

Social Justice Leadership for Students' Holistic Lifelong Learning through Professional Learning Community, Engagement, and Sustainability: Perspectives of Principals and Teachers in the United States

BY

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Abstract

This study explores how US principals and teachers advocate social justice leadership for students' holistic lifelong learning through professional learning community, engagement, and sustainability in K12 schooling in the United States. The descriptive qualitative study was employed to conduct a one-on-one interview with 12 principals and 12 teachers through semi-structural and open-ended interview protocols within an average of 60 minutes, either in person or remotely. This study found that principals and teachers face three major challenges while promoting social justice for students' lifelong learning. The challenges are (1) lack of resources, such as funding; (2) implicit bias, such as stereotypes; and (3) limited training and professional development. This study discovered that principals and teachers have three opportunities to promote social justice for students' lifelong learning. They are (1) equity-centered pedagogy and leadership, (2) community engagement, and (3) leadership for systematic change. Findings suggested that principals and teachers use three major strategies to promote social justice for students' lifelong learning. The strategies are (1) culturally responsive leadership and pedagogy and mentoring, (2) equity in resources such as funding, and (3) community partnership. Implications and recommendations are suggested.

Keywords: *Principals, Lifelong Learning, Communities of Practice, Learner Engagement, Sustainability, Qualitative*

Introduction

Social justice has become a major concern for principals and teachers in the diverse school community. Issues concerning race, ethnicity, class, poverty, gender, special education, school safety, and accountability: Principals face many challenges regarding promoting social justice among all school stakeholders for students' lifelong learning through building a professional learning community. All these issues call for principals to practice social justice as a central to their leadership for stakeholders' engagement, school sustainability, and student lifelong learning.

In the increasing body of leadership research, previous studies call for educational leaders to advocate social justice by examining school initiatives and practices that support justice and equity. For example, Biolchino (2024) pointed out that principals need to think out strategies to make all the stakeholders feel involved and recognize the unequal circumstances of low-income and marginalized groups with actions directed toward eliminating inequalities. Sayici and Sincar (2023) suggested that principals who advocate social

justice need to ensure the formation of trust, cooperation, and collective consciousness at schools and need to use contextual factors while promoting social justice in schooling and pointed out that principals face many problems, such as lack of resources, power conflict, regulations, and local people while leading the social justice.

Other previous studies, such as, (Bertrand & Rodela, 2018; Gorski & Pothini, 2024; Miller, 1999; Wang, 2018; Zhang, 2023), suggested that principals could facilitate conversations about equity, inclusion, and equality and engage in social justice initiatives while superintendents and school districts provide suggestions, strategies, and policies on promotion equity and inclusiveness in schools.

Although school principal standards have focused on social justice since the creation of the Interstate School Leadership Licensure Consortium (ISLLC) standards in 1996, the ISLLC was replaced by the Professional Standards for Educational Leaders (PSEL) in 2015, which strengthened the focus on equity by adding emphasis on each student throughout the ten standards and explicitly mentioning equity, social justice, and

culturally responsive leadership through the elements. California's leadership standards, especially the California Administrator Performance Expectations (CAPE) elements, also focus on principles of equity-driven leadership and social justice (California Commission on Teacher Credentialing, 2021). Despite this heavy emphasis on equity and social justice leadership in the leadership standards in California and nationally, the extent to which principal preparation programs focus on equity and social justice varies greatly.

In addition, contemporary social justice leadership is replete with complexities, contradictions, and challenges. These are primarily manifested in unjust intraorganizational policies and culture. When school leaders are asked to lead without appropriate or adequate resources and with underperforming and inexperienced teachers and principals, their challenges become even more demanding (Zhang, 2023). Numerous barriers exist, such as the segregation and exclusion of disadvantaged and disempowered social groups (Zhang, 2023). Other challenges are the momentum of the status quo, obstructive staff attitudes and beliefs, privileged parental expectations, deficit thinking about marginalized groups, an emphasis on technical leadership, and the cost or burden to individuals engaging in transformative leadership, democratic, inclusion, transformative and moral leadership approaches are instrumental in dealing with the injustices that are interwoven with diversity in schools (Zhang & Koshmanova, 2022; Zhang, 2023). Such approaches focus more on moving away from an individual domineering manner and branching out into collegial leadership, eventually empowering another individual for social change (Zhang & Koshmanova, 2022).

However, Wang (2018) indicated that, to date, previous studies just gave a piece of limited information about the social justice practice in the diverse school setting for students' lifelong learning. More studies are needed about how principals advocate social justice leadership for engagement and sustainability for students' holistic growth. The current educational leadership embraces a broader concept of social justice, such as fairness, equity, inclusion, equality, and moral care (Zhang & Koshmanova, 2022). Principals face challenges such as the transformation of inequitable social arrangements, inclusive practices in response to diversity, and critical awareness in leadership practice (Zhang & Koshmanova, 2021). The previous literature suggested that principals need to create equal opportunities for students' well-being, and social justice practice is context-related and comes with different goals and priorities. More attention must be paid to the attitudes, beliefs, and mindsets of those working closely with students (Zhang & Koshmanova, 2021).

Since leadership is about people and relationships, principals must use social justice leadership to engage in democratic, inclusive, and transformative practices to change social structures and influence all stakeholders to promote collegial justice and equity in schools (Zhang & Koshmanova, 2021). Wang (2018) emphasized that such relationships are a fundamental feature of principals' social life. Principals need to always focus on people such as students, teachers, and parents to build a community that has a strong sense of

belonging, collective concern for each individual, individual responsibility for the collective good, and appreciation for the rituals and celebrations for the group. This people-centered leadership practice focuses on putting students at the center, positioning them as leaders, helping them promote social justice, and fostering them to build a positive learning community through family and community engagement (Zhang & Koshmanova, 2020). Also, using social justice leadership requires forming a diverse cultural background of the leadership to improve students' academic achievement and lifelong learning outcomes. As for the issues and needs of advocating social justice leadership, the previous has not yet discussed how principals use social justice leadership for students' lifelong learning by strengthening stakeholders' engagement and school sustainability for school effectiveness.

Therefore, this study is to investigate how US principals and teachers advocate social justice leadership for students' holistic lifelong learning through professional learning community, engagement, and sustainability in the United States. The research questions were as follows in this study:

1. What challenges do US principals and teachers face in advocating social justice for students' lifelong learning through building a professional learning community, engagement, and school sustainability in the United States?
2. What opportunities and leadership programs are needed for US principals and teachers to promote social justice for students' lifelong learning through building a professional learning community, engagement, and school sustainability in the United States?
3. What strategies do US principals and teachers use to promote social justice and equity in K12 schools for students' lifelong learning through building a professional learning community, engagement, and school sustainability in the United States?

Literature Review

This literature review examines the relationships and impacts between social justice and the professional learning community, social justice and stakeholder engagement, social justice and school sustainability, and social justice and holistic growth for students' lifelong learning.

Social Justice Leadership and a Professional Learning Community

Advocating social justice could help principals and teachers build a professional learning community for students' lifelong learning. First, promoting social justice could allow principals and teachers to contribute their talents through collaboration with the professional learning community. The previous studies support this view. For example, Olmo-Extremera et al. (2024) pointed out that principals use social justice to ensure all students learn, establish a collaborative culture, and focus on student learning through stakeholder collaboration. By doing so, all school stakeholders could work together toward the school's effectiveness for students' learning outcomes. When each stakeholder realizes they are one of the school

community's members, they contribute their talents to build a professional learning community for students' learning outcomes (Campbell, 2024; Zhang & Koshmanova, 2020). Zhang and Koshmanova (2022) supported their viewings. They indicated that principals promote social justice to effectively build a caring professional learning community because each member in the community feels that they are one of the and freely contributes their talents for community building (Zhang & Koshmanova, 2020; 2022). King (2022) indicated that building a professional learning community requires all school members to be involved and contribute their talents to its building. Katz and Deckman (2024) stated that collaboration could help principals build a learning community through professional development activities. Their viewing supported that principals use social justice to make community members feel that they are one of them, thus contributing and serving this community with their talents, skills, and knowledge.

Second, promoting social justice could help principals integrate their thoughts into the professional development program to build a professional learning community. Within professional development embedded with social justice, principals, the superintendent, school board committees, teachers, and the local community could effectively build a professional learning community by integrating the teacher's professional development programs for principals and teachers (Zhang & Koshmanova, 2020). For example, Hattam and Weiler (2024) stated that using professional development could effectively support principals in building a professional learning community by advocating social justice because principals could encourage teachers to transform what they have learned in the professional development for their social justice practices for students' achievement. Ribay (2024) indicated that building a social justice learning environment should shift the tension from the potential barriers supported by principals, superintendents, teachers, parents, and school districts to build a professional learning community for social justice empowerment. McCollough (2024) confirmed that principals could use professional development to promote social justice among teachers and staff to build a professional learning community in an uncertain society.

However, most previous studies have limited studies about how principals and teachers advocate social justice to build a professional learning community for students' lifelong learning and school sustainability. For example, Furman (2012) pointed out that principals could use social justice for lifelong commitments. Wang (2018), however, indicated that principals use social justice to build a positive community for students' better academic performance. Their studies revealed that the previous studies have yet to integrate how principals and teachers advocate social justice in building a professional learning community for students' better outcomes and school performance, such as students' better test scores. Therefore, principals and teachers advocate social justice in building a professional learning community for students' better learning outcomes.

Social Justice Leadership, Stakeholders Engagement, and School Sustainability

Principals and teachers promote social justice to engage teachers, staff, students, parents, superintendents, and other school stakeholders for school sustainability and students' learning effectiveness. Previous studies found that principals promote social justice to make stakeholders engaged and school sustainability. For example, Lowery, Johnson, and Spearman (2024) suggested that principals could engage students and parents in school activities and advocate social justice by centering their cultures and contexts. They also mentioned that teachers could make students share their cultures and learning experiences with their peers. By doing so, students could build a sense of lifelong learning in daily learning activities. For example, Zhang and Koshmanova (2020) pointed out that principals promote social justice as a core school culture to make students, teachers, and parents engage in their contribution to helping students' lifelong learning outcomes, such as good habits, virtue, and higher test scores. Hands (2023) and Zhang (2023) also stated that principals could advocate social justice in fostering community stakeholders' engagement in the diverse school community for better school performance, such as parents' satisfaction with the school.

In addition, principals promote social justice as a school's contextual core values and culture to make the school sustainable development, such as increasing student enrollment and parents' satisfied comments to the schools. The previous studies support this view. For example, Lowe (2023) suggested that educators and leaders, such as principals and teachers, could let students engage in their contributions and contribute their talents to school sustainable development, such as a higher graduate rate and higher employee rate after graduation. DePaul (2023) said that principals could engage students, parents, teachers, and staff in the diverse community by practicing core cultures such as social justice, trust, and equity. Imperatori (2017) confirmed that principals and teachers could encourage students and parents to contribute their talents and skills to help schools maintain and increase enrollment and graduation rates.

Finally, principals and teachers could encourage teachers, parents, students, staff, and other school stakeholders to contribute their knowledge and talents to school sustainable building. The previous studies suggested that principals need to advocate core values such as justice, creativity, and trust in making schools sustainable growth. For example, Rishi (2022) indicated that principals and teachers could make students contribute their knowledge toward their learning outcomes, which could foster school-sustainable performance. Lange (2023) stated that principals could make all school stakeholders maintain high performance, such as student academic outcomes, through transformative and social justice. Therefore, principals and teachers could foster stakeholders' engagement for school sustainable growth and students' lifelong learning through advocating social justice.

Social Justice Leadership and Holistic Growth of Students' Lifelong Learning

Principals and teachers who promote social justice to help students develop their holistic lifelong learning capacity for students with high learning outcomes and high performance. The previous literature supported this view. For example, Tamadoni, Hosseingholizadeh, and Bellibas (2024), in their literature review analyzing 169 studies, claimed that principals and teachers explore social justice to develop holistic growth for students' lifelong learning. Santamaria (2024) indicated that principals and teachers could promote social justice by developing students' holistic capacity for lifelong learning. Wang (2018) indicated that principals and teachers practice social justice that builds on holistic development for students' lifelong learning. Wang (2020) confirmed that principals and teachers could use social justice leadership to help students' holistic development in leading school reform. Whang (2019) suggested that principals promote social justice to pursue equitable relationships of gender, race, and culture, which could help students develop their integrated capacity for school effectiveness. Sarid (2021) said principals could explore social justice contextually to help students' holistic growth for lifelong learning. Their viewings indicated that principals and teachers use social justice leadership to foster students' integrated capacity for school sustainability and lifelong learning.

Therefore, the literature shows that principals and teachers could use social justice to build a professional learning community, strengthen stakeholders' engagement, and promote students' holistic growth for lifelong learning. Previous studies have determined that principals and teachers must contextually promote social justice for students' lifelong learning.

Methodology

Overview of Research Study

A descriptive qualitative research study explored how US principals and teachers promote social justice through building a professional learning community, stakeholder engagement, and sustainability for the holistic growth of students' lifelong learning. This study investigates principals' and teachers' perceptions, beliefs, and values in leading school development for students' lifelong learning, which is fully compatible with this research design (Crossman & Bordia, 2021; Crotty, 1998; Creswell & Poth, 2018). Merriam and Tisdell (2016) indicated that the descriptive qualitative inquiry could help principals and teachers investigate their in-depth understanding of the school issues and analyze their experiences and practices in leading schools to better performance.

Descriptive, interpretative, and thematic analyses synthesize and analyze the principals' and teachers' voices. These narratives provide a rich understanding of how they promote social justice for students' learning outcomes and continuous performance in leading school development (Denzin & Lincoln, 2018). The descriptive approach collects, analyzes, and interprets principals' and teachers' voices.

The interpretative approach is then used to analyze these experiences and synthesize the major themes and categories

that align with the research questions contextually (Smith et al., 2022). The thematic analysis is crucial in coding the interview data and identifying the major themes that align with the research questions (Braun & Clarke, 2022).

In addition, I employed Saldana's coding approach, a robust method, to merge the theme, sub-theme, and categories with selected codes to respond to the research questions (Saldana, 2016). This approach ensures a systematic and comprehensive analysis of the data. Therefore, the thematic, descriptive, and interpretative analysis approaches are used to analyze the principals and teachers' perceptions, beliefs, and opinions through coding, categorizing, and synthesizing in this study (Adu, 2019; Bazeley, 2013; Miles & Huberman, 1994). The conceptual framework shown in Figure 1 below guided this study.

Conceptual Framework in this Study

Figure 1 shows how principals and teachers use social justice leadership to support students' lifelong learning through contextually building a professional learning community, engagement, and sustainability. This framework states that principals and teachers need to use an integrated approach. First, principals and teachers must know their school's contextual and demographical data and determine their roles and responsibilities in promoting social justice. By doing so, principals and teachers could seek more help from both internal and external resources in leading school development for student lifelong learning.

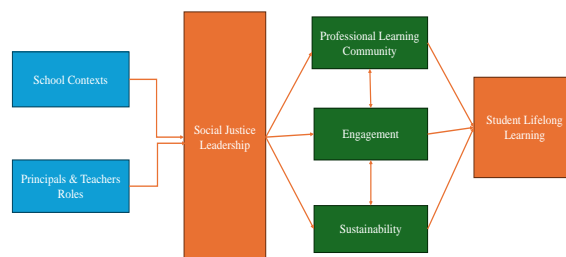


Figure 1: Conceptual Framework in this Study

Second, principals and teachers must practice social justice leadership associated with the professional learning community, engagement, and sustainability for students' lifelong learning. Literature in the introduction of this study shows that principals and teachers using social justice associated with them could foster students' lifelong learning and increase school performance. Specifically, Rawls' (1991) book *A Theory of Justice* pointed out that justice as fairness could help principals and teachers help students discover their nature and talents for strengthening their lifelong learning. Tamadoni et al. (2024) supported Rawls' view in their literature. They pointed out that principals and teachers use social justice as equity, inclusiveness, and equality to lead school development for students' outcomes and effectiveness. Therefore, Rawls and Tamadoni et al.'s thoughts guide this study associated with professional learning community (Caine & Caine, 2010; Zhang & Koshmanova, 2022), engagement

(Hands, 2023; Varsou, 2023), and sustainability (Lange, 2023) for students' lifelong learning.

Positionality and Participants

Through meticulous data analysis, the positionality of the author significantly influences the informants' access to understanding the participants' experiences, beliefs, and perceptions (Creswell, 2015; Zhang, 2021). As the author of this study, I bring a wealth of experience, having completed my higher education from master's to doctoral level in Western countries. My specialization in research methodology equips me with the necessary tools to analyze the interviewing data and conduct qualitative research. Moreover, my extensive teaching experience from K12 schools to higher education in the United States ensures a high level of skill in qualitative research, including data collection, analysis, and trustworthiness (Denzin & Lincoln, 2018).

I used the semi-structured and open-ended interview protocol to collect data from principals and teachers online or in person. The interview process was to record the information through a recorder and store the data with a password in the cloud for security protection (Creswell, 2015). There were 24 participants (n=24), including 12 principals (n=12) and 12 teachers (n=12), who were randomly recruited in the United States. I have used the pseudonym to code each participant contextually.

Specifically, purposive and snowball sampling was used to collect data from principals and teachers via an invitation letter. The invitation letter included the purpose of this study, confidentiality, voluntary withdrawal, consent form, and researchers' information (Stake, 2010). Finally, I recruited a total of 24 participants (n=12) who were working in K12 schools in the United States and agreed to the study with the signed consent form were employed in this study. Among participants, there are 12 principals (n=12), including six males (n=6) and six females (n=6), and 12 teachers (n=12), including six males (n=6) and six females (n=6). Their age ranges from 25 to 51 years old. They have 3 to 25 years of working experience in the school. The lower age is 25 years old, and the highest experience is 25 years, as shown in Table 1.

Table 1
Demographic Participants of School Principals and Teachers

Participants	Age	Gender	Level of Education	Years of Experiences	Position
Bellarmino	51	M	Ed.S.	25	Elementary School principal
Borgia	41	M	MA	15	Elementary School principal
Faber	32	M	MS	6	Middle

					School Principal
Jerome	36	M	MS	10	High School Principal
Ogilvie	37	M	MAT	11	Middle School Principal
Denial	39	M	BA	13	Elementary School Principal
Ava	42	F	MA	16	High School Principal
Ana	41	F	MS	15	Middle School Principal
Barbara	38	F	MS	12	Elementary School Principal
Camilla	35	F	MA	9	Elementary School Principal
Clarita	34	F	Ed.S.	8	High School Principal
Edith	31	F	Ed.S	5	Middle School Principal
Michael	39	M	BA	17	5 th Grade Teacher
Christopher	35	M	BS	13	3 rd Grade Teacher
Joseph	38	M	BS	16	2 nd Grade Teacher
Sebastian	37	M	BA	15	9 th Grade Science Teacher
Aquinas	31	M	BS	9	1 st Grade Teacher
Benedict	27	M	BS	5	8 th Grade ELA teacher
Flora	25	F	BA	3	10 th Grade Math Teacher
Helena	32	F	BA	10	12 th ELA teacher
Jane	33	F	BS	11	11 th History Teacher
Paula	34	F	BS	12	12 th Science

					Teacher
Victoria	30	F	BS	8	6 th ELA teacher
Theresa	29	F	BA	7	9 th Math Teacher

Data Collections Procedures

I meticulously gathered all the signed consent forms from the participants, adhering to the ethical requirements of the human study. The consent process was followed by inviting the participants to an average of 60-minute interviews, recorded with digital recorders and transcribed verbatim. These one-on-one interviews, conducted through a semi-structured and open-ended interview protocol, spanned from March 2020 to May 2023 through a Zoom meeting or in person (Merriam & Tisdell, 2016).

I created the interview questions through a literature review and invited two principals and two teachers in the fields to give me suggestions, and I revised the interview protocol. The scholars from the previous studies include Angelle and Torrance (2019), Atkins and Duckworth (2019), Bass and Avolio (1994), Bull (2008), Butler and Bullock (2024), Campbell (2024), Coutinho (2022), and Parson and Ozaki (2020). Their thoughts inspire me to write and finalize my interview questions. After I wrote my interview questions, I invited two principals and two teachers to review and revise the questions based on their comments and feedback. Then, I also used the literature to verify the quality of the questions and finalize the interview questions.

Therefore, the questions are: (1) Would you tell me anything about yourself and your opinions about social justice in schooling? (2) What challenges do you think you have difficulty promoting social justice? (3) what are the relationships between social justice, stakeholder engagement, school sustainability, and student lifelong learning? (4) What contextual factors impact you to promote or practice social justice at school? (5) What challenges do you face when building a professional learning community? (6) what challenges do you have when you promote stakeholders' engagement? (7) what challenges do you have when promoting sustainable school growth? (8) what challenges do you have when you foster students' holistic growth for their lifelong learning? (9) What opportunities and leadership programs do you need to have when you promote social justice? (10) What additional resources would you need to promote social justice? (11) What do you want to learn from the leadership program? (12) What strategies would you use to promote social justice in school students' lifelong learning? (13) Do you want to share anything I have yet to ask from you?

Data Analysis

After I completed the verbatim transcript, I uploaded the transcripts to the computerized-aided qualitative analysis software, namely N-vivo12, to code, analyze, categorize, and synthesize the major themes and categories aligned with each

research question (Adu, 2019; Creswell & Poth, 2018; Saldana, 2016).

Specifically, I first used the thematic and descriptive approaches to code the transcript by reading the transcripts, which helped me to identify the categories (Adu, 2019). Then, I identified the major themes through an interpretative approach with all categories (Smith et al., 2022). After I merged the major themes, I compared all the major themes and categories aligned with each research question. Finally, I invited one qualitative scholar and one Ph.D. candidate to ensure my data and analysis were clear and accurately aligned with all audited materials (Denzin & Lincoln, 2018). Therefore, I strictly followed the qualitative research disciplines to ensure consistency and trustworthiness in this study.

Results

The results regarding school principals and teachers' exploration of social justice through building a professional learning community, stakeholders' engagement, and sustainability for students' lifelong learning were presented according to the research questions in the table.

Question 1: What challenges do US principals and teachers face in advocating social justice for students' lifelong learning through building a professional learning community, engagement, and school sustainability in the United States?

I identified three challenges faced by principals and teachers: (1) a lack of resources, (2) implicit bias and discrimination, and (3) limited training and professional development.

Theme 1: Lack of Resources

Each theme with three categories is presented in Table 2, and I quote some from participants to support this challenge below.

Bellarmino said: "Our school budget is tight. I often feel struggling with limited funds."

Borgia indicated, "I spend a lot of time in school's daily operations, and I want to say that I have difficulty finding time for additional training."

Faber stated, "My school has no counseling service or other resources, such as an intervention specialist, because of its limited budget. So, I feel challenged to make everyone feel equal and receive the same support from the school."

Michael said, "Since our school cuts teachers' budgets, providing everything I need for my classroom is tough."

Christopher indicated: "I have no free time because I spend time teaching, grading, and meeting. I want to say that the additional training seems impossible."

Joseph stated, "I feel struggled and frustrated because my school has no counseling services and resources. But I realize that somehow it is needed."

Those quotes above indicate that principals and teachers who advocate social justice face the challenges of lacking resources in several dimensions, including funding constraints, time constraints, and support services.

Theme 2: Implicit Bias and Discrimination

One theme with three categories, as shown in Table 2, emerged. It was presented with quotations from principals and teachers, and I quoted their voices to support this theme below.

Jerome said: "I sometimes feel that I have a challenge to address bias issues."

Ogilvie indicated: "I am working on implementing training sessions to tackle bias issues. I think it is the right step."

Denial stated: "I suggest that our school policy promotes social justice, equity, and equality."

Sebastian said: "I realize that we, as teachers, need to pay more attention to biases and stereotypes that affect our students' performance."

Aquinas indicated, "I think the principal offers some training sessions aligned with social justice, which is important for principals and teachers to address bias and help all students in the same manner."

Benedict stated, "I suggest my school principal must reflect our school policies about equity and inclusion for long-term growth. I think right now, it is falling short."

Those quotes above indicate that principals and teachers promote social justice for students' lifelong learning, which makes them face bias and discrimination challenges due to a lack of awareness addressing bias and institutional policy.

Table 2

Major Themes of Challenges for US Principals and Teachers with Categories and Codes Selected with Frequency

Major Themes	Categories	Codes Selected with Frequency
Theme 1: Lack of Resources	Funding Constraints	Limited funding (10), Budget Allocation (15), Insufficient funding (8), funding (18)
	Time Constraints	Limited time for additional training (8), inadequate time (9)
	Support Services	Counseling (6), special educational resources (9), language support (8)
Theme 2: Implicit Bias and Discrimination	Lack of awareness and recognition	Unconscious attitudes (6), stereotypes (6), bias (8)

Addressing bias
Implementing training (6), bias (9)

Institutional policies and practices
Policies (12), practices (6), institutional policy (5)

Theme 3: Limited Training and Professional Development
accessibility
Availability of training (6), professional development (6), limited access (8), financial barriers (9), lack of support (5)

Relevance and quality
Low quality of training (3), lack a focus on social justice issues (6), lack of addressing equity and inclusion (3)

Sustainability
One-time events (6), short-term program (8), long-term (3)

Theme 3: Limited Training and Professional Development

One theme with three categories that I emerged, shown in Table 2, was presented with quotations from principals and teachers below.

Denial said: "I think access to social justice and school policy training is important. However, it is not always easy to come by. Therefore, I need to make all resources more available."

Ava indicated, "Training should focus on real-world issues such as social justice, equity, pedagogy, quality of education, assessment, and teacher strategies."

Ana stated, "I think the short-term training sessions are not enough. We need to have a long-term teacher training program."

Benedict said: "finding time for professional development is tough because I feel that time is too pressure."

Flora indicated: "I suggest that principals offer some training related to teachers' daily challenges, such as students' behavior management, inclusive pedagogy, counseling approaches, and practice."

Helena stated, "I think the short-term program is inefficient for principals to promote social justice and help teachers, students, and all other school stakeholders for long-term school development. I think principals need to offer the ongoing training program, which is essential."

Those quotes above confirm that US principals and teachers face three challenges aligned with their voices. Therefore, principals and teachers play different roles in promoting school social justice and improving their capacity through leadership programs and learning opportunities explored in question 2.

Question 2: What opportunities and leadership programs are needed for US principals and teachers to promote social justice for students' lifelong learning through building a professional learning community, engagement, and school sustainability in the United States?

Principals and teachers have three ways to promote social justice for students' lifelong learning through building a professional learning community, engagement, and sustainability that emerged, including (1) equity-centered pedagogy and leadership, (2) community engagement, and (3) leadership for systematic change.

Theme 1: Equity-centered pedagogy and leadership

One theme with three categories supported this theme, as shown in Table 3, and presented and supported with quotations from principals and teachers below.

Barbara said, " We have been actively working on curriculum integration to meet students' needs."

Jane indicated, " Culturally responsive pedagogy could help me transform my understanding and beliefs, fostering a more inclusive learning environment."

Camilla stated: "restorative justice practices could help me to foster a positive school culture."

Paula said, " Implementing restorative justice practice could help me foster students' repair of harm and build relationships through community-building activities."

Clarity indicated: "Implicit bias training has been eye-opening for our teachers, staff, parents, students, and all school stakeholders regarding their awareness of biases."

Victoria stated, " Principals need to encourage all teachers to improve their cultural competence, which could help them understand the diverse backgrounds of our students."

Those quotes above indicated that principals and teachers could use curriculum integration, restorative justice practice, and implicit bias training to promote social justice for stakeholder engagement, school sustainability, and students' holistic growth for lifelong learning.

Theme 2: Community Engagement

One theme with three categories I emerged with supported community engagement for principals and teachers to promote social justice through building a professional learning community, engagement, and sustainability for students' holistic growth of lifelong learning. I quote principals' and teachers' voices to support this theme below.

Edith said: "I think the parental involvement initiatives have strengthened the connection between home and school. Through home-school cooperation, I can better support students' academic, emotional, and social growth."

Theresa indicated: "Empowering families to take an active role in their kids' education has been rewarding. When parents feel involved, their support surely impacts their kids' learning outcomes."

Borgia said, "I believe students can learn more, such as responsibility and community engagement, through community service."

Helena indicated, " Through community service, teachers can help students learn about real-world issues and discover new ways to solve problems."

Jerome stated: "Principals work with teachers, parents, students, and other stakeholders through knowledge sharing, which could foster all stakeholders in building a professional learning community for students' academic achievement."

Paula indicated: "Being a professional learning community is valuable, and I suggest that principals foster students to become effective educators."

Those quotes above indicate that principals and teachers promote social justice for community engagement of students' lifelong learning through family and community partnerships, community service learning, and professional learning communities.

Table 3
Major Themes of Opportunities and Leadership Programs for US Principals and Teachers with Categories and Codes Selected with Frequency

Major Themes	Categories	Codes Selected with Frequency
Theme 1: Equity-centered Pedagogy and Leadership	Curriculum Integration	Differentiation (7), culturally responsive pedagogy (5), culturally responsive teaching (3), multicultural (5), diverse culture (6).
	Restorative Justice Practice	Conflict (7), restorative (5), justice practice (6), resolution (8)
	Implicit Bias Training	Cultural competence (6), stereotype awareness (5), stereotype (8)
Theme 2: Community Engagement	Family and Community Partnership	Family (6), parental involvement (7), home-school partnership (8), partnership (12)
	Community Service Learning	Social responsibility (7), community (8), service learning

Theme 3: Leadership for Systematic Change	Professional Learning Communities	(9) Peer learning (6), reflective practice (7), learning community (9)
	Diversity in Leadership	Inclusive leadership (6), equity in hiring (9)
	Data-Informed Decision-Making	Analytics (8), assessment (9), measurement (8), evidence-based practices (7)
	Policy Advocacy and Activism	Social justice initiatives (7), legislative reform (7), activist (6)

Theme 3: Leadership for Systematic Change

Table 3 shows one theme, with three categories that emerged from principals' and teachers' voices: support leadership for systematic change. I cited quotations to support this theme.

Faber said: "I promote inclusive, justice, and equity in my daily practice."

Ogilvie indicated: "I encourage all my students to express their ideas and share their understanding and views with others. By doing so, we learn from each other."

Ava stated, "Data-driven decision-making is effective when deciding and implementing school daily practices. Besides, I also use evidence-based data to support teachers in helping their students succeed."

Victoria said: "I use analytics to track student progress and help me to meet each student's needs."

Bellarmino indicated, "As a principal, I support the superintendent in promoting social justice initiatives at the school district level, and I also advocate this policy to support students and the community."

Christopher stated: "Engaging in legislative reform efforts allows me to address school systematic issues and figure out new ways to help students engage in their learning goals."

Those quotes above indicate that principals and teachers promote social justice through leadership for systematic change with diversity in leadership, data-informed decision-making, and policy advocacy and activism.

Question 3: What strategies do US principals and teachers use to promote social justice and equity in K12 schools for students' lifelong learning through building a professional learning community, engagement, and school sustainability in the United States?

Principals and teachers have three ways to promote social justice for students' lifelong learning through a professional learning community, engagement, and sustainability that emerged, including (1) equity-centered pedagogy and

leadership, (2) community engagement, and (3) leadership for systematic change.

Theme 1: Culturally Responsive Leadership and Mentoring

One theme with three categories that I emerged from principals' and teachers' voices supports culturally responsive leadership and mentoring, as shown in Table 4. I cited their voices to support this theme below.

Denial said: "I have been actively working on diversifying our curriculum to meet students' needs. This statement means incorporating various communities' literature, history, and cultural perspectives, not just the dominant culture."

Aquinas indicated: "I have used culturally responsive pedagogy, which is effective for me to foster students toward their learning goals."

Barbara stated: "I think teachers have accepted their culturally competent teaching training through professional development, which gives them more ideas about creating a diverse learning environment."

Jane said: "I have learned to be more mindful of how I deliver lessons and interact with students from different cultural backgrounds."

Camilla stated, "Creating a safe and inclusive school environment is my top priority, and my goal is to make students feel safe and supported."

Theresa stated: "I have noticed a positive change in the school climate since I promote social justice and inclusive education."

Those quotes above indicate that principals and teachers promote social justice through culturally responsive leadership and mentoring, diverse representation, inclusive curriculum, culturally competent teaching practice, and a safe and inclusive school environment for students' lifelong learning.

Table 4

Major Themes of Strategies for US Principals and Teachers with Categories and Codes Selected with Frequency

Major Themes	Categories	Codes Selected with Frequency
Theme 1: Culturally Responsive Leadership and Mentoring	Diverse Representation and Inclusive Curriculum	Diversity (18), inclusion (10), inclusive (9), multiculturalism (5), cultural difference (5)
	Culturally Competent Teaching Practices	Culturally responsive teaching (3), student-centered learning (3), culturally responsive

		assessment (1)
	Safe and Inclusive School Environment	Safe (5), inclusive (9), emotional safety (5)
Theme 2: Equity in Resources and Opportunities	Equitable Resource Allocation	Funding equity (9), equal access (8), budget allocation (8), financial equity (7)
	Support for Underrepresented Groups	Minority (5), students with special needs (7), inclusive practices (9)
	Readiness for All	College readiness (3), academic well-preparation (3), future readiness (2), I am ready (5)
Theme 3: Community Partnerships and Parent Involvement	Community Collaboration	Partnerships (16), networking (5), resource sharing (3), shared vision and goals (3), community involvement (5), networks (8)
	Parent and Family Engagement	Family engagement (5), parent involvement (6), parent-teacher communication (7), home-school partnership (8), engagement (12)
	School-Community Support Networks	Support networks (5), social services (3), community advocacy (1), neighborhood

support (3)

Theme 2: Equity in Resources and Opportunities

One theme with three categories that emerged from principals' and teachers' voices supports equity in resources and opportunities in Table 4. I quote their voice to support this theme below.

Clarita said: "I am committing to making sure that all students have access to the resources we have for their success."

Benedict indicated: "I have seen the impact of equitable resource allocation, which helps me help all students achieve their learning goals."

Edith stated: "I, as a principal, promote serving all students, no matter their backgrounds, race, economic status, or education."

Michael said: "I think my school principals ask us, as teachers, to pay attention to each student's needs. I, as a teacher, need to support the minorities."

Ava said, "As a principal, I must improve the student graduation rate."

Christopher stated: "Preparing students for their future lifelong learning is the priority of the priorities. For example, I need to let teachers understand the importance of students' graduation and academic performance rates."

Those quotes above indicate that principals and teachers advocate social justice through using school resources with equitable resource allocation, support for underrepresented groups, and readiness for all.

Theme 3: Community Partnerships and Parent Involvement

One theme with three categories that emerged from principals' and teachers' voices supports community partnerships and parent involvement in Table 4. I quote their voices to support this theme below.

Camilla said, "I believe community partnership is essential for principals to work with teachers, parents, students, staff, and all other stakeholders to improve students' academic performance."

Flora indicated, "I think partnerships, such as the pathway program between our school district and college, give students a chance to get their college diploma after graduating high school."

Ogilvie stated: "I realize that parents and family play a vital role in school growth."

Paula said: "I have seen how parents and family engagement positively impact student success."

Jerome said, "I am happy to help all students achieve their learning goals in the school community. I mentor students if needed for their performance and growth."

Benedict stated, "Positive communication between parents and teachers could help students reach their learning goals. By doing so, students feel safe and share their experiences with

their friends in their network to increase students' enrollment rate for sustainable school growth."

Those quotes above indicate that principals and teachers promote social justice through culturally responsive leadership and mentoring, resource equity, and community partnership for school holistic lifelong learning.

Discussion

The three significant findings in this study were discussed. First, principals and teachers face the similar challenge of needing more resources when they promote social justice for students' holistic lifelong learning. This study determined whether principals and teachers could receive more resources, such as funding, to offer equal support to all students for their holistic growth. This finding is compatible with the previous studies. For example, Tamadoni et al. (2024), in their systematic literature review from the 2001 to 2020 database, pointed out that principals face 734 contextual challenges, such as challenges related to principals' roles, about 32%. They also indicated that principals and teachers have difficulty promoting social justice for students' holistic lifelong learning because of insufficient funding.

In their qualitative study, Khanal and Ghimire (2024) stated that principals face limited funding challenges when they and teachers promote social justice for students' lifelong learning outcomes and personality growth. McGregor and Bedi (2024) pointed out that principals and teachers need to figure out new ways, such as partnerships and workshops, to promote social justice for students' lifelong learning. For example, Gorski and Pothini (2024) indicated that principals could work with parents, students, teachers, and other community partners to promote social justice through informal talks, workshops, and retreats. Those scholars indicated that principals and teachers need more funding and resources such as intervention rooms, counselors, and psychologist services to promote social justice for students' lifelong learning.

However, this finding inspires me to think about how principals and teachers could promote social justice with limited funding and resources for students' lifelong learning through innovative approaches. The approaches include coffee parties, workshops, conferences, teacher-parent meetings, and monthly school district public meetings. Therefore, principals and teachers could promote social justice for students' lifelong learning.

Second, this study found that principals and teachers use equity-centered pedagogy, leadership, and community engagement for students' lifelong learning when promoting social justice in schooling. Previous studies support my findings. For example, Biolchino (2024) indicated that principals, teachers, parents, staff, and students used equity-focused leadership to make all stakeholders in the community feel at home. This viewing inspires me to realize that principals and teachers must always get to know each of the school stakeholders, such as students, and offer individualized support, which could help principals practice social justice at the school level.

Galloway and Ishimaru (2021) suggested that principals should use community engagement to promote social justice and invite community members to contribute their knowledge and skills to students' learning outcomes. Wright's (2022) study about inequity inspired me to determine that principals could work with teachers through workshops and coffee parties to meet parents and promote a social justice school vision for students' higher performance. Kelty and Wakabayashi (2020) and Zhang and Koshmanova (2020) suggested that principals work with teachers to increase family engagement for students' academic, social, and emotional development for better performance. Those scholars pointed out that principals and teachers could help students strengthen their lifelong learning skills through social justice, equity, and engagement.

Finally, this study suggested that principals and teachers could use social justice for students' holistic lifelong learning through culturally responsive leadership and mentoring. Previous studies support the idea that principals could use culturally responsive leadership to promote social justice for students' lifelong learning. For example, Lowery et al. (2024) pointed out that principals use culturally responsive leadership or pedagogy to build a professional learning community for student learning outcomes. Khalifa, Gooden, and Davis (2016) pointed out that principals need to contextually develop their culturally responsive knowledge, pedagogy, leadership, and skills to promote social justice for student learning outcomes and higher school performance.

Khanal and Ghimire (2024) suggested that principals could use mentoring to work with each school stakeholder, such as teachers, students, and staff, to make them realize the importance of practicing social justice for students' learning outcomes. Shaked (2024), in a qualitative study conducting 29 interviews with 29 Israeli principals, found that principals could use mentoring as a practical approach to make students and teachers actively participate and promote the school's core vision, such as social justice and equity. Those scholars pointed out that principals and teachers could help students develop their lifelong learning through social justice, community engagement, and culturally responsive pedagogy and leadership contextually. Therefore, principals and teachers could help students strengthen their lifelong learning capacities through social justice leadership associated with culturally responsive leadership and pedagogy, mentoring, and equity-focused leadership.

Conclusion

Three significant findings can be drawn from this study. First, principals and teachers can use equity-centered leadership, culturally responsive leadership and pedagogy, and community engagement to promote social justice for students' holistic lifelong learning. Findings show that principals and teachers need more resources and funding. I suggest that principals work with the superintendent and school board committee to seek more resources from external grants, such as community funding, foundation grants, city grants, and state grants. Second, principals and teachers could strengthen

partnerships between schools and colleges, schools and business partnerships, and schools and universities. By doing so, principals and teachers could receive more support from outside school resources. Since they promote social justice in schooling, they could use various ways to get potential volunteers involved and provide support. For example, schools could invite college researchers and professors to research to find out what resources the schools need to seek help from external resources and to get help from the college level for K-12 schools through transitional preparation or pathway programs. Third, principals and teachers could request official assistance from the superintendent and school board committee and promote social justice at the school district level. By doing so, principals could have more opportunities to request help from internal and external and promote social justice for students' lifelong learning. Therefore, this study concluded that principals and teachers could use social justice leadership for students' lifelong learning through a professional learning community, engagement, and sustainability in the 21st century.

Limitations, Implications, and Recommendations

This study has two limitations. First, participants in this study only have principals and teachers. I could invite more participants, including parents, students, superintendents, college professors, and business sector managers. This study discovered that principals and teachers need more funding and resources. As for this finding, principals and teachers could use different ways to get more support from external resources, such as community and justice funding from foundations, state, or federal. Also, principals must work with more school partners to promote social justice. By doing so, I suggest that the first future study could use a qualitative multiple-case research design by conducting one-on-one and focus-group interviews with principals (n=12), teachers (n=12), parents (n=12), students (n=12), superintendents (n=12), college professors (n=12), and business sector managers (n=12) about how they promote social justice in schooling in the United States.

Second, this study only collected the data via interviewing. If this study could use multiple ways to collect data, such as classroom observation, shadowing, field trips, and surveys, this study could gather more amazing data to contribute to the current research. This study suggested that principals and teachers use equity-centered pedagogy, culturally responsive leadership and pedagogy, and community engagement to promote social justice for students' lifelong learning. So, the implications of this major finding suggest that principals must seek help from all school stakeholders, such as teachers, parents, staff, superintendents, and even state officials. By doing so, principals could build a core vision with promotion strategies aligned with social justice to lead school effectiveness in students' holistic growth of lifelong learning. Therefore, the second future study will use grounded theory research design to form a social justice leadership framework by collecting data for principals and teachers about

how they could promote social justice for students' lifelong learning in the 21st century and beyond.

References

1. Adu, P. (2019). A step-by-step guide to qualitative data coding. Routledge.
2. Angelle, P.S. & Torrance, D. (2019). Cultures of social justice leadership: An intercultural context of schools. Palgrave MacMillan.
3. Atkins, L. & Duckworth, V. (2019). Research methods for social justice and equity in education. Springer.
4. Bazeley, P. (2013). Qualitative data analysis: Practical strategies. Sage.
5. Bass, B.M. & Avolio, B.J. (1994). Improving organizational effectiveness through transformational leadership. Sage.
6. Biolchino, E. (2024). Preparing social justice leaders in the era of high-stakes licensure assessments: student and faculty perceptions of a redesigned principal preparation program. Sage Open, 1-14.
7. Bertrand, M. & Rodela, K.C. (2018). A framework for rethinking educational leadership in the margins: implications for social justice leadership preparation. *Journal of Research on Leadership Education*, 13(1), 10-37.
8. Braun, V. & Clarke, V. (2022). Thematic analysis: A practical guide. Sage.
9. Bull, B.L. (2008). Social justice in education: An introduction. Palgrave MacMillan.
10. Butler, B.M. & Bullock, S.M. (2024). Understanding a pedagogy of teacher education: Contexts for teaching and learning about your educational practice. Routledge.
11. Campbell, B. (2024). How to think better about social justice: why good sociology matters. Routledge.
12. Caine, G. & Caine, R.N. (2010). Strengthening and enriching your professional learning community: the art of learning together. ASCD.
13. Crossman, J. & Bordia, S. (2021). Handbook of qualitative research methodologies in workplace contexts. Edward Elgar Publishing.
14. Crotty, M. (1998). The foundations of social research: meaning and perspective in the research process. Sage.
15. Creswell, J.W. & Poth, C.N. (2018). Qualitative inquiry & research design: Choosing among five approaches (4th ed). Sage.
16. Creswell, J.W. (2015). Educational research: planning, conducting, and evaluating quantitative and qualitative research (5th ed). Pearson.
17. Coutinho, A.M.J. (2022). Curriculum work and social justice leadership in a post-reconceptualist era. Routledge.
18. Denzin, N.K. & Lincoln, Y.S. (2018). The Sage handbook of qualitative research (5th ed). Sage.

19. DePaul, G.A. (2023). *Nine practices of 21st-century leadership: A guide for inspiring creativity, innovation, and engagement* (2nd ed). Routledge.
20. Furman, G. (2012). Social justice leadership as praxis: developing capacities through preparation programs. *Educational Administration Quarterly*, 48(2), 191-229.
21. Gorski, P.C. & Pothini, S.G. (2024). *Case studies on diversity and social justice education* (3rd ed). Routledge.
22. Galloway, M.K. & Ishimaru, A.M. (2021). Radical recentring: equity in educational leadership standards. *Educational Administration Quarterly*, 51(3), 372-408.
23. Katz, S. & Deckman, S.L. (2024). Adapting for anti-racism: collaboratively diversifying faculty open professional development. *New Review of Academic Librarianship*, 1-10. <https://doi.org/10.1080/13614533.2024.2306356>
24. Hattam, S.K. & Weiler, T. (2024). Reframing the illegitimate academic: the critical role of professional development for sessional staff. *Teaching in Higher Education*, 29(4), 1023-1041.
25. Hands, C.M. (2023). *Pathways to community engagement in education: collaboration in diverse, urban neighborhoods*. Palgrave MacMillan.
26. Imperatori, B. (2017). *Engagement and disengagement at work: drivers and organizational practices to sustain employee passion and performance*. Springer.
27. King, H. (2022). *Developing expertise for teaching in higher education: Practical ideas for professional learning and development*. Routledge.
28. Keltz, N.E. & Wakabayashi, T. (2020). *Family engagement in schools: parent, educator, and community perspectives*. Sage Open (October-December), 1-13.
29. Khanal, J. & Ghimire, S. (2024). Understanding role conflict and role ambiguity of school principals in Nepal. *Educational Management Administration & Leadership*, 52(2), 359-377.
30. Khalifa, M.A., Gooden, M.A., & Davis, J.E. (2016). Culturally responsive school leadership: A synthesis of the literature. *Review of Educational Research*, 86(4), 1272-1311.
31. Lowery, K., Johnson, K., & Spearman, R. (2024). There's no place like homeplace: school principals' roles in developing student belonging as resistance against oppression. *Theory into Practice*, 63(1), 17-27.
32. Lowe, T. (2023). *Advancing student engagement in higher education: Reflection, critique, and challenge*. Routledge.
33. Lange, E.A. (2023). *Transformative sustainability education: Reimagining our future*. Routledge.
34. McCollough, C. (2024). Engaging social justice in STEM teaching. *American Journal of Science Education Research*, 573, 1-4.
35. Merriam, S.B. & Tisdell, E.J. (2016). *Qualitative research: A guide to design and implementation* (4th ed)> Jossey-Bass.
36. Miller, D. (1999). *Principles of social justice*. Harvard University Press.
37. Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: A methods sourcebook* (3rd ed). Sage.
38. McGregor, C. & Bedi, S. (2024). *Diversity leadership in education: Embedding practices of social justice*. McGill-Queen's University Press.
39. Olmo-Extremera, M., Fernandez-Terol, L., & Domingo-Segovia, J. (2024). Leading a professional learning community in elementary education: A systematic review of the literature. *Journal of Research on Leadership Education*, 19(1), 53-76.
40. Parson, L. & Ozaki, C.C. (2020). *Teaching and learning for social justice and equity in higher education: foundations*. Springer.
41. Ribay, K. (2024). Lessons from a professional learning community: Navigating tensions while moving between theory and practice in teaching chemistry for social justice. *Science Education*, 108, 734-761.
42. Rishi, P. (2022). *Managing climate change and sustainability through behavioral transformation*. Springer.
43. Rawls, J. (1999). *A theory of justice*. Harvard University Press.
44. Sayici, M. & Sincar, M. (2023). A cross analysis on social justice leadership of school principals in Turkey and Greece. *International Journal of Educational Leadership and Management*, 00(0), 1-29.
45. Santamaria, L.J. (2024). Critical change for the greater good: Multicultural perceptions in educational leadership toward social justice and equity. *Educational Administration Quarterly*, 50(3), 347-391.
46. Saldana, J. (2016). *The coding manual for qualitative researchers* (3rd ed). Sage.
47. Sarid, A. (2021). Social justice dilemmas: A multidimensional framework of social justice educational leadership. *Leadership and Policy in Schools*, 20(2), 149-167.
48. Smith, J.A., Flowers, P., & Larkin, M. (2022). *Interpretative phenomenological analysis: Theory, method, and research*. Sage.
49. Stake, R.E. (2010). *Qualitative research: studying how things work*. The Guilford Press.
50. Shaked, H. (2024). Expanding instructional leadership: How elementary school principals in Israel ensure the right teachers are in the right places. *Leadership and Policy in Schools*, 23(1), 29-41.
51. Tamadoni, A., Hosseingholizadeh, R., & Bellibas, M.S. (2024). A systematic review of key contextual challenges facing school principals: Research-informed coping solutions. *Educational*

- Management Administration & Leadership, 52(1), 116-150.
52. The Council of Chief State Officers (1996). Interstate School leaders licensure consortium: Standards for school leaders. <https://www.easds.org.uk/uploads/docs/Inter%20state%20standards%20USA.pdf>
53. The National Policy Board for Educational Administration (2015). Professional standards for educational leaders. https://www.npbea.org/wp-content/uploads/2017/06/Professional-Standards-for-Educational-Leaders_2015.pdf
54. The California Commission on Teacher Credentialing (2021). The California administrator performance expectations (CAPE) elements. <https://www.ctc.ca.gov/>
55. Varsou, O. (2023). Teaching, research, innovation, and public engagement. Springer.
56. Wang, F. (2018). Social justice leadership Theory and practice: A case of Ontario. *Educational Administration Quarterly*, 54(3), 470-498.
57. Wang, F. (2020). Social justice leadership and the art of war. *Critical studies in education*, 61(1), 86-100.
58. Whang, N. (2019). School leadership for social justice and its linkage with perilous politics. *Asia Pacific Education Review*, 20, 117-133.
59. Wright, J. (2022). The deep roots of inequity: Coloniality, racial capitalism, educational leadership, and reform. *Educational Administration Quarterly*, 58(5), 693-717.
60. Zhang, W. & Koshmanova, T. (2022). American high school principals create a caring professional learning community in serving students with disability in the mid-western schools: A basic qualitative study. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, 1(6), 21-33.
61. Zhang, W. (2023). Chinese private school principals explore transformational leadership in building a trust-based learning community for student development and school effectiveness. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, 2(9), 1-17.
62. Zhang, W. & Koshmanova, T. (2021). Exploring Chinese school principal experiences and leadership practice in building a professional learning community for student achievement. *International Journal of Organizational Leadership*, 10, 331-347.
63. Zhang, W. (2023). School principals as leaders of educational environments in school settings: Recontextualization of American educational practices in China. [Doctoral dissertation, Western Michigan University]. ProQuest Dissertations and Theses Global. <https://www.proquest.com/docview/2835781581?fq-omopenview=true&pq-origsite=gscholar>
64. Zhang, W. (2023). Exploring whole-person educational reform from principals' perspective on high-stakes testing. *International Journal of Educational Reform*, 1-33.
65. Zhang, W. (2023). Chinese school principals explore the fifth discipline fostering a learning community in a high school in Beijing. *International Journal of Educational Reform*, 32(1), 102-124.
66. Zhang, W. & Koshmanova, T. (2022). Chinese school principals create an equity-based learning community in leading school improvement for secondary high school student achievement. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, 1(5), 23-33.
67. Zhang, W. (2023). Exploring the trust-based learning culture from teachers for student success, growth mindset, and school development. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, 2(3), 1-14.
68. Zhang, W. & Koshmanova, T. (2022). Chinese school principals create an equity-based learning community in leading school improvement for secondary high school student achievement. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, 1(5), 23-33.
69. Zhang, W. & Koshmanova, T. (2022). American high school principals create a caring professional learning community in serving students with disability in the mid-western schools: A basic qualitative study. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, 1(6), 21-33.
70. Zhang, W. & Koshmanova, T. (2021). Building trust: Reflections of school principals working with students, parents, and teachers in an intensive language training center in Beijing. *Journal of Higher Education Theory and Practice*, 21(6), 63-78. <https://doi.org/10.33423/jhetp.v21i6.4376>
71. Zhang, W. & Koshmanova, T. (2021). From personal experiences of transformative learning on educational challenges and reforms in secondary school in China. *International Journal of Education*, 9(3), 1-8.
72. Zhang, W. & Koshmanova, T. (2021). Chinese teachers build a growth mindset to foster student achievement in the disadvantaged private secondary high schools. *Journal of Education and Human Development*, 10(3), 7-19.
73. Zhang, W. & Koshmanova, T. (2021). Exploring the role of school principal for social responsibility in the test-oriented educational context. Paper presented and published at the Annual Meeting of the American Educational Research Association (AERA), USA, April 9-12, 2021/*AERA Online Paper Repository*, 2021. <https://doi.org/10.3102/1687610>
74. Zhang, W. & Koshmanova, T. (2020) Creating A Teacher Collaborative Practice in An International

- High School in Beijing: The Role of The Principal, *Edulearn20 Proceedings*, Pp. 1760-1768.
75. Zhang, W. & Koshmanova, T. (2020). Understanding the Impact of Race, Socioeconomic Status on Student Achievement for Secondary School Students. *International Journal of Education and Human Developments*, 6(3), 5-10
76. Zhang, W. & Koshmanova, T. (2020). A Comparative Study of School Principal Experiences: Recontextualization of Best American School Principals of Using Technology in China. In Gary H. Marks & Denise Schmidt-Crawford (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 651-656). Online: Association for the Advancement of Computing in Education (AACE). Retrieved April 21, 2020, from <https://www.learntechlib.org/primary/p/21580>
77. Zhang, W. & Koshmanova, T. (2020). Chinese school principal views on trust, learning-centered leadership, and teacher learning in the test-oriented educational environment. *ICERi2020-Proceedings*. 86-92
78. Zhang, W. & Koshmanova, T. (2020). Chinese schoolteachers' view on critical thinking, self-direction, and problem-solving skills on student success in an international high school in Beijing. *ICERi2020-Proceedings*, 3026-3030.
79. Zhang, W. & Koshmanova, T. (2020). Understanding the Impact of Race, Socioeconomic Status on Student Achievement for Secondary School Students. *International Journal of Education and Human Developments*, 6(3), 5-10.

Autism (ASD) is a lifelong neurodevelopmental disorder which result in marked speech and language difficulties as well as mental abilities or behaviour [1]. The prevalence of autism is rising at an alarming rate globally [2] and this creates a major concern for quality nursing care in a variety of clinical settings. In 2014, CDC released new data on the prevalence of autism in the United States which identified 1 in 68 children (1 in 42 boys and 1 in 189 girls) as having ASD. In Cameroon, studies have shown that there has been a steady rise in the number of children with autism [3, 4, 5, 6]; in Africa however, the prevalence is uncertain [5]. The reasons for the alarming rate could be partly due to more advanced testing and classification methods and increasing awareness. Therefore, in response to the rising numbers of individuals being diagnosed with ASD, it is extremely important for nurses to be adequately prepared to meet the healthcare needs of this special population. Nurses working in the paediatric outpatient department, paediatric wards, physiotherapy, paediatric emergency, or the extended immunization unit are most likely to interact with this special group of individuals [7].

Nurses need to be adequately informed and prepared to meet the challenge of providing appropriate care for these special group of persons. It is very necessary for nurses to be aware

of ASD and how to interact properly with this special population in order to render the same high quality care as they do to the rest of society. Many times fear, partly due to the lack of knowledge regarding ASD may affect the amount and quality of healthcare time that is spent with this special group of persons.

Literature demonstrates that little or no attention is given to ASD in the undergraduate and postgraduate nursing training programmes [8,7]. It is worth stating that students' education and training would affect their attitudes and practice in future and hence, the outcomes of patient care. Thus, all nurses need to be empowered in order to be knowledgeable and confident in caring for patients with ASD, regardless of their practice setting. Nurses need to have knowledge regarding ASD as they are the ones interacting more with patients compared to other health care providers [9]. A lack of knowledge in regards to ASD can contribute to adverse feelings towards providing care for and interacting with individuals of the ASD population [10]. If nurses are adequately prepared with the necessary skills and knowledge regarding ASD, this unique population will receive the same safe, high quality, competent care as the rest of society, which they are entitled to.

Despite increasing awareness of ASD, recent studies reveal nurses' inadequate knowledge on autism and care [7]. Identifying nurses' knowledge gaps is mandatory in order to provide frameworks for equipping them with the necessary knowledge and skills to enhance their ability to interact with this special individuals and provide high quality and safe care. This study sought to investigate nurses' knowledge and attitudes regarding autism, specifically to assess nurses' basic knowledge on autism and common health conditions associated with autism, and to determine if nurses can competently offer care to children with autism. This may provide information that could go a long way to support the need for the inclusion of autism content in the training programmes for nurses [7]

MATERIALS AND METHODS

A hospital-based cross-sectional study was conducted from the 20th of October, 2019 to 30th of June, 2020 to investigate nurses' basic knowledge and attitude regarding autism. Both qualitative and quantitative approaches were employed to collect and process data. The Knowledge about Childhood Autism among Health Workers (KCAHW) questionnaire developed by Bakare et al, was adapted and used to collect data for this study. It has been previously shown to be an effective tool in measuring knowledge of ASDs among nurses in developing countries [11, 12]. The questionnaire has Cronbach's alpha value of 0.97 and has been established to have good test-retest reliability. The questionnaire had both open and closed ended questions.

The target population was made up of all nurses working in the Buea and Limbe Regional Hospitals in Fako Division, South West Region of Cameroon. Fako Division is divided into seven municipalities; Buea, Limbe I, Limbe II, Limbe III, Muyuka, Tiko and West coast. These areas are mainly inhabited by the Bakwerians, although many other tribes also

reside among them. These hospitals were purposively selected because they serve as referral and teaching hospitals. A sample of 41 participants who were selected by purposive and consecutive convenient sampling completed the study. The nurses were purposively selected to participate in the study according to their availability. All nurses working in the Maternity, Out Patient Department (OPD), Paediatric and Neonatology Units, and who gave their written consent to participate in the study were included.

Data was collected on nurses' basic knowledge on autism, common health conditions associated with autism and the nurses perceived feelings of being able to competently offer care to persons with autism. Participants' knowledge on autism was evaluated using 12 questions each given a point, making a total of 12 points. A score of 0-5 on 12 (00-41.7%) was referred to as not knowledgeable (poor knowledge) while a score of 6-12 (50-100%) was referred to as knowledgeable (good knowledge). Similarly, attitude was scored on a scale of 3, participants with scores of 2 and above on 3 (66-100%) were considered to have positive (good) attitude while those with scores of 1 on 3 (00-44%) had negative (bad) attitude towards autism. Before administering the questionnaire, it was pre-tested by administering five copies to five parents who were not part of the study sample. Their responses confirmed the clarity and validity of the questions. Copies of the questionnaire were then administered to the study participants who completed the various sections of the questionnaire.

This study was authorised by the Department of Nursing Faculty of health Sciences, University of Buea, Cameroon. An official permission was obtained from the directors of the hospitals and also, from the heads of each units to collect data. The participants were assured that the data will be kept confidential and used for research purposes only. In addition, the researcher assured the participants that they will not be exposed to any harm by giving their honest responses regarding knowledge and attitude toward autism.

RESULTS

All the 41 respondents who had heard of autism completed all sections of the questionnaire giving a response rate of 100%. The age range >30years was the most represented 30(75.6%), 33(80.49) were females, 21 (51.2%) were from the neonatology unit, 26(65%) were Bachelor's degree holders, 23(56.1%) had more than 5 years of work experience and 31(75.6%) were employed. Among participants who had heard of autism, 50% said they heard in the health facility, only 1(2.44%) of them had attended a seminar on autism and 15(35.59%) had not encountered autism (Table 1)

In all, 41 (58.57%) of the 70 participants approached for the study had heard of autism and overall, 24.4% of participants were not knowledgeable on ASD. Slightly above half of them 23(56.10%) defined autism correctly, 15(36.59%) said autism can be identified by abnormal behaviour, repetitive speech and body movements, 33(80.49%) said autism manifests as deficit in social interaction, 29(70.43%) said deficit in communication and 23(56.10%) said repetitive restrictive stereotyped behaviour. About half 21(51.22%) of the

participants said the cause of autism is unknown, 22(53.66%) knew common health conditions associated with autism, and 23(56.10%) knew the risk factors of autism (Table 2). It was statistically significant that knowledge on autism had an association ($p < 0.001$) with qualification, years of working experience and their units of work and gender. Bachelor's degree holders were more knowledgeable 21(80.77%), females 27(81.82%) were more knowledgeable than males, and participants who have worked for more than five years 18(81.82) were more knowledgeable (Table 3)

In aggregate, 40.65% of the respondents had positive attitudes towards autism; 38(92.68%) said nurses should care for persons with autism, while 25(60.98) said they cannot competently care for individuals with autism (Table 4).

Reasons why nurses should care for persons with autism include "they should be treated as patients" 9(24.3%), 13(35.15) said "to improve on condition and reduce stigmatisation", 8(21.6%) mentioned "they deserved to be cared for" while 8 (21.6%) said "it gives them a sense of belonging". Reasons why nurses should not care for persons with autism was stated as "they are special cases and should be treated as such" (Table 5). The participants thought they can competently render care to persons with autism for various reasons;" trying to interact with the child, devise a unique nursing care plan, learn to appreciate them and be patient with them" 11 (40.7%), "competent care is offered by team because management is multidisciplinary" 4(14.8%), while reasons competent care cannot be provided include "Not very familiar with the condition, no proper knowledge in the disease, I need more training" 12(44.4%) (Table 6)

DISCUSSION

This study aimed at investigating nurses' basic knowledge and attitudes regarding autism. It is worth mentioning that nurses need adequate knowledge and skills in order to competently provide quality care to patients with autism Corden et al [13]. This will go a long way to prepare them to face the challenge of caring for persons with autism.

According to the findings of this study, female respondents were the most represented. This is in line with the study of Mohamed et al [14] and Tasew et al [15] who found in their studies respectively that more than half (60%) and the majority (70.1%) of the respondents were females. Also, our finding agrees with that of Sampson et al [16] where females were most represented. This could be explained by the fact that females are more involved in nursing. Also, it is very clear that since the Florence Nightingale era nursing is a female dominated profession [17]. Similar result was reported by Bofo [18] from his study conducted among nurses in Ghana.

In addition, our study revealed that majority of the participants were Bachelor's Degree holders. This could be due to the fact that the status of nursing is fast changing in Africa and in response, many higher institution of learning in Cameroon are training Bachelor's Degree holders in nursing to meet the challenge of the 21st Century. Our finding concurs with the finding of Tasew et al [15] where the majority

(64.4%) of the respondents had completed their first degree. Again, our study revealed that more than half of the participants had not encountered autism. This finding could be explained by the fact that many persons with ASD in many Africa countries, Cameroon inclusive are not being diagnosed due to the low level of awareness and inadequate or lack of proper diagnostic measures *Fabo* [3].

Concerning the participants' knowledge on autism, this study showed that generally, more than half participants had basic knowledge on autism. This finding supports that of Corden et al [13] who reported the overall results of their study indicated that health care workers had low to moderate levels of knowledge on autism. Also, the findings of Corsano et al [19] showed that nurses have a basic knowledge of ASD. Again, our finding is congruent with that conducted by Sampson et al [16] who revealed that Psychiatric Nurses as well as Paediatric Nurses had low knowledge on autism.

Furthermore, our study revealed that majority of the participants could define autism correctly, and about half of the participants said the cause of autism is unknown. This is in disagreement with that of Corden et al [13] in which over 40% of respondents attributed the aetiology of autism to supernatural causes such as lineage curses, enemies and the devil. They also reported that over 30% of the participants stated that autism could be prevented by avoiding sin or pleasing ancestral spirits. Our finding also contradicts McDonnell et al [20] whose participants mentioned that autism could be caused by child neglect. It is worth stating that current studies on autism disagree with these beliefs [21].

This study further revealed that slightly above half of the participants mentioned that autism presents as repetitive speech and abnormal repetitive restrictive stereotyped behaviour while most of them said deficit in social interaction and communication. This finding coincides with that of Tasew et al [15] who found that nurses were knowledgeable regarding the obsessive and repetitive behavioural pattern domain of the core symptoms of autism. This could be due to the fact that nurses may be more familiar with these core symptoms of ASD. Again, our finding is congruent with [Govindan et al \[22\]](#) who found that most of the study participants reported that children with autism have problem in social interaction and communication, why less number knew that they would have specific repetitive restricted pattern behaviour.

Also, the findings of this study showed that slightly above half of the participants knew common health conditions associated with autism. This is incongruent with Corsano et al [19] finding where the nurses obtained lower scores regarding comorbidity and onset of the ASD; however, our finding is similar to that of [Govindan et al \[22\]](#) where most of the study participants knew the comorbid conditions that occur along with autism.

Furthermore, the study revealed that there was a statistically significant difference between knowledge on autism and qualification, years of working experience and participants' units of work as well as gender. Our finding disagrees with

those of Sampson et al [16] and Mohamed et al [14] who found that total knowledge scores results revealed that there was no significant difference with health care professionals' gender, job differences and years of experience. However, our study revealed that all the nurses in the Paediatric unit had good knowledge on autism, and this finding is in agreement with that of Corsano et al [19]. Also, Tasew et al [15] found that nurses working in Pediatric and Psychiatric Departments can be considered more knowledgeable of ASD.

As mentioned earlier our study showed an association between working experience and nurses' knowledge on autism; it was statistically significant that those who had more years of working experience were more knowledgeable. This supports the finding of Tasew et al [15] who found that the respondents with more experience had higher mean scores on knowledge regarding autism compared to those with less years of working experience. Similarly, Corsano et al [19] found that older nurses and those who had more experience with children with ASD showed higher scores. Our finding is also in conformity with that of a study conducted in South Nigeria [11]. To further support our finding, Corden, et al [13] found that nurses with less than six years' experience increasingly demonstrated lack of knowledge regarding the cause of autism. This finding indicates that learning and experience in practice might influence nurses' knowledge. This confirms the fact that a more extended experience of practice in the clinical setting would have a significant impact on the overall quality of nursing care rendered to patients.

Talking about association between knowledge and qualification, this study also revealed a statistically significant difference in knowledge scores among the different levels of qualification for the nurses. It was found that all participants with the State Registered Nursing (SRN) diploma had good knowledge regarding autism compared to participants with Bachelors and Postgraduate degrees where some respondents were not knowledgeable. This finding contradicts that of Tasew et al [15] in which the respondents with a BSc degree achieved higher mean scores than diploma holders. Our finding is also contrary to those of the studies of Keklik et al [23] and Esegbe et al [24] conducted in Turkey and Nigeria respectively which showed that nurses with higher qualifications were found to be more knowledgeable than those with lower qualifications. This difference could be explained by the fact that a more general content is being taught at lower levels of nursing training while a more specialised content is being taught at the postgraduate level. Thus, it is high time we considered the inclusion of developmental disability particularly autism content in higher-level nursing education curricula.

With respect to the participants' attitude toward autism, almost all of the respondents said nurses should care for persons with autism. This is in line with the goal of nursing which is to care for all with diseases and infirmities [25]. More than half of the participants said they cannot competently care for individuals with autism. This finding is in conformity with Singer [26] findings which reveals the importance of nurses receiving education with respect to all

forms of disabilities, including other intellectual and developmental, especially ASD. Queisser [27] noted that if nurses are unaware of ASD and how to interact with this special population, one wonders how they can competently render the same high quality of care to them as they would do to the rest of society. It is worth mentioning that the symptoms of ASD may prove to be quite challenging to the nurse, if nurses are not prepared for interacting with persons with autism.

Overall, less than half of the participants had positive attitudes towards autism. This could be due to the fact that fear, secondary to a lack of knowledge regarding ASD, would negatively influence nurses' attitude towards care provision. Chun and Berrios-Candelaria [28] stipulate that the core symptoms of autism; social difficulties, communication impairments and ritualistic or repetitive behaviours, can be very problematic when the individual is exposed to changes in routines, thus, affecting the amount and quality of healthcare time that is spent with these individuals. Therefore, by being aware of these issues, the nurse can proactively prepare for these possible challenges Queisser [27].

This study revealed that participants said reasons why nurses should care for persons with autism include they should be treated as patients, to improve on condition and reduce stigmatisation, they deserved to be cared for and give them a sense of belonging. On the other hand, reasons why nurses should not care for persons with autism was stated as they are special cases, should be treated as such. It is important to state that persons with autism frequently suffer from associated conditions such as gastrointestinal disorders, eating and feeding challenges, seizures, sleep disturbances, attention deficit and hyperactivity disorder (ADHD), and anxiety among others [29]. Thus, they need to receive quality medical care just like their normally developing peers [30].

The study revealed that among participants who said nurses should care for patients with autism, majority said they can competently render care to persons with autism by "trying to interact with the child, devise a unique nursing care plan, learn to appreciate them and be patient with them". This finding suggests that nurses are aware of the primary goal of nursing which is quality care for all. Our finding is in conformity with Corden, et al [13] finding in which studies reviewed demonstrated perceived self-efficacy about autism among health workers across a range of backgrounds. Also, a few of our respondents said "competent care can be offered by a team because the management of autism is multidisciplinary". This is in accordance with [31] who stipulates that the supports for persons with autism is multidimensional.

This study revealed that majority of the participants said reasons why competent care cannot be provided included the fact that the nurses are not very familiar with the condition, they lack proper knowledge in the disease, and they need more training. This finding could be justified by the fact that awareness and adequate knowledge regarding autism can possibly result in greater confidence in caring for patients

with autism. This may in turn boost an individual’s belief in their ability to perform specific interventions in their clinical practice. Our finding is in accordance with Corsano et al [19] whose study showed that nurses had difficulties in managing the relationship with children having ASD, and that they sought useful strategies to help out. Also, the authors reported that due to difficulties interacting with persons having autism nurses declared the need for more knowledge about ASD. They said the nurses would like to improve their capacity (through training) in order to better interact with these special group of patients. In like manner Corden, et al [13] found that there was a positive relationship between autism knowledge and perceived self-efficacy. Similarly, Sena *et al* [32] found that the nurses had inadequate knowledge towards ASD due to lack of training. Most of their subjects expressed that they needed further information about the management of children with autism. Hence, continuing education programme toward childhood autism is necessary among nurses to improve on their knowledge.

CONCLUSION

This study revealed that more than half of the respondents had basic knowledge on autism. The respondents’ knowledge level was significantly different among participants’ qualifications, units of practice and work experience. Overall, less than half of the participants had positive attitude towards autism. There is therefore, need for autism spectrum disorders to be included in the training curriculum as well as the organization of seminars for nurses to improve and upgrade nurses’ knowledge. This may go a long way to enhance quality care for persons with autism in Cameroon. This study which is the first in Cameroon could serve as a reference to initiate further investigation.

LIMITATIONS OF THE STUDY

Due to the small sample size, the findings may not be generalised, however, the study was conducted in the two hospitals in the South West which serve as referral and teaching hospitals in the South West Region of Cameroon. In addition, some of the respondents took the questionnaire home and return the next day. They might have consulted other sources before completing the questionnaire, hence, their responses might not have revealed the true picture regarding nurses’ basic knowledge on autism. However, our findings are very much within the range/in line with documented literature. Also, based on our findings our study suggests the need for awareness and training on the proper

care of autism as well as the need for a more robust study in this area.

TABLES AND FIGURES

Table 1: Demographic Characteristics of Participants

Table 2: Participants’ Knowledge on Autism

Table 3: Factors associated with Knowledge.

Table 4: Participants’ Attitudes on Autism

Table 5: Reasons why Nurses should and should not Care for Persons with Autism

Table 6: Reasons for and against the Provision of Competent Care

Table 1: Demographic Characteristics of Participants

Characteristic		N (%)
Age	>30 years	10(24.4)
	<30 years	31(75.6)
Sex	Female	33(80.49)
	Male	8(19.51)
Unit	Neonatology	21(51.2)
	Pediatric	8(19.5)
	OPD	10(24.4)
	Maternity	2(4.8)
Years of Work Experience	<5	18(43.9)
	>5	23(56.1)
Qualification	Nurse Aid	2(5)
	BNS	26(65)
	SRN	3(7.5)
	Postgrad	9(22.5)
Employment Status	Employed	31(75.6)
	Not Employed	10(24.4)
	Community	9(50%)
Heard of autism in Health Facility	Yes	26(65)
	No	26(63.41)
	Encountered Autism	15(35.59)

Table 2: Participants’ Knowledge on Autism

Items on Knowledge	Responses			
	Yes	No	Don’t know	
Definition	Right	56.10% (23)	43.90% (18)	0.0% (0)
	Correctly characterized autism	56.10 % (23)	43.90% (18)	0.0 % (0)
Cause/How	Autism is hereditary	56.10 % (23)	29.27% (12)	14.62% (6)
	Abnormal Behaviour	12.20% (5)	00.0% (00)	00.0% (00)

	I Was told	36.59% (15)	0.0% (0)	0.0% (0)
	Repetitive Speech	14.62% (6)	0.0% (0)	0.0% (0)
	Abnormal Behaviour; Repetitive Speech/body movement	36.59% (15)	0.0% (0)	0.0% (0)
	Unknown	51.22% (21)	34.15.0% (14)	14.62% (6)
	A lifelong disorder	63.41% (26)	36.59% (15)	0.0% (00)
	Knew the risk factors of autism	56.10% (23)	34.15.0% (14)	9.76% (4)
	Knew common associated health conditions	53.66% (22)	17.10% (7)	29.27% (12)
Risks/Signs	Deficit in Social Interaction	80.49%(33)	24.39%(10)	0.0%(0)
	Deficit in Communication	70.43%(29)	30.0%(3)	4.88%(2)
	Repetitive restrictive stereotyped behaviour	56.10% (23)	26.83%	17.10%(7)

Table 3: Association between Knowledge and Participants Characteristics

Variable	Knowledgeable (n=31)	Non-knowledgeable (n=10)	P-value
Qualification			<0.001
Nurse AID	2 (100)	0 (0.00)	
BNS/Degree	21(80.77)	5 (19.23)	
SRN	4 (100)	0 (0.00)	
Postgraduate	4(44.44)	5 (55.56)	
Employment Status			<0.001
Unemployed	7 (58.33)	3(41.67)	
Employed	24 (77.42)	7 (18.42)	
Sex			<0.001
Male	4(50)	4(50)	
Female	27 (81.82)	6 (18.18)	
Years of Experience			<0.001
<5 years	13 (68.42)	6 (31.58)	
≥ 5 years	18 (81.82)	4 (18.18)	
Unit of work			<0.001
OPD	1(50)	1 (50.00)	
Neonatology	21(72.41)	8 (27.59)	
Paediatric Unit	8(100)	0 (0)	
Maternity	1(50)	1 (50)	

Table 4: Participants' Attitudes on Autism

Items on Attitudes	Responses		
	Yes	No	Don't know
Nurses should care for persons with autism	92.68% (38)	7.32% (03)	0.0% (0)
Can competently care for persons with	26.83 % (11)	60.98% (25)	12.20 % (5)

Autism			
Attended Seminar on Autism	1(2.44%)	40(97.56)	
MRS	Positive	Negative	Non-response
	40.65%	55.29%	12.20%
	(50)	(68)	(5)

Table 5: Reasons why Nurses should and should not Care for Persons with Autism

Indicators	Reasons	N(%)
Nurses should Care for Persons with Autism	They should be treated as patients	9(24.3%)
	To improve on condition and reduce stigmatisation	13(35.15)
	They deserve to be cared for/ equal health for all	8(21.6%)
	gives them a sense of belonging	8 (21.6%)
	TOTAL	38(100%)
Nurses Should not Care for Persons with Autism	They are special cases, should be treated as such	3(7.30)
	TOTAL	3(100%)

Table 6: Reasons for and against the Provision of Competent Care

Indicators	Reasons	N(%)
Why nurses can provide competent care	Trying to interact with the child	2(7.41)
	Devise a unique nursing care plan	3(11.11)
	Learn to appreciate them and be patient with them	3(11.11)
	I know the various areas of need	2 (7.41)
	Equal health for all	1(3.70)
	Competent care is offered by team Because management is multidisciplinary	4(14.8)
	TOTAL	15(55.54)
Why nurses cannot provide competent	Don't have much knowledge	1(3.70)
	Not very familiar with the condition	1(3.70)
	I need more training	9(33.3)
	No experience in doing that	1(3.70)
	TOTAL	12(44.4)

REFERENCES

1. National Center on Birth Defects and Developmental Disabilities (NCBDDD), Centers for Disease Control and Prevention (CDC). Developmental monitoring and screening. 2020. Web site. <https://www.cdc.gov/ncbddd/childdevelopment/screening.html>. Retrieved October 10, 2020. Accessed December 17, 2021.
2. Redfield RR, Richards CL, Bunnell R, et al. Prevalence of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2016. *MMWR Surveill Summ* 2020; 69(4): 1–8.
3. *Fabo, R. (2012).Autism in Cameroon: Autism around the globe.* Retrieved on 25-07-2022, 9pm from

- <http://www.autismaroundtheglobe.org/countries/Cameroun.asp>
4. **Ntaryike, D. (2013).** Autism victims population on the increase in Cameroon. Retrieved on May 24, 2022, 9pm from <http://www.cameroonpostline.com/autism-victims-population-on-the-increase-in-cameroon/>.
 5. Nzie, F. (2014). The thin line between autism and witchcraft in Cameroon. Retrieved on June 25, 2022, 9pm from <http://www.africaontheblog.com/the-thin-line-between-autism-and-witchcraft-in-cameroon/>.
 6. Ayakaka G. Healthcare professionals' knowledge about Autism Spectrum Disorder in children A Systematic Literature Review SCHOOL OF EDUCATION AND COMMUNICATION (HLK) Jönköping University 2021. Available at ; <https://hj.diva-portal.org/smash/get/diva2:1548709/FULLTEXT01.pdf> accessed on 26th March, 2023
 7. Gardner, M. R., Dunphy Suplee, P., & Jerome-D'Emilia, B. (2016). Survey of nursing faculty preparation for teaching about autism spectrum disorders. *Nurse Educator*, 41(4), 212- 216. doi.10.1097/NNE.0000000000000237
 8. Giarelli, E., Ruttenberg, J., & Segal, A. (2012). Continuing education for nurses in the clinical management of autism spectrum disorders: Results of a pilot evaluation. *The Journal of Continuing Education in Nursing*, 43(4), 169-176. doi.org/10.3928/00220124-20111115-01
 9. Garg, P., Lillystone, D., Dossetor, D., Wilkinson, H., Kefford, C., Eastwood, J., & Liaw, S. T. (2015). A framework for developing a curriculum regarding autism spectrum disorders 28 for primary care providers. *Journal of Clinical and Diagnostic Research*, 9(10), SC01- SC06. <http://dx.doi.org/10.7860/JCDR/2015/13248.6651>
 10. Werner, S. (2011). Assessing female students' attitudes in various health and social professions toward working with people with autism: A preliminary study. *Journal of Interprofessional Care*, 25, 131-137. doi.10.3109/13561820.2010.5125043
 11. Bakare MO, Ebigbo PO, Agomoh AO, et al. Knowledge about childhood autism among health workers (KCAHW) questionnaire: description, reliability and internal consistency. *Clin Pract Epidemiol Ment Health* 2008; 4: 17.
 12. Igwe MN, Ahanotu AC, Bakare MO, et al. Assessment of knowledge about childhood autism among paediatric and psychiatric nurses in Ebonyi state, Nigeria. *Child Adolesc Psychiatry Ment Health* 2011; 5(1): 1-8.
 13. Corden, K., Brewer, R. & Cage, E. A Systematic Review of Healthcare Professionals' Knowledge, Self-Efficacy and Attitudes Towards Working with Autistic People. *Rev J Autism Dev Disord* 9, 386-399 (2022). <https://doi.org/10.1007/s40489-021-00263-w>
 14. Mohamed Mohamed; Naglaa Fathy Mahmoud. Knowledge and attitude of Mothers and Health Care Professional related to Autistic Children Sayeda, D.N.Sc.; Psychiatric Mental Health Nursing Faculty of Nursing, Cairo University Tanta Scientific Nursing Journal. 2017; 12 (1); 1-28. https://tsnj.journals.ekb.eg/article_71161_32322deaf66d1fb5d24b7ca6f6df0d15.pdf
 15. **Salem Tasew, Hussien Mekonnen,** and **Abel Tibebe Goshu** et al. Knowledge of childhood autism among nurses working in governmental hospitals of Addis Ababa, Ethiopia. 2021 <https://doi.org/10.1177/205031212111049121>. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/205031212111049121>
 16. Sampson W-G, Sandra AE. Comparative study on knowledge about autism spectrum disorder among paediatric and psychiatric nurses in public hospitals in Kumasi, Ghana. *Clin Pract Epidemiol Ment Health* 2018; 14: 99-108.
 17. Bureau's Industry and Occupational Statistics. Men in nursing occupations-Census Web Sites 2013. Available from: <http://www.census.gov/people/io/publications/reports.html>
 18. Bofo IM. Ghana nurses' emigration intentions: The role of workplace violence. *Int J African Nursing Sci* 2016; 5: 29-35.
 19. Corsano P, Cinotti M, Guidotti L. Paediatric nurses' knowledge and experience of autism spectrum disorders: An Italian survey. *J Child Health Care*. 2020;24(3):486-495.
 20. McDonnell CG, Boan AD, Bradley CC, Seay KD, Charles JM, Carpenter LA. Child maltreatment in autism spectrum disorder and intellectual disability: results from a population-based sample. *J Child Psychol Psychiatry*. 2019;60(5):576-584.
 21. NICE. (2017). *Overview | Autism spectrum disorder in adults: Diagnosis and management | Guidance | NICE*. <https://www.nice.org.uk/guidance/cg128>
 22. **Govindan R, Ramu R.** Nurses' Knowledge and Understanding about Autism. *Indian J Community Med*. 2020; 45(3): 382-383
 23. Keklik D, Nazik E. Knowledge about childhood autism among nurses in Turkey: a cross-sectional descriptive study. *Perspect Psychiatr Care*. Epub ahead of print 23 January 2021. DOI:
 24. Esei gbe EE, Nuhu FT, Sheikh TL, et al. Knowledge of childhood autism and challenges of management among medical doctors in Kaduna State, Northwest Nigeria. *Autism Res Treat* 2015; 2015: 892301.
 25. Ahmed FY, El Karmalawy E, Helmy E. Assessment of knowledge and attitude of technical nursing school students regarding autistic children. *Egypt Nurs J* 2020;17:117-25. Available at

- <http://www.enj.eg.net/text.asp?2020/17/2/117/320264>
26. Singer, B. (2012). Perceptions of school nurses in the care of students with disabilities. *The Journal of School Nursing*, 29(5), 329-336. doi:10.1177/1059840512462402
 27. Queisser C. Assessing Nurses' Knowledge About Autism Spectrum Disorders. *The Journal of Nursing Education* 2016 pp1-31pdf Accessed on 30-03-2023 from <https://sigma.nursingrepository.org/bitstream/handle/10755/621158/Paper.pdf?sequence=3>
 28. Chun, T., & Berrios-Candelaria, R. (2012). Caring for children with autism in emergency situations: What can we learn from ... *Broadway? Contemporary Pediatrics*, 29(9), 56- 65. ISSN: 8750-0507
 29. Batshaw ML, Roizen NJ, Pellegrino L. *Children with Disabilities*. 8th ed. Baltimore, Maryland: Brookes Publishing Co; 2019.
 30. Eta VEA. Healthcare issues in children with developmental disabilities (Autism). *Pediatr Neonatal Nurs Open J*. 2022; 8(1): 1-13. doi: 10.17140/PNNOJ-8-134
 31. Eta EVA. *Developmental Disabilities (Autism): Comprehensive Guide For Nurse, Midwives And Special Educators*. 1st Edition, Vol 1. LAMBERT academic Publishing, 2021
 32. Sena RC, Reinalde EM, Silva GW, Sobreira MV. Practice and knowledge of nurses about childhood autism. *Research Magazine: Care is Fundamental Online*. 2015;7:2707–16.