell & van Nieuwerburgh, 2018). The retired director served as the program coordinator in a non-evaluative role, facilitating sessions, overseeing the program's structure, and serving as the primary one-on-one coach. To expand support, the coordinator paired AECs with experienced principals from different schools within the school division whose strengths matched each AEC's goals. While the experienced principal coaches were informally referred to as "mentor principals" and general mentoring practices such as offering career guidance and professional support (Feeney & Bozeman, 2008) were used, the experienced principals used active listening and questioning, provided

feedback, and challenged AECs' thinking in a coaching manner (Campbell & van Nieuwerburgh, 2018). Coaching occurred during one-on-one personalized sessions, job-embedded exercises, and PL sessions aligned to ten instructional leadership performance indicators (PIs) provided by the Virginia Department of Education (VDOE).

Researchers have identified coaching as an effective way to grow self-efficacy and instructional leadership in AECs (Darling-Hammond et al., 2022; Brinkmann et al., 2021; van Nieuwerburgh et al., 2020; Warrick, 2024). Yet, the exploration of coaching in conjunction with professional development and how coaching occurs are limited, making it challenging to identify definitive conclusions (van Nieuwerburgh et al., 2020). This study addressed this gap by exploring a program that delivered one-on-one coaching by a program coordinator and cross-site principals as the primary mechanisms for strengthening ten specific instructional leadership skills. AECs also attended PL and job-embedded learning activities alongside their coaches. At the conclusion of the program, AECs self-assessed the extent coaching increased their ILSE using an end-of-program survey, focusing on ten instructional leadership skills established as performance indicators (PIs) by the Virginia Board of Education (VDOE, 2022) [Figure 1]. The VDOE provides eight standards for principal evaluation and multiple affiliated PIs that detail expectations for effective performance under each standard (VDOE, 2022). This study examined the influence of coaching in relation to Standard One, Instructional Leadership and ten affiliated PIs [Figure 1]. As the findings relate to specific PIs and coaching structures, they offer a promising model for school districts seeking to develop AECs' instructional leadership competencies and self-efficacy.

Figure 1

Virginia Department of Education Performance Indicators (PIs) for Instructional Leadership (2022)

1.1	Leads the collaborative development and implementation of a compelling shared vision for educational improvement and works collaboratively with students, parents/caregivers, staff, and other stakeholders to develop a mission and programs consistent with the division's strategic plan.
1.2	Collaboratively plans, implements, supports, monitors, and evaluates instructional programs that enhance rigorous and relevant teaching and student academic progress and that lead to school improvement.
1.4	Analyzes current academic achievement data and instructional strategies to make appropriate educational decisions that improve classroom instruction, increase student achievement, and maximize overall school effectiveness.
1.5	Acquires and shares knowledge of research-based instructional best practices in the classroom.
1.6	Works collaboratively with staff to identify student needs and to design, revise, and monitor instruction to ensure effective delivery of the required curriculum.
1.7	Generates, aligns, and leverages resources for the successful implementation of effective instructional strategies.
1.8	Monitors and evaluates the use of diagnostic, formative, and summative assessment to provide timely and accurate feedback to students and parents/caregivers, and to inform instructional practices.
1.10	Provides the expectation and focus for continuous learning of all members of the school community.
1.11	Promotes and supports professional development and instructional planning and delivery practices that incorporate the use of achievement data and result in increased student progress.
1.12	Demonstrates the importance of sustained professional development by participating in and providing adequate time and resources for teachers and staff for professional learning (i.e., peer observation, mentoring, coaching, study groups, learning teams, action research).

Note. This table displays modified sample performance indicators (PIs) from the VDOE Guidelines for Uniform Performance Standards and Evaluation Criteria for Principals (2022, p. 9).

Literature Review

This literature review draws on seminal research and peer-reviewed articles published from 2008 to 2025 addressing principal preparation and PL, instructional leadership, coaching and mentoring, and self-efficacy. Studies examining coaching of teachers were excluded to preserve a focus on principal and leader coaching, unless a specific approach applied across contexts. The foundation of this study was informed by research on the influence of non-evaluative coaching on principal expertise and self-efficacy, with a focus on ILSE in AECs. Although coaching and mentoring are sometimes used interchangeably in the literature, coaching targets specific skills and problem-solving within a shorter time frame (Irby et al., 2023). This study examined the extent coaching increased AECs' expertise as related to VDOE Principal Performance Standard One, Instructional Leadership, and ten corresponding performance indicators (PIs) [Figure 1]. In 2022, the Virginia Board of Education approved a revision of its Guidelines for Uniform Performance Standards and Evaluation Criteria for Principals, developed in partnership with Virginia educational leaders and Stronge & Associates Educational Consulting, LLC (VDOE, 2022). The guidelines recognized the positive influence effective principals have on achievement, attendance, and collective efficacy (VDOE, 2022). Across studies, there were limited findings on principal coaching models, defined coaching roles, and ILSE. These gaps highlight the need for a deeper understanding of how coaching influences the ILSE of AECs.

What it Takes to be an Effective Principal Today

Research affirms the increasingly demanding responsibilities of principals and calls for greater investment in their development (Grissom et al., 2021; Darling-Hammond et al., 2026). Building on this need, research shows unaddressed stress diminishes principals' effectiveness and adversely influences outcomes, including student well-being and achievement (Wang, 2025). In 2021, the Wallace Foundation commissioned Grissom et al. (2021) to analyze how the principalship has evolved over 20 years and principals' impact on school outcomes. Through their research, they described the arduous role of today's principals and the critical need to invest in their development. Grissom et al. found successful principals demonstrate strength in instruction, people skills, and organizational management [Figure 2]. Related to instruction, successful principals foster teacher collaboration, participate in instructional dialogue, and facilitate PL (Grissom et al., 2021). Beyond these concrete behaviors, principals who exhibit strong instructional leadership and organize opportunities for teachers' development of instructional skills and purpose have been observed in schools with high levels of collective efficacy (Cansoy & Parlar, 2018). Principals with higher self-efficacy are associated with higher levels of work engagement and job satisfaction (Federici, 2013). Conversely, principals with low self-efficacy perceive a limited ability to control their environments, hindering their capacity to deploy effective strategies (Tschannen-Moran & Gareis, 2007).

Figure 2

Profile of an Effective Principal



Note. The figure is based on research provided by the Wallace Foundation in a report by Grissom et al. (2021). The figure was developed using Canva. Author's Own Work.

Inadequate Principal Professional Learning (PL) and Preparation

Effective principal preparation and PL are essential for success, yet principals perceive their preparation as inadequate and many report limited access to high-quality PL (Darling-Hammond et al., 2022; Gordon, 2020). In 2015, the Wallace Foundation commissioned four studies examining university-based principal preparation and barriers to effective leadership development (Davis, 2016). A common finding across the studies was that district leaders and principals identified concerns regarding the extent traditional preparation programs developed the knowledge and skills needed for the demands of the principalship. In one study, 408 superintendents rated preparation for 15 common school-leader responsibilities, including instructional leadership, change management, recruiting teachers, and using data, below the effective level, highlighting concerns about the effectiveness of traditional principal preparation (Davis, 2016). More specifically, research shows principals need more development in leading schoolwide improvement, using data, and serving students with disabilities (Darling-Hammond et al., 2022). In a national study by the National Association of Elementary School Principals (NAESP) and the Learning Policy Institute (LPI), 84% of principals reported difficulties accessing PL, with few engaging in job-embedded experiences like mentoring and coaching (Levin et al., 2020). These growing demands, coupled with rising principal turnover, highlight the urgent need for districts to invest in the development of AECs (Golding et al., 2021; Grissom et al., 2021; Darling-Hammond et al., 2026).

Exemplary Principal Professional Learning Includes Coaching

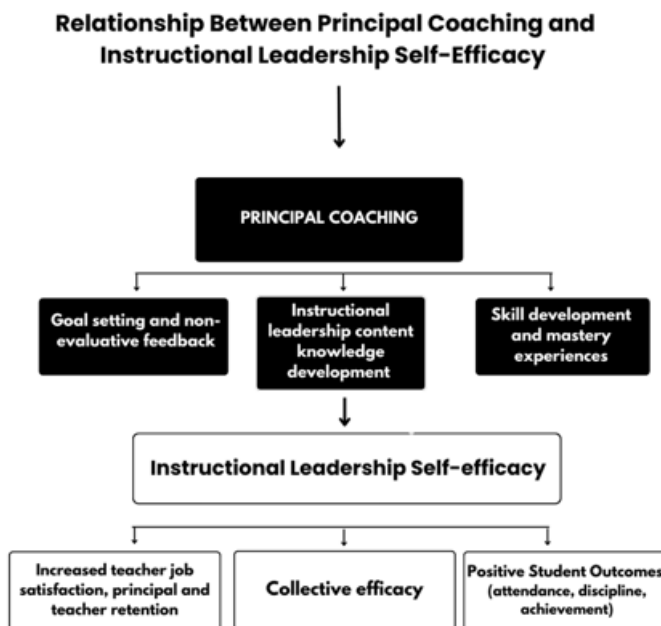
Researchers have identified coaching and mentoring as effective forms of PL to improve leadership practices and school outcomes (Darling-Hammond et al., 2022; Darling-Hammond et al., 2026; Hobson & van Nieuwerburgh, 2022; van Nieuwerburgh et al., 2020). Coaching enhances the professional competencies and emotional resilience of school leaders, helping them manage the demands of their job (Campbell & van Nieuwerburgh, 2018). In particular, coaching contributes to resource sharing, collaborative problem-solving, and targeted skill development (Brinkmann et al., 2021; Gimbel & Kefor, 2018; Irby et al., 2023; Lochmiller, 2018). Darling-Hammond et al. (2022) found coaching and mentoring were associated with increased student learning, principal preparedness, and efficacy, sharing that 87% of principals who accessed a coach felt the coach contributed to their success. Yet, just 23% reported having access to a coach. Wise and Cavazos (2017) conducted a study to quantify the prevalence of coaching among U.S. principals and to understand its benefits, finding 85% of principals who had a coach believed the coach improved their effectiveness, and 72% felt coaching helped them increase student achievement (Wise & Cavazos, 2017). van Nieuwerburgh et al. (2020) explored the coaching component of an aspiring principal program supported through the Australian Department of Education, finding coaching increased mentees' hope and optimism, created a safe space for learning, and increased strategic school leadership. These findings suggest districts can accelerate the growth of AECs if coaching is positioned as a foundational component of capacity building.

Conceptual Framework

Figure 3 illustrates the conceptual framework for this case study, showing the relationship between non-evaluative, one-on-one coaching, instructional leadership PIs, ILSE, and school outcomes. The AECs in this case study perceived that coaching strengthened their ILSE related to ten VDOE instructional leadership PIs [Figure 1] in alignment with social cognitive theory (SCT). As Bandura and the National Institute of Mental Health (1986) theorized, scaffolded learning, modeled strategies, and goal-aligned feedback influence growth and efficacy. Research highlights a reciprocal relationship between principal efficacy, positive student outcomes, and collective teacher efficacy, reinforcing school success (Hattie & Zierer, 2018; Husain et al., 2021; Tschannen-Moran & Gareis, 2007). The development of instructional leadership expertise through coaching may enhance principals' ILSE, positively influencing school outcomes [Figure 3].

Figure 3

Conceptual Framework - The Relationship Between Principal Coaching and Instructional Leadership Self-Efficacy



Note. Informed by the works of Aguilar, (2013); Bandura and National Institute of Mental Health (1986); Darling-Hammond et al., (2022); Karakose, (2024); van Nieuwerburgh et al. (2020); Wise and Cavazos (2017). Author's Own Work

Methodology

According to Stake (1995), case study researchers analyze bounded systems to gain rich perspectives. Case study methodology was appropriate to explore a cohort of AECs' inner beliefs about coaching, instructional leadership PIs, and ILSE. Institutional Review Board (IRB) and school division approval were obtained prior to obtaining the archival data. The verified data set, composed of qualitative and quantitative survey responses, achieved a 70% response rate (14 out of 20). Consistent with the depth required of case study research (Stake, 1995), the archival data sources were analyzed using a paired approach. Ten quantitative Likert-type items were analyzed using descriptive statistics, while ten corresponding open-response items were analyzed through first and second cycle coding to study participants' perceptions of how coaching influenced their ILSE (Saldaña, 2013). This dual focus allowed for the development of themes, findings, and implications grounded in measurable data and rich perspectives (Stake, 1995).

Selection of the Case

Twenty AECs formed a single, bounded case defined by shared experiences. The AECs participated in the same leadership program, were employed in the same division, and were in similar career stages. They were assistant principals or principals with fewer than two years of experience. The school division confirmed diversity among participants in racial background, gender, school assignment, and professional experience. Fourteen of the 20 eligible AECs participated in the study, resulting in a 70% response rate for the bounded case.

Survey Instrument

An anonymous and voluntary post-program survey was administered by the school division to examine the extent AECs believed coaching increased their ILSE related to ten VDOE PIs [Figure 1]. The program coordinator, who held no supervisory role, communicated that participation was anonymous and optional. Survey instructions asked participants to respond to the questions by reflecting on their sense of self-efficacy related to ten PIs before and after receiving coaching. To ensure understanding, self-efficacy was defined within the survey as one's "capabilities to structure a particular course of action to produce desired outcomes in the school he or she leads" (Tschannen-Moran & Gareis, 2004, p. 573). Each survey item began with the sentence stem, "To what extent did the coaching provided within the AEC program increase your self-efficacy in the following area?" AECs reported increases in their ILSE on a five-point scale (1 not at all, 2 very little, 3 some degree, 4 quite a lot, or 5 a great deal), similar to rating approaches used within a self-efficacy measurement tool developed by Tschannen-Moran and Gareis (2004). After selecting a Likert-type rating for each PI, AECs utilized an open-response field to provide rich explanations of their ratings, thus integrating qualitative responses directly with quantitative ratings to enhance interpretability (McLeod, 2008; Patton, 2002).

Analysis of Likert-type Survey Items

Recalling the survey prompt, AECs self-assessed the extent to which coaching increased their ILSE related to ten VDOE PIs [Figure 1]. The researcher manually calculated ratings to identify trends and identify items participants selected mostly 4-5s, indicating high agreement, and 3-5s, all levels of agreement. Next, the researcher identified items with ratings of 1-2, which indicated coaching increased ILSE very little or not at all. After identifying trends, descriptive statistical analysis was conducted to examine the mean, median, mode, and standard deviation for each item and across items. The researcher analyzed range, clustering of ratings, and variability to identify outliers and note patterns (Newhart & Patten, 2023; Goldring & Jones, 2022). Finally, the researcher created tables to examine overall agreement and percentage frequency distributions to assess the extent to which AECs perceived coaching to have increased their ILSE related to each PI [Figure 1].

Analysis of Open-Response Survey Items

The AECs provided vivid justifications for their rating selections within open-response survey fields, explaining the extent to which coaching increased their ILSE related to each PI [Figure 1]. Qualitative responses added depth to the corresponding Likert-type ratings, allowing the researcher to further examine the inner thoughts of the case. In the first stage of qualitative analysis, the researcher analyzed responses as a whole to gain a sense of the case's feelings related to coaching and their ILSE (Creswell and Poth, 2018). Excerpts related to the research question were noted. Next, the researcher used inductive coding to manually tally emergent ideas and summarize reflections (Creswell & Poth, 2018; Saldaña, 2013). Repeated phrases, quotes, and words were organized in an electronic spreadsheet and classified by similar concepts with a code to develop and assess interpretations and to compare to the literature (Creswell & Poth, 2018; Jugessur, 2022; Saldaña, 2013). During second-cycle coding, the researcher grouped related codes and refined categories to identify and summarize themes. Analytic and reflexive memos were maintained throughout the coding process to note patterns, reflect on interpretations, and record decisions related to code and theme development (Saldaña, 2013). Responses that diverged from emerging themes were examined to determine whether they warranted modification. Themes were identified based on recurring patterns.

Credibility and Trustworthiness

Establishing credibility and trustworthiness was central to this study. The researcher's background as an instructional coach, principal, and principal supervisor provided contextual insight, enhancing interpretation through an understanding of participants' experiences. Acknowledging the researcher's positionality could introduce bias, steps were taken to maintain transparency and accuracy (Kivunja & Kuyini, 2017; Stake, 2006). In alignment with the strategies of Lincoln and Guba (1985), the researcher utilized peer debriefing and auditing to challenge interpretations and strengthen the trustworthiness of the findings. The inclusion of multiple data sets (qualitative and quantitative) supported comprehensive and credible interpretations (Lincoln & Guba, 1985). Additionally, the researcher engaged in personal reflection and ongoing reflexivity throughout the study to examine potential assumptions and biases.

Study Considerations

Several considerations were addressed to mitigate potential limitations. This case study examined 14 of 20 eligible elementary AECs, making the findings particularly germane to elementary contexts. As new leaders may be hesitant to fully disclose beliefs, the survey was anonymous, voluntary, and framed as a means for program improvement and a contribution to research. Informed consent and confidentiality were emphasized, and AEC coaches held no supervisory role. The researcher could not match responses to each AEC due to the anonymity of the survey. Although nonresponse bias cannot be ruled out due to self-reported data, the school division confirmed the cohort's diversity of experience, school assignments, and racial makeup. Although case study methods can raise concerns regarding scope and subjectivity, the benefits of this study outweighed limitations. While the small number of participants is not generalizable, the diversity among the AECs across 14 varied school settings enhances the applicability of the findings for other school systems, casting a net (Stake, 1995) for those interested in developing AEC coaching programs and successful principals. The study expands current scholarship and provides actionable insights to prepare AECs for the principalship (Yin, 2014).

Results

The following sections present the results examining AECs' perceptions of the extent to which coaching increased their ILSE across ten VDOE instructional leadership PIs [Figure 1]. Quantitative results indicated 100% perceived coaching as contributing to increased ILSE for performing these responsibilities. Qualitative results demonstrated consistent appreciation for non-evaluative one-on-one coaching and time to collaborate and learn alongside coaches. The results contribute to the research related to specific coaching approaches, the influence of coaching on specific instructional leadership skills, and provide a detailed analysis regarding the influence of one-on-one coaching on ILSE (Jones, 2015; Hobson & van Nieuwerburgh, 2022).

Quantitative Results

Quantitative findings suggested coaching experiences were associated with increased ILSE among all AECs. Survey items aligned to ten instructional leadership PIs [Figure 1]. Descriptive statistics for the ten Likert-scale items are presented in Table 1, with the final row summarizing overall results.

Table 1*AECP Instructional Leadership Self-Efficacy (ILSE) Quantitative Survey Responses*

Survey item	VDOE Performance Standard Indicator (PI)	N	M	SD	Mode
1	1.1 Implement vision and mission	14	4.85	0.36	5
2	1.2 Develop instruction to increase achievement	14	4.78	0.42	5
3	1.4 Analyze data and instruction to increase achievement	14	4.14	1.02	5
4	1.5 Share research-based strategies	14	4.21	0.80	5
5	1.6 Collaborate to effectively deliver curriculum	14	4.64	0.49	5
6	1.7 Generate and align resources	14	4.28	0.72	5
7	1.8 Use data to inform feedback and instruction	14	4.21	0.97	5
8	1.10 Provide focus on continuous learning	14	4.71	0.46	5
9	1.11 Support data-driven professional development	14	4.71	0.61	5
10	1.12 Provide support and time for professional development	14	4.85	0.36	5
All responses		140	4.54	0.70	5

Source: Author's Own Work

Mean scores ranged from 4.14 to 4.85, demonstrating participants perceived coaching as a positive influence on their ILSE. The overall mean was 4.54, with a median of 4.67. The mode for each item, as well as the overall mode, was 5, demonstrating most AECs indicated they perceived coaching to have increased their ILSE “a great deal.” The overall standard deviation was 0.70, indicating consensus and clustering around the mean (Newhart & Patten, 2023).

Table 2

Frequency Distribution of the Extent Coaching Increased AECs' Instructional Leadership Self-Efficacy (ILSE)

Survey item	VDOE Performance Standard Indicator (PI)	N	5 A great deal	4 Quite a bit	3 Some degree	2 Very little	1 Not at all	Overall agreement
1	1.1 Implement vision and mission	14	12 / 85.7%	2 / 14.2%	0 / 0%	0 / 0%	0 / 0%	14 / 100%
2	1.2 Develop instruction to increase achievement	14	11 / 78.8%	3 / 21.4%	0 / 0%	0 / 0%	0 / 0%	14 / 100%
3	1.4 Analyze data and instruction to increase achievement	14	7 / 50.0%	3 / 21.4%	3 / 21.4%	1 / 7.0%	0 / 0%	13 / 92.8%
4	1.5 Share research-based strategies	14	6 / 42.8%	5 / 35.7%	3 / 21.4%	0 / 0%	0 / 0%	14 / 100%
5	1.6 Collaborate to effectively deliver curriculum	14	9 / 64.2%	5 / 35.7%	0 / 0%	0 / 0%	0 / 0%	14 / 100%
6	1.7 Generate and align resources	14	6 / 42.8%	6 / 42.8%	2 / 14.2%	0 / 0%	0 / 0%	14 / 100%
7	1.8 Use data to inform feedback	14	8 / 57.1%	1 / 7.0%	5 / 35.7%	0 / 0%	0 / 0%	14 / 100%
8	1.10 Provide focus on continuous learning	14	10 / 71.4%	4 / 28.5%	0 / 0%	0 / 0%	0 / 0%	14 / 100%
9	1.11 Support data-driven professional development	14	11 / 78.5%	2 / 14.2%	1 / 7.0%	0 / 0%	0 / 0%	14 / 100%
10	1.12 Provide support and time for professional development	14	12 / 85.7%	2 / 14.2%	0 / 0%	0 / 0%	0 / 0%	14 / 100%

Source: Author's Own Work

Notably, 100% of participants selected a 3 or higher on nine of ten items, indicating consistent agreement that AECs felt coaching increased their ILSE [Table 2]. Over 75% of AECs reported their ILSE increased “a great deal” related to instructional leadership skills such as leading a shared vision, instructional planning and continuous improvement, and supporting data-informed professional learning [Figure 1]. PI 1.1 and 1.12, relating to leading a shared vision and evaluating programs to support rigorous instruction and improvement, received the highest levels of agreement, with a mean of 4.85. PI 1.4, relating to using data and instructional analysis to improve teaching and learning, had the lowest mean score, 4.14, and the lowest percentage of agreement for all items (92.8%) [Table 1; Table 2], with one participant indicating coaching increased his/her ILSE “very little.” Correspondingly, qualitative analysis indicated a need for additional time and more in-depth content in this area.

Qualitative Results

After selecting Likert-type ratings to indicate the extent coaching increased their ILSE related to each instructional leadership PI, AECs provided rich written explanations for their rating choices. Based on these qualitative responses, themes were established when a similar concept was referenced by three or more AECs. As minimal variation in participants’ experiences was observed, no disconfirming cases substantially altered thematic interpretations. Below are the PIs in which the theme of one-on-one coaching and collaboration time with a coach emerged.

VDOE PI 1.1: Lead the development and implementation of a shared vision for educational improvement and develop a mission and programs consistent with the division’s strategic plan (VDOE, 2022, p. 9)

As displayed in Table 2, 100% of AECs agreed coaching increased their ILSE related to PI 1.1. Eight AECs, 57.14%, cited one-on-one collaboration and conversations with coaches as the reason for their increased ILSE in this area. Qualitative responses demonstrated psychological safety and trust between AECs and coaches. Phrases such as “given me courage,” “provided a safe space,” and “let me pick your brain” illustrated the non-evaluative relationship cultivated by coaches. AECs also used descriptions such as “collaboration with my 1:1 coach,” “rich discussions,” “relevant feedback,” and “my coach shed a light” to characterize time spent with coaches related to PI 1.1. Six AECs shared that one-on-one coaching and time with their coach led to an improved understanding of how to align their school mission and improvement plan with the district’s and that they felt better prepared to explain the purpose behind the district and school plan to staff. For example, AEC 6 stated, “One-on-one coaching allowed me to see not only what to do, but to pick the brain of an experienced principal for the *why* behind it.”

VDOE PI 1.2: Implement, monitor, and evaluate instructional programs that enhance relevant and rigorous teaching and learning and increase student academic progress (VDOE, 2022, p. 9)

As displayed in Table 2, 100% of the AECs reported increased ILSE related to their ability to implement, monitor, and evaluate instructional programs to provide relevant and rigorous teaching and learning to increase achievement. Eleven AECs, 78.5%, reported coaching increased their ILSE “a great deal,” and three, 21.4%, reported it increased “quite a lot.” Half of the AECs attributed individual coaching conversations as a reason for their increased ILSE. Six explained

these discussions helped them think deeply, solve problems, and put processes in place to monitor instruction. Phrases such as “deep discussions,” “pick your brain,” and “helped me put things in place” appeared across responses. AECp 11 shared his/her coach helped them think through potential risks and benefits of decisions, and shared,

In my one-on-one coaching sessions, I was able to see the importance of an instructional lens and learned I need to continue to grow my instructional knowledge at the elementary level. I was able to set goals for myself to do this.

Six AECps also noted collaborative learning activities and evaluation of instructional programming with a coach increased their ILSE. References to coaches strengthening professional learning communities, instructional leadership teams, and increasing the capacity of instructional coaches were also included.

VDOE PI 1.4: Analyze achievement data and instructional strategies to make appropriate educational decisions that improve instruction, increase achievement, and maximize school effectiveness progress (VDOE, 2022, p. 9)

Thirteen AECps, 92.8%, reported they felt coaching increased their ILSE to analyze data and instruction to make decisions that improve instruction, achievement, and effectiveness. Eight AECps shared coaching focused on data analysis contributed to increased ILSE. Notably, one AECp reported coaching increased his/her ILSE “very little” in this area, explaining additional time and opportunity to observe the coach responding to data would have further increased his/her ILSE. The words “discuss” and “analyze” appeared across responses. AECp 2 shared the coach helped “unpack” the work of data analysis. AECp 13 explained,

In working with my veteran principal, I was able to see how to analyze achievement data and make decisions to create positive change and growth. I was able to get ideas from two schools. We were able to see successful growth in my school.

AECps consistently noted coaches and the program coordinator broadened their perspective and built their skillset to interpret assessment reports and leverage data to make decisions.

VDOE PI 1.8: Monitor and evaluate the use of diagnostic, formative, and summative assessments to provide timely and accurate feedback to students and parents/caregivers, and to inform instructional practices (VDOE, 2022, p. 9)

As displayed in Table 2, 100% of the AECps agreed coaching increased their ILSE related to using assessments to provide feedback and inform instruction. Although a majority of AECps, 57%, reported their ILSE increased “a great deal,” five participants reported an increase of “some degree.” Consequently, the selection of “some degree” represented the highest frequency for this specific item. AECp 10 noted a “great deal” of increase in his/her ILSE related to PI 1.8, explaining, “1:1 coaching provided me great insight and allowed me to ask questions in a safe space.” AECp 12 also reported “a great deal” of increase, explaining their coach enhanced his/her knowledge of types of assessments and how to run specific reports for parents and staff.

VDOE PI 1.10: Provide the expectation and focus for continuous learning of all members of the school community (VDOE, 2022, p. 9)

As displayed in Table 2, 100% of the AECPs agreed coaching increased their ILSE related to providing a continuous learning focus and clear expectations for PL. Ten AECPs, 71.4%, shared coaching from the program coordinator and their assigned principal coach increased their ILSE “a great deal” in this area, and four, 28.5%, reported “quite a lot” of increase. AECPs shared feedback and guidance from their assigned principal was invaluable, using phrases such as “safe space,” “sounding board,” and “helpful feedback.” AECP 2 explained, “Learning how others handle the demands and mitigate them for staff from my coach was beneficial.” AECP 9 also valued one-on-one time, stating, “1:1 coaching provided me with great insight and allowed me to ask questions in a safe space about how we provide PD.”

VDOE PI 1.11: Promote and support professional development and instructional planning and delivery practices that incorporate the use of achievement data and result in increased student progress (VDOE, 2022, p. 9)

Fourteen, 100%, of the AECPs believed coaching increased their ILSE to support data-driven PL and instruction to increase achievement. Eleven, 78.5%, reported a “great deal” of increase and two, 14.2%, felt coaching increased their ILSE “quite a lot”. One AECP selected “some degree.” AECPs referenced an appreciation of “time,” “feedback,” and “shared insight.” AECP 2 explained, “The 1:1 coach was instrumental for being a sounding board and providing me feedback to implement innovative professional learning opportunities.” AECP 4 shared, “Anecdotal and concrete examples/ideas were shared throughout.” AECP 11 shared, “I was able to collaborate with my mentor principal to plan PL and utilize this information in my current school.” AECP 14 reported an increase to “some degree,” describing a need for more isolated focus related instructional planning.

VDOE PI 1.12: Demonstrate the importance of sustained professional learning by participating in and providing adequate time and resources for teachers and staff for professional learning (VDOE, 2022, p. 9)

Fourteen AECPs (100%) reported coaching increased their ILSE related to PI 1.12. Of the 14, 85.7% indicated their ILSE increased “a great deal.” They used phrases such as “receiving feedback to implement,” and “able to discuss 1:1” to explain agreement. AECP 6 shared, “We discussed PL together, and several models were shared for how to provide these opportunities for staff.” AECP 7 explained, “I received direct feedback and guidance from my mentor principal.” AECP 9 explained one-on-one coaching broadened his/her perspective about how other principals allocate time for sustained PL and how they use instructional coaching cycles with teachers to increase relevance. AECPs consistently referenced learning new ideas for scheduling and resource sharing to support PL in their schools. Five AECPs explained they felt stronger in time allocation and staff-informed scheduling, suggesting this was a challenge for aspiring and early career principals before coaching.

Discussion

The quantitative and qualitative results of this study are supported by previous research indicating coaching contributes to strengthening school leaders' instructional leadership expertise and self-efficacy (Goldring et al., 2021; van Nieuwerburgh et al., 2020; Wise & Cavazos, 2017). Consistent with research on applied learning (Darling-Hammond et al., 2022; Darling-Hammond et al., 2026; Versland, 2016), the AECs in this study attributed their increased ILSE to one-on-one coaching and collaboration time with a coach. AECs repeatedly referenced one-on-one coaches when explaining growth in key instructional leadership PIs, including data-driven decision making, progress monitoring, providing feedback, and supporting sustained PL. In line with Social Cognitive Theory (SCT) (Bandura and the National Institute of Mental Health, 1986), AECs explained that coaches prompted self-reflection, modeled and provided supportive practice, and delivered targeted feedback. Aligning with Hobson's (2016) assertion that non-evaluative and non-judgmental approaches are foundational to professional growth through supportive learning, the trusting and non-evaluative nature of the coaching relationship within this program generated positive emotions for AECs. The results are consistent with the study's conceptual framework [Figure 3], demonstrating coaching can serve as a theoretically grounded mechanism for developing AECs' instructional leadership expertise and self-efficacy to perform important instructional responsibilities.

Findings

Quantitatively, 100% agreement was reported on nine of the ten items, and 92.8% agreement was reported on one item. Consistent with case study methodology, findings were identified through patterns and the examination of quantitative and qualitative data, with themes considered prominent when 50% or more of the AECs explicitly referenced one-on-one coaching and/or collaboration time with a coach. The findings offer a deep exploration of how non-evaluative one-on-one coaching can influence perceived ILSE in AECs.

Finding 1

AECs perceived one-on-one coaching increased their instructional leadership self-efficacy (ILSE) related to leading and implementing a shared vision and mission aligned to their division's strategic plan (VDOE PI 1.1)

As outlined in Table 2, 100% of the AECs perceived coaching to have increased their ILSE to lead and implement a shared vision and mission aligned to their division's strategic plan. The mean score for this PI was 4.85, reflecting a substantial increase in AECs' perceptions of their ILSE, as evidenced by twelve AECs selecting a rating of 5 ("a great deal") and two selecting 4 ("quite a lot"). With a standard deviation of 0.36, strong consensus within the case was demonstrated, suggesting AECs' felt their capacity to address PI 1.1 had strengthened (Newhard & Patten, 2023).

The AECs' qualitative responses offered rich contextual detail related to how one-on-one coaching increased their ILSE. Nine AECs, 64.28%, cited one-on-one coaching as a reason for the increase. Eleven, 78.57%, explained the coach and program coordinator provided valuable feedback and insight to strengthen their ability to develop and align their school's vision and goals to the division's. They shared appreciation for learning how to communicate the purpose behind their school plans. Additionally, AECs described working with coaches to review current school improvement plans and practice using various tools with coaching support. This finding aligns with the research of Darling-Hammond et al. (2022), who found principals and superintendents want more relevant principal preparation and PL focused on schoolwide processes to improve achievement. As outlined in the conceptual framework [Figure 3], AECs perceived job-embedded practice,

exposure to experienced principals' perspectives, constructive feedback, and a non-evaluative learning environment supported skill development and increased self-efficacy to perform PI 1.1.

Finding 2

AECs perceived one-on-one coaching increased their instructional leadership self-efficacy (ILSE) related to planning, monitoring, and evaluating instructional programs to enhance instruction and student progress (VDOE PI 1.2)

All AECs reported they perceived that one-on-one coaching increased their ILSE to plan, monitor, and evaluate instructional programs to improve instruction and student progress. Eleven selected a rating of 5 (“a great deal”) and three selected 4 (“quite a lot”). The mean score for this Item was 4.78, with a standard deviation of 0.42, showing low dispersion and strong consensus.

Within qualitative responses, seven AECs (50%) referenced the one-on-one coach as a reason for their increased ILSE. They also noted appreciation of time to learn and practice new strategies with a coach, with several sharing they could ask their coaches anything. Similarly, van Nieuwerburgh (2020) found coaching increased aspiring principals’ self-efficacy by providing reflective time, a sense of safety, and focus on individual needs. Consistent with the conceptual framework [Figure 3], AECs described collaborating with coaches who provided goal-oriented feedback and guidance in generating solutions for relevant school-based challenges. AECs also emphasized the value of time to work with experienced principals whose expertise aligned with their individual goals.

Finding 3

AECs perceived one-on-one coaching and collaboration with a coach increased their instructional leadership self-efficacy (ILSE) related to monitoring, evaluating, and leveraging assessments to provide feedback and inform instruction (VDOE PI 1.8)

As outlined in Table 2, 100% of the AECs reported coaching increased their ILSE related to PI 1.8, with a mean of 4.21. The standard deviation, 0.97, showed moderate dispersion (Newhart & Patten, 2023). Within the context of this study, close examination of ratings showed most responses clustered to a rating of 4 and 5, as eight, 57.1%, selected “a great deal,” and one, 7%, selected “quite a lot.” Five AECs, 35.7%, reported their ILSE increased “some degree,” the highest frequency observed for this rating. Similarly, Darling-Hammond et al. (2022) reported 77% of principals surveyed in a large-scale U.S. national sample reported needing more PL related to using student data for instructional improvement. Qualitatively, AECs stated one-on-one coaches were the reason for their increased ILSE related to PI 1.8. Eight AECs, 57.1%, referenced collaboration time with their coaches focused on assessments and leveraging data significantly helped prepare them for the principal role. Building on Warrick’s (2024) finding that principals valued coaching for its support in analyzing data and student work, Aguilar (2023) explained this support is critical for new leaders, as it provides the feedback needed to overcome decision doubt, thereby building agency and efficacy for data-driven decisions. Consistent with the conceptual framework [Figure 3], AECs explained their assigned coaches broadened their perspective by sharing approaches and assessments utilized in their schools, and that the combination of this exposure, individualized feedback, and a safe space to ask questions strengthened their expertise and skill set.

Finding 4

AECs perceived one-on-one coaching and collaboration with a coach increased their instructional leadership self-efficacy (ILSE) related to providing an expectation and focus on continuous learning for the school community (VDOE PI 1.10)

As outlined in Table 2, 100% of AECPS perceived coaching to have increased their ILSE a “great deal” or “quite a lot” related to providing an expectation and focus for continuous learning. The mean for this Item was 4.71, and the standard deviation was 0.46, showing consensus among AECs (Newhart & Patten, 2023). Ten, 71.4%, selected “a great deal” to describe the extent to which coaching increased their ILSE to provide expectations and a school-wide focus for PL. Within qualitative responses, eleven AECs (78.5%) shared that time collaborating with their coach and the program coordinator helped them develop PL, communicate with and motivate teachers, and foster a culture of learning. AECs noted learning strategies to promote shared decision-making, leverage instructional coaches, promote shared leadership, and communicate the “why” of PL. In alignment with the conceptual framework [Figure 3], research shows coaching focuses learning on individualized needs, provides relevant practice, and actionable learning (Aguilar, 2013; Darling-Hammond et al., 2022; van Nieuwerburgh et al., 2020).

Practical Implications

Drawing on firsthand experiences as instructional coaches, principals, and supervisors, the authors have observed the challenges that hinder principals’ ILSE. Given the critical need to invest in principal development for positive school outcomes (Grissom et al., 2021; Darling-Hammond et al., 2026), these findings offer implications for district leaders, state education departments, and higher education preparation programs.

Implication 1

School district AEC programs should include coaching as a component of instructional leadership PL.

Based on the compelling quantitative and qualitative evidence showing strong agreement that coaching increased AECs’ perceived ILSE across all instructional leadership PIs [Figure 1], it is essential that school districts embed a dedicated coaching component within AEC programs. This approach addresses the documented need for more relevant and individualized training on critical responsibilities like evaluating data and developing instruction to meet diverse learners’ needs (Darling-Hammond et al., 2022). Consistent with Bandura’s SCT (Bandura and the National Institute of Mental Health, 1986), coaching provides key mechanisms for self-efficacy and skill development through mastery experiences, supportive learning, and individualized feedback. Therefore, school districts should prioritize coaching to provide exemplary PL, thereby ensuring the enhancement of ILSE, a critical precursor to effective school leadership and positive student achievement [Figure 3].

Implication 2

AEC leadership coaching should be implemented through a non-evaluative, one-on-one approach that remains distinct from formal evaluation processes.

To maximize the effectiveness of the coaching component, school districts should ensure principal coaches hold no evaluative responsibilities over the AECs they support. Separating coaching from evaluation fosters the trust and open dialogue necessary for AEC vulnerability and honest reflection (Hobson & van Nieuwerburgh, 2022). To address potential funding concerns, this

study provides a model for leveraging experienced principals as coaches. The principal mentors in this study voluntarily participated and received no compensation for coaching, with district leaders providing scheduling flexibility. Since the coaches held no supervisory role over the AECs, the resulting non-evaluative environment enabled targeted feedback, encouraged questions, broadened AECs' perspectives, and supported individualized learning related to essential instructional leadership skills [Figure 1], as evidenced by the quantitative and qualitative results and the study's conceptual framework [Figure 3].

Implication 3

School division AECP programs should couple one-on-one coaching with job-embedded learning, professional development, and problem-solving.

AECs reported job-embedded, problem-solving experiences, such as observations and learning walks, as critical to increasing their ILSE, aligning with the research of Darling-Hammond et al. (2022). AECs noted appreciation of attending PL alongside coaches so they could discuss dilemmas, ask questions, and receive feedback about content in real-time. Consistent with Bandura's SCT, mastery experiences are a source of self-efficacy and skill development. School districts should consider ways to include coaches in PL with AECs and build in time for problem-solving and job-embedded activities, as illustrated in the conceptual framework [Figure 3].

Implication 4

School divisions should intentionally match AECs with experienced mentor principals outside of their current school who demonstrate strengths in the AECs' identified areas for growth.

This AEC leadership program utilized an experienced principal coaching model, pairing AECs with mentor principals from another school within the same school district. The experienced principals were selected by the program coordinator depending on the AECs' needs. As evidenced by qualitative responses, the experienced principals exposed AECs to how other schools operate, diverse perspectives, and different instructional leadership styles. They further supported AECs by providing non-evaluative feedback and inviting them into their schools to observe. While internal coaching between a principal and assistant principal within the same school may be convenient, intentionally assigning an external, experienced principal may offer distinct advantages: it broadens perspectives, models diverse leadership, builds content knowledge, and facilitates cross-setting network building [Figure 3]. This cross-site model provides a dedicated layer of support and goal-related feedback that AECs' home principals may not be able to consistently provide due to time constraints and interruptions that occur during the school day. This model also leverages already available human resources to enhance AEC programming.

Suggestions for Future Research

The findings from this study serve as a launching point for future research. Future studies could examine another critical leadership realm, such as organizational management or people skills (Grissom et al., 2021). A deeper connection to AECs' well-being could also be explored in relation to self-efficacy (Hobson & van Nieuwerburgh, 2022). Finally, a study that compares coaches' or mentors' experiences and perceptions to that of AECs could offer an additional layer of data leading to more practical implications for developing effective AEC preparation and coaching programs.

Conclusion

This case study found coaching as part of an AECp program positively influenced participants' perceptions of their instructional leadership self-efficacy (ILSE), aligning with Bandura's SCT (1986, 1997). As illustrated in the conceptual framework [Figure 3], experienced principals and a program coordinator immersed AECps in mastery experiences, modeled strategies, offered differentiated support, and gave real-time feedback during non-evaluative one-on-one sessions, strengthening AECp perceptions of their abilities to perform essential instructional leadership responsibilities (Holleb, 2016; Goldring et al., 2021; van Nieuwerburgh et al., 2020; Wise & Cavazos, 2017). The school division provided AECps and the coaches time out of their buildings to participate in coaching sessions, job-embedded learning, and PL sessions with a coach, thus also building a small network of support for AECps and partnerships among experienced principals to support new leaders. By analyzing perceptions and cognitive dimensions related to ILSE, this study highlights how a structured non-evaluative coaching approach can influence the development of key instructional leadership skills and AECps' beliefs in their ability to lead instruction [Figure 1]. The results contribute to the scholarship on principal self-efficacy, a vital factor influencing school culture and school outcomes. Additionally, it addresses research gaps by detailing specific AECp coaching approaches and strategies to support future research on coaching and principal development. The approaches utilized by this school division are also cost-effective as they capitalized on the human resources of their own leaders. The findings offer practical implications for school district leaders and state departments aiming to utilize coaching as a mechanism for principal development.

Correspondence

Danielle E. Colucci: colucci@estu.edu
ORCID iD: 0009-0002-6864-7719

Disclosure Statement and Funding

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Aguilar, E. (2013). *The Art of coaching*. Wiley.
- Aguilar, E. (2023). Transformational coaching for school leaders. *Educational Leadership*, 81(2). <https://ascd.org/el/articles/transformational-coaching-for-school-leaders>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/ Henry Holt & Co.
- Bandura, A., & National Institute of Mental Health. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Brinkmann, J. L., Cash, C., & Price, T. (2021). Crisis leadership and coaching: A tool for building school leaders' self-efficacy through self-awareness and reflection. *International Journal of Mentoring and Coaching in Education*, 10(2), 234–246. <https://doi.org/10.1108/IJMCE-01-2021-0009>
- Campbell, J., & van Nieuwerburgh, C. (2018). *The leader's guide to coaching in schools: creating conditions for effective learning* (1st ed.). Corwin.

- Cansoy, R., & Parlar, H. (2018). Examining the relationship between school principals' instructional leadership behaviors, teacher self-efficacy, and collective teacher efficacy. *International Journal of Educational Management*, 32(4), 550–567. <https://doi.org/10.1108/IJEM-04-2017-0089>
- Creswell, J.W. and Poth, C.N. (2018) *Qualitative inquiry and research design: choosing among five approaches* (4th ed.). Sage Publications, Inc., Thousand Oaks.
- Darling-Hammond, L., Wechsler, M. E., Levin, S., Leung-Gagné, M., & Tozer, S. (2022). *Developing effective principals: What kind of learning matters?* Learning Policy Institute. https://learningpolicyinstitute.org/media/3698/download?inline&file=Developing_Effective_Principals_REPORT.pdf
- Darling-Hammond, L., Fitz, J., Giani, M. V., Gordon, M. F., & Wechsler, M. (2026). *The principal effect: How investing in school leaders is key to solving education's challenges*. Learning Policy Institute. <https://doi.org/10.54300/644.197>
- Davis, J. (2016). *Improving University Principal Preparation Programs: Five Themes from the Field*. The Wallace Foundation. <https://doi.org/10.59656/EL-PP2361.001>
- Feeney, M. K., & Bozeman, B. (2008). Mentoring and network ties. *Human Relations (New York)*, 61(12), 1651–1676. <https://doi.org/10.1177/0018726708098081>
- Federici, R. A. (2013). Principals' self-efficacy: relations with job autonomy, job satisfaction, and contextual constraints. *European Journal of Psychology of Education*, 28(1), 73–86. <https://doi.org/10.1007/s10212-011-0102-5>
- Gimbel, P., & Kefor, K. (2018). Perceptions of a principal mentoring initiative. *NASSP Bulletin*, 102(1), 22–37. <https://doi.org/10.1177/0192636518754405>
- Goldring, J., & Scott Jones, J. (2022). Introducing Descriptive and Exploratory Statistics. In *Exploratory and Descriptive Statistics* (pp. 1–22). SAGE Publications, Limited. <https://doi.org/10.4135/9781529682786.n1>
- Goldring, E., Rubin, M., & Herrmann, M. (2021). *The Role of Assistant Principals: Evidence and Insights for Advancing School Leadership*. The Wallace Foundation. <https://www.wallacefoundation.org/knowledge-center/pages/the-role-of-assistantprincipals-evidence-insights-for-advancing-school-leadership.aspx>
- Gordon, S. P. (2020). *The Principal Development Pipeline: A Call for Collaboration*. NASSP Bulletin, 104(2), 61–84. <https://doi.org/10.1177/0192636520923404>
- Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How Principals Affect Students and Schools: A Systematic Synthesis of Two Decades of Research*. The Wallace Foundation. <http://www.wallacefoundation.org/principalsynthesis>
- Gümüş, S., & Bellibaş, M. Ş. (2020). The relationship between professional development and school principals' leadership practices: the mediating role of self-efficacy. *International Journal of Educational Management*, 34(7), 1155–1170. <https://doi.org/10.1108/IJEM-10-2019-0380>
- Hattie, J. & Zierer, K. (2018). *10 mindframes for visible learning: Teaching for success*. Routledge/ Taylor & Francis Group.
- Hobson, A. J. & van Nieuwerburgh, C. J. (2022). Extending the research agenda on (ethical) coaching and mentoring in education: embracing mutuality and prioritising well-being. *International Journal of Mentoring and Coaching in Education*, 11(1), 1–13. <https://doi.org/10.1108/IJMCE-11-2021-0099>
- Hobson, Andrew. (2016). Judgementoring and how to avert it: introducing ONSIDE Mentoring for beginning teachers. *International Journal of Mentoring and Coaching in Education*. 5(2), 87–110. 10.1108/IJMCE-03-2016-0024.

- Holleb, A. (2016). *Principal Self-Efficacy Beliefs: What Factors Matter?* [Doctoral dissertation, Virginia Polytechnic Institute and State University]. VTechWorks. <https://vtechworks.lib.vt.edu/server/api/core/bitstreams/5ee64184-e923-4326-99ff-98d2aca86658/content>
- Husain, A. N., Miller, L. C., & Player, D. W. (2021). Principal turnover: Using teacher-assessments of principal quality to understand who leaves the principalship. *Educational Administration Quarterly*, 57(5), 683–715.
- Irby, B. J., Pashmforoosh, R., Tong, F., Lara-Alecio, R., Etchells, M. J., Rodriguez, L., Prickett, C., & Zhao, Y. (2023). Virtual mentoring and coaching for school leaders participating in virtual professional learning communities. *International Journal of Mentoring and Coaching in Education*, 11(3), 274–292. <https://doi.org/10.1108/IJMCE-06-2021-0072>
- Jones, M. (2015), “Mentoring and coaching in education practitioners’ professional learning”, *International Journal of Mentoring and Coaching in Education*, 4 (4), 293-302.
- Jugessur, Y. S. (2022). In vivo coding qualitative data analysis methodology adapted, contextualized into 7 stages and applied to data from interview, focus group and case study in school enterprises. *International Journal of Humanities and Social Science Invention*, 11(5), 30-36.
- Karakose, T., Kardas, A., Kanadli, S., Tülübaş, T., & Yildirim, B. (2024). How collective efficacy mediates the association between principal instructional leadership and teacher self-efficacy: findings from a meta-analytic structural equation modeling study. *Behavioral Sciences*, 14(2), 85. <https://doi.org/10.3390/bs14020085>
- Kivunja, C., & Kuyini, A. (2017). Understanding and applying research paradigms in education. *International Journal of Higher Education*, 6(5), 26–41.
- Levin, S., Leung, M., Edgerton, A. K., & Scott, C. (2020). Elementary school principals’ professional learning: Current status and future needs. Palo Alto, CA: Learning Policy Institute.
- Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Lochmiller, C. R. (2018). Coaching principals for the complexity of school reform. *Journal of School Leadership*, 28(2), 144–172. <https://doi.org/10.1177/105268461802800201>
- McLeod, S. (2008) Attitude Measurement. Likert Scale, Likert Scale. <https://www.simplypsychology.org/likert-scale.html>
- Newhart, M. & Patten, M. (2023). *Understanding research methods: an overview of the essentials* (11th ed.). Routledge.
- Patton, M. Q. (2002). Two Decades of Developments in Qualitative Inquiry: A Personal, Experiential Perspective: A Personal, Experiential Perspective. *Qualitative Social Work*, 1(3), 261-283. <https://doi.org/10.1177/1473325002001003636> (Original work published 2002)
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). SAGE Publications.
- Saldaña, J. (2025). *The coding manual for qualitative researchers* (5th ed.) SAGE Publications.
- Stake, R. E. (1995). *The art of case study research*. Sage.
- Stake, R. E. (2006). *Multiprofessional learning case study analysis*. The Guilford Press.
- Tschannen-Moran, M. & Gareis, C.R. (2007). Cultivating principals’ self-efficacy: Supports that matter. *Journal of School Leadership*, 17(1), 89–114.
- Tschannen-Moran, M., & Gareis, C. R. (2004). Principals sense of efficacy: assessing a promising construct. *Journal of Educational Administration*, 42(5), 573–585.
- van Nieuwerburgh, C., Barr, M., Munro, C., Noon, H., & Arifin, D. (2020). Experiences of aspiring school principals receiving coaching as part of a leadership development programme. *International Journal of Mentoring and Coaching in Education*. 9(3), 291-306. <https://doi.org/10.1108/IJMCE-11-2019-0107>

- Versland, T. M. (2016). Exploring Self-Efficacy in Education Leadership Programs: What Makes the Difference? *Journal of Research on Leadership Education*, 11(3), 298–320. <https://doi.org/10.1177/1942775115618503>
- Virginia Department of Education. (2022, March 17). *Virginia Board of Education Guidelines for uniform performance standards and evaluation criteria for principals*. Virginia Department of Education. <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/performance-evaluation/principals>
- Wang, F. (2025). Emotional well-being of school principals: exploring enhancement and risk factors. *Journal of Educational Administration*, 63(3), 224–238. <https://doi.org/10.1108/JEA-07-2024-0239>
- Warrick, T. (2024). *A case study of principal perceptions of the impact of instructional leadership in a low performing school district* [Doctoral dissertation, National University].
- Wise, D., & Cavazos, B. (2017). Leadership coaching for principals: a national study. *Mentoring & Tutoring: Partnership in Learning*, 25(2), 223–245.
- Yin, R. K. (2014). *Case study research design and methods* (5th ed.). Sage Publications.

EDUCATIONAL PLANNING SUBMISSION OF MANUSCRIPTS

Call for Manuscripts:

Educational Planning welcomes manuscripts relating to all aspects of international educational planning in, but not limited to, the following themes:

- The theoretical development of educational planning
- Educational planning practices
- Educational planning concept applications
- Professional observations of educational planning challenges
- Empirical studies on educational planning issues

The journal complies with the following schedule for publication:

- Winter Issue: Deadline for paper submission is January 1
- Spring Issue: Deadline for paper submission is April 1
- Summer Issue: Deadline for paper submission is July 1
- Fall Issue: Deadline for paper submission is October 1

Submission guidelines:

- Length of manuscript – limited to 8,000 words including abstracts, references, tables, figures and appendixes.
- Writing style – Adherence to APA Publication Guidelines, 7th edition.
- Cover page – should include the manuscript title, author(s)' name(s), official title(s), affiliation(s) and contact information.
- The manuscript – should be submitted in a separate file to include the paper title, a 200-word abstract, the paper itself, the references, the tables, the figures and the appendixes if any. The identity of the author(s) should not be disclosed at the paper for peer review.

Review Process:

All manuscripts submitted to Educational Planning for publication will be sent to Dr. Selahattin Turan, the Editor, with attachments in WORD files. (e-mail: selahattinturan2100@gmail.com) Manuscripts can also be submitted online through the website of the International Society for Educational Planning (ISEP). The manuscripts will first be screened by the editors for suitability to the planning themes of the journal. They will then be sent for peer review by at least two members of the editorial review board. In consideration of the reviewers' comments, the editors will make decision and inform the author(s) of the decision of the editors for the manuscript to be published, to be rejected, to be revised and published, or to be revised and resubmitted for another review.

A summary of the reviewers' comments and recommendations on the manuscript will be shared with the author(s). The entire review process will take about four weeks. All the accepted manuscripts in their final publication format will be sent to the author(s) for final approval before publication. Author(s) of accepted manuscripts for publication will be asked to sign manuscript copyright release forms to Educational Planning before publication. All the issues of Educational Planning containing the manuscripts will be published online on the website of the International Society for Educational Planning.

GUIDELINES FOR SUBMITTING BOOK REVIEWS

Submission of book reviews is invited with the following guidelines:

1. The book must have been published with a recognized publisher within the last five years.
2. The author(s) and/or editor(s) of the book must be identified.
3. The reviewer cannot be the author(s) or editor(s) of the book under review.
4. The book review must demonstrate a professional tone, and provide positive, constructive and objective feedback.
5. The viewpoints expressed in the book reviews are those of the reviewer and do not represent the opinions of the Educational Planning Editorial Board. The reviewers will bear full legal responsibility of their published review.
6. The book review should range between three to five thousand words.
7. All the submitted book reviews must adhere to the APA Guidelines (7th edition).
8. An abstract of 100-150 words must be provided.
9. The book reviews may include, but not be necessarily limited to, the following sections:
 - a. Introduction
 - b. Overall description of the book
 - c. Strengths
 - d. Weaknesses
 - e. Major contributions
 - f. Comparison with similar books published in the last five years
 - g. Potential readership
 - h. Use as a textbook or reference material
 - i. Recommendations for improvement
10. All submitted book reviews will undergo a blind review process by at least two peer reviewers.
11. The editorial decision regarding publication will fall into one of the following categories:
 - a. Accept for publication as submitted
 - b. Accept for publication with minor revisions
 - c. Revise and resubmit for further review
 - d. Reject
12. Drafts of book reviews should be submitted to Dr. Selahattin Turan, Editor-in-Chief of Educational Planning.

Name: _____

Last	First	Middle
------	-------	--------

Mailing Address: _____

Email: _____

Payment by check, money order, or Purchase Order required with application.

MAKE PAYABLE TO: ISEP
RETURN MEMBERSHIP APPLICATION AND PAYMENT TO:

Vol. 33, No. 3

ORGANIZATION

The Society was founded December 10, 1970, in Washington, DC. Over 50 local, state, national, and international planners attended the first organizational meeting.

Since then, its continued growth demonstrates the need for a profession's organization with educational planning as its exclusive concern.

PURPOSE

The International Society for Educational Planning was established to foster the professional knowledge and interests of educational planners. Through conferences and publications, the society promotes the interchange of ideas within the planning community. The membership includes persons from the ranks of governmental agencies, school-based practitioners, and higher education.

MEMBERSHIP IN THE SOCIETY

Membership in the society is open to any person active or interested in educational planning and the purposes of the Society. To join the Society or renew a membership please complete and submit the enclosed form.

Please forward check/money order/PO to:

ISEP
Dr. Jodie Brinkmann, Treasurer
5701 Maple Brook Drive
Midlothian, VA 23112, USA

EDUCATIONAL PLANNING

