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The Purpose of the Publication

The Journal of Issues and Practice in Education (JIPE) is a refereed journal produced by the Faculty of Education of the Open University of Tanzania. It is published twice a year that is June and December. The journal is designed to inform both academics and the public on issues and practice related to the field of education.

The journal provides academics with a forum to share experiences and knowledge. It also informs the public about issues pertinent to their day to day educational experiences. Sharing information related to education is important not only for academic, professional and career development but also for informed policy makers and community activity in matters pertaining to the field of education.

Editorial

Dear readers, on behalf of the editorial board, kindly allow me to introduce to you this Issue Number 2, Volume 13 of the Journal of Issues and Practices in Education (JIPE), of the Faculty of Education – the Open University of Tanzania. I sincerely acknowledge the contribution of all authors and reviewers who dedicated their time to write and review the manuscripts included in this Issue. I also appreciate the hard work of the Editorial Board of JIPE and the secretariat team for bringing out this issue of the Journal.

The Journal of Issues and Practice in Education (JIPE) is a refereed journal. The journal is published twice a year – June and December. JIPE is designed to inform both academics and the public on issues and practices in the field of education. The current issue comprises of seven (7) articles. These articles delve on: *Parental Self-Efficacy*; *Impacts of Reciprocal Teaching Technique on Academic Achievement of Students*; *Leadership Styles and Turnover Intentions of Public Secondary School Teachers*; and *Vocabulary Size and Learners' Performance across the Levels of Text Comprehension*. Other areas include *Parents' valence toward school as related to their perceptions of Invitation to School involvement; Choice of Subject Combinations among Students in Secondary Schools and the Quest of Future Careers among Graduates;* and *Leadership Styles and Turnover Intentions of Public Secondary School Teachers*. It is the expectation of the editorial team that you will benefit reading the articles published in this issue. I look forward to receiving more manuscripts for the forthcoming JIPE issues

Dr. Mohamed Msoroka
CHIEF EDITOR

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The Choice of Subject Combinations among Students in Secondary Schools and the Quest of Future Careers among Graduates in Tanzania

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ABSTRACT

It is common for many employees, especially for the most recent young graduates in Tanzania, to complain that they have entered professions which are not of their interest. This incongruity has been due to lack of knowledge on the right choice of subjects against their future career/aspirations. It is from this reason, the current study examined factors influencing students' choices of subjects in Tanzanian secondary schools. This study adopted mixed-methods research approach, with a cross-sectional design. It involved 165 respondents – 5 heads of schools, 25 teachers and 135 students from 5 selected secondary schools. The study employed questionnaires and interviews to collect data. The findings revealed that 60% of students were not aware of the subject combinations to study. Alongside, 60% of students were not comfortable on the subject combinations they were studying. Also, 68% of reported that their parents were not involved in a discussion with their children on the subject choice and future careers. It was further revealed that, teachers rarely influenced students' choices of subjects. It was therefore recommended that, there should be an orientation to students on the choices of subjects in relation to future careers when they enter secondary schools. This should go along with parents' encouragement to their children dreams.

Keywords: *Aspirations, career choices, choice of subjects, graduates, subject combinations*

INTRODUCTION

The development of any nation depends on its quantity and quality of available human resources. The human resources, who are sufficiently equipped with requisite knowledge to solve societal problems, are able to meet diverse challenges and competitions both regionally and globally. Such knowledge is built both at home, through parents'/guardians' teachings, and at school through teachers with a support of reflective policies and curricular (Tapia-Fonllem et al., 2020; Jungea et al., 2021). It is argued here that the foundation of developing good human resources in different professions is built on the subject choices at lower classes, especially at ordinary level secondary school education. Young people's subject choices at age 14 may have important consequences for their future academic and labour market outcomes. Usually, the decisions on subject choices are shaped by schools in which children find themselves (Anders et al., 2018).

Based on policies and curricula, different countries have set different approaches on students' transition from school to work. For instance, Iannelli and Smyth (2017) suggested two different logics that underpin national education systems. The first system follows education logic (e.g. Scotland, Ireland). This system shapes the boundaries between school-based vocational and academic education. The second system follows employment logic (e.g. Netherlands). This system makes a sharp distinction between academic and vocational education at school (Hipkins & Vaughan, 2019). This system shows clear association between the type of learning pathway a student chooses and their employment outcomes. Iannelli and Smyth (2017) describe a key difference between the national systems of Scotland and Ireland. The latter

has a common core of compulsory examination subjects (English, Irish, mathematics) and students typically choose a minimum of other six subjects. In Scotland, there are no compulsory subjects for higher leaving certificate examinations — students are free to put together any combination, within the limits of their individual school system (Hipkins & Vaughan, 2019). Like Ireland, England provides students with tightly structured choices. Since 2010, the English General Certificate of Secondary Education (GCSE) qualification has been structured as an "English Baccalaureate" (EBacc). This specifies English, Mathematics, sciences (including computer science), history or geography, and language subjects as academic. Only these subjects can contribute to the EBacc qualification; therefore, they shape subject choices across secondary schools. Consequently, subject specialisation happens earlier in England than in many other countries (Hipkins &Vaughan, 2019).

Tanzania has its long history for subject combination choices. For instance, in 1972, the government diversified secondary education into vocational biases including commercial, agriculture, technical and home economics (United Republic of Tanzania, 2000). This was further expanded by secondary education curriculum of 2007. United Republic of Tanzania (2007) indicates five main learning areas including Languages (Kiswahili, English, French and Arabic) and Natural Sciences and Technologies (Biology, Chemistry, Physics, Mathematics, Information and Computer Studies, Technical Education, Agriculture and Home Economics). Other learning areas include Social Sciences (History, Geography and Civics), Business (Commerce and Book Keeping) and Aesthetics (Fine Arts, Theatre Arts, Physical Education and Music). Through these five learning areas, a student is able to decide the subjects of his/her choice of interest and dream as he/she continues with

higher learning to develop his/her career. The opportunity for students to decide the subjects of their choices is made in form three based on the performance of Form Two National Examination (FTNE) results. As students enter form three, they study five compulsory subjects and at least two elective subjects from natural science subjects, social science subjects (art subjects) or from business subjects. Students make choices based on their abilities, strengths and aspirations. This selection is guided by learners' experiences acquired from form one to form two (Ndalichako & Komba, 2014). However, the issue of subject choice among secondary school students has become a debate among scholars (Olamide & Olawaiye, 2013). The experience shows that most students have future life aspirations in their minds but they do not know which subjects are relevant to their aspirations. It shows that, they do not have sufficient knowledge and information on the subjects to be selected as regards to their future careers (Nyamwange, 2016). The following is researcher's experience:

> One day, the researcher got shocked from the answers of certain secondary school students. He asked them about their aspirations with regards to their subjects of choices; they had different answers. Some of them aspired for medical specialization, but followed arts and business subjects; they were not studying natural science subjects. On the other hand, there were some others who wanted business/accounts specialization, but they studied natural science subjects and not business subjects.

This suggests a great mismatch between subjects selected and expected future careers. It is possible that most of graduates have irrelevant certificates to their inner anticipated future career/aspirations. With this contradiction, the researcher sought to investigate factors influencing students' choices of subject

combination in Tanzanian secondary schools. This study was guided by the following research questions:

i.   What is the students' level of awareness on the available subject combinations in secondary schools?
ii. How do parents influence students' choices of subject combinations in secondary schools?
iii. How do teachers influence students' choices of subject combinations in secondary schools?

Methodological Approaches

This study adopted a mixed-methods research approach. The use of this approach enabled the researcher to employ the aspects of both qualitative and quantitative approaches, which were necessary to address the research questions, guided this study. With this approach, the researcher equally balanced the anticipated doubts that could happen when one approach was implemented (Cohen, Manion & Morrison, 2007). With this approach, cross-sectional design was considered an appropriate design, because it enabled a collection of relevant data one point in the time (Creswell, 2012). This study involved five selected secondary schools in Mbeya District. These schools were purposefully selected as they have ordinary and advanced levels of secondary school classes (form one to form six classes). From the selected schools, five (5) Heads of schools were selected (purposefully) based on their position. Twenty-five (25) teachers, fifty (50) form two students, and fifty (50) form three students were randomly selected. The remained thirty-five (35) form six students were stratified randomly selected based on their subject combination streams to make a total number of one hundred sixty-five (165) respondents. Form two students were selected because they are about to attend the FTNE which prepares them to enter

form three, a class in which they are supposed to make subject choices. Form three students were selected because they have an experience with subject choices. Moreover, form six students were involved because they were expected to be in a good position to judge whether the subject-combination chosen and studied satisfy their near career aspirations or not. The data from students and teachers were collected through questionnaires. The questionnaires comprised of closed and open ended questions. Interviews were used to collect the data from heads of schools. The quantitative data were analysed through descriptive statistical analysis whereby tables and percentages were presented through computer software programme called Excel. For qualitative data, thematic analysis – data familiarization, grouping of common themes and assigning properties and patterns – was used.

Results

This part presents research findings as regards to specific questions of the study.

Awareness the Subject Combination Choices

Under this part, the researcher asked two questions to students. The first question was asked to form two students who were expecting to sit for FTNE as a requirement to enter form three. The question asked, *"Are you aware of the available subject combinations?"* It was revealed that 40% of form two students were aware of the available subject combinations, 36% were not aware of the available subject combinations, and 24% depended on the allocation made by their teachers. The second question was asked to both form three and form six students. The question asked, *"Are you comfortable with the subject combination you are studying?"* The results show that 40% of form three and form six students involved in the study were comfortable with their subject combinations. On

the other hand, 60% of form three and form six students involved in the study were not comfortable with their subject combinations. When asked why they were not comfortable, 60% of them noted that they selected subject combinations which did not correspond to their future careers/aspirations. They made such a mistake because of the lack of knowledge on the relationship between subject combinations and future career.

The Influence of Parents on Students' Subject Combinations Choices

On this aspect, the researcher asked the following question to students: *"Do your parents discuss with you about your subject combination choices and your future career?"* With this question, the researcher wanted the respondents to respond with either YES or No. However, as regards to the demand of the question, students were asked to explain about their responses. The results as regards to these questions were as follows.

Table 1: Parents' Involvement on Students' Subject Combination Choices

Response	Form Two	Form Three	Form Six
YES	15	18	10
NO	35	32	25
Total	50	50	35

Source: Field data (2019)

The results in Table 1 shows that 43 (32%) of students discuss with their parents about their choices of subjects and future careers. On the other hand, 92 (68%) of students did not discuss with their parents about their choices of subjects and future careers. This

suggests that most parents did not involve much with subject choices and future careers of their children. Those who had time to discuss with their parents about their choices of subjects and future careers had different experiences. One of them noted:

> My father forced me to study the subjects he likes, but they are difficult for me. I think our teachers and parents need to help us to build better foundation of education in order to assist us so that we may reach towards our intended goals (Student from school B, April, 2019).

Another student noted: *"My mother told me not to take Mathematics and Science subjects because they are really difficult" (Student from school A, April, 2019).* On the other hand, those whose parents were not involved in a discussion related with subject choices and future careers had their experiences as well. One of them noted: *"My parents have never explained to me anything concerning my subjects of study, but they used to ask when the school will close for holiday" (Student from school C, April, 2019).*

In addition, one student commented, *"My parents do not care whether I have gone to school or not. So, it is impossible for them to advise me the best subject combination choices and future careers" (Student from school E, April, 2019).*

Influence of Teachers on Students' Subject Combinations Choices
This subsection presents the information on how teachers in schools influence their students on subject choices for the betterment of their future career/aspirations. On this aspect, the researcher asked the following question to students: *"Does your teacher have any influence on your choices of subject combination?"* In this question, the respondents responded either with YES or NO answers. The "how" followed to allow students to explain how

they were influenced by their teachers in making subject choices. Again, the researcher asked the following question to teachers: *"Do you involve yourself in discussions with your students about their subject choices?"* On this aspect, teachers were to respond with either YES or NO responses. Those who responded NO were asked "WHY?" so that they could provide the reasons. Table 2 summarises responses from students.

Table 2:   Students' Responses on teachers' Influence on their Combination Choices

Response	Form Two	Form Three	Form Six
YES	18	09	13
NO	32	41	22
Total	50	50	35

Source: Field data (2019)

The results in Table 2 show that 40 (30%) students agreed that teachers influenced their subject combination choices, while 95 (70%) students denounced teachers' influence on their subject combination choices. These results indicate that teachers had minimal influence on students' choices of subject combination. Those who confirmed the influence of their teachers on their choices of subject combination expressed their concerns. One of them commented:

> *"Good teaching style of my teacher made me to love his subject and thereafter I decided to select his subjects as my study choice"* (Student from school D, April 2019).

In addition, one student commented:

> *"On my side I do not know which subject combination is good for my future, otherwise I will ask the guidance*

> *of my teachers when I will be making combination selection" (Student from school E, April 2019).*

Students who denied the influence of teachers on subject combination choices had different opinions. For instance, one of them noted:

> *At primary school, I was good at mathematics, but when I entered form one, the Mathematics teacher was not motivating me to continue struggling for the subject. Hence, I decided to drop the subject and I took other subjects which I did not like as much as mathematics (Student from school A, April 2019).*

Another student had this to report:

> *My teachers do not influence me in my subject choices. One day I asked a certain teacher to advise me a good combination to take and he said to me "think on your own because you are talking about your future." This answer did not help me (Student from school C, April 2019).*

In the same vein, one student noted:

> *Our teachers do not help us. When you try to ask them about different careers and how they relate with subject choices, they tell you to go and ask this question to your parents who is paying for you. They say that they avoid directing us contrary to our parents. The reality is that, some of our parents are not educated enough (Student from school B, April 2019).*

On the same aspect, teachers were asked the following question, *"Do you involve yourself in discussions with your students about their subject combination choices?"* Teachers were also required to respond with either YES or NO responses. Table 3 summarises teachers' responses to this question.

Table 3: Teachers' Responses on their Influence on Students'
Combination Choices

Teachers' response	School A	School B	School C	School D	School E
YES	2	3	1	0	2
NO	3	2	4	5	3
Total	5	5	5	5	5

Source: Field data (2019)

Table 3 shows that 8 (32%) teachers agreed that they involved themselves in discussions with their students about subject combination choices while 17 (68%) teachers noted that they were not involved in such discussions. For those who said NO, they had their reasons. For instance, one of them noted:

> *"A student should select the subjects by him/herself. The role of teachers and parents is to seat with a student and know from him/her what he/she likes and provide guidance only" (A teacher from school E, April 2019).*

Another teacher had this to write down: *"I do not involve myself in deciding the subject choices of students because the determinant of the subject combination choice is FTNE Results" (A teacher from school B, April 2019).*

In the same view, during the interview with heads of schools, one of them commented:

> *"The issue of students' subject choices does not cost a teacher but the student him/herself. This is because his/her choices depend on his/her ability and trends in performance" (Head of school C, April 2019).*

In the same line, another head of school said:

> *The work of a teacher is to teach effectively and efficiently, and the work of a student is to study hard. This means that, a student has to study hard and perform well so that he/she may have a great chance to choose whatever subjects he/she likes (Head of school E, April 2019).*

These findings have been discussed hereunder in the following part of discussion.

Discussion

As observed in this study, most form two students were not aware of the available subject combinations they were supposed to choose in relation to their future careers. Scholars suggest that knowledge is power and a leader of everything we do (Cortes-Ramirez, 2014); thus, it can be argued that a lack of knowledge is blindness, and being blind one cannot escape going astray. The findings of this study may suggest that many students would be pursuing wrong combinations (pathways) which cannot help them reach their aspirations. It is suggested here that there is a need to build early knowledge to students on the relationship between the subjects they are intend to study and the future world of working. This is vital because the subjects selected by a learner can either make career options accessible or limited in some cases (Raleigh, 2016). It is therefore necessary to take subjects which will optimize possibilities, but are also in line with the learner's interests, personality and aptitude. This will probably help them in setting and mastering various priorities related to their future careers (Mackay, 2020). As seen in the data, most form three and form six students were less comfortable with their choices of subject combinations as they have selected subject combinations which did not match their future careers/aspirations. This could arguably reduce students' confidence and enjoyment of their choices. Hernik and Jaworska (2018) suggest that taking pleasure in learning is one

of the conditions that can bring good outcomes in learning. They added that enjoyment positively influences the didactic process, increases the satisfaction of participants and can positively affect memorizing of information. It is argued here that there is possibility that most students involved in this study did not enjoy learning and had low self-efficacy (Green & Ahuna, 2014); hence, they may be performing poorly. Also, it is observed that most parents did not involve in the discussions with their children on issues related with subject choices and future careers. With this reason, one would argue that parents have forgotten their roles as leaders who always show direction to children. This is contrary to the arguments made by different educational scholars who believe that parents have significant influence towards children choices of subjects for their future careers/aspirations/employment (Omondi, 2013).

For those few parents involved in discussions, they wanted to their children to pick their choices; it was not a two-way discussion. This is an indication of some kind of dictatorship. This finding is in connection with Mwenga (2015), who found that, parents were commanding their children to study science with a reason that it would be easier for them to get employment, admission to high school and universities as well as higher education loans. This kind of involvement is not helpful to the children who are expected to grow and become responsible workers and exercise their career of interest. Thus, parents should research about different careers and their potential opportunities and then expose them to their children who would ask their teachers and other experts about the related subjects. It is clear in this study that teachers were not fully involved in guiding students on the choices of subject combination in relation to one's future career aspiration. Ideally, teachers are expected to guide students on career choices as they are key people

who can easily influence students in their choice of subjects to study (Elster, 2014; Omondi, 2013). It is easier for teachers to have such impact because, at school setting, a teacher is trusted by students. Students believe that teachers know almost everything and everything the teacher does is considered right (Ntawigaya, 2016). Thus, it is argued here that teachers in the selected study did not fulfil their expected responsibility in influencing students in career development. It is suggested that teachers should reform their mind sets and continue holding their positions as developers, mentors and leaders to students for the betterment of their future.

Conclusion and Way Forward
This study concludes that: one, most students in secondary schools, who were expected to make choices on the subject combinations, were not well informed of the available combinations. Also, most students, who were undertaking various subject combinations, were not comfortable with their choices. Two, although parents are expected to have great influence on children's future, most of them did not involve themselves in the discussions with their children on issues related to subject choices and future careers. Three, most teachers were not fully involved in guiding students on the choices of subject combination in relation to one's future career aspiration.

Thus, the following are the recommendations put forward by this paper. One, schools should run orientations to form one students, with insistence on the relationship between subject choices and future careers. This initiative may help to build early academic endeavours for good future. Two, parents should play their role in guiding their children on the best subject combination choices in relation to their future aspirations. Three, teachers should help students to make rational choice of subjects based on their future

aspirations. On this aspect, teachers should consider students' learning ability and their interests.

REFERENCES

Anders, J., Henderson, M., Moulton, V., & Sullivan, A. (2018). The role of schools in explaining individuals' subject choices at age 14. *Oxford Review of Education, 44* (1), 75-93

Atweh, B., Taylor, S., & Singh, P. (2005). School curriculum as cultural commodity in the construction of young people's post-school aspirations. In *Proceedings Australian Association for Research in Education*, University of Western Sydney, Parramatta.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th Ed.). London: Routledge.

Cortes-Ramirez, E. E. (2014). Knowledge is power. Francis Bacon's theory of ideology and culture. *Via Panoramica: Revista Electronica de Estudos Ango-Americanos/An Anglo-American Studies Journal, Série 3*, Número Especial, 25-42.

Creswell, W. J. (2012). *Educational research, planning, conducting and evaluating quantitative & qualitative research* (4th ed.). London: Pearson.

Elster, D. (2014). First-year students' priorities and choices in STEM studies – IRIS findings from Germany and Austria. *Science Education International, 25* (1), 52-59.

Hernik, J., & Jaworska, E. (2018). The effect of enjoyment on learning. *Proceedings of INTED 2018 Conference held on 5th-7th March 2018, Valencia, Spain*.

Hipkins, R., & Vaughan, K. (2019). *Subject choice for the future of work: Insights from research literature*. Wellington: New Zealand Council for Educational Research.

Iannellia, C., & Smyth, E. (2017). Curriculum choices and school-to-work transitions among upper secondary school leavers in Scotland and Ireland. *Journal of Education and Work, 30*(7), 731–740.

Jungea, K., Schmersea, D., Eva-Maria Lankes, E., Carstensenc, C. H., & Steffensky, M. (2021). How the home learning environment contributes to children's early science knowledge — Associations with parental characteristics and science-related activities. *Early Childhood Research Quarterly, 56* (3), 294-305

Mackay, J. (2020). *The "everything is important" paradox: 9 practical methods for how to prioritize your work (and time)*. Retrieved from https://blog.rescuetime.com/how-to-prioritize/

Mwenga, H. (2015). *Factors influencing the choice of science subjects in secondary schools in Tanzania: The case of Kibaha district* (Master Dissertation, The Open University of Tanzania).

Ndalichako, J. L., & Komba, A. A. (2014). Students' subject choice in Secondary Schools in Tanzania: A matter of students' ability and interests or forced circumstances? *Open Journal of Social Sciences, 2*(8), 49-56

Ntawigaya, N. J. (2016). *Redefining discipline in a contemporary school setting: Empirical evidence from Kasulu District* (Master Dissertation, The Open University of Tanzania).

Nyamwange, J. (2016). Influence of student's interest on career choice among first year university students in public and private Universities in Kisii County, Kenya. *Journal of Education and Practice, 7*(4), 96-102

Olamide, S. O., & Olawaiye, S. O. (2013). The factors determining the choice of career among secondary school students. *The International Journal of Engineering and Science, 2*(6), 33-44

Omondi, J. O. (2013). *Factors influencing the choice of science subjects in Kenya's secondary schools: A case study of Langata High school in Nairobi City*. Unpublished Project for Postgraduate Diploma, University of Nairobi

Raleigh, A. (2016). *The importance of grade 9 subject choice: Why is it important for learners to make informed subject choices?*

Retrieved from https://www.abassessments.co.za/the-importance-of-grade-9-subject-choice

Tapia-Fonllem, C., Fraijo-Sing, B., Corral-Verdugo, V., Garza-Terán, G., & Moreno-Barahona, M. (2020). School environments and elementary school children's well-being in Northwestern Mexico. *Front. Psychol. 11*(510), 1-8

United Republic of Tanzania. (2000). *The education sector development programme document*. Dar es Salaam: Ministry of Education and Culture.

United Republic of Tanzania. (2007). *Curriculum for ordinary level Secondary education in Tanzania 2005.* Dar es Salaam: Tanzania Institute of Education.

Does Parents' Valence toward School Relate to their Perceptions of Invitation to School Involvement?

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ABSTRACT

Parents' involvement in children's schooling is usually affected by their prior personal experience with schooling. Thus, if we want to assess parents' involvement in school activities and their children's learning it is crucial to assess their prior personal experience with schooling. This study, therefore, examined the relationship between parents' self-reported valance toward school and their perceptions of invitations to the involvement of the school, teachers, and their child. The study involved 1176 low-income parents of children from 55 primary schools in four regions in Northern Tanzania. A multivariate linear regression model showed that parents' prior schooling experience (school valence) has a statistically significant effect on parents' perceptions of general invitations from school, teachers, and specific invitations from the child. Results showed that the school attributes could affect the relationship between parents' valence and their perceptions of involvement invitations. Possible interventions to promote inclusive parental involvement through supportive schools will be discussed.

Keywords*: Valence, parental involvement, involvement invitation, school-family partnership, primary school, inclusive parental involvement, supportive schools*

INTRODUCTION

Although parent involvement is crucial for children to learn the importance of education and develop reading skills, not all low-income parents are involved in their children's education (Gay et al., 2020). This can negatively affect children's educational progress. It is proven that when a child starts school, the parents' school memories are likely to become activated and function as a basis for their evaluation of the child's schooling; hence studying the effect of parents' schooling is crucial (Räty, 2010). Parents with low socioeconomic status often need more knowledge on how to be involved in their child's education and school activities. Socioeconomic background, especially schooling experiences, can accelerate or minimize their desire for involvement. By 2020, Tanzania had a 97% enrolment rate in primary education, whereby both boys and girls have the same access to primary schools (UNESCO, 2022). Despite the successful universal primary education, parents' and families' role in strengthening children's learning in primary education, girls' retention in schools and transition to secondary education is minimal in Tanzania. Introducing fee-free education brought many concerns about parents' position in educating a child; teachers worry that a fee-free education policy might have an undesirable effect on parents (Gregory, 2016). With most poor parents in public schools, it is questionable if parents are engaging in children's education and

how social-economic backgrounds affect their involvement. Understanding how parents' schooling experiences affect their perceptions of education involvement is vital in achieving effective inclusive parental involvement, especially in a country like Tanzania, where there are economic disparities between parents in public and private schools. This study, therefore, explored the relationship between parents' school experience (school valence) and their perceptions of involvement invitations from schools, teachers and their children in Tanzania to understand how parents' prior School experience relates to their recent decisions on school involvement.

Parents' Valence toward School and Invitation to Involvement

Valence is the emotional positivity and negativity of an experience (Taylor & Rowley, 2004). parents' valence toward school can be defined as the extent to which a parent, based on prior personal experience with schooling, is generally attracted to or repelled from school engagements (Hoover-Dempsey et al., 2004). Generally, parental valence toward schools is referred to how attracted a parent is to school, given past experiences. Parental involvement in children's learning takes different forms and can be motivated by various factors related to parents' personal life experiences and other general contextual factors. Understanding the relationship between parents' beliefs and relevant social-contextual variables governing beliefs about their roles in children's learning requires exploration of the link between parents' understanding of their role in children's learning and their prior experiences with schools (Whitaker & Hoover-Dempsey, 2013). Parents' own past school experiences might not only influence how they construct their roles in children's education but also might affect their response to the involvement invitations and

their beliefs on the effect of their involvement. Researchers explained that parents might use their personal schooling experience to develop expectations for their roles, as well as their ideas about the roles of others in various social systems, especially schools and teachers (Gay et al., 2020; Manz et al., 2004; Raty, 2002; Whitaker & Hoover-Dempsey, 2013). Whitaker and Hoover-Dempsey (2013) stressed that parents' construction of their role regarding involvement in their children's schooling might be influenced by experiences and memories of their own school experiences and past teachers' behaviours. These experiences may include memories and evaluations of childhood interactions with parents and teachers, which contribute to an individual's schema for anticipated and expected interactions between parents, teachers, school and students (Whitaker & Hoover-Dempsey, 2013). Such experiences indicate what teachers and families should do for students learning.

It is argued here that parents' experiences related to engagement with schools engender an overall attitude about or valence towards schooling and their roles in the educational process as related to their children. Hoover-Dempsey and Sandler (2005) suggested that parents' childhood experiences with schools are likely joined with present experiences with schools to influence the development of role construction and beliefs on the impact they can make for involvement in their children's schooling. Parents' assessment of their school experiences may make them feel competent or incompetent when interacting with teachers. This might influence their decisions when they are invited to schools or in any form of involvement from teachers and their children (Manz et al., 2004; Raty, 2002). The assessment of parents' past schooling experiences does not only help in understanding parents' involvement decisions but also might help in designing proper interventions to

empower and boost parents' confidence in dealing with their children's teachers and school personnel.

Theoretical Framework

This study employed the Hoover-Dempsey and Sandler model of parental involvement, which suggests that family engagement is a process that begins with families' decision-making about being involved and culminates with student outcomes (Whitaker et al., 2018). Although several models have tried to analyse the parental involvement process, the Hoover-Dempsey model is perhaps the most informative because it describes the personal, contextual and life context motivators for involvement. The model views human behaviour as part of a reciprocal system that also includes personal factors (e.g., beliefs) and environmental factors (e.g., social interactions and physical surroundings) (Walker et al., 2010). This study focused on the first level of the model.

At this level, it is assumed that parents' motivation to be involved is influenced by motivational beliefs (parents' role construction and sense of self-efficacy), perceptions of invitations to involvement (from school, teacher, and child), and perceived life context (time and energy, skills and knowledge). This study focuses on how parents' personal school experience can affect how parents perceive the invitations to involvement from school, teachers and their children. Past research findings suggested that among these four categories, parents' perceptions of invitations from school, teachers and children are the strongest predictors for both parents' home-based and school-based involvement behaviours across grade levels (Anderson & Minke, 2007; Green et al., 2007; Kigobe et al., 2018; Kigobe, 2019; Kohl et al., 2002; Simon, 2004 Walker et al., 2006). Literature has shown that parents' motivational beliefs and perceived life context play a secondary

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role in shaping parents' involvement; this is the same with family socio-economic background (Walker et al., 2010; Green et al., 2007; Walker et al., 2006). This study was motivated by the assumption that assessing how parents' personal school experiences (parents' valance towards school) relate to how parents perceive invitations to involvement might help motivate inclusive involvement activities in low-income families. Taylor et al. (2004) proposed that a parent's perception of their own school experiences influences their thinking towards their child's schooling, which consequently may affect academic socialization practices and, in turn, may impact their children's academic success.

The Current Study

The present study identified the relationships between parents' valence towards school with their perceptions of the invitations to involvement from schools, teachers and their children. This study is part of a large project designed to promote child literacy development through an intervention focusing on capacity-building teacher training to help teachers work with parents in primary schools. The intervention programme was implemented in four regions in Northern Tanzania (Shinyanga, Mara, Simiyu and Mwanza), including 55 schools within ten administrative districts. This study presents the findings of the baseline data of the intervention. The present study explored two research questions: 1.) Does Parents' valence toward school relate to their perceptions of the invitation to school involvement from schools, teachers and their children? 2.) How is the relationship between parents' prior school experiences (school valance) and their perceptions of invitations to involvement affected by school conditions?

Methods

Participants

A total of 1187 parents (a maximum of 15 to 20 parents from each school and one parent from each family) participated in the study. Of 1187 parents, 52% were mothers, and 48% were fathers. Regarding relationship status, 67.7% were married, 6.5% were single parents, 7.2% were widows, 1.4% were divorced, 11.9% were separated, and 5.3% did not disclose their status. Of all these parents, 7.3% were illiterates, 70.4% had primary school education, 13.9% had secondary school education, 3.2% had a college education, 1.4% had undergraduate degrees, and 0.2% had postgraduate degrees. In this study, 22% of the families had only one child, 20.8% had two children, 19.6% had three children, 18% had four children, and 14.1% of the families had five or more children. Regarding income status, 83.2% had a low income, with a budget under 5000 Tshs (2 USD) per day, 11.9% were parents with middle income, having between 10000-15000 Tshs (4-6 USD) per day, and 4.9% were considered parents with high income having 20000 Tshs or more (9 USD or more) per day.

Procedures

This study was part of an intervention study designed to enhance parental involvement in primary education as a key factor in child literacy in the Northern part of Tanzania. Participants were drawn from 55 public primary schools from 10 administrative districts in four regions of Northern Tanzania. These regions are Mara, Shinyanga, Mwanza and Simiyu. These regions were selected because they are among the regions in Tanzania with vast enrolment but simultaneously experiencing many social and economic problems. Such problems include school dropout and early marriage, which endanger the quality of education (BEST,

2020). All four regions have 2766 public primary schools, with approximately 2,300,000 enrolled students from grades one to seven. Through simple random sampling, 55 public primary schools were selected from lower and higher-performing schools in ten districts. All 55 invited schools agreed to be registered in the intervention programme and invited parents at school to fill out the survey and participate in teacher-involving parent training sessions. In the first meeting, district and ward educational officers were invited to officiate the meetings. Parents were asked to sign a consent form to participate in the study and allow their children to participate in the intervention study. To coordinate the exercise and minimize social desirability basis, 12 trained research assistants who were tutors from nearby teacher colleges guided parents and teachers in each school during training and survey administration.

Measures
All measures included in the survey were the revised Hoover-Dempsey and Sandler's model of parental involvement from Walker et al. (2005). These scales were used and tested for the first time in Tanzania by Kigobe et al. (2018). The scales showed good internal reliability ranging from .67 to .89 Cronbach's alpha's, indicating moderate to good internal consistency. With the excellent fitness of the tool in the Tanzanian environment, I decided to use the same tool in this study.

Parent self-reported Valance towards School
Parent valence was measured by six items which assessed parents' attraction to or general disposition toward schools based on prior experiences with schools. Parents were asked to rate their own experiences when they were in school, and they were asked to rate their personal experiences with their teachers and school personnel

and rate their general school experience. The response for each item was anchored by negative experiences and positive experiences (e.g., My school: 1 = disliked, 6 = liked; My teachers: 1 = ignored me, 6 = cared about me). Higher scores indicated a strong attraction or good experience towards school; lower scores indicated a lower attraction toward school. The Cronbach's alpha of this scale was .76, indicating a good internal consistency.

Parents' perceptions of invitation to be involved

Parents' Perceptions of General School Invitations to Involvement

Parents' perceptions of school invitation to involvement were assessed using a six items measure. Parents were asked to rate their experiences concerning their involvement in school activities organised by schools. Responses for this measure ranged from 1 (strongly disagree) to 6 (strongly agree). The six items included items such as "This school lets me know about meetings and special school events", "Parent activities are scheduled at this school so that I can attend," and "This school's staff contacts me promptly about any problems involving my child." The Cronbach's alpha of this scale was .66, indicating a moderate internal consistency.

Parents' Perceptions of Specific Teacher Invitations to Involvement

Researchers explained that parents might use their personal schooling experience to develop expectations for their roles, as well as their ideas about the roles of others in their various social systems, especially schools and teachers. Parents' perceptions of teachers' invitations to involvement were assessed with the five-item scale developed by Walker et al. (2005). Parents rated their

perceptions of teacher invitation to involvement through six common involvement behaviours that represent home-based activities (e.g., communicating with the child about the school day, helping the child with homework, supervising the child's homework) and school-based activities (e.g., helping out at the school, communicating with the teacher, attending special events at the school). Response options for this measure were 1 (never), 2 (one or two times), 3 (four or five times), 4 (once a week), 5 (a few times a week), or 6 (daily). Cronbach's alpha of this scale was .86, indicating a strong internal consistency.

Parents' Perceptions of Specific Child Invitations to Involvement

With five items, parents rated their children's requests for parental involvement in common home-based and school-based involvement activities (e.g., "My child asked me to help explain something about his or her homework;" "My child asked me to help out at school"). Responses for this measure ranged from 1 (never) to 6 (daily). Cronbach's alpha of this scale was .82, indicating a strong internal consistency.

Parents' Personal Motivators to the Involvement

Parents' Role Construction
Role construction was assessed by nine items describing parents' beliefs about what they should do concerning their children's schooling (Walker et al., 2005). Parents rated their role beliefs on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: "I believe it is my responsibility to (a) volunteer at the school and (b) communicate with my child's teacher regularly". Higher scores indicated that parents strongly believed that it was their responsibility to be

involved in their children's schooling. The internal consistency of this scale was good, with a Cronbach's alpha value of .80.

Parental Efficacy for helping Children Succeeds in school

At school, it was assessed by four items referring to parental beliefs on whether or not their involvement is likely to have a positive influence on their children's learning (Walker et al., 2005). Parents rated their self-efficacy beliefs on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: (a) "I make a significant difference in my child's school performance", and (b) "I feel successful about my efforts to help my child to learn". Higher scores indicated that parents have a higher sense of efficacy. The Cronbach's alpha of the two items in the scale was .63 after the deletion of two negative worded items.

Parents' Perceived Life Context

Parents' Perceptions of the Time and Energy
It was measured by six items referring to how parents perceived time and energy in their decision about involvement (Walker et al., 2005). Parents rated their perceptions on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: "I have enough time and energy to (a) communicate with my child about the school day and (b) attend special events at school." The Cronbach's alpha of this scale was .68, indicating a moderate internal consistency.

Parents' Skills and Knowledge
This aspect measured six items examining parents' understanding of their skills and knowledge (Walker et al., 2005). Parents rated

their perceptions on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: "(a) I know effective ways to contact my child's teacher; (b) I know how to supervise my child's homework." The Cronbach's alpha of this scale was .70, indicating a good internal consistency.

Results

Statistical Analysis

All the statistical analyses were conducted in SPSS Statistics software 25.0. For all samples, Pearson and Spearman correlations, means and standard deviations of the variables were calculated to examine the relationships between variables (see table 1 below). The results showed that parents' level of education, employment condition, parent income and the number of children were not correlated with the outcome variable. Therefore, I did not include them in further analyses. Since I had more than one dependent variable, a multiple linear regression was inappropriate because an ordinary linear regression cannot accommodate more than one dependent variable; hence, I opted for multivariate linear regression.

The multivariate linear regression model extends the standard multiple linear regression models. While OLS regression seeks to find the line that best predicts one DV from one or more IVs, multivariate multiple linear regressions are used when there is a problem consisting of two or more predictor variables and two or more response variables (Quick, 2013). I ran two models in the general linear model for multivariate analysis; in the first model, I had seven dependent variables; I added three invitation variables (the general school invitations, specific invitations from teachers and specific invitations from students). Then two parents'

motivators (role construction and parent's sense of efficacy) and two contextual life variables (parents' knowledge and skills and parents' resources and energy) were added to the model. I added these variables because, in several studies, they have been related to other hypothesized motivators of parents' engagement in their student's learning, including student, teacher, and school invitations to involvement and parent's valence towards school (e.g., Anderson & Minke, 2007; Chrispeels & Rivero, 2001; Drummond & Stipek, 2004; Green et al., 2007; Kigobe et al., 2018). In the second similar model, I wanted to control the effect on specific school attributes by adding school as a fixed factor to assess its effect on the relationship between parents' valence with their perception of involvement invitation. Literature suggests that a specific school climate uniquely shapes how each school supports and influences parental involvement practices. Whitaker and Hoover-Dempsey (2013) acknowledge the specific influence each school might (school climate) have by examining how schools' different administrative approaches to parent involvement appeared to function differently in supporting parents' role beliefs. Lastly, I added parent school valance as a covariate (main predictor) to assess the multivariate significance tests and significance tests of between-subjects effects (F tests)

Table 1. *Correlation between all study variables*

		1	2	3	4	5	6	7	8	9	10	11	12
1	Gender												
2	Education	-.037											
3	children	-.001	-.034										
4	Income	-.011	.244***	.043									
5	Parent valence	.006	-.023	.034	-.051								
6	School invitation	.001	-.051	-.056	.042	.303***							
7	Teachers invitation	-.010	-.014	-.056	-.031	.085***	.323***						
8	Child Invitation	-.030	-.025	-.019	.025	.094***	.405***	.385***					
9	Parents efficacy	.008	.033	-.059	.087***	.233***	.303**	.124***	.180***				
10	Parents' Role construction	-.014	.058*	-.067*	.143***	.163***	.235***	.109***	.290***	.208***			
11	Parents Knowledge and skills	-.030	-.021	.017	.155***	.229***	.344***	.166***	.336***	.335***	.487***		
12	Parents Energy and Resources	.019	.061*	-.012	.155***	.255***	.374***	.147***	.313***	.321***	.476***	.697***	
	M	1.48	1.53	2.80	1.69	5.80	5.13	3.26	4.29	5.04	5.33	5.24	5.36
	SD	0.50	0.97	1.38	1.16	0.48	0.76	1.55	1.38	1.18	0.62	0.78	0.73
	Cronbach's alpha					.750	.66	.86	.82	.63	.80	.70	.68

Note. * $p < .05$ ** $p < .01$ *** $p < .001$. Spearman non-parametric correlations were calculated between parent's characteristics and other variables; Pearson correlations were calculated between all other variable

Multivariate Significance Tests

In multivariate tests, the main covariate, *parent school valance,* was significantly better than the .05 mile by any of the four leading multivariate tests of group differences (Hotelling's T-Square, Wilks' lambda, Pillai's trace and Roy's most significant root). This means that each effect is significantly related to all outcome variables. I checked Wilks' lambda, a standard measure of the difference between groups of means on the independent variables. I used it to test whether there are differences between the means of identified groups of subjects on a combination of dependent variables. The findings showed a statistically significant difference in parents' perceptions of the invitations to the involvement from school, teachers and the child, based on parents' prior school experiences (school valance) in both models. F (7, 1168) = 26.05, $p <$ .001; Wilk's Λ = 0.86, partial η2 = .13 and F (7, 1162) = 9.14, $p <$ .001; Wilk's Λ = 0.94, partial η2 = .06 respectively. Having achieved a statistically significant result in multivariate significance tests (see table 2), I then continued with further tests to assess the significance tests of the between-subjects effects of the F tests.

Table 2. *Multivariate Tests*

Effect		*Value*	*F*	*df*	*P*	*Partial Eta Square*
Intercept	Pillai's Trace	0.25	56.11	7	.001	0.25
	Wilks' Lambda	0.75	56.11	7	.001	0.25
	Hotelling's Trace	0.34	56.11	7	.001	0.25
	Roy's Largest Root	0.34	56.11	7	.000	0.25
Parent valence	Pillai's Trace	0.13	26.05	7	.001	0.13
	Wilks' Lambda	0.86	26.05	7	.001	0.13
	Hotelling's Trace	0.16	26.05	7	.001	0.13
	Roy's Largest Root	0.16	26.05	7	.001	0.13

Statistically significant difference: $p < .001$

Significance Tests of between-subjects Effects (F tests)

To understand how parents' school valance affects parents' current perceptions of the invitations to the involvement; I checked the tests of between-subjects products to see how parents' school valance affects parents' perceptions of the invitations to the involvement from school, teachers and child. I also assessed whether parents' school valance affected parents' motivators (role construction and sense of efficacy) and perceived life context variables (knowledge and skills, energy and resources). Findings showed that parents' school valence experience had a statistically significant effect on parents' perceptions of general school invitations (F (1, 1174) = 119.05; p < .001; partial η2 = .06), specific teacher invitation (F (1, 1174) = 8.59; p < .003; partial η2 = .001) and for specific child invitation (F (1, 1174) = 10.57; p >.001; partial η2 = .01). On personal motivators, parents' school valence had a statistically significant effect on both role construction (F (1, 1174) = 32.14; p < .001; partial η2 = .03) and parent sense of efficacy (F (1, 1174) = 67.59; p < .001; partial η2 = .05).

In the parent's life contextual variables, parents' prior school experience (school valance) had a statistically significant on both parents' perceived knowledge and skills (F (1, 1174) = 65.09; p < .001; partial η2 = .05) and (F (1, 1174) = 81.61; p < .001; partial η2 = .06) for parents perceived energy and skills. Adding a school as an intervening variable made some changes in the model. The model showed that school statistically affected the relationship between teacher invitation and specific child invitation on parents' school valence (see table 3). After adding school, parents' prior school experience (school valance) was no longer a significant predictor of specific child invitations and (F (1, 1068) = 0.09; p=76; partial η2 = .00) for specific teacher invitations. However, the interaction of

parents' school (valance) and school involvement invitations predicted all three (See table 3).

Table 3. *Tests of Between-Subjects Effects with School effect*

Source	Dependent Variables	Type III Sum of Squares	df	Mean Square	F	P	Partial Eta Squared
Corrected Model	School Invitation	252.81	107	2.36	5.90	.001	.37
	Teachers Invitation	1152.96	107	10.77	6.86	.001	.41
	Child Invitation	657.81	107	6.14	4.12	.001	.29
	Parents efficacy	673.00	107	6.29	7.01	.001	.41
	Role construction	150.52	107	1.40	4.92	.001	.33
	Knowledge and skills	241.46	107	2.25	4.99	.001	.33
	Parents Energy and Resources	188.14	107	1.75	4.22	.001	.30
Intercept	School Invitation	12.95	1	12.94	32.32	.001	.03
	Teachers Invitation	18.10	1	18.10	11.52	.001	.01
	Child Invitation	23.99	1	23.98	16.09	.001	.01
	Parents efficacy	1.16	1	1.16	1.29	.256	.00
	Role construction	26.35	1	26.34	92.16	.001	.08
	Knowledge and skills	5.18	1	5.17	11.44	.001	.01
	Parents Energy and Resources	9.71	1	9.70	23.28	.001	.02
School	School Invitation	82.91	52	1.59	3.91	.001	.16
	Teachers Invitation	130.79	52	2.51	1.60	.005	.07
	Child Invitation	185.45	52	3.56	2.32	.001	.10

	Parents efficacy	156.78	52	3.01	3.31	.001	.14
	Role construction	37.42	52	0.72	2.52	.001	.11
	Knowledge and skills	89.40	52	1.71	3.80	.001	.16
	Parents Energy and Resources	77.73	52	1.49	3.58	.001	.15
Parent valence	School Invitation	6.10	1	6.10	15.24	.001	.01
	Teachers Invitation	0.14	1	0.15	0.09	.759	.00
	Child Invitation	0.04	1	0.05	0.03	.860	.00
	Parents efficacy	23.96	1	23.96	26.70	.001	.02
	Role construction	1.25	1	1.25	4.39	.036	.00
	Knowledge and skills	15.21	1	15.21	33.61	.001	.03
	Parents Energy and Resources	10.27	1	10.27	24.62	.001	.02
School * Parent valence	School Invitation	83.97	52	1.61	4.03	.001	.16
	Teachers Invitation	137.32	52	2.64	1.68	.002	.08
	Child Invitation	194.17	52	3.73	2.50	. .001	.11
	Parents efficacy	149.90	52	2.88	3.21	.001	.13
	Role construction	37.30	52	0.72	2.51	.001	.11
	Knowledge and skills	86.10	52	1.66	3.66	.001	.11
	Parents Energy and Resources	76.39	52	1.47	3.52	.001	.15
Error	School Invitation	427.78	1068	0.40			

Teachers Invitation	1677.69	1068	1.57
Child Invitation	1592.12	1068	1.49
Parents efficacy	958.06	1068	0.90
Role construction	305.31	1068	0.29
Knowledge and skills	483.32	1068	0.45
Parents Energy and Resources	445.36	1068	0.42

Statistically significant difference: $p < .001$

Discussion

This study explored the impact of parents' self-reported valance towards the school on how parents perceive invitations for involvement from school, teachers and children. The study was conducted in public schools, where many families possess low socio-economic conditions. The majority of parents, 77.7%, in the study went to school up to grade seven; others never went to school or did not finish primary education; 83% of parents lived under two dollars. The bivariate correlation showed no significant relationship between parents' socio-economic conditions (level of education, income, employment conditions and the number of children) with parents' valence towards school. The lack of correlation between parents' school valance and parents' socio-economic variables indicates no link between socio-economic conditions and parents' attitudes towards schooling.

This finding contrasts with Brown (2013) who found a significant bivariate correlation between education level and valence toward school. Although he found a correlation between parents' education level and school valence, he acknowledged that parents' school valence is only sometimes high when parents are educated. Brown explained that sometimes parents, who answered more positively about their school experiences pressed through difficult situations and developed resilience as a child, perhaps motivated their desire to continue pursuing educational goals. The lack of bivariate relationship between parents' level of education and parents' school valence might indicate that education can have some contributions but is only one of the factors for positive valence in parents. Other social contextual factors influence positive school valence in parents, such as a supportive school

environment. This is true for the population of this study. Although they come from a low socio-economic background, they possess higher expectations for their children education success, which motivate them to have positive attitude when invited for school involvement. The results showed that parents' school valence had a significant effect on parents' perception to involvement invitations. The findings showed that the stronger valence a parent possesses the more positive they are with the involvement invitations from schools, teachers and their children, which in turn motivates active involvement of parents in children's schooling and affects their learning success. This is in line with the findings of Barnett and Taylor (2009). They found that valence, positive or negative recollections of a mother's school experiences, were associated with parent reports of higher engagement in their children's academics. Thus, it is argued here that parent's perception of their own school experiences influences their thought process towards their child's schooling.

Consequently, this may affect academic socialization practices and, in turn, may impact their child's academic success. Adding a variable school in the model changed the effect of parents' valence towards involvement invitations from teachers' invitations and specific child invitations. This finding suggests that specific school climate impacts the association between parents' valence and present views of their children's schooling. This shows that school is a vital aspect of parental involvement, which might hinder or promote active parents' engagement in their child's schooling regardless of their schooling background. Having the majority of participants from low-income families, it is promising that the school can provide social support that will motivate parents and boost their confidence in their children's schooling. This is in

connection with Brown (2013), who noticed that some parents who reported positive valence came from low socio-economic status but possessed higher educational goals for their children because of the solid social support they received. The absence of a link between parents' school valence with teacher and child invitations might also imply that parents hold negative memories of their relationship with their teachers and parents while at school. Another explanation might be the lack of interaction between teachers and parents. Teachers might perceive schools doing enough to involve parents in school activities or need more skills to motivate parental involvement. However, the interaction of school and parents' valence was significant and positively related to all invitation variables, which might indicate that the relationship between school valence and the involvement invitation is motivated by supportive school environment.

Furthermore, the findings showed a significant solid effect of parents' valence towards school, with two parents' variables (self-efficacy and role construction). These are significant variables explaining parents' decisions to be involved in their children's schooling. The results indicated that the higher the parent's valence towards school, the higher parent's sense of efficacy and role construction. This was also proven by Whitaker and Hoover-Dempsey (2013). They found that parents construct an overall perception of or valence toward education and their roles in their children's educational experience based on past experiences relating to their involvement with schools. In both models, the relationship between parents' valence with life contextual variables (parents' knowledge and skill and parents' energy and resources) was strong. This finding indicates that the more knowledgeable and resourceful parents are, the more positive valence they

possesses. It is explicit that knowledge and resources are crucial in motivating parental involvement regardless of their schooling history. Hence, schools and teachers need to consider these factors by designing an inclusive parental involvement system that empowers parents with essential skills and knowledge to engage in their student's learning actively. In a low-income population like in this study, the desire and willingness of parents to be involved in children's education are pre-determined by the number of resources, skills and knowledge that parents possess. Schools and teachers must create an excellent supporting system to enable parents to participate in children schooling actively. Gay et al. (2020) stressed that parents with insufficient resources are often less involved than parents from higher-income backgrounds. In this regard, schools need to create inclusive involvement system to support parental involvement to all parents regardless their income and resources.

Implications for Research

Parents' valence towards school can be seen as one potential social–psychological link in the chain through which the meanings of education are transmitted from one generation to the next (Räty, 2010). Research that seeks to explain parents' involvement in decisions needs to understand the effect of parents' schooling on their children's learning, despite the evidence that meanings assigned to education contribute to educational life histories and educational generations (Barnett & Taylor, 2009; Brown, 2013; Räty, 2007, 2010), there are minimal studies on parent's valence towards school in children's schooling. Thus, this study contributes to the same. Researchers should continue exploring multidimensional factors that can explain parents' involvement in decisions and the processes involved. To effectively encourage

parental involvement activities, it requires a good understanding of parental personal motivators and the role of life contextual variables to support inclusivity in parental involvement in schools. Researchers need to continue researching the role of schools in creating an excellent supporting system for parents, particularly those from low social and economic backgrounds. It is already proven that parents with higher levels of education process higher valence (Brown, 2013; Räty, 2010). Thus, researchers should focus on how schools can stimulate inclusive parental involvement by creating a welcoming climate that accommodates all parents regardless of social and economic standards. The emergence of specific invitations from teachers and children as the most influential variables on parents' involvement choices is significant because schools can influence teacher practices more than any other variables (Anderson & Minke, 2007). The same teachers can stimulate parental involvement at home by providing parent-child learning opportunities through interactive homework to enable parents' engagement in their children's learning at home.

Strengths and Limitations of the Study

Parent valence is an essential aspect that few studies in this research area have considered necessary to focus on compared to other factors. Especially parent valence towards school and parental involvement in school has been relatively unexplored (Barnett & Taylor, 2009). Thus, the current study contributes considerably to understanding parental participation by studying the overlooked element in the processes. In many studies using the Hoover-Dempsey and Sandler model, parent valence was used as a supporting variable to explain parents' role construction. However, none of the studies investigated it as a leading factor variable (Brown, 2013; Whitaker & Hoover-Dempsey, 2013;

Whitaker, 2011), even though Walker et al. (2005) tested and suggested that the two scales were uncorrelated and should be separate components. In this study, parents' valence towards school was an independent variable employed to explain the link between parents' past school experience and their perceptions towards involvement invitations from schools, teachers and the child. However, the findings of this study need to be considered in light of the following limitations. First, this study reports parents' self-reported valence only, which might be influenced by social desirability. In the future, it is essential to include teacher and student reports to assess their perceptions on how they view the effect of parents' valence towards their schooling interactions and practices. Second, the study involved parents from public schools only; in the future, researchers should include private schools for comparison purposes. In Tanzania, the conditions of public and private schools are pretty different; it is essential to involve both schools to get more factual findings.

Conclusions

Although parents' valence towards school is essential in supporting the active involvement of parents in children's schooling, schools have an indispensable role in helping parents regardless of their schooling background. Parental involvement is complex because parents differ and come from different social and economic backgrounds. However, schools should embrace parent disparities because all parents deserve equal treatment in the involvement process through an inclusive school environment. Therefore, understanding parents' schooling background is essential in enabling every parent to be equally involved in their child's schooling.

REFERENCES

Anderson, K. J., & Minke, K. M. (2007). Parent involvement in education: Toward an understanding of parents' decision making. *The Journal of Educational Research*, *100*(5), 311–323. https://doi.org/10.3200/joer.100.5.311-323

Barnett, M. A., & Taylor, L. C. (2009). Parental recollections of school experiences and current Kindergarten transition practices. *Journal of Applied Developmental Psychology*, *30*(2), 140–148. https://doi.org/10.1016/j.appdev.2008.11.001

Brown, M. (2013). Deconstructing evaluation in education: The case of Ireland (PhD Thesis, Dublin City University). Available at: http://doras.dcu.ie/19382/

Chrispeels, J. H., & Rivero, E. (2001). Engaging Latino families for student success: How parent education can reshape parents' sense of place in the education of their children. *Peabody Journal of Education*, *76*(2), 119–169. https://doi. org/10. 1207/s 15327 930pje7602_7

Deslandes, R., & Bertrand, R. (2005). Motivation of parent involvement in secondary-level schooling. *The Journal of Educational Research*, *98*(3), 164–175. https://doi. org/10.3200 /joer.98.3.164-175

Drummond, K. V., & Stipek, D. (2004). Low-income parents' beliefs about their role in children's academic learning. *The Elementary School Journal*, *104*(3), 197–213. https://do i.org/ 10.1086/499749

Epstein, J. L., & Van Voorhis, F. L. (2001). More than minutes: Teachers' roles in designing homework. *Educational Psychologist*, *36*(3), 181-193. https://doi. org/10.1207/ s15326 985ep3603_4

Gay, B., Sonnenschein, S., Sun, S., & Baker, L. (2020). Poverty, parent involvement, and children's reading skills: Testing the compensatory effect of the amount of classroom reading instruction. *Early Education and Development*, *32*(7), 981–993. https://doi.org/10.1080/10409289.2020.1829292

Gutman, L. M., & McLoyd, V. C. (2000). Parents' management of their children's education within the home, at school, and in the community: An examination of African-American families living in poverty. *The Urban Review, 32*(1), 1–24. https: //doi.org/10.1023/A:1005112300726

Green, C. L., Walker, J. M., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology, 99*(3), 532–544. https://doi.org/10.1037/0022-0663.99.3.532

Gregory, S. (2016, December 6). Tanzania: Free education for all but not yet there. The Citizen. https://www. allafrica.com /stories/ 2016 12 060470.html

Hoover-Dempsey, K. V., Bassler, O. C., & Burow, R. (1995). Parents' reported involvement in students' homework: Strategies and practices. *The Elementary School Journal, 95*(5), 435–450. https://doi.org/10.1086/461854

Hoover-Dempsey, K. V., & Sandler, H. M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record, 97*(2), 310–331. https://doi .org/10.1177/ 0161468 19509700202

Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research, 67*(1), 3–42. https://doi.org /10.3102 /0034 6543067001003

Hoover-Dempsey, K.V., Wilkins, A.S., Sandler, H.M., Jones O'Connor, K.P. (2004, April). *Parental role construction and parental involvement: Interactions among theoretical, measurement, and pragmatic issues in instrument development.* Paper presented at the annual meeting of the American Educational Research Association, San Diego

Hoover-Dempsey, K. V., Walker, J. M. T., & Sandler, H. M. (2005). Parents' motivations for involvement in their children's education. In E. N. Patrikakou, R. P. Weisberg, S. Redding, & H. J. Walberg (Eds.), *School–family partnerships for*

children's success (pp. 40–56). New York: Teachers College Press.

Kigobe, J. (2019). *Parental Involvement in Literacy Development of Primary School Children in Tanzania* (Doctoral dissertation, KU LEUVEN).

Kigobe, J., Ghesquière, P., Ng'Umbi, M., & Van Leeuwen, K. (2018). Parental involvement in educational activities in Tanzania: Understanding motivational factors. *Educational Studies*, *45*(5), 613–632. https://doi.org/10.1080/03055698.2018.1509780

Kigobe, J., Van den Noortgate, W., Ligembe, N., Ogondiek, M., Ghesquière, P., & Van Leeuwen, K. (2021). Effects of a parental involvement intervention to promote child literacy in Tanzania: A cluster randomized controlled trial. *Journal of Research on Educational Effectiveness*, *14*(4), 770–791. https://doi. org/ 10.1080/19345747.2021.1931998

Kohl, G. O., Lengua, L. J., & McMahon, R. J. (2000). Parent involvement in school conceptualizing multiple dimensions and their relations with family and demographic risk factors. *Journal of School Psychology*, *38*(6), 501–523. https://doi. org/10. 1016/s0022-4405(00)00050-9

Lott, B. (2001). Low-income parents and the public schools. *Journal of Social Issues*, *57*(2), 247–259. https://doi.org/10.1111/0022-4537 .00211

Manz, P. H., Fantuzzo, J. W., & Power, T. J. (2004). Multidimensional assessment of family involvement among urban elementary students. *Journal of School Psychology*, *42*(6), 461–475. https:// doi.org/10.1016/j.jsp.2004.08.002

Quick, C. (2013). *Multivariate multiple regression with applications to powerlifting data*. University of Minnesota Duluth.

Räty, H. (2003). The significance of parents' evaluations of their own school for their educational attitudes. *Social Psychology of Education, 6*(1), 43-60. https://doi.org/ 10.1023/A: 102179 8713 525

Räty, H. (2007). Parents' own school recollections influence their perception of the functioning of their child's school.

European Journal of Psychology of Education, *22*, 387–398. https://doi. org/10.1007/BF03173434

Räty, H. (2010). Do parents' own school memories contribute to their satisfaction with their child's school? *Educational Studies*, *36*(5), 581-584. https://doi.org/10.1080/0305569100372900

Simon, B. S. (2004). High school outreach and family involvement. *Social Psychology of Education*, *7*(2), 185–209. https://doi. org/10.1023/b:spoe.0000018559.47658.67

Taylor, L. C., Clayton, J. D., & Rowley, S. J. (2004). Academic socialization: Understanding parental influences on children's school-related development in the early years. *Review of General Psychology*, *8*(3), 163–178. https://doi. org/10. 1037/ 1089-2680. 8.3. 163

Tornblad, H., & Widell, K. (2014). *"Education is the key of life" A minor field study about the discourses of parental involvement in two Tanzanian primary schools*. Bachelor Degree Project in teacher education. Retrieved from http://www.diva portal.org/ smash/get/diva2:695855/FULLTEXT01.pdf

UNESCO (2022). *Data for the sustainable development goal data*. Retrieved from https://uis.unesco.org/

URT (2020). *Basic education statistics in Tanzania (BEST)*. Dodoma. Ministry of Education

Walker, B. H., Anderies, J. M., Kinzig, A. P., & Ryan, P. (2006). Exploring resilience in social-ecological systems through comparative studies and theory development: introduction to the special issue. *Ecology and Society*, *11*(1). https://doi.org/10.5751/es-01573-110112

Walker, J. M., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal, 106*(2), 85-104.

Walker, J. M. T., Shenker, S. S., & Hoover-Dempsey, K. V. (2010). Why do parents become involved in their children's education? Implications for school counselors. *Professional School Counselling, 14(1).*

Whitaker, M., & Hoover-Dempsey, K. (2013). School influences on parents' role beliefs. *The Elementary School Journal*, *114*(1), 73–99. https://doi.org/10.1086/671061

Whitaker, M. C. (2011). *School influences on parents' role beliefs* (Doctoral dissertation, Vanderbilt University, Nashville, TN).

Vocabulary Size and Learners' Performance across Levels of Text Comprehension: A Case of First-Year Students at the University of Dodoma

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ABSTRACT

This study examined the relationship between vocabulary size and learners' performance across the three levels of text comprehension among 230 first-year students from three programmes in the University of Dodoma (UDOM). The Vocabulary Size Test (VST) by Nation and Beglar (2007) and a Reading Test were used to answer three questions: (1) What is the vocabulary size of the sampled first-year university students at UDOM? (2) What is the performance of the sampled first-year university students across the three levels of text comprehension? (3) What is the relationship between the students' vocabulary size and their performance across the levels of text comprehension? The results showed that, on average, the students did not have adequate vocabulary size required to understand authentic texts; they had a moderate reading comprehension at the literal level while their comprehension of texts at inferential and critical levels was relatively low. The results depicted a strong positive relationship between vocabulary size and each level of text comprehension. Regression analysis indicated that vocabulary size was powerful enough to predict performance at each level of text comprehension. Therefore, it is suggested that university students should be assisted to promote their vocabulary size as the latter has an impact on text comprehension and university academic success.

Key terms*: vocabulary size, academic texts, reading comprehension, text comprehension levels, Vocabulary Size Test*

INTRODUCTION

Reading is a vital activity in academic life as it guarantees acquisition of knowledge and skills from texts. Thus, comprehension of texts is the heart of any reading activity. Consequently, it is common that scholars tend to use the term comprehension whenever explaining what reading is. For instance, Grabe (2009) asserts that "reading is centrally a comprehending process" (p.14). Ahmadi, Ismail, and Abdullah (2013) define reading comprehension as "the ability of readers to understand the surface and the hidden meanings" (p.238) while Cline, Johnstone and King (2006) define reading as a process of "decoding and understanding written texts" (p.2). Therefore, several studies (Akyol, Cakiroglu, & Kuruyer, 2014; McLean, 2014; Türkyılmaz, Can, Yildirim & Ateş, 2014) stress that, the key objective of reading is comprehension, and reading without text comprehension is useless.

In the academic context, reading is an indispensable tool that every student needs to own for academic success. Available literature (Cromley, 2009; Nyarko, Kugbey, Kofi, Cole, & Adentwi, 2018; Pretorius, 2002; Vacca, 2005) report that reading proficiency correlate significantly with academic success. For instance, in their study, Nyarko et al. (2018) report a correlation of .66 (r(381) = .66, p < .01) among lower primary school children in Ghana. In another study, Anggaraini (2017) investigated the relationship between reading comprehension and academic achievement among 79 students in the English education programme. The results depicted that reading comprehension contributed to academic achievement for about 5.6%, p value = .037 < 0.05. Furthermore, Cromley (2009) studied the relationship between reading comprehension and proficiency in science. The result revealed that there was a strong correlation of .819 between the two variables. Likewise, Pretorius

(2002) investigated the relationship between reading skills and academic performance of undergraduate students. In his study, Pretorius found that all low achievers had a serious problem of reading comprehension. Thus, based on such research evidence, it can be concluded that the ability to read a text and infer correct messages is important for academic success. Researchers (Hamra & Syatriana, 2010; Pang, 2008; Razi & Grenfell, 2012) highlight the importance of linguistic knowledge for reading comprehension. Razi and Grenfell (2012), for example, report that weak linguistic competence was a challenge to reading comprehension among the participants of their study. In the other study, Hamra and Syatriana (2010) declare that lack of vocabulary and failure to make inference obstructed participants from comprehending texts.

Thus, Pang (2008) identifies three components of linguistics (knowledge of vocabulary, grammar and discourse) as essential for successful reading comprehension. Nevertheless, Barrot (2013) argues that in relation to other linguistic aspects, vocabulary is the primary of reading and comprehension because meaning is always carried by vocabulary. Myriad studies support Barrot's arguments by showing that vocabulary size is a good predictor of text comprehension. The study by Qian and Schedl (2004) that involved 207 students of English as a Second Language (ESL) showed that there was a correlation of 0.84 between vocabulary size and reading comprehension. The study by Huang (2006) reported the correlation of .71 between vocabulary size and reading comprehension after testing 24 ESL learners. In the other study, Mehrpour, Razmjoo and Kian (2011) reported the correlation of .717 between the two variables; while the study of Iranian ESL university students by Farvardin and Koosha (2011) depicted the correlation of .78. Despite the fact that substantial studies have

established a positive correlation between vocabulary size and reading comprehension, there are some areas which have been insufficiently examined. In particular, the correlation between vocabulary size and reading comprehension levels requires some research attention. Thus, there is a need to develop research based evidence on whether vocabulary size (Independent variable) correlates with each level of reading comprehension (dependent variable). This study makes an attempt to contribute on literature by assessing the statistical relationship between the two variables.

Literature Review
Vocabulary Size

Vocabulary size is one of the dimensions of vocabulary knowledge that refers to the number of approximated words that an individual knows, at least at the surface aspect of meaning (Qian, 2002). The term 'vocabulary size' denotes that every speaker of any language possesses a stock of words that are used when communicating. In the viewed literature, 'vocabulary size' is also referred to as the breadth of vocabulary or lexical breadth (Daller, Milton & Treffers-Daller, 2007). Researchers on this issue report that vocabulary size is a predictor of language competency and it affects individuals' language performance in all language skills (Schmitt, 2008). Further, substantial studies show that vocabulary size predicts school success (Biemiller & Boote, 2006; Bornstein & Haynes, 1998). Meara (1996) regards vocabulary size as the heart of "communicative competence" (p. 35). He declares that "All other things being equal, learners with large vocabularies are more proficient in a wide range of language skills than learners with smaller vocabularies" (p. 37). Generally, researchers in this area agree that everyone needs a satisfactory number of words to interact effectively with other users. Given the importance of

vocabulary size, several researchers have embarked on studying this aspect of language, in particular, among users of the English language (both native and non-native speakers). For instance, attempts have been made to establish the vocabulary size of native English speakers. Goulden, Nation and Read (1990), for instance, claim that on average, educated native English speakers have a vocabulary size between 15,000 and 20,000 word-families. Aitchison (2003) reports the vocabulary size of 60,000 word-families among educated monolingual speakers, while Treffers-Daller and Milton (2013) suggest that monolingual speakers of English have the vocabulary size of about 10,000 English word-families. Despite this daunting number of words reported for native speakers of English, non-native speakers need less than 10,000 word-families to use the language appropriately for different purposes (Nation, 2001).

Thus, studies that focus on determining vocabulary size among non-native speakers of English are currently common in educational programmes. These studies are important for pedagogical purposes as they inform instructors about the vocabulary level of their students, and whether, they need special programmes before being exposed to academic tasks which require a big vocabulary size (Schmitt, 2008). The fact that words differ in terms of use frequency/number of occurrences in different domains has influenced researchers to categorise English words into indefinite number of bands also known as word-families. These word families have 1,000 words each. For example, Nation and Beglar (2007) identify 14 word-families of 1,000 words each while the lexical profile at Nation's website[1]and at Cobb's website[2]

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[1](http://www.victoria.ac.nz/lals/staff/paul-nation/nation.aspx)
[2](http://lextutor.ca)

divide words in 20 word-families based on the British Nation Corpus (BNC). Thus, the first 1,000 word-family consists of words that are considered to have high frequency appearing in different domains of use, followed by the 2,000 word-family. Thus, Schmitt and Schmitt (2014) comment that the first 1,000 – 2,000 word-families are traditionally considered as high frequency word-families while from 2,001 word-families to 10,000 and beyond are referred to as low frequency word-families. It is therefore noteworthy that vocabulary size of individuals is approximated based on scores obtained from some standardized tests. Some of the commonly used tests are the Vocabulary Size Test (Nation & Beglar, 2007), the X-Lex test (Milton & Meara, 2003), and the Vocabulary Levels Test (VLT) (Nation, 1983) which was revised by Schmitt, Schmitt and Clapham (2001). Using the above tests, researchers in the field of English as a Second/Foreign Language (ESL/EFL) have established the vocabulary size of students in different educational programmes. For example, Putra (2009) reported an average of 5,388 word-families among university students in Indonesia. Nizonkiza (2005) reported 4,500 word-families among first year university students in South Africa while Huang (2006) reported 2,838 word-families among Taiwanese students.

Reading Comprehension

Different scholars have various definitions on reading comprehension. According to Klingner, Vaughn, and Boardman (2007), reading comprehension refers to a person's ability to understand what is read. Brassell and Rqsinski (2008) define the term as the ability to deduce meaning from written texts. Nunan (2006) assumes that reading comprehension refers to the process of searching for meaning while Snow and Sweet (2003) assert that

reading comprehension is the process of extracting meaning from texts. Based on the above attempts of defining the term, it can be deduced that comprehension is at the heart of any reading activity and whoever reads aims at constructing meaning from the text at hand (Durkin, 1993). Reading comprehension is a multifaceted process since its attainment depends on multiple abilities, including the reader's prior knowledge, his/her working memory, and his/her linguistic ability (vocabulary and grammatical knowledge). Other factors to consider are the ability to make inference, the effective use of strategic reading processes and the readers' ability of monitoring the flow of a text (Ntereke & Ramoroka, 2017).

Hogan, Bridges, Justice, and Cain (2011) divide these multiple abilities needed for reading comprehension into both lower and higher comprehension skills. Lower comprehension skills include linguistic knowledge, particularly grammar and vocabulary knowledge. Accordingly, lower comprehension skills provide a foundation for higher comprehension skills which are responsible for constructing the mental image of a text. As for higher comprehension skills, they include the ability to make inferences from texts and monitoring the text flow. Both the lower and higher comprehension skills are important to ensure that readers are able to attain maximum comprehension of the targeted text. However, text comprehension can be achieved at three levels (Yussof, Jamian, Hamzah, & Roslan, 2013). These include the literal, inferential and critical levels. The literal level enables a reader to understand information that is explained explicitly in the text. The inferential level is concerned with interpreting what the author wants to communicate though not explicitly explained. At the highest level of comprehension is the critical level of text

comprehension; that is an evaluative or judgemental level. It is a level of comprehension where a reader is supposed to judge some issues in the text, basing on the literal and inferential information available. At university level, students are required to have competency in all levels of reading comprehension so as to comprehend all important information from the textbooks used in each course. De-la-Peña and Luque-Rojas (2021) emphasise that it is necessary for university students to develop a critical ability of understanding texts for academic success. However, available studies (cited in De-la-Peña and Luque-Rojas, 2021) suggest that most of the students comprehend texts at the literal level compared to the two other levels (inferential and critical levels). In their study, Del Pino-Yépez, Saltos-Rodríguez and Moreira-Aguayo (2019) showed that students had an average score of 40% at the literal level, 40% at inferential level and 20% at the critical level. The study by Yáñez Botello (2013) showed that students' average scores in each level were 56.4% for the literal level, 43.5% at inferential level and 0%at the critical level. Finally, the study by Figueroa Romero, Castañeda Sánchez and Tamay Carranza (2016) depicted that the average scores of students at the literal, inferential and critical levels were 86.7%, 45.4% and 34.29%respectively. These findings suggest that there was a problem of text comprehension among students in higher learning institutions. In fact, the problem was more pronounced at both the inferential and critical levels.

Relationship between Vocabulary Size and Reading Comprehension

The prominent role that vocabulary knowledge plays to reading comprehension is without doubt acknowledged by different researchers. Several studies report that vocabulary size predicts

performance in reading and academic achievement in general (Farvardin & Koosha, 2011; Huang, 2006; Laufer & Goldstein, 2004; Nation & Meara, 2002; Qian & Schedl, 2004). In particular, there is consensus among researchers that students with large vocabulary size tend to score higher in text comprehension compared to students with low vocabulary size. For instance, Grabe and Stoller (2002) showed that the main difference between good and poor readers depends on how efficient one is in terms of lexical access and semantic processing. In this connection, it can be concluded that students who are competent in vocabulary knowledge are good at decoding and interpreting reading passages compared to their counterparts who are less competent in vocabulary knowledge (Nation, Clarke, Marshall, & Durand, 2004).

Several studies have declared the relationship between vocabulary knowledge and text comprehension. On the one hand, several quantitative studies have established a correlation between English language vocabulary knowledge and text comprehension. Stæhr (2008) studied the relationship between vocabulary size (breadth) and skills of reading comprehension, listening and writing. The results suggested that vocabulary size correlated significantly with the above three language skills. Another study by Chou (2011) revealed that students in the experimental group performed better than those in a control group. Likewise, Neemeh and Behzad (2015) depicted a strong correlation between vocabulary size and reading comprehension. On the other hand, qualitative studies have also revealed some evidences about the role of vocabulary in reading comprehension. For instance, Garcia, Ramayan, Sepe and Silor (2014) studied the challenges faced by students in reading comprehension. This study reported that the major challenge of learners was difficulties in understanding word meanings. The

same finding was reported by Zuhra (2015) who found that a problem of reading comprehension was associated with lack of vocabulary knowledge. In another study by Sasmita (2012) it was found that grammar and lack of vocabulary challenges were causes of learners' failure in comprehending texts. Other studies have also established that the vocabulary size ranging between 3,000 and 8,000 word-families provide appropriate size for ESL/EFL learner to read and comprehend texts. In this connection, Laufer (1992) reports that the first 3,000 word-families are required as a minimal vocabulary size to provide a threshold for someone to read and comprehend a text. A linear regression in that study showed that 3,000 word-families could enable learners to get a score of 56% in a comprehension test; similarly, 4,000 word-families would enable learners to score 63%while 5,000 word-families would enable learners to get 70%. In the above study, the author suggested that 5,000 word-families provide an appropriate level for learners to pass a comprehension test at university level.

Elsewhere, Hirsh and Nation (1992) found that learners needed a vocabulary size of about 5,000 word-families to comprehend unsimplified novels. Another study by Nation (2006) found that in order to read a novel or a newspaper without external assistance, readers needed about 8,000-9,000 word-families. Further, the study by Laufer and Ravenhorst-Kalovski (2010) established two different lexical thresholds for students to comprehend and pass a university entrance comprehension test. The optimal threshold was set at 8,000 word-families and the minimal threshold was set between 4,000 and 5,000 word-families. While the students in the optimal level could read independently, those at the minimal level required some external assistance to comprehend texts. Currently, researchers agree that the two vocabulary thresholds can be used

as points of reference for data interpretation in both vocabulary size and lexical-coverage studies (Masrai, 2019; Nizonkiza & van Dyk, 2015).

Gaps in the Literature
The reviewed literature has covered three key areas: (1) lower reading comprehension skills and high reading comprehension skills (2) reading comprehension levels (literal, referential and critical/evaluative levels) (3) vocabulary knowledge as a predictor of reading comprehension. Despite this coverage, there is one other research area that seems to be inadequately explored, namely, understanding the relationship between ESL/EFL learners' vocabulary size and their performance across the levels of text comprehension (Yussof, et al. 2013). In fact, previous studies have exclusively focused on the relationship between vocabulary size and overall reading comprehension. Further, this study sought to inform whether the sampled university entrants at UDOM were ready to cope with the university reading demands. Thus, the present paper, aimed to contribute to this area by answering three questions (1) What is the vocabulary size of the sampled first year students at UDOM? (2) What is the performance of the sampled first year students across the three levels of text comprehension? (3) What is the relationship between the students' vocabulary size and their performance across the levels of text comprehension?

Theoretical Frame Work
The present study was propped by the instrumental hypothesis by Anderson and Freebody (1981). The hypothesis proposes that the competency level of vocabulary knowledge can facilitate or hamper reading comprehension. The hypothesis argues that there is a cause-effect relationship between vocabulary knowledge and comprehending written texts. Consequently, the more words the

reader knows, the more he/she comprehends the texts he/she reads. In that relationship therefore, vocabulary knowledge of the reader determines achievement in comprehension. This hypothesis is pertinent to the present study because it interprets the relationship between vocabulary knowledge and reading comprehension which is the concern of this study.

Methods

This section discusses issues related to methods guided this study.

Participants

This study involved 230 first-year students from the University of Dodoma (UDOM). These students belonged to three degree programmes in the humanities: Bachelor of Arts in History, Bachelor of Arts in English and Bachelor of Arts in Theatre and Film studies. The participants from the above degree programmes were sampled for this study because they were also participating as samples in another study of the same kind (M.A. research) which was carried out by one of the researchers. The sample size was determined by Yamane (1967) formula: $\mathbf{n = N/1 + N\ (e)^2}$. It is worth mentioning that the students in the sample just like other students in Tanzania were users of English as a Foreign Language (EFL)[3] and they had used English as a medium of instruction for six years of secondary school education.

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[3]In view of Broughton, Brumfit, Flavell, Hill and Pincas (1980) and Crystals (2008), English is a foreign   language in Tanzania since it is only taught in classrooms and used for educational functions. Outside the classrooms, the language has no essential role in people's social life as social conversations are dominated by Swahili in urban and native languages in rural areas.

Instruments

Two tests were used in this study. The first was the Vocabulary Size Test (VST) by Nation and Beglar (2007)[4] which was used to assess students' vocabulary size and the second was a Reading Comprehension Test (RCT) which was developed by the researchers of the present study. The VST is a collection of 140 multiple choice items which are divided into 14 vocabulary families and each family is represented by 10 items. All items in this test were designed to measure the examinees' receptive vocabulary meaning. For purposes of this study, the first 80items were selected. These items were from the 1,000to 8,000 word-families. Items from these word-families were deliberately chosen based on the fact that researchers agree that ESL/EFL learners' competency in the 1,000 to 8,000 word-families is sufficient for reading and comprehending varieties of authentic texts including university textbooks, novels, scholarly articles, newspapers and reports of all kinds (Hacking, Rubio, Tschirner, 2018; Laufer & Ravenhorst-Kalovski, 2010; Nation 2006; Nizonkiza, & Van Dyk, 2015; Schmitt, 2008). It is worth noting that, VST was opted as a genuine test for this study because it is recommended as a valid and reliable assessment for measuring vocabulary size (Beglar, 2010; Laufer & Aviad-Levitzky, 2017; Leeming, 2014; McLean, Hogg & Kramer, 2014). Furthermore, VST scores are accurately reflected within the 14 vocabulary levels of the British National Corpus (BNC) since it measures the meaning recognition of words sampled from different BNC levels (Laufer & Aviad-Levitzky, 2017).

Thus, using VST, scores from test takers' can be easily interpreted and compared with scores attained by ESL/EFL learners from other areas. With regard to assessing students' knowledge of text comprehension levels, the RCT tool was developed by the researchers. It consisted of three texts copied from three books which were among the suggested references in the programmes

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[4]downloaded from www.lextutor.ca/test

where the samples belong. One reference book from each degree programme was therefore sampled for this purpose. The first text was a linguistics-based extracted from a book by Yule (2017), *The Study of Language*, the second text was taken from a history book by Helge (1996), *Ecology Control & Economic Development in East African History: The Case of Tanganyika 1850-1950*, and the third was a theatre-based text taken from the book by Kelly (2002) titled *Performing the Nation: Swahili Music and Cultural Politics in Tanzania*. Though there are several standardised tests of reading comprehension available for assessing English proficiency of non-native English speakers, the researchers decided to develop their own test for three reasons.

First, most of available tests had copyrights; for example TOEFL and IELTS. Thus, it was deemed unethical to manipulate them to reflect the needs of the present study. Second, it was considered that the use of passages from textbooks which are in lists of the suggested references would not only expose learners to passages of appropriate level but also reveal the ability of learners to comprehend textbooks recommended for their references. Third, it was necessary to develop the test with items covering three levels of comprehension (that is the literal, inferential and critical levels). The test consisted of thirty six (36) Multiple-Choice Questions (MCQ) distributed across three comprehension levels such that each level had twelve questions. The RCT underwent two validity tests (content and internal validity). The content validity was based on the method of content validation by Lawshe (1975). The researchers submitted the test to five experts for their opinions. Following the experts' opinions, seven questions were modified. To assess its internal validity, the test was assigned to 50 first year students from the Bachelor of Education (Arts) – 2021/2022.The students' responses to such questions were coded using SPSS version 21 and the test for reliability showed Cronbach alpha of .843. Nevertheless, two weak items from each comprehension level were dropped to remain with 10 items in each level.

Procedure

The participants sat for the two tests at different intervals. In the morning, the VST was administered for an hour and in the evening the RCT was administered. Guessing was discouraged and students were encouraged to answer only the questions that they were sure of. The two tests were marked manually by the researchers. With regard to VST, each correct answer was awarded one point while wrong answers and un-attempted questions were awarded zero. Thus, the maximum score of VST was supposed to be 80/80. On the other hand, each correct answer in RCT was awarded 10 points so that the maximum score was expected to be 100/100 at each text comprehension level.

Data Analysis

The data obtained in this study were quantitatively analysed. After marking the participants' tests, scores from the two tests were entered in SPSS (version 21) for analysis. Thereafter, descriptive statistics was computed to get the participants' mean scores for the two variables. This was important because it revealed the participants' performance in terms of vocabulary size and reading comprehension. On top of that, the formula by Nation and Beglar (2007) was used to compute the vocabulary size of each participant in the sample. Nation and Beglar suggest that VST scores obtained by each individual in each word-family should be multiplied by 100 to get the vocabulary size of an individual. This is due to the fact that 10 items in each word-family of the VST represent 1,000 words of the same band. Therefore, if a test taker scores all 10 items, it implies that he knows all the 1,000 words in that word-family (10 x 100 =1,000). Further, Pearson's product-moment correlation coefficient was computed to find the relationship of vocabulary size (independent variable) and each comprehension level (dependent variables). This parametric measure was selected

after carrying out the normality test which showed that the data were anomaly distributed.

Results

This section presents the findings of this study.

Vocabulary Size of the Sampled First Year University Students

The concern of the first research question was to estimate the vocabulary size of first year students in the sample measured at 8,000 word-families. As presented in 2.1, the estimation of vocabulary size was based on the scores obtained from the VST. Table 1 below summarises the participants' scores in the VST and their estimated vocabulary size after multiplying 100 to each individual's scores according to Nation and Beglar (2007).

Table 1: Descriptive Statistics for Vocabulary Size (n = 230)

Minimum		Maximum		Mean	
VST Score	Vocabulary Size	VST Score	Vocabulary Size	VST Score	Vocabulary Size
30	3000	65	6500	45.2	4520

Table 1 shows that the participants' minimum score in VST was 30/80 while the maximum score was 65/80 and the mean was 45.6. The VST scores suggest that the participant with the lowest vocabulary size had 3,000 word-families measured at 8,000 bands, the highest participant had 6,500 word-families and on average these participants had a vocabulary size of 4,500 word-families.

Students' Performance at each Level of Text Comprehension

This was a concern of the second research question. In response to this question, descriptive statistics was computed to depict the

performance of participants at different levels of text comprehension as Table 2 below reveals:

Table 2: Descriptive Statistics for Levels of Text Comprehension

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Literal	230	20.0	80.0	55.130	15.6861
Inferential	230	10.0	90.0	47.130	17.8917
Critical	230	.0	70.0	35.487	15.4580

Table 2 depicts that, on average, the participants' results were good at the literal level with a mean score of 55.13, SD = 15.69. The performance at the literal level was followed by the performance at inferential level with a mean score of 47.13, SD = 17.89. The participants' performance at the critical level was the last in the list with a mean score of 35.49, SD = 15.46. However, it was necessary to justify whether the mean differences among the three variables were either significant or attributed to chance. To achieve this objective, a paired samples t-test was computed. Table 3 below shows the inferential statistics for that comparison.

Table 3: Paired Samples Test (n = 230)

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval				
					Lower	Upper			
Pair 1	Literal - Inferential	8.0000	12.0189	.7925	6.4385	9.5615	10.095	229	.000
Pair 2	Literal - Critical	19.6435	14.1999	.9363	17.7986	21.4884	20.980	229	.000
Pair 3	Inferential - Critical	11.6435	15.6577	1.0324	9.6092	13.6778	11.278	229	.000

Table 3 shows that the differences among the three means in Table 2 were statistically significant as the p-value was less than 0.05 in all the three tests. Further, Table 3 depicts that the mean scores in literal comprehension was statistically significantly higher than the inferential comprehension at t(229) = 10.09, p = .000 at 5% level of significance. Likewise, the above table shows that the mean difference between literal and critical comprehension was statistically significant at t(229) = 20.98, p = 000 at 5% level of significance. Lastly, the results in Table 3 depict that the inferential comprehension had higher significant mean scores than the critical comprehension scores at t(229) = 11.28, p = .000 at 5% level of significance. Generally, the paired t-test justified that the learners' mean scores in the three comprehension levels were different, and that, performance at the literal level was above the other two levels, followed by performance at the inferential level while the lowest performance was demonstrated at the critical level.

Relationships between Vocabulary Size and Each Level of Text Comprehension

In answering the third research question, the Pearson correlation was calculated to ascertain the direction and strength of a liner relationship between vocabulary size and performance at each level of text comprehension. Thereafter, a linear regression was computed to depict the impact of vocabulary size on each level of reading comprehension. However, it should be noted that before finding the Pearson R correlation coefficient, the data had shown that it was normally distributed. Table 4 presents the relationship between the independent variable (vocabulary size) and the dependent variables (levels of text comprehension).

Table 4: Correlation between Vocabulary Size and Comprehension Levels

Variable		Literal	Inferential	Critical
VST Scores	Pearson Correlation	.673**	.606**	.628**
	Sig. (2-tailed)	.000	.000	.000
	N	230	230	230

** Correlation is significant at 0.01 levels (2 tailed)

Table 4 depicts the Pearson product-moment correlation coefficient results. The above table shows that there were strong, positive linear relationships between the independent variable (vocabulary size) and the dependent variables (levels of text comprehension) with the largest correlation appearing between vocabulary size and literal comprehension level (r=.673). This was followed by the relationship between vocabulary size and the critical comprehension level (r=.628).Lastly the correlation between

vocabulary size and inferential comprehension level was computed at (r=.606). In general, there were no big differences among the correlations of the independent and dependent variables. Table 4 also reveals that the linear relationship among the variables was significantly correlated (p=.001). The results suggested that the participants with large vocabulary size scored higher in all levels of RCT than the participants with a smaller vocabulary size. Nevertheless, to examine how well the independent variable affected the dependent ones, a linear regression was calculated and the results are presented in Table 5 below:

Table 5: Effect of Vocabulary Size on Levels of Text Comprehension (n = 230)

Dependent Variables	R^2	Unstandardized		Standardized	Sig
		B	SE	β	
Literal level	.452	1.557	.133	.673	.000
Inferential level	.368	1.601	.139	.606	.000
Critical level	.394	1.433	.118	.628	.000

As shown in Table 5 above, the participants' vocabulary size (independent variable) was strong enough to predict the participants' reading performance at all levels of reading comprehension. Based on the Beta values, the results suggested that the participants with more vocabulary attained good scores at all levels of text comprehension. Again, the r-square results showed that about 45% of the participants' scores at the literal level, 37% of the scores at the inferential level and 39% of the scores at the critical level were attributed to vocabulary size. These findings implied that, vocabulary size had a substantial contribution to text

comprehension at each of the three levels. Lastly, the results of non-standardized coefficient B supported the above arguments by showing that one unit increase in vocabulary size would increase scores of comprehension at all the three levels of text comprehension by 1.557 (literal level), 1.601 (inferential level), and 1.433 (critical level). Thus, a regression analysis helped to justify that the vocabulary size of the participants had an effect on the comprehension of texts at all the three levels under investigation.

Discussion

The present study examined the relationship between vocabulary size and performance in terms of reading comprehension at three levels of text comprehension (literal, inferential and critical levels). Three research questions were addressed in relation to this objective. The first research question focused at analysing the vocabulary size of the sampled first year university students at UDOM. The results showed that, on average, the participants in the sample had a vocabulary size of 4,520 word-families based on computed VST scores. Further, the results depicted that the student with the highest vocabulary size had 6,500 while the lowest student had 3,000 word-families. In relationship to the findings from previous studies (Laufer & Ravenhorst-Kalovski, 2010; Nation, 2006), it is suggested that a threshold of 8,000 word-families is needed by ESL/EFL learners to becomeproficient and independent readerscapable ofadequately reading and comprehending authentic texts (including academic ones) without any external assistance.

On the other hand, Laufer and Ravenhorst-Kalovski (2010) suggest that athreshold of vocabulary size ranging between 4,500 and 5,000 word-families canenable ESL/EFL learners to achieve a

minimalacceptable comprehension level of texts albeit with some external assistance like the use of dictionary to deduce meaning of some words. Thus, the present study found that the participant with the highest vocbulary size had a vocabulary size of 6,500 word-families. This suggest that there was no independent reader in the sample. Further, this study also found that the participant with minimum performance had 3,000 word-families. This also implythat some participants in the sample undertook university programmes while lacking even the minimum lexical threshold of between 4,500 – 5,000 word-families required for a minimal comprehension of texts. This finding therefore revealed thatsome university students at UDOM joined university programmes with a vocabulary size that was less than the the expected lexical threshold needed to support adequate comprehension of texts. The second research question addressed the issue of the participants' performance at the three levels of reading comprehension. The essence of this question was to examine whether the participants' comprehension of academic texts varied across the levels. Using a paired t-test analysis, the results revealed that the participants' performance was significantly different from one comprehension level to another. In particular, the results showed that it was only at the level of literal comprehension that the participants scored above 50% (mean = 55.13, SD = 15.69). In other words, the participants had an average below 50%at the two other levels (mean = 47.13 and SD = 17.89) at inferential level and (mean = 35.49, SD = 15.46) at critical level. These results suggest that the participants' understanding of information explicitly communicated in the passages was at least above 50%. However, they failed to comprehend information that required them to make association of meaning of some parts of the texts with their personal experiences.

Generally, the results showed that text comprehension was a challenge among the sampled first year university students at UDOM, particularly understanding information at both inferential and critical levels. The results of the present study corroborate Chachage (2006) and Kiondo and Matekere (2010) who observed that most of the students in universities preferred the use of lecture notes or summaries written by their fellows (popularly known as *madesa*) to reading authentic books in libraries since comprehending books is too demanding than reading lecture notes. Furthermore, the findings of the present study resonate with previous studies outside Tanzania in the area under study. For instance, reporting the reading comprehension challenge among first year university students in Botswana, the study by Ntereke and Ramoroka (2017) reported that only 14.2% of their sample passed the reading comprehension test fairly well, 51.5% achieved a satisfactory mark and 34.3% were below the expected level of reading performance at university level. The study also reported that participants in that sample performed poorly in comprehension of questions which were assessing higher levels of reading skills. De-la-Peña and Luque-Rojas (2021) conducted a meta-analysis study of seven articles with a total of 1,044 students in their sample. The results showed that 56% of the students passed a reading test at literal level, 33% passed at inferential comprehension level and 22% were able to pass at a critical level. Thus, the results of the present study complement previous studies by reporting the results which are more or less the same though the methodologies used were different. The third Research question sought to determine the relationship between the participants' vocabulary size and each level of text comprehension.

Pearson correlation coefficient results showed thatthere was a significant relationship between independent (vocabulary size) and dependent variables (levels of reading comprehension). Furthermore, regression analysis depicted that vocabulary size (independent variable) predicted significant variances at all the three levels of reading comprehension (dependent variables). These results suggested that vocabulary size is a good predictor of reading comprehension at all levels of text comprehension. In view of the theoretical framework of the present study (Anderson & Freebody, 1981), it can be argued that the present results support the theory that students with a large vocabulary size had an advantage of comprehending the RCT tool at literal, inferential and critical levels compared to those who had small vocabulary size. The above findings provide vital implications for education system in Tanzania. First, the findings inform that there is a need to plan for English language vocabulary development for pre-university education levels (both primary and secondary education). Currently, English language curricula, in the two educational levels, assume that vocabulary size is something that develops as learners use language. However, given the limited domains in which learners in primary and secondary schools use English, it is obvious that learners cannot acquire the needed vocabulary to carry out different tasks when they join the university education. Thus, it can be argued that special reading programmes should be introduced in Tanzanian primary and secondary schools to expose learners to varieties of vocabulary. The findings also inform that there is a need for universities in Tanzania to invest in pre-university English language programmes so as to assist students with low language proficiency. Lastly, it is suggested that reading activities in language classes from primary schools should be accompanied by questions equally distributed in the three levels of

text comprehension. This would help learners to become good readers capable of comprehending texts at any level of exposure.

Limitations and Suggestions for Further Research

The present study had some limitations. In fact, caution should be taken when generalising the results of the present study to first year university students in Tanzania and the University of Dodoma in particular. Specifically, the first limitation is that the present study was a correlation based-research that examined the relationship between vocabulary size and levels of reading comprehension. The results showed that vocabulary size can predict reading comprehension at all three levels (literal, inferential and critical). Thus, an experimental study with control and experimental groups is suggested in the future as a follow up strategy to examine the impact of the investigated independent variable on the dependent one. Second, the present study was limited by the use of few participants all of whom from degree programmes which fall under the humanities disciplines including B.A. English, B.A. History, and B.A. in Theatre and Film Studies. A follow-up study that would include students outside the field of the humanities or even students from different universities is suggested to examine the relationship of the same variables. Lastly, this study was limited by the fact that the reading test used had few questions at each level. It would be more practical if each text comprehension level had more questions. Nevertheless, the test used was useful in providing scores that enabled the researchers to infer some meaning about the relationship between the variables. Since there is no reading test (to the researchers' knowledge) that distributes questions based on the three comprehension levels, it is therefore advised that a more standardized test with more than ten questions at each level should be used for future studies.

Conclusion

The present study addressed the relationship between vocabulary size and the levels of text comprehension among sampled first year students at UDOM. The findings revealed that, on average, the students investigated had a vocabulary size that would enable them to function as dependent readers. Further, the results indicated that the students in the sample performed moderately in answering reading comprehension questions at the literal level but poorly at both the inferential and critical levels. On top of that, it was found that vocabulary size correlated significantly with each of the levels of text comprehension. Lastly, the regression analysis justified that vocabulary size (independent variable) was strong enough to predict performance at the literal, referential and critical levels (dependent variables). Based on the results of the present study, it can be concluded that efforts to develop large vocabulary size among university students is needed so as to promote their ability to read and comprehend texts at the three levels of text comprehension. Lastly, the results of this study inform English language teachers and teaching material developers that learners should be exposed to all levels of text comprehension. Thus, textbooks and classroom reading should cover not only the literal level but should also be extended to inferential and critical levels.

REFERENCES

Ahmadi, R. A., Ismail, H. N., & Abdullah, M. K. (2013). The importance of metacognitive reading strategy awareness in reading comprehension. *English Language Teaching,* 6(10), 235-249.

Aitchison, J. (2003). *Words in the mind: An introduction to the mental lexicon*. (3rdedition). Malden, MA: Blackwell.

Akyol, H., Cakiroglu, A., & Kuruyer, H. G. (2014). A study on the development of reading skills of the students having difficulty in reading: Enrichment reading program. *International Electronic Journal of Elementary Education*, 6(2), 199-212.

Anderson, R. C., & Freebody, P. (1981). Vocabulary knowledge. In J. Guthrie (Ed.), *Comprehension and Teaching: Research Reviews* (pp. 77-117). Newark, DE: International Reading Association.

Anggaraini, S. (2017). *The Correlation between reading comprehension and academic achievement of English education* (Thesis, Islamic State University, Raden Fatah).

Barrot, J. S. (2013). Revisiting the role of linguistic complexity in ESL reading comprehension. *The Southeast Asian Journal of English Language Studies*, 19(1), 5-18.

Beglar, D. (2010). A Rasch-based validation of the Vocabulary Size Test. *Language Testing, 27*(1): 101-118.

Biemiller, A., & Boote, C. (2006). An effective method for building meaning vocabulary in primary grades. *Journal of Educational Psychology, 98*(1), 44–62.

Bornstein, M. H., & Haynes, O. M. (1998). Vocabulary competence in early childhood: Measurement, latent construct, and predictive validity. *Child Development, 69*(3), 654–671.

Brassell, D., and Rasinski,T. (2008). *Comprehension That Works: Taking Students Beyond Ordinary Understanding to Deep Comprehension*. Califorinia: Shell Education.

Broughton, G., Brumfit, C., Flavell, R., Hill, P., & Pincas , A. (1980). *English as a Foreign Language.* London, United Kingdom: Routledge.

Chachage, C. S. (2006). The University as a site of knowledge: The role of basic research. *JHEA/RES, 4*(2), 47–67.

Chou, P. T. (2011). The effects of vocabulary knowledge and background knowledge on reading comprehension of Taiwanese EFL students. *Electronic Journal of Foreign Language and Teaching, 8*(1), 108-115.

Cline, F., Johnstone, C., & King, T. (2006). Focus Group Reaction to Three Definition of Reading (as Originally Developed in Support NARAP Goal1). Minneapolis, M.N.: National Accessible Reading Assessment Project.

Cromley, J. (2009). Reading achievement and science proficiency: International comparisons from the Programme on International Student Assessment. *Reading Psychology, 30*, 89–118.

Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed.). Oxford: Blackwell.

Daller, H., Milton, J., & Treffers-Daller, J. (2007). *Modelling and assessing vocabulary knowledge.* Cambridge: Cambridge University Press.

De-la-Peña, C., & Luque-Rojas, M. J. (2021). Levels of Reading Comprehension in Higher Education: Systematic Review and Meta-Analysis. *Frontiers in psychology, 12*, 1 - 11.

Durkin, D. (1993). *Teaching them to read.* Boston MA: Allyn & Bacon.

Farvardin, M.T., & Koosha, M. (2011). The role of vocabulary knowledge in Iranian EFL students' reading comprehension performance: breadth or depth? *Theory and Practice in Language Studies, 1*(11), 1575-1580.

Garcia, Y.P., Ramayan, A.J.R. Sepe, A.P. & Silor, A.C. (2014). Difficulties in Reading Comprehension and Metacognitive Strategies for Technology Livelihood Education Students.

Proceeding at the Global Summit on Education GSE 2014 (E-ISBN978-967-11768-5-6)

Goulden, R., Nation, P., & Read J. (1990). How large can a receptive vocabulary be? *Applied Linguistics*, *11*(4), 341-363.

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. New York: Cambridge University Press.

Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading.* London: Pearson Education.

Hacking, J.F., Rubio, F., Tschirner, E. (2018). The relationship between reading proficiency and vocabulary size: An empirical investigation. *The American Association of University Supervisors, Coordinators and Directors of Foreign Languages Programs (AAUSC)*, 58-77.

Hamra, A., & Syatriana, E. (2010). Developing A Model of Teaching Reading Comprehension for EF Students. *TEFLIN Journal*, *21* (1), 27-40.

Helge, K. (1996), *Ecology Control & Economic Development in East African History: The Case of Tanganyika 1850-1950,* London : James Currey.

Hirsh, D., & Nation, I. S. P. (1992). What vocabulary size is needed to read unsimplified texts for pleasure? *Reading in a Foreign Language, 8* (2), 689-696.

Hogan, T. P., Bridges, M. S., Justice, L. M., & Cain, K. (2011). Increasing Higher Level Language Skills to Improve Reading Comprehension. *Focus on Exceptional Children*, *44*(3),1-20.

Huang, H. F. (2006). *Breadthand depth of vocabulary knowledge: Which really matters in the academic reading perfomance of Chinese University students?* [Unpublished Master's thesis]. McGill University, Montreal, Canada.

Askew, K. M. (2002). *Performing the nation: Swahili music and cultural politics in Tanzania*. Chicago: University of Chicago Press.

Kiondo, E. Y., & Matekere, Y. (2010). The relevance of Mwalimu Nyerere's philosophy in educational development: Search for missing links in the development of higher education in

Tanzania. *UONGOZI Journal of Management and Development Dynamics, Special Issue* (2).

Klingner, J. K., Vaughn, S., & Boardman, A. (2007). *Teaching reading comprehension to students with learning difficulties*. New York: The Guilford Press.

Laufer, B. (1992). How much lexis is necessary for reading comprehension? In H. Bejoint & P. L. Arnaud (Eds.), *Vocabulary and applied linguistics* (pp.126-132). Basingstoke & London: Macmillan.

Laufer, B., & Aviad-Levitzky, T. (2017). What type of vocabulary knowledge predicts reading comprehension: Word meaning recall or word meaning recognition? *The Modern Language Journal*, *101*(4), 729-741.

Laufer, B., & Goldstein, Z. (2004). Testing vocabulary knowledge: Size, strength and computer adaptiveness. *Language Learning*, *54* (3), 399-436.

Laufer, B., & Ravenhorst-Kalovski, G. (2010). Lexical threshold revisited: Lexical text coverage, leaners' vocabulary size and reading comprehension. *Reading in a Foreign Language*, 22(1), 15-30.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563–575.

Leeming, P. (2014). Group formation and longevity in the foreign language classroom: Students' views. *The Journal of Asia TEFL*, *11*, 105–132.

Masrai, A. (2019). Vocabulary and reading comprehension revisited: Evidence for high, mid and low-frequency vocabulary
knowledge. *Sage Open*, *9*(2), 1-13.

McLean, S. (2014). Addressing the importance of comprehension to reading: learning lessons from Chang (2012). *Reading in a Foreign Language*, *26* (1), 186-191.

McLean, S., Hogg, N., & Kramer, B. (2014). Estimations of Japanese university learners' english vocabulary sizes using the vocabulary size test. *Vocabulary Learning and Instruction, 3* (2), 47-55.

Meara, P. (1996). The Dimensions of Lexical Competence. In G. Brown, K. Malmkjaer & J. Williams (Eds.), *Performance and competence in second language acquisition* (pp. 35-53). Cambridge: Cambridge University Press.

Meara P. & Milton. J. (2003). *X_Lex, The Swansea levels test*. Newbury: Express.

Mehrpour, S., Razmjoo, S.A., & Kian, P. (2011). The relationship between depth and breadth of vocabulary knowledge and reading comprehension among Iranian EFL learners. *Journal of English Language Teaching and Learning*, 2(222), 97-127.

Nation, I. S. P. (1983). Teaching and testing vocabulary. *Guidelines*, *5*, 12–25.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge, England: Cambridge University Press.

Nation, I. S.P. (2006). How large a vocabulary is needed for reading and listening? *The Canadian Modern Language Review*, *63*(1), 59-82.

Nation, I.S.P., & Meara, P. (2002). Vocabulary. In N. Schmitt (Ed.), *An introduction to applied linguistics* (pp.35-54). Edward Arnold.

Nation, I. S. P., & Beglar, D. (2007). A vocabulary size test. *The Language Teachers*, *31*(7), 9-17.

Nation, K., Clarke, P., Marshall, C. M., & Durand, M. (2004). Hidden language impairments in children: Parallels between poor reading comprehension and specific language impairment? *Journal of Speech, Language and Hearing Research, 47*(1), 199-211.

Neemeh, K., & Behzad, G. (2015). The impact of vocabulary knowledge on reading comprehension ability of Iranian English learners receiving reciprocal teaching and cooperative grouping intervention program. *International Journal of Research Studies in Education, 4*(3), 47-56.

Nizonkiza, D. & Van Dyk. T. (2015). Academic literacy of South African higher education level students: Does vocabulary size matter? *Stellenbosch Papers in Linguistics*, 44, 147 - 174.

Ntereke, B.B. & Ramoroka, B.T., (2017), 'Reading competency of first-year undergraduate students at University of Botswana: A case study'. *Reading and Writing, 8*(1), 1-11.

Nunan, D. (2006). *Practical English language teaching: Young learners*. New York, NY: McGraw Hill.

Nyarko, K., Kugbey, N., Kofi, C. C., Cole, Y. A., & Adentwi, K. I. (2018). English reading proficiency and academic performance among lower primary school children in Ghana. *SAGE Open*, *8*(3), 1-10.

Pang, J.X., (2008). 'Research on good and poor reader characteristics: Implications for L2 reading research in China'. *Reading in a Foreign Language, 20*(1), 1–18.

Pretorius, E.J. (2002), 'Reading ability and academic performance in South Africa: Arewe fiddling while Rome is burning'. *Language Matters, 9*(33), 169–196.

Putra, Y. (2009). *The relationship between vocabulary size and writing ability of the English language laboratory students at universitas pelita harapan*. (Thesis, Universitas Pelita Harapan, Karawaci).

Qian, D. D. (2002). Investigating the relationship between vocabulary knowledge and academic reading comprehension: an assessment perspective. *Language Learning*, *52*(3), 513- 536.

Qian, D., & Schedl, M. (2004). Evaluation of an in-depth vocabulary knowledge measure for assessing reading perfomance. *Language Test*, *21*(2), 28-52.

Razi , O. & Grenfell, M. J. (2012). The impact of linguistic knowledge on learner strategy deployment, *Procedia - Social and Behavioral Sciences, 47*, 818 – 822.

Sasmita, E. (2012). Identifying students' ability in understanding English reading texts. A case study at the second year student of SMK N 1 Gangga in Academic, Year 2012/2013.

(online). Retrieved from http://fkip-unramac.id/ ejurnal/ index. php/ ingris/article/view/235.

Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research 12*(3), 329-363.

Schmitt, N., & Schmitt, D. (2014). A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching*, *47*(4), 484-503.

Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the vocabulary levels test. *Language Testing*, *18*(1), 55-88.

Snow, C. E., & Sweet, A. P. (2003). Reading for comprehension. In A. P. Sweet, & C. E. Snow (Eds.), *Rethinking reading comprehension*. New York: The Guilford Press.

Stæhr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *Language Learning Journal*, *36*(2), 139-152.

Treffers-Daller, J. & Milton, J. (2013). Vocabulary size revisited: the link between vocabulary size and academic achievement. *Applied Linguistics Review*, *4*(1), 151-172.

Türkyılmaz, M., Can, R., Yıldırım, K. & Ve Ateş, S. (2014). Relations among oral reading fluency, silent reading fluency, retell fluency, and reading comprehension. *Procedia-Social and Behavioral Sciences*, *116*(21), 4030-4034.

Yule, G. (2017). *The study of language* (6th.Ed). Cambridge: Cambridge University Press.

Vacca, R. T. (2005). Making a difference in adolescents' school lives: Visible and invisible aspects of content area reading. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (pp. 184 - 204). Newark, DE: International Reading Association.

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd Ed). New York, Harper and Row.

Yussof, Y. M., Jamian, A. R., Hamzah, Z. A. Z., & Roslan, S. (2013). Students' reading comprehension performance with

emotional literacy-based strategy intervention. *International Journal of Education and Literacy Studies*, *1*, 82-88.

Zuhra, Z.(2015). Senior high school students' difficulties in reading comprehension. *English Education Journal (EEJ)*, *6*(3), 424-441.

Leadership Styles and Turnover Intentions of Public Secondary School Teachers in Dodoma, Tanzania: The Mediating Role of Team-Member Exchange

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ABSTRACT

Using a survey study design with 133 public secondary school teachers in Dodoma, this paper explores the relationship between leadership style (both Transformational and Transactional) and teachers' turnover intentions with mediating effect of Team Member Exchange. The study found that teachers' turnover intentions have a negative relation with transformational leadership style, while transactional leadership style has a positive relationship. Also, TMX was observed to have a positive relationship with transformational leadership style, while transactional leadership style has a negative relationship. Despite teachers' turnover intentions and TMX being observed to have a negative relationship, there was no mediating effect of TMX on transformational leadership style and teachers' turnover intentions. At the same time, there was a negatively mediating effect of TMX between transactional leadership style and teacher turnover intentions. The findings of this study provided insight into a leadership style that may be used to motivate and encourage teachers to work even more complex and reduces turnover intention. The findings can help develop strategies and programmes for heads of schools to improve their leadership styles that would enable the retention of public secondary school teachers.

Keywords: Leadership Styles; Transactional Leadership Style; Transformational Leadership Style; Team Member Exchange; Turnover Intention

INTRODUCTION

Addressing employee turnover intentions has been a significant concern for scholars and practitioners for decades (Al-Suraihi et al., 2021).Employee turnover intention can be defined as an employee's purposeful desire to leave the organization shortly (Rabbi, Kimiya, & Farrukh, 2015). According to Saiful (2015), the turnover intention is a decision-making process that occurs before a worker leaves their employment. It has been suggested that employee turnover decisions are influenced by their plans to depart the job, which is a precursor to actual employee turnover (Mamun & Hasan, 2017; Wells & Peachey, 2011). In order to reduce turnover intention, the organization needs to adopt a suitable leadership style that will make employees feel good and stay longer in the organization (Almaaitah, 2018). Leaders can provide employees with a clear sense of direction and purpose by discussing career prospects with them. This also helps lower dysfunctional turnover rates by making employees feel valued and integral to the work team (David, 2008).

Organizations invest significant resources in recruiting and training personnel (Rahman & Nas, 2013). Making efforts to reduce employee turnover in an organization is critical because when an employee leaves, the invested resources will be lost, and an organization will need to reinvest in recruiting and training new employees (Alaarj et al., 2017). Voluntary turnovers come with high personal and organizational costs, such as the cost of losing organization-specific human capital, the cost of recruiting and training replacement personnel, diminished service quality, and other related costs (Babalola et al., 2016; Wright & Bonett, 2007). One of the biggest reasons for employee turnover is the leadership style influencing employee feelings and their decision to leave or

stay in the organization (Puni et al., 2016). Leaders, as opposed to followers who have limited power and authority, have the potential to change what needs to be changed, which can impact employee turnover intentions (Alkhawaja, 2017). The favourable exchange between team members in an organization is enhanced by the relationship between a leader and his or her subordinates through motivation and inspiration from the leader (Vermeulen et al., 2020). In this process, the team members' self-concept moves from individualism to collectivism (Zou et al., 2015). Based on role theory and social exchange theory, (Seers, 1989) developed the idea of team-member exchange (TMX), which refers to the process of mutual exchange between team members. Team member exchange (TMX) is related to work results such as job performance, organizational commitment, job satisfaction, and intention to leave (Banks *et al.,*2014).

The style of leadership that leaders have adopted in organizations does not only affect the relationships between leaders and followers; it also influences the exchange of relationships between team members through emotional processes (Lai et al., 2019). Transformational and Transactional are said to be leadership styles that are more prevalent than others, particularly in public organizations, and they are required when leaders need to revitalize or change organizations(Jaroliya & Gyanchandani, 2022). In this regard, there is a need to study the existing dynamics between leadership styles and turnover intentions, as well as the mediation role of team-members exchange. Therefore, specifically this study looked at the role of team member exchange (TMX) on the relationship between leadership style (Transformational and Transactional) and intention to leave the teaching profession by

taking the experience of the public secondary school teachers in Dodoma.

Conceptual Framework

It is assumed here that leadership style is among the factors that affect employees' turnover intentions (Yamak & Eyüpoglu, 2018); both transformational and transactional leadership style affect employee's turnover intentions (Odumeru & Ogbonna, 2013). In addition, when employees receive social support from their co-workers' network, they create sentiments of belonging and emotional attachment to the organization, which boosts employee organizational commitment and reduces turnover intentions (Lu et al., 2017). In this regard, both leadership styles and TMX directly affect turnover intention or as intermediate variables. This research was accomplished by running two models whereby we wanted to know if TMX affects the relationship between both leadership styles and teacher turnover intentions.
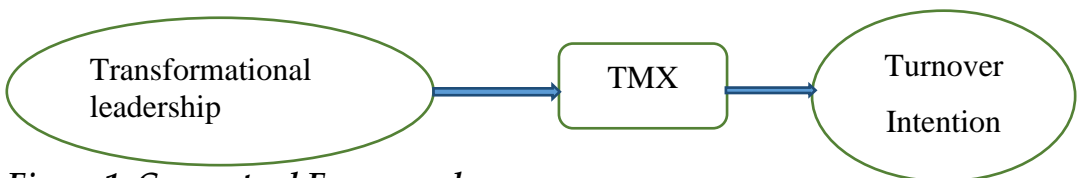
Figure 1: Conceptual Framework

Research Methodology
Research Design, Participants, Sample and Sampling Procedure

A survey research design was employed to collect data through structured questionnaires which were distributed to public secondary school teachers in ten selected public secondary schools in Dodoma. A convenient sampling technique was used to select teachers who happened to be available at school during the study as respondents. About 189 questionnaires were distributed, and

146 (77.25%) questionnaires were returned. However, 133 (70.37%) questionnaires were used for the analysis, while 13 (6.88%) questionnaires were not used because they had incomplete responses.

Table 1. Variables and Measurements

Variable	Measurement
Transformational leadership style	Transformational leadership was measured using four leadership aspects, namely; (i) Idealized Influence (ii) Inspirational Motivation (iii) Intellectual Stimulation, and (iv) Individual Consideration. A five-point Likert scale was used to measure the outcomes, i.e. 1=Strongly Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Strongly Agree
Transactional leadership style	Transactional leadership was measured using two transactional leadership aspects, namely; (i) Contingent reward and (ii) Management by Exception. A five-point Likert scale was used to measure the outcomes, i.e. 1=Strongly Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Strongly Agree
Team-Member Exchange	TMX was assessed through the use of 10-items scale adopted from (Bass et al., 2003), using a five-point Likert scale outcomes i.e. 1=Strongly Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Strongly Agree
Turnover Intention	The turnover intention was measured by teacher's responses using six items of teacher's turnover intention as stipulated by Bass and Avolio (1996) through the use of five points Likert scale outcomes i.e. 1=Strongly Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Strongly Agree

Source: Bass and Avolio (1996)

Data Analysis

To address the relationships between leadership styles (Transformational and Transactional Leadership), turnover intention (TI) and Team Member Exchange (TMX), six hypothesis

were tested. Researchers had two models and hypotheses were stated as indicated hereunder:

Model 1:
- *H1a: Transformational leadership style is positively related to TMX.*
- *H2a: TMX is negatively related to turnover intention (TI).*
- *H3a: The relationship between transformational leadership style and teachers' turnover intentions is mediated by TMX.*

Model 2:
- *H1b: Transactional leadership style is positively related to TMX.*
- *H2b: TMX is negatively related to turnover intention (TI).*
- *H3b: The relationship between transactional leadership style and teacher turnover intentions is mediated by TMX.*

Using a survey approach, descriptive information was gathered. A formal list of direct questions was used in a structured survey administered to the participants. The variables of interest – transformational leadership style, transactional leadership style, Team Member Exchange, and Turnover Intention were measured using five points on the Likert scale. Secondly, the variables were transformed into the mean score. Thirdly, inter-correlation between leadership styles (Transformational and Transactional), TMX, and turnover intention was also established using a correlation matrix (used to track if there is an association between the variables. After that, we regressed using an extension of PROCESS v3.5 macros for SPSS developed by Hayes(Hayes, 2013). Additionally, the bootstrapping techniques (CI=95%) were[H1] also used to establish the significance level instead of using Cronbach alfa (Hayes, 2017). This Bootstrapping technique is preferable because it gives accurate statistics by treating a sample as a population by resampling and replacing the data several times at a confidence interval of 95% (Hayes, 2013). The correlation

matrix followed a standard procedure stipulated by (Wooldridge, 2019).

Results

A reliability test was performed to test the reliability of the research instruments. Cronbach's alphas were generated using a scale test and compared to the standard cut-off point of 0.7. Traditionally, a Cronbach's alpha greater than 0.7 shows that the instrument has internal consistency. For each subscale, Cronbach alphas were generated, and the findings are shown in Table 2. According to the findings, Cronbach's alphas ranged from 0.717 to 0.949. The obtained alpha coefficients were all higher than 0.7 level, indicating that each subscale used in the study had acceptable internal consistency and thus can reliably measure what it was designed to measure.

Table 2: Cronbach's Alpha Reliability Test

Scale	N	Alpha
TRANSFORMATIONAL LEADERSHIP		
Idealized Influence (II)	3	0.949
Inspirational Motivation (IM)	3	0.892
Intellectual Simulation (IS)	3	0.792
Individual Consideration (IC)	3	0.854
TRANSACTIONAL LEADERSHIP		
Contingent Reward (CR)	3	0.869
Management by exception (MBE)	3	0.848
TEAM MEMBER EXCHANGE	10	0.903
TURNOVER INTENTION	6	0.717

Source: Field Data, (2020)

Table 3 summarizes the demographic information about the gender, age, academic qualifications and working experience

status of the respondents. Respondents included 53 (39.8%) males and 80 (60.2%) females. The majority of the respondents had Bachelors' Degree 95 (71.4%), while 25 (18.8%) held Master degrees and 11 (8.3%) were Diploma holders. In addition, the average working experience of the respondents is 6-10 years, while the average age is below 35 years old. This distribution implies that most of the respondents were in a position to give a fair assessment of their turnover intentions concerning the style of leadership adopted by their school heads.

Table 3: Demographics

Category	Classification	Frequencies	Percentages (%)
Gender	Male	53	39.8
	Female	80	60.2
Age	Below 35	79	59.4
	36-48	48	36.1
	Above 48	6	4.5
Academic qualification	Diploma	11	8.3
	Advanced Diploma	2	1.5
	Bachelor Degree	95	71.4
	Masters	25	18.8
	PhD	0	0.0
Working Experience	Below 5 years	28	21.1
	6-10	65	48.9
	Above 10 years	40	30.1

Correlation Results

Table 4 presents correlation results for transformational leadership (TfL), Transactional leadership (TSL), TMX, and Turnover intention (TI). It was observed that, only the mean for TMX (4.05) is a bit higher compared to other variables TfL 3.48, TsL 3.32 and TI 3.52. TI and TfL were observed to have a negative association -.47 (at $p<5\%$), TI and TMX were also negatively associated -.26 (at $p<5\%$). Moreover, the association of TI and TsL is positive .33 at $p<5\%$. Likewise, the association of TMX and TsL is .19 (at $p<5\%$). All correlation outcomes have a second value, $P< .05$, which indicates that they are statistically significant but also suggests that the results are unconvincingly accidental.

Table 4. Correlation Matrix among TfL, TsL, TMX and Turnover Intension

	Mean	SD	1	2	3	4
1. Transformational leadership (TfL)	3.48	.94				
2. Transactional leadership (TsL)	3.32	.85	-.01[*]			
3. Team Member Exchange (TMX)	4.05	.73	.46[**]	.19[**]		
4. Turnover intention	3.52	.99	-.47[**]	.33[**]	- .26[**]	

N = 133, ** Correlation is significant at $p < .05$ (2- tailed)

Regressions

A simple regression analysis was deployed to establish the relationship between leadership styles (Transformational and Transactional) and employee turnover intention. Table 5depicts the results of multiple regression analysis between transformational and transactional leadership styles and employee turnover intention. The outcome's *R*-square value (coefficient of determination) of .316 indicates a significant relationship between both leadership styles (Transformational and Transactional) on employees' turnover intentions. *Beta* values for transformational

leadership and transactional leadership, respectively, were -.47 and.39. These results indicate that transactional leadership style has a significant positive impact on employee turnover intentions while transformational leadership has a significant negative association with employee turnover intentions. One unit change in a transactional leadership style is predicted to increase employee turnover intention by .39, while one change in a transformational leadership style may result in a drop in employee turnover intentions by -.47.

Table 5. Relationship between Leadership Styles, TMX and Turnover Intention

Model	Team Member Exchange			Turnover intentions		
1	B	SE	p	b	SE	P
Transformational leadership	.36	.06	<.01	-.47	.08	<.01
		R^2=.21				R^2=.21
	$F(1, 131) = 34.99$		p<0.01	$F(1, 131) = 34.41$		*p*<0.01
2	b	SE	*p*	b	SE	*p*
Transactional leadership	.16	.07	<.01	.39	.10	<.01
		R^2=.04				R^2=.11
	$F(1, 131) = 4.78$		p<0.01	$F(1, 131) = 16.33$		*p*<0.01
3	b	SE	*p*	B	SE	*P*
Team member exchange	-	-	-	-.32	.12	<.01
						R^2=.06
				$F(2, 130) = 07.77$*p*<0.01		

Table 6. Indirect effect of TMX on the relationship between leadership style(s) (transformational and transactional) and turnover intention.

Indirect effect of TMX on the relationship between transformational leadership style and Turnover intention:

	B	SE	LLCI 95%	ULCI 95%
Team Member Exchange	-.02	.04	-.0826	.0580

Indirect effect of TMX on the relationship between Transactional leadership style and Turnover intention:

	B	SE	LLCI 95%	ULCI 95%
Team Member Exchange	-.07	.04	-.1635	-.0030

Relationship between Transformational Leadership Style, TMX and Turnover Intention

Model 1 of this study tested the relationship between Transformational leadership style, TMX and employees turnover intention. To test for this relationship, three hypotheses were developed and tested.

Hypothesis H1a predicted that Transformational leadership will be positively related with TMX. Results indicate that transformational leadership style had a significant positive relationship with TMX (b = .36, $p < .001$) and therefore confirms the H1a. This suggests that, transformational leadership causes an employee to change from individual perspective to the broad organizational interests. Transformational leaders have the power to influence higher quality interactions among employees in an organization by encouraging employees to actively support one another in achieving tasks set by the other team members, encouraging team

members to define and engage in team objectives, and to perform work-related duties above expectations.

Hypothesis two H2a predicted that TMX will be negative related with employees turnover intention (TI). Based on the finding above, TMX correlated negatively with employee's turnover intention (b=-.32, $p < .001$) and therefore H2a is endorsed. TMX increases employee organizational commitment and lowers turnover intentions when employees receive social support from their co-workers. Higher quality TMX also reduces turnover intentions in an organization because employees are worried to lose the good working conditions of the working environment because such relationships are not easily replaced at a new employer's. Table 5 presented the analysed data that tested the indirect relationship between leadership styles and turnover intention through TMX. In order to test for an indirect effect of TMX on the relationship between leadership styles (Transformational and Transactional leadership) and Turnover intention, we deployed Hayes (2013) bootstrapping approach through the use of PROCESS v3.5 macros for SPSS. Bootstrapping technique is preferred because it gives accurate statistics through treating a sample as a population by re-sampling and replacing it several times (5000). The bootstrapping techniques reduces the sampling anomaly by computing the confidence interval of 95% (Malingumu et al., 2016, Hayes, 2013).

Hypothesis H3a predicted that, the relationship between transformational leadership style and teachers' turnover intentions will be mediated by TMX.Results of the mediation analysis shows that all the conditions that are required for the existence of mediation do exist. However, when the mediating variable comes

in, results of the relationship was found to be non-significant (b = -.02; 95% CI [-0.0814, 0.0589]). Therefore, there is no mediating effect of TMX in the relationship between transformational leadership style and turnover intentions and we rejected H3a. The findings suggest that, TMX does not affect the negative relationship between transformational leadership style and turnover intention.

Relationship between Transactional leadership style, TMX and turnover intention

Model 2 of this study tested the indirect effect of TMX on the relationship between Transactional leadership style and employees turnover intention. To test for this relationship, three (3) Hypotheses were developed and tested.

Hypothesis 1b predicted that, transactional leadership style will be positively related to TMX. Results indicated that transactional leadership style was positively related to TMX (b = .16, $p < .001$). These results therefore confirm hypothesis H1b.Transactional leadership style is not looking forward to change the future and revitalize organizations rather to merely keeping things the same. These leaders follow up their subordinates in order to find faults and deviations in their operations. Transactional leader can be a problem with expectations whereby if the expectation of one person is not met, then exchange process among employees in an organization will be interrupted(Ojokuku et al., 2013).

The second hypothesis (H2b) under model two predicted that, TMX will be negatively related with employee's turnover intention. Based on the findings above, TMX correlated negatively with employee's turnover intention (b=-.32, $p < .001$); therefore, these results endorsed H2b. When employees receive social

support from their co-workers, they also increase organizational commitment and lowers turnover intentions. Employees are likely to increase higher turnover intentions if they don't receive higher quality working relationship with peers(Lee & Mowday, 1987).

Hypothesis 3b predicted that there will be an indirect relationship between transactional leadership and turnover intention through TMX. Results of the mediation analysis indicated that the relationship between transactional leadership style, and turnover intentions is mediated by Team Member Exchange (TMX) (b = -.07; 95% CI [-0.1635,-0.0030]) and, thus confirms H3b.The findings therefore suggest that, the higher degree of team member exchange lowers employees turnover intentions regardless of leadership style adopted.

Discussion

This study explored the relationship between transformational leadership and transactional leadership styles and turnover intentions of Public secondary school teachers in Dodoma. Specifically, the study examined the role of Team Member Exchange (TMX) in mediating the relationships between transformational leadership, transactional leadership, and turnover intention. Findings show that the transformational leadership style has a negative relationship with teacher turnover intentions in the studied public secondary schools. This means that a transformational leadership style is preferable to reduce teacher turnover intention in public secondary schools. The more transformational leadership style is used in managing public secondary schools, the more reduction of teachers' turnover intentions. This finding concurs with Gul et al. (2012), Lim et al.(2017) and Naseer et al.(2018), who found a negative relationship

between transformational leadership style and employee turnover intentions. Transactional leadership style was found to have a positive relationship with teachers' turnover intentions.

This suggests that heads of schools that practice transactional leadership style increase the turnover intentions among public secondary school teachers. Transactional leader focuses on performance and reward, then exchange for a suitable response that motivates employees to enhance their performance (Kim Siew, 2017). To drive employees to perform at their best, transactional leader deploys a variety of incentives and disciplinary power. Incentives and disciplinary power increase tendencies that normally frustrate and demotivate employees. Generally, teachers in public secondary schools rarely receive rewards and appreciation for their teaching job; even if they are rewarded occasionally, the reward is not satisfying. As a result, these teachers do not find leadership as a helpful that tries to get the work done by giving contingent awards. This may be a reason for the positive relationship between transactional leadership and turnover intentions among public secondary school teachers in Dodoma. These findings are consistent with studies by Long et al.(2016) and Naseer*et al.* (2018) who found a positive relationship between transactional leadership style and employees' turnover intentions**.** Likewise, this study found a non-significant indirect relationship between transformational leadership style, TMX, and teacher turnover intentions in Dodoma. These findings did not support hypothesis three H3a, which predicted that there would be an indirect relationship between Transformational leadership and turnover intention through TMX. Turnover intentions correlate negatively with the Team Member Exchange (TMX) and the transformational leadership style. These results concur with

Gul et al.(2012) and Lim*et al.* (2017). Gul*et al.*(2012) studied leadership styles and turnover intentions of public sector employees of Lahore (Pakistan) with the mediating effect of affective commitment.

They discovered that transformational leadership style did not affect turnover through affective commitment as a mediator; instead, there was a direct negative effect of transformational leadership on turnover intentions. Also, Lim et al. (2017) studied the impact of leadership on turnover intentions with the mediating role of organizational commitment and job satisfaction. Their study revealed that organizational commitment did not mediate the relationship between transformation leadership and turnover intentions of employees. Thus, this is a new finding since the previous studies did not use TMX as a mediator. On the other hand, this study discovered an indirect relationship between transactional leadership TMX and turnover intention. This finding supported hypothesis H3*b*, which predicted that TMX would mediate the relationship between transactional leadership style and turnover intention. Team member exchange had a negative correlation with employee's turnover intention while turnover intention correlated positively with transactional leadership. Therefore, more transactional leadership may result in less team member exchange among public secondary school teachers, which in turn may raise teacher's intentions to quit teaching profession. These findings are consistent with the study by Naseer et al. (2018) who discovered a partial mediation effect between affective commitment and staff nurse turnover intentions. Also, the findings of the present study are consistent with the study by Gul et al. (2012) who discovered an indirect relationship between

transactional leadership style and employee turnover intentions through affective commitment.

Conclusions

The survival and growth of the educational sector depend most on teachers among other resources. Due to high levels of technological advancement, employees have evolved into being smarter, more sensitive, and aware of working environments that will meet both their demands and organizational goals. This research studied the relationship between leadership styles and turnover intention with the mediating effect of team member exchange. Based on the results of this study, we can recommend that school heads should employ a transformational leadership style as an effective tool to decrease the turnover intention and turnover rate in public secondary schools. Additionally, we recommend that the management of public secondary schools should make up the strategies and activities that can promote transformational leadership. This is because transformational leadership creates a higher level of trust and confidence between leaders and subordinates and therefore may reduce turnover intentions. Also, this study's findings have underlined the importance of team member exchange in an organization. Team member exchanges were seen to relate negatively to employees' turnover intention. The higher quality working relationship is beneficial for individual employee performance as well as their job satisfaction and organizational commitment. Working well together is facilitated by the positive relationship that employees have and when individuals work together in an organization decreases any desire and intent of quitting employment. Employees are likely to increase higher turnover intentions if they don't receive higher quality working relationships with peers.

Recommendations

This study noted that formal organizations aspire to have stable human capital so as to thrive and flourish in a competitive environment. In accomplishing the goals of schools, teachers are necessary resources. In this regard, retaining teachers and mitigating turnovers is key to ensuring the survival and sustainability of the school. Thus, it is recommended that school heads should be aware of the leadership style that encourages teachers to work even harder devoid of turnover intentions. School heads should be able to influence higher quality interactions between teachers by encouraging them to actively support one another in achieving tasks set by the other team members, encouraging team members to define and engage in team objectives, and to perform work-related duties above expectations

Limitations and Future Research

Although we found a significant influence between leadership styles and public secondary school teacher's turnover intentions in Dodoma as well as mediating effect of TMX on the relationship between transactional leadership style and turnover intentions, this study had some limitations. For this study, information was gathered from ten selected public secondary schools in Dodoma City. As a result, the findings of this study describe the circumstances of public secondary school teachers in other Tanzanian cities or regions. Also, sampling technique used in this study may have a variety of drawbacks, including the potential for bias and the inability to generalize the findings.

On the other hand, the focus of the present study was only on transactional and transformational leadership, ignoring other styles of leadership such as laissez-faire, charismatic, autocratic,

and servant leadership. The intention of public secondary school teachers to leave their jobs may also be impacted by these leadership styles. The impact of the two studied leadership styles (Transformational and transactional) may be different in other organizational contexts such as higher learning institutions or non-academic institutions. Thus, future research may focus on the impacts of leadership style on private secondary school, higher learning institutions or even non-academic institutions. Researchers may also study other leadership styles such as laissez-faire, charismatic, autocratic, and servant leadership on how they may influence turnover intentions of employees. It is also recommended that future study may expand the sample by adding other regions of Tanzania.

REFERENCES

A, O. J., & Ogbonna, I. G. (2013). Transfo rmatio nal_ vs._ Transactional_Leade.pdf. *International Review of Management and Business Research*, 2(1), 355–361.

Al-Suraihi, W. A., Samikon, S. A., Al-Suraihi, A.-H. A., & Ibrahim, I. (2021). Employee Turnover: Causes, Importance and Retention Strategies. *European Journal of Business and Management Research*, 6(3), 1–10. https://doi.org/10.24018/ejbmr.2021.6.3.893

Alaarj, S., Mohamed, Z. A., & Bustamam, U. S. A. (2017). The effect knowledge management capabilities on performance of companies: A study of service sector. *International Journal of Economic Research*, *14*(15), 457–470.

Alkhawaja, A. (2017). Leadership Style and Employee Turnover A Mythical Relationship or Reality ? *University of San Diego*.

Almaaitah, A. (2018). The Role of Leadership Style on Turnover Intention. *International Review of Management and Marketing*, *8*(5), 24–29.

Babalola, M. T., Stouten, J., & Euwema, M. (2016). Frequent Change and Turnover Intention: The Moderating Role of Ethical Leadership. *Journal of Business Ethics*, *134*(2), 311–322. https://doi. org/ 10.1007/s10551-014-2433-z

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207–218. https:// doi.org/10.1037/0021-9010.88.2.207

Burns, J. M. (1978). *Leadership*. Harper & Row.

David, A. (2008). Retaining Talent: A Guide to Analyzing and Managing Employee Turnover. *SHRM Foundation*, 3. https:// www. shrm.org/hr-today/trends-and-forecasting/special-reports-and-expert-views/documents/retaining-talent.pdf

Gul, S., Ahmad, B., Ur Rehman, S., Shabir, N., & Razzaq, N. (2012). Leadership Styles , Turnover Intentions and the Mediating Role of Organizational Commitment. *Information and Knowledge Management*, *2*(7), 44–51.

Hayes, A. F. (2013). Integrating Mediation and Moderation Analysis: fundamentals using PROCESS. In *Introduction to Mediation, Moderation and Conditional Process Analysis*.

Jaroliya, D., & Gyanchandani, R. (2022). Transformational leadership style: a boost or hindrance to team performance in IT sector. *Vilakshan - XIMB Journal of Management*, *19*(1), 87–105. https:// doi.org/ 10.1108/xjm-10-2020-0167

Khan Saiful. (2015). the Mediating Effects of Trust and Job Performance. *Doctoral Dissertation, Bangkok University.*

Kim Siew, L. (2017). Analysis of the relationship between leadership styles and turnover intention within small medium enterprise in Malaysia. *Journal of Arts & Social Sciences*, *1*(1), 1–11.

Lai, F. Y., Lu, S. C., Lin, C. C., & Lee, Y. C. (2019). The Doctrine of the Mean: Workplace Relationships and Turnover Intention. *Canadian Journal of Administrative Sciences*, *36*(1), 84–96. https://doi. org/10.1 002/cjas.1481

Lee, T. W., & Mowday, R. T. (1987). Voluntarily Leaving an Organization: An Empirical Investigation of Steers and Mowday's Model of Turnover. In *Academy of Management Journal* (Vol. 30, Issue 4, pp. 721–743). https://doi.org/10.5465/256157

Lim, A. J. P., Loo, J. T. K., & Lee, P. H. (2017). the Impact of Leadership on Turnover Intention: the Mediating Role of Organizational Commitment and Job Satisfaction. *Journal of Applied Structural Equation Modeling, 1*(June), 27–41. https://doi. org/10.47263 /jasem.1(1)04

Long, C. S., Thean, L. Y., Khairuzzaman, W., Ismail, W., Jusoh, A., Sun, R., & Wang, W. (2016). Transformational leadership , employee turnover intention , and actual voluntary turnover in public organizations. *Public Management Review*, *00*(00), 1–18. https://doi.org/10.1080/14719037.2016.1257063

Lu, L., Liu, J., & Zhao, N. (2017). Why employees stay: The roles of psychological ownership, territoriality and work relationship closeness in affecting employee turnover intention. *Frontiers of Business Research in China*, *11*(1).

https://doi.org/10.1186/s11782-017-0010-x

Malingumu, W., Stouten, J., Euwema, M., & Babyegeya, E. (2016). Servant leadership, organisational citizenship behavior and creativity: The mediating role of team-member exchange. *Psychologica Belgica*, *56*(4), 342–356. https://doi.org/ 10.5334/ pb.326

Mamun, C. A. Al, & Hasan, M. N. (2017). Factors affecting employee turnover and sound retention strategies in business organization: A conceptual view. *Problems and Perspectives in Management*, *15*(1), 63–71. https://doi.org/ 10.21511/ppm. 15(1). 2017.06

Naseer, A., Perveen, K., Afzal, M., Waqas, A., & Gillani, S. A. (2018). The Impact of Leadership Styles on Staff Nursesâ◉™ Turnover Intentions. *International Journal of Academic Research in Business and Social Sciences*, *7*(12), 1133–1138. https://doi.org/10.6007 /ijarbss/ v7-i12/3702

Ojokuku, R. M., Odetayo, T. A., & Sajuyigbe, A. S. (2013). Impact of Leadership Style on Organizational Performance: A Case Study of Nigerian Banks. *American Journal of Business and Management*, *2*(1), 202. https://doi.org/10.11634/216796061706212

Puni, A., Agyemang, C. B., & Asamoah, E. S. (2016). Leadership Styles, Employee Turnover Intentions and Counterproductive Work Behaviours. *International Journal of Innovative Research & Development*, *5*(1), 1–7.

Rabbi, F., Kimiya, F., & Farrukh, M. (2015). The Impact of Job Satisfaction , Perceived Availability of Job Alternative on Turnover Intention. *Journal for Studies in Management and Planning*, *01*(11), 319–328.

Rahman, W., & Nas, Z. (2013). Employee development and turnover intention: Theory validation. *European Journal of Training and Development*, *37*(6), 564–579. https://doi.org/10.1108/EJTD-May-2012-0015

Seers, A. (1989). *Team-Member Exchange Quality : A New Construct for*.

Uzunsaf Yamak, Ö., & Zihni Eyüpoglu, S. (2018). Leadership Styles

of Hotel Managers in Northern Cyprus: Which Style is Dominant? *International Journal of Organizational Leadership*, *7*(1), 1–11. https://doi.org/10.33844/ijol.2018.60202

Vermeulen, M., Kreijns, K., & Evers, A. T. (2020). Transformational leadership, leader–member exchange and school learning climate: Impact on teachers' innovative behaviour in the Netherlands. *Educational Management Administration and Leadership*. https:// doi.org /10.1177/1741143220932582

Wells, J. E., & Peachey, J. W. (2011). Turnover intentions: Do leadership behaviors and satisfaction with the leader matter? *Team Performance Management*, *17*(1), 23–40. https://doi.org /10.1108/ 13527591111114693

Wooldridge, J. M. (2019). Correlated random effects models with unbalanced panels. *Journal of Econometrics*, *211*(1), 137–150. https://doi.org/10.1016/j.jeconom.2018.12.010

Wright, T. A., & Bonett, D. G. (2007). Job satisfaction and psychological well-being as nonadditive predictors of workplace turnove. *Journal of Management*, *33*(2), 141–160. https://doi. org/10.1177 /01492 06306297582

Zou, W.-C., Zheng, Y., & Liu, J. (2015). The Impact of Transformational Leadership on the Helping Behavior of Hotel Employee. *Journal of Economics, Business and Management*, *3*(3), 322–325. https://doi. org/ 10.7763/joebm.2015.v3.203

Impacts of Reciprocal Teaching Technique on Academic Achievement of Students in Office Practice in Colleges of Education, Kwara State, Nigeria

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ABSTRACT

The study investigates the impacts of reciprocal teaching technique on academic achievement of students in Office practice in Kwara State, colleges of education, Nigeria. Two research questions were raised and answered while two hypotheses were tested at the 0.05 level of significance. The population of the study was 200 level of Office practice students in colleges of education, Kwara state, Nigeria. Purposive sampling technique was used to select a sample of 138 students who were grouped into treatment and control. The data were collected through programmed material (modules) for Office Practice which was divided into weeks, and Office Practice Achievement Test (OPAT) developed by researchers. The ANCOVA statistical tool was used to test the two hypotheses at 0.05 alpha level of significance. The results showed that reciprocal teaching technique improves students' academic performance. It was recommended that Business educators should use reciprocal teaching technique for teaching effectiveness and enhanced academic performance.

Keywords: *Reciprocal teaching, Conventional lecture methods, Academic achievement*

INTRODUCTION

The rate of failure and lack of prerequisite skills among office practice students in recent times is disturbing and points to the fact that students do not achieved enough from the courses they undertake. Many students can neither type without looking at the keyboard nor use computer systems independently. Apart from lack of computer skills and low speed and accuracy, many of the students find it difficult to drill shorthand (Fawale, 2022). This scenario has become a serious concern to stakeholders and everyone is searching for the possible cause of this ugly incident. The essence of every instructional activity is to bring about desirable changes in the learner. For office practice education, acquisition of office management/organization skill, proficiency in shorthand, business communication skills and technological skills constitute the hallmark of student's achievement (Ademiluyi, 2016; Leonardi, 2021). The researcher holds tenaciously to the view that office practice students have not performed or achieved very well if they do not show mastery of these skills.

Academic performance is the completion of specific work that is evaluated against specified standards of accuracy, completeness, cost, and speed. It also refers to the academic activity of studying and how effectively students adhere to the criteria established by the relevant authorities (Hacker & Tenent, 2002). A variety of factors, such as subject matter, teacher's goals, learning resources, teacher's skills and willingness to improvise in the absence of traditional teaching aids, follow-up activities, and individual learning styles of each student, influence the choice of a particular teaching method (Gomaa, 2015). According to Ademiluyi (2016), office education students are finding it more and more difficult to complete office education courses in colleges of education,

particularly those involving shorthand, office practice, and word processing. Business school lecturers have incorporated a number of tactics and ways to raise the bar for students' academic performance. Students find it challenging to advance in their skills because of their subpar academic achievement in office education (Muraina & Oladimeji, 2022). Based on the researcher's interaction with some lecturers and students at Colleges of Education, Kwara State of Nigeria, lecturers are not comfortable with mass failure in all these courses mentioned above. Studies suggest that reciprocal teaching technique can be used to address the situation. Reciprocal teaching technique is considered one of the most effective contemporary teaching methods to help students comprehend what they are being taught, especially for low-achieving students (Muraina & Oladimeji, 2022). This was the reason that pushed the current researcher to carry out this study. The study was guided by the following research questions.

i.   What is the impact of reciprocal teaching on academic performance of office practice students in colleges of education?

ii.   What is the impacts of gender on academic performance of office practice students using reciprocal teaching techniques in colleges of education?

The following research hypotheses were tested at 0.05 significant levels in this study:

Ho1: There is no significant main impact of reciprocal teaching on academic performance of office practice students in colleges of education

Ho2: Gender has no significant effect on the academic performance of office practice students taught using reciprocal teaching technique in colleges of education.

Reciprocal Teaching Method

The concept of reciprocal teaching was first developed by Annemarie Sullivan Palincsar and Ann L. Brown in 1984 (Fawale, 2022). Reciprocal teaching was developed as a technique to help teachers to bridge the gap for students who demonstrated a discrepancy between decoding skills and comprehension skills (Muraina & Oladimeji, 2022). Ismail, Ahmadi, and Pourhosse (2012) claim that reciprocal teaching method offers a successful example for teachers to encourage students' involvement in their learning and teach them how to read well. They argue that reciprocal teaching method facilitates communication between students and their teacher or between students themselves. After the teacher has modeled the procedure, students switch roles and use reciprocal teaching method to instruct one another. Through the use of sub-sections of reciprocal teaching technique, a teacher can provide an example and ensure that students have enough practice to develop the meaning of a text.

According to Hacker and Tenent (2002), reciprocal teaching is an approach in which small groups of students are taught comprehension-monitoring strategies through scaffolded instruction. According to Hacker and Tenent (2002), students practice and master the four main reciprocal teaching styles. First, the teacher summarises all the desired objectives for students through the work plan. Second, the teacher uses scripted dialogues to walk students through the entire procedure step by step. Thirdly, s/he invites the students to take part and fourthly coaches them on how to ask insightful questions, write adequate summaries, and other abilities. The instructor's leadership responsibilities gradually diminish. However, the role of students grows. Last but not least, in keeping with Rosenshine and Meister

(1994), students assume more responsibility for carrying out the entire procedure. Reciprocal teaching method helps students to immediately employ metacognitive thinking as they decipher the meaning of a text. However, this technique is used in cooperative groups where students collaborate with informational materials to better understand the subject matter. Poor academic performance in the Office practice field, according to Arepo (2015), can be linked to a number of issues, the main one could be the teaching methods employed during instruction.

This suggests that without utilization of effective teaching method, a student's understanding of business education topics may not be fully attained. According to Fawale (2022), poor academic performance in business education may be associated with a variety of issues. They include government's attitude toward secondary school business education subjects, a shortage of business education teachers, societal perceptions of the programme, poor teaching techniques employed by some teachers, and poor reading habits on the part of students. Office practice is one of the aspects of Business Education Programme at tertiary institutions level, colleges of education inclusive. Courses in office practice are skill courses that must be acquired through constant practice, and requires drillings every day. Ademiluyi (2016) reports that Office practice students in colleges of education increasingly finding office practice courses very difficult, most especially Shorthand, Office Practice, Word Processing, among others. To enhance standard of academic achievement, lecturers of business education have adopted series of methods and techniques. Students in office practice are having a terrible time, despite their efforts. Umoru and Oluwafemi (2018) claim that ineffective teaching practices utilized by teachers, who constantly prioritize

covering as much content as possible, are to blame for students' low academic achievement. As a result, students experience frustration, learning challenges, and a lack of active participation.

Methodology

This study employed quantitative research approach, with quasi experimental design. The experimental and control groups participated in pre and post-tests as part of the study's quasi-experimental research methodology. The population for the study comprised of 8,386 office practice students in Colleges of Education, Kwara State. Multi-stage sampling technique was used to select 90 respondents of this study. The first stage involved the use of simple random sampling technique to select two colleges of education in Kwara State. The second stage witnessed the selection of 3 schools in each sampled College. Fifteen office practice students were sampled in each school through balloting and this cut across different gender. On the whole, 90 university students were drawn for the study. However, the whole sample was grouped into two, one group formed treatment class and the other one served as control group. 40 test items with four alternative responses made up the researchers' devised Office Practice Achievement Test (OPAT) (A to D). It was face validated by two research professionals and pilot tested using 20 students (who were not selected for the sample) over a period of two weeks. The pre-test was provided to both the experimental and control groups; the control group received a copy of the instrument developed by researchers and used as a therapy throughout the four-week trial. In order to compare the academic performance of the two groups, post-treatment tests were given to both, and two weeks later, a delayed post-test was given to each group in order to ascertain any changes in learning. The study's research

questions were answered using the mean, and the hypotheses were evaluated using analysis of covariance (ANCOVA). Any technique with a greater mean was considered to be better than the others, and hypotheses were disregarded if the estimated F-value was less than F-critical at the 0.05 level of significance. However, if the estimated F-value was greater than 0.05 threshold of significance, the hypothesis was rejected.

Results

Research Question 1: What is the impact of reciprocal teaching on academic performance of office practice students in colleges of education?

Table 1: Mean achievement scores of the impacts of reciprocal teaching techniques on academic performance of Office Practice students'

Groups	N	Pre-test $\bar{X}_1$	Post-test $\bar{X}_2$	Mean difference $\bar{X}_D$
RT	45	22.8667	29.0000	6.1333
Control	45	20.7957	22.9892	2.1935
Total	90			

Table 1 shows that the mean post-test achievement scores increased; the mean difference in reciprocal teaching techniques and control group was also high (with mean difference of 6.1333 against 2.1935). Students taught through reciprocal teaching technique had higher mean score ($\bar{x}$ = 29.0000) than control group ($\bar{x}$ = 22.9892). This suggests that office practice students who were taught through reciprocal teaching technique benefitted from the teaching methods. Thus, the treatment was effective in favour of students exposed to RT.

Research Question 2: What is the impact of gender on academic performance of office practice students using reciprocal teaching techniques in colleges of education?

Table 2: Means and Standard Deviation of pretest and Posttest Mean Scores on Gender

Source	Sex	N	Mean	Std. Deviation
Pretest	Male	21	20.9008	5.05042
	Female	24	21.1260	5.37778
	Total	45	21.0161	5.21130
Posttest	Male	21	27.3058	4.81637
	Female	24	26.1732	5.26056
	Total	45	26.7258	5.26056

Table 2 shows the mean for pretest and posttest scores of male and female students exposed to the techniques. It shows that at pretest, the mean score for male students who attended experiment was 20.9008 and standard deviation was 5.05042 compared to female students whose mean score was 21.1260 and standard deviation of 5.37778. After intervention, the mean score for male students rose to 27.3058, with a standard deviation of 4.81637 while the mean score of the female students also raised to 26.1732 with a standard deviation of 5.26056. This outcome suggested that the treatment had positive impact to both male and female students.

Test of Hypotheses

Hypothesis 1: There is no significant difference between the pre-test and post-test performance mean scores of office practice students using reciprocal teaching and those taught using lecture method in colleges of education.

Table 3: ANCOVA Summary of the Difference between Lecture Method and Reciprocal Teaching Techniques on Students' Scores in Office Practice

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2903.267[a]	3	1451.633	147.415	.000
Intercept	902.830	1	902.830	91.683	.000
Pretest	1807.611	1	1807.611	183.565	.000
Treatment	616.523	1	616.523	62.609	.000
Error	1329.378	87	9.847		
Total	90133.000	90			
Corrected Total	4232.645	89			

Table 3 shows a one-way Analysis of Covariance conducted to test the effectiveness of Reciprocal Teaching Technique to improve students' academic performance against the control group. The covariate used in the analysis was the pretest score of both treatment and control group. It is clear in this table that there was a significant impact of Reciprocal Teaching Technique on students as compared to control group on the mean scores (F (1,135) = 62.609, P= 0.000). It can therefore be said that Reciprocal Teaching Technique is effective in improving students' academic

performance in office practice. The null hypothesis was therefore rejected.

Hypothesis 2: Gender has no significant effect on the academic performance of office practice students taught using reciprocal teaching technique in colleges of education.

Table 4: ANCOVA summary on impacts of gender on the academic achievement of office practice students using reciprocal teaching techniques in colleges of education

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3666.263[a]	7	458.283	34.562	.000
Intercept	3833.989	1	3833.989	2 89.144	.000
Pretest	1465.347	1	1465.347	110.511	.000
Gender	104.667	1	104.667	7.894	.035
Group	1968.272	2	656.091	49.480	.810
Gender*group	78.724	2	28.241	.118	.225
Error	3169.092	87	13.260		
Total	183974.000	90			
Corrected Total	6835.365	89			

Table 4 shows that there is no significant difference between the post-test mean achievement score of male and female students taught by using reciprocal teaching techniques F(1,89)=7.894, P=0.35) 53.6%. This implies that a student's academic performance was not much influenced by gender. Therefore, the null hypothesis was accepted.

Discussion of Findings

The Research Question 1 sought to determine the difference between academic achievements of students taught the office

practice by using Reciprocal Teaching and those taught by using conventional lecture method. Findings revealed that office practice students taught by using Reciprocal Teaching achieved higher scores than their counterparts who were taught by using conventional lecture method (CLM). This finding agrees with that of Afrizatama (2016) who reported that the Reciprocal Teaching gives the students positive response in learning. He went further asserting that question generation helps students to identify information from text and also gives the students more understanding. This finding concurs with that of Ahmadi and Gilakjani (2012), which confirm that reciprocal teaching encourages students to reflect on their reading process, create a plan of action, track their own reading to build their own knowledge, and self-evaluate their reading process.

The current researchers conceive that this could be possible because the strategy promotes critical thinking and self-learning skills, which allow students to make judgments and form self-opinion about what is being taught. Consequently, they are able to reproduce it whenever they are required to do so. The results on the second research question revealed that, after the intervention, the mean score for both male and female students increased. This finding suggests that the treatment was effective to both male and female students. This finding contradicts the findings of Nwaukwa and Okolocha's (2020), Kumar and Roshan (2006) and that of Hamdan (2017) who found that female students' scores were higher (and the difference was statistically significant) than those of males when taught office practice using think-pair-share technique. This could arguably be contributed by the fact that females are more social and disciplined than males. Although female students performed better than males, but the difference is

not statistically significant. Females seem to be versatile naturally when it comes to typing and office filling in colleges; this could be the reason for their good performance as compared to their male counterpart.

Conclusion

It is clear in this article that reciprocal teaching technique has a positive effect on students' academic performance in office practice. Thus, if business educators can use the technique in the teaching-learning processes, students may gain relevant knowledge and skills. This will probably help students majoring in business to demonstrate to perform better. Since the technique benefitted both male and female students, it is concluded here that the approach effective for all students in instructional delivery of office practice.

Recommendations

The following recommendations are given based on the study's findings:

1. For effective teaching and learning, business educators should apply reciprocal teaching strategy in teaching students for enhanced academic performance in office practice.
2. Educational stakeholders ought to support greater study on the effectiveness of the reciprocal teaching technique in order to spread knowledge of this technique for professional and teaching enhancement in schools.
3. Gender discrimination are to be avoided while handling students using reciprocal teaching method.

REFERENCES

Ademiluyi, L. F. (2016). Strategies for improving the quality of business education programmes in Nigeria Tertiary Institutions. *Osun Journal of Business Education* 7(1), 49-60

Afrizatama, D. (2016). Teaching Reading through Reciprocal Teaching Strategy. *ELT Perspective* 4(2), 5-14

Ahmadi. M.R. & Gilakjani, A. P. (2012). Reciprocal Teaching Strategies and Their Impacts on English Reading Comprehension. *Theory and Practice in Language Studies*, 2(10), pp. 2053-2060

Arepo, I A. (2015). *Evaluation of Business Education resources available for teaching and learning in secondary schools in Moro Local Government Area of Kwara State*. Unpublished Master thesis. Kwara State University. Malete. Nigeria

Fawale, A. A. (2022). *Impacts of collaborative m-learning techniques on academic performance of students in office practice*. Unpublished Doctoral thesis. Kwara State University. Malete. Nigeria

Gomaa, O. M. K. (2015). The impacts of reciprocal teaching intervention strategy on reading comprehension skills of 5Th grade elementary school students with reading disabilities. *International Journal of Psycho-Educational Sciences*, Volume (4), (2), 8–20

Hacker, D. J., & Tenent, A. (2002). Implementing reciprocal teaching in the classroom: Overcoming obstacles and making modifications. *Journal of Educational Psychology, 94*(4), 699–718

Hamdan, R.K.A. (2017). The effect of (think – pair – share) strategy on the achievement of third grade student in sciences in the educational district of Irbid. *Journal of Education and Practice,* 8 (9), 88-95.

Ismail, T. J., Ahmadi, P. R and Pourhosse, B. D. (2012). Moving from old to new: Research on reading comprehension instruction. *Review of Educational Research*, 61, 239 – 264

Kumar, R. & Roshan, L. (2006). The role of self-efficacy and gender difference among the adolescents. *Journal of the Indian Academy of Applied Psychology, 32*(3), 249-254.

Leonardi, J.P. (2021). Using Reciprocal Teaching Method to Improve Female Students' Reading Comprehension Achievement at SMA Negeri Tujuh Prabumulih. *Holistics Journal, 13(1), 4-18*

Muraina, K.O. & Oladimeji, L.O. (2022). Internet-based technique and social support in the management of depression among secondary school teachers in Oyo State, Nigeria. *International Journal on Education Insight (IJEI), 3*(1), *9-18*.

Nwaukwa, F.C. & Okolocha, C.C. (2020). Effect of think-pair-share instructional strategy on students' academic achievement and self-efficacy in financial accounting in Abia state. *International Journal of Recent Innovations in Academic Research, 4*(1), 37-48.

Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*(2), 117–175

Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research, 64*(4), 479–530.

Umoru, T. A. & Oluwafemi, P. A. (2018). Effects of programmed instruction teaching method on academic achievement and retention of students in business studies in oyo state, Nigeria. *Association of Business Educators of Nigeria (ABEN 5(1). Conference Proceedings* 386-393

The Relevance of Bourdieu's Social Practice Theory to Parents' Participation in Basic Schools

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ABSTRACT

Parents' participation in basic school management has been identified to be very paramount in the growth and development of basic schools. Many scholars have espoused the critical roles they play in various dimensions to the development of basic schools, most especially in developing countries. This study investigated the relevance of Bourdieu social practice theory to parents' participation in basic school management. The study sought to identify how Boudieu's Social Practice theory assertions manifested in parents' participation in basic schools' activities. The purposive sampling technique was used to sample PTA executives, parents and school authorities. The study adopted the exploratory research method with in-depth interviews, observation and focus group discussions as techniques for data collection. The findings from the study revealed that the parents' traits, experience and operational environment in schools determined the ways that parents participated in the management of basic schools. This article recommends that since the mode of synergy between parents and school environment had a pertinent impact on the parents' desire to fully participate in the management of basic schools, government and other relevant stakeholders in the education fraternity should ensure a cooperative school environment.

Keywords: *Bourdieu's social practice theory, basic schools, parents' participation, social practice theory.*

INTRODUCTION

The formation of parents and teacher/school associations has been in existence for many years ago. Parents' role in the management of basic schools has led to the establishment of Acts and legislative instruments to secure a sound atmosphere for operation of various stakeholders in the management of basic schools (Nkansa-Akukwe, 2004). This is insisted in consideration that parents play a vital role in the total welfare and development their children; they provide emotional, physical and psychosocial needs of their children. Their involvement in the management of school activities positively impacts the development of school as a structure and students as people (Abdul-Rahaman, Ababio, Arkorful, Basiru, & Abdul Rahman, 2018). According to Edwards and Redfern (2017), globally, parents' participation in the management and governance of schools cannot be over emphasized as the design of administrative and management systems encompass avenues for their participation since time in memory.

The prime focus of education is to impart knowledge, values, attitudes and skills in the child. This begins the moment the child is given birth. This suggests that parents naturally set the pace of the child's education through socialization either formally or informally before the child formally assumes formal education in schools. Hence, the school environment should produce the conditions for social cohesion and for the re-construction of actors to ensure that all the social groups have access to management of schools (Zambeta, Askouni, Androusou, Leontsini, Papadakou & Lagopoulou, 2017). Equally, the steering committee in developing the Commonwealth Education Fund (CEF) views parent-school associations as a body made up of strategic partners of the civil society that assists the government to ensure that all children have

access to quality education for future security (Nurkholida & Hakim, 2020). As was anciently envisaged by Plato (437-347 BC), children should be valued and nurtured by the society because they would become the future citizens, leaders and guardians of their nations (Abdul-Rahman, N., Arkoful, V., Basiru, I., & Abdul Rahman, A. B. 2018). That is the diverse capital endowment of parents and the entire society should be tapped to compliment that of the central government to facilitate effective functioning of schools in the country. Hence the study explores; how parents' experiences and personality influence their participation in the management of schools, how operational environment in schools' influence parents' participation in school management and the extent to which parents contribute to basic schools' activities.

Rationale for parent participation in basic schools
Globally, the ability for schools to attain and achieve a universal recognition has led to the adoption of diverse approaches by nations and international organizations. A typical example is the Sustainable Development Goal 4 which is patronized by the United Nations Organization (Ghana Education Service, 2020). As further held by the World Bank (2008), communities should be empowered through involvement in the education of their wards by situating parents in pivotal positions in school affairs to further enhance rural educational improvement and poverty reduction at large. This has therefore positioned all stakeholders in the educational fraternity on their toes, though some alliances between some of these stakeholders in the educational field existed. Commonly, among such alliances, is the one that usually exist between parents and school. As opined by Pang (2004), these associations bear various names in different countries. For instance, in Australia, it is called Parents and Friends Association,

whilst in England; it is known as Parent-Teacher Association, in Papua New Guinea, it is termed as Parents and Citizens Association. In Canada, it is referred to as Parents Advisory Council, while in Ghana it is known as Parents Teacher Association. According to Edwards and Redfern (2017), Parent Teacher Association (P.T.A) is conceptualized as a group of people who deliberately come together to mobilize resources either actively or inactively to enhance the achievements of goals and objectives of schools. Equally, the steering committee in developing the Commonwealth Education Fund (CEF) also viewed Parent Teacher Association as a body made up of strategic partners of the civil society that assists the government to ensure that all children have access to quality education (Mariam, 2008). This indicates that the participation of parents in the activities associated with their children education provides a number of contributions in the school systems. Parents' involvement in school activities enhances quality and accessibility to education, solve problems and issues related to welfare of student/pupils and teachers.

It enhances children's learning, motivation, aiding their wards to understand the need and value of education, and assist them in pupils' discipline. Consequently, this enhances academic performance of pupils and schools in general (Nurkholida & Hakim, 2020). In Ghana, the government took over the entire management and governance of basic schools after independence so as to ensure fair and equitable allocation of educational facilities throughout the country (Akyeampong, Fobih & Koomson, 1999). This notwithstanding around the late 1970s and mid-1980s, the country was bemoaned by educational catastrophes resulting from worldwide economic chaos, mismanagement of schools, poor

performance, inadequate professional teachers and quantitative expansion of all schools at all levels (Nkansa-Akukwe, 2004). As a part of addressing some of these catastrophes further proceeding in 1987, the earliest reform was adopted. This reform was with the primary goals of increasing school's enrolment through easy accessibility to primary education and providing schools with the necessary facilities and equipment to enhance efficiency and effectiveness. All these were geared towards enhancing Ghana's socio-economic development (Nkansa-Akukwe, 2004). According to Community School Alliance's report (2003), parents, teachers, community opinion leaders, government and other educational key stakeholders were made to collaborate (to work together) as a single entity in the management of basic schools in the country (Nkansa-Akukwe, 2004). The Free Compulsory Universal Basic Education programme, which was launched in 1996 to help resolve the existing challenges facing the educational systems, further gave recognition and necessitation for all stakeholders in education. This was especially for parents to be actively involved in contributing in diverse ways to the school system in the country. This led to the formation of School Management Committee (SMC) and Parents Teacher Association (PTA) (Akyeampong, Fobih & Koomson, 1999).

Bourdieu Social Practice Theory

This theory is associated with Bourdieu (1977). It is commonly used in educational discourses and social management. The theory serves as a lens that provides the basis to critically analyze social institutions or agents (parents) and their impact in organizations (basic schools). The theory holds that social actions in any environment are induced by the linkages between the agency and the structure. Bourdieu explains the theory in three mutually

inclusive terms; habitus, field and capital (Bourdieu, 1977). In summary, the theory asserts that before an agent (parent) plays a role in an organization (school) the agent has to internalize roles in the field (school environment) which forms part of the socialization process. These internalized relationships and habitual expectations and relationships forms the habitus. In a nutshell, the theory emphasizes on both the agency and the structures but relies much on reconciling the structure and the agency (Bourdieu, 1990).

Habitus

In this concept, the theory assumes that agents' (parents) actions, perception of things, and their feelings are influenced by agents' past experiences (Crossley, 2005). That is to say, the way a parent behaves and react (participate) on situations are always engineered and controlled by their past interactions and experiences. Allan (2006) explains that habitus does not only aid us to organize our own behavior on the field, but it assists us to accept the behaviors of others as well. The concept is therefore identified as the product of inculcation and appropriation of parents past interactions and experiences that are required for the attainment of the objective/goals of the institution (Bourdieu, 1977). In view of that, agents permanently avail to the same conditionings, which limit them to the same material condition of existence.

Field

The theory explains field as a social space with its set of rules, regulations, authority and legal framework that indicates the boundaries of operation within a social space. As revealed by Allan (2006), the field is characterized by many positions which are occupied by components constituting the organization. The parameters of the field are set by the relationships between these

positions. Focusing on mode of interaction and expected output, Bourdieu (1990) propounded the analogy of field and game. In this analogy, every team has a collective responsibility among actors and that, though there are rules of the game on the field, it is the feel of the game steered by habitual competence and know how that determines action on the field.

Capital

In the views of Bourdieu (1990) and Crossley (2005), capital in social settings can be grouped into different forms; it could be symbolic, social, economic and or cultural. The wealth, income and financial value of goods agents have and are accrued from economic field, form the economic capital of the agent (Crossley, 2005). The measurement nature of economic capital differentiates it from the other forms of capital. From the perspective of Allan (2006), social capital is the computation of resources tangible or intangible a person or an entity gets by means of belonging to a strong network of relationships of mutual benefits or recognition. In categorizing social capital, Crossley (2005) holds that there are at least two forms of social capital. The first one is referenced to social networks which are treated structurally and from the point of view of the network; the second one conceptualizes networks as resources from the point of view of their members (Bourdieu & Loïc, 1992). Capital that manifests in the form of status and recognition an agent possesses is classified as the symbolic capital. Such power deals with possession of command, authority, honor and prestige in the society (Bourdieu & Loïc, 1992).

Methodology

This research took place in the Nadowli-Kaleo District at the Upper West Region of Ghana. This district is made up of seven

circuits. The district is boarded to the West by Burkina Faso, to the East by Daffiama-Issa-Bussie district, South by Wa Municipal and to the North by Jirapa district (Ghana Statistical Service, 2014). The study area covers a total land area of about 2,742.50km². The area is made up of 183 basic schools. Source of information from a preliminary assessment from the Nadowli-Kaleo Educational Directorate indicated that all these schools have a functional Parents Teachers Associations in the schools. According to the Ghana Statistical Service (2020), about 49% of the total population constitute the working force, 6% representing 60years and above and the remaining 45% between the ages of 0-14. Below is the map of the district under study.
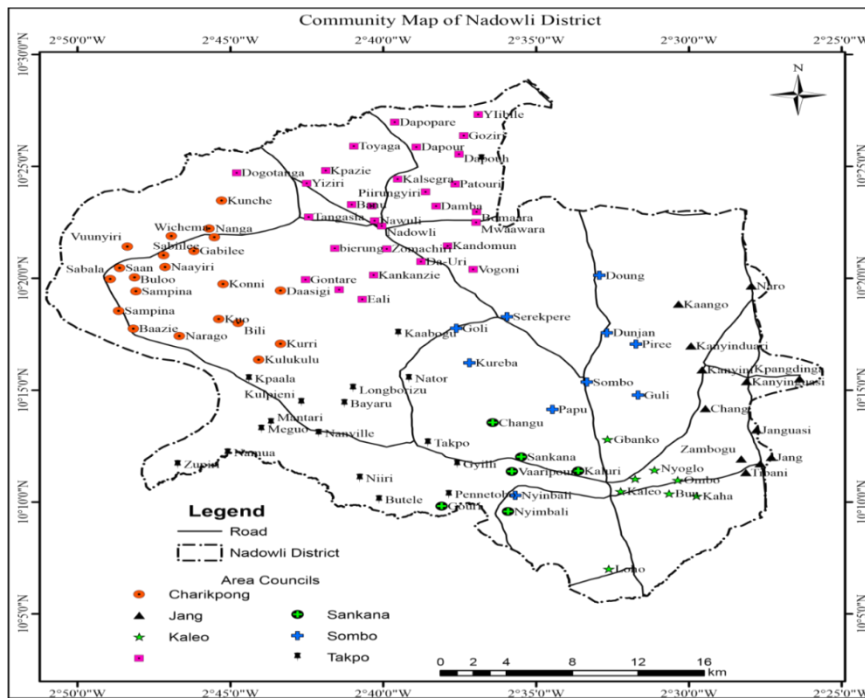
Source: Physical Planning Department, Nadowli-Kaleo District

The exploratory research design was adopted for the study; this was induced by the fact that opportunity was created for the researcher to have a thorough interaction with participants involved in the study. This further led to extensive understanding of the factors or indicators that influenced parents' participation in the activities of basic schools in the district. Out of 183 basic schools, the simple random sampling with the lottery technique was used to select two schools from each circuit in the district to get a total of 14 schools involved in the study. This method gave all schools in the district equal chance to be involved in the study. The purposive sampling technique was adopted to get participants for the study. These participants included parents, PTA executives and school authorities. The focus group discussion was used to collect primary data from parents in groups of seven to eight (7-8). This was organized for parents in all the selected schools on the surety of confidentiality as held by Murray and Agyare (2018). The groups intensively discussed the three main research questions in the study. The local language (Dagaare) was used during the discussion to allow parents freely discuss issues pertinent to the study. PTA executives were purposively selected on the basis of number of years served in the school to undergo in-depth interview, guided by confidentiality and anonymity.

The researcher further adopted the observation method too upon the consent and assistance of head teachers and PTA executives to probe visible structures in the school environment. This was carried out by the use of a check list, note book and a camera. Before the study was carried out, the researcher sought the consent of all participants. All the instruments for data collection were sent to the SD-Dombo University for Business and Integrated Development Studies Ethics Team for ethical scrutiny before implementation. Data collected from the field were qualitatively analyzed. After the data collected from the in-depth interviews and focus group discussions were tape-recorded and transcribed. Afterwards, the frequent emerging themes were achieved and

were coherent, they were presented. Further, qualitative data presentation approaches like direct and indirect quotes and paraphrases were used to present data.

Results and Discussion

This section discusses the findings of this study. The discussion is arranged based on the research questions guided this study.

How do parents' Experiences and Personality Influence their Participation in the management of Schools?

Data collected on parents' experiences and personality traits revealed that, individual parents had diverse experience and personality traits. Parents, through PTA, were able to harness the experiences and opportunities that others possessed to assist in the management of basic schools. It was identified that that chiefs, opinion leaders, assembly men and some community members in high positions used their outfits to contribute to basic schools' development in their societies. During key informant interview this was the assertion of one PTA executive:

> *The assembly man and the chief were able to lobby for boreholes and other teaching and learning materials from the district assembly to schools in this community.*

This finding debunks the notion by Crossley (2005) and associates that people of different experiences and personality traits work together in the management of schools. Thus, parents capitalized on the various experiences and personality traits of individuals in diverse ways in the management of schools. Amongst these were the assertions that:

> *We get funds and other resources for the management of basic schools after we have organized meetings with different*

stakeholders constituting parents-school association, and agree on some unanimous decisions though some parents' participation in school activities were limited.

This resulted from their low level of knowledge in the roles and responsibilities expected of them. Further, parents with expertise on any project or infrastructure needed by the school willingly did so for the school at no cost. Others with influential positions in their communities and work places used their portfolio to assist the schools to get projects such as boreholes, classroom desk among others. These revelations from the study, conforms to Bourdieu's assertion that habitus does not only enable people to organize their own behavior, but appreciate the behavior of others as well (Allan, 2006). The findings also, revealed that most of the schools that had many students and as such more parents as PTA members participated in basic school activities in diverse ways. These schools had a very active parents-membership participation in school activities. Most parents are highly educated elites and were devoted to participate in basic schools by lobbing for projects and teaching and learning resources for the schools and vice versa. This finding complements the notion of Bourdieu (1990), the larger the social network the bigger and diverse the resources and assistance that the organization receives from the agents towards its growth and development.

How does Operational Environment in Schools Influence Parents' Participation in School Management?

Results from the study revealed that, to enhance an effective operational environment for parents and teachers to work harmoniously, Parents Teacher Associations existed. This association was operated in a defined social space, governed by

rules and regulations, code of conducts, executives and a legal statute in schools. According to both parents and teachers, this helped them to regulate the activities of each group without the emergence of conflicts of interest. They further revealed that existence of rules and regulations assisted in the performance of duties and responsibilities in the association smoothly. This finding confirms Allan's (2006) argument that the social space on the field is characterized with a set of rules and regulations (legal framework) that delineates the limits of operation within the social space to avert conflicts. It was revealed in this study that willingness and enthusiasm of parents' participation in school activities was informed by nature of existing space (parents-school authorities' relations) in the school. The operational environment determined the ways that parents participated in the management of basic school. It was identified that schools that had an open and tolerant school environment had vibrant PTA, where parents willingly participated and contributed in diverse ways to the growth of schools.

In a school at Charikpong-Saan, it was revealed that parents monthly contributed a bowl of maize or cereals to teachers as a motivation. This has exacerbated the parents-school relationship in the school. Arguably, this is an intrinsic motivation for parents and local authorities in the community to participate in school activities. In a similar dimension, it was revealed that, the operational environment was very accommodating for parents' participation in basic school activities. It was affirmed that this existing atmosphere served as an impetus for parents to willingly provide infrastructural assistance to schools. This finding corroborates Bourdieu's (1990) analogy of field and the game, and Crossley's (2005) emphasis on the feel of the game. These scholars

argue that when agents are allowed to have opportunity to participate in the activities on the field, it motivates the agent to give out the maximum output and vice versa. This revelation further affirms the idea of the theory that parents feel of the game (ability and willingness to participate in school management) is always steered by habitual competence of the parent. An additional observable affirmation to the above is the photo and response below:

In a FGD, a participant had this to say:

> *Although most of us are not educated, teachers in the school are always welcoming and ready to engage us in all school activities. They sometimes visit parents to find out why they are not able to attend parents-school meetings. In fact, they actually make us feel very proud and determined to participate in school activities (FGD Takpo, 2020).*

During interview, a PTA executive commented that some parents should be educated massively on their roles in schools, so as to enable them recognize their importance in participating in the

school operations. This finding affirms Bourdieu (1977) assertion that for a parent to function effectively in the relationship, the agent (parent) has to internalize roles in a field. Since these internalized relationships and habitual expectations and relationships form the habitus that becomes part of the socialization process in a field which enable the agent (person) perform the various expected roles in the working environment (school environment). The study discovered that some parents refused to attend parents-schools' meetings with the excuse of busy schedules affecting their collective efforts of in partaking in school activities. This reassures Bourdieu (1988) postulation that relationships are not naturally or socially given but are as the result of time and energy invested, consciously or unconsciously, toward the generation or reproduction of relationships that are "directly usable in the long or short term" In another scenario it was realized from the study that in order for parents' to be able to effectively take part in the activities of basic schools, there is the need to strategically organize orientation programs for teachers on the rules and regulations of the working environment to help prevent parents-teacher conflicts in some schools. This confirms the theory's assertion that the field is characterized by conflicts and struggles for power (Farnell 2000).

To what extent do Parents Contribute to basic Schools?
Data revealed that parents participated in diverse ways to basic schools. These contributions could broadly be divided into three main aspects. These included contribution to infrastructural development, curriculum and support to teachers. It was revealed from the study that parents contributed in diverse ways to ensure that the infrastructural base of basic schools are in good conditions. Some parents provided free technical labor, building materials,

food and physical labor to assist in the provision of basic schools' infrastructure. It was affirmed from the field that such assistance from parents promoted accountability and sense of ownership on the part of the parents. An observable example below is a Kindergarten block that parents-school-authorities bemoaned to a parent and this was built for them. Below, is a Kindergarten built through collaborative efforts of parents and school authorities in Charikpong-Saan.

On the issue of curriculum, it was identified that parents were engaged in the contributions of funds to purchase teaching and learning materials such as pamphlets, computers, blackboard construction set, markers and extension of electricity to school computer laboratories. It was further identified that parents assisted in the provision of paraprofessional teachers; they collaborated with teachers to seek the assistance of Senior High school graduates and other unemployed graduates to teach in schools. They pay teachers agreed stipends and provide other social assistance such as communal assistance in their farms,

contribution of foodstuffs for them. This is in direct consonance with the theory's postulations that when the linkages that form the basis of system are derived collectively from all agents, it is sustained from communal establishment (Bourdieu, 1988). It was identified that though such assistance to these paraprofessional teachers were communally arranged, it actually motivated them to contribute to their maximum level in the teaching and learning process. This consolidates the postulation by Coleman (1988), that the linkages that forms the roots of the system is emanated and sustained in the form of any material or symbolic exchanges that are felt or received earlier on or in the process. It was also revealed that, some of the community elders and workers in other places were sometimes invited to come and assist in teaching certain curriculum and co-curriculum activities; they always appreciate a chance to assist with their expertise at no cost. This is in line with Crossley's (2005) argument that social capital in the form of social networks can easily be tapped by the organization if the agents on the field are endowed with resources needed by the organization at no cost. It further affirms Bourdieu and Loïc (1992) observation that network, as a resource from agents, generally plays a critical role in time of need in any institution.

The study revealed that, in some communities, parents termly agreed to provide two tubers of yam or one bowl of maize per each student. These items were collected by a delegate of parents and kept at school premises within the first week after school vacation. These foodstuffs are handed over to teachers so as to motivate teachers. This is in relation to Allan (2006) who argues that social capital is the computation of resources tangible or intangible a person or an entity gets by means of belonging to a strong network of relationships of mutual benefits or recognition. It was also

revealed that some teachers were given free accommodations in communities. Such accommodations were produced by the chiefs, assembly men, opinion leaders, chief farmers and imams. The status of these people in society made them to accept to provide accommodations for teachers who were posted to the communities. This finding supports Bourdieu and Loïc's (1992) assertion that capital that manifests in the form of status and recognition an agent possesses (command, authority, honor and prestige) in society can oblige it to offer assistance to the benefit of the entire organization.

Conclusion

The importance of social practice theory cannot be under emphasized in present-day social and organizational settings. The theory throws more light on understanding social action and practice in such diverse group such as parents' participation in basic schools' activities, its nature and contributions to basic schools. It also helped to appreciate the perceptions and factors that influenced parents' engagement in basic schools' activities. The assumptions of the theory vividly manifested in the study as it was evidenced that developing and non-developing schools' parents' participation in basic schools' activities were in harmonious marriage to the postulations of the theory. The study further recommends the use of the theory in contemporary studies.

Recommendations

The study recommends that contemporary researchers adopt this theory in their studies, most especially in the fields where, participants' or stakeholders in groups work as a team to achieve common aims or goals. This will unearth the total-reality of happenings among the stakeholders for the necessary actions to be

taken on the field. Such approach will further stimulate and enable efficient operations of institutions and organizations.   It will also help the researchers to have a deep insight in the usual cause-effect syndrome in most of the organizations for the required actions to be put in place for the overall performance of institutions.

REFERENCES

Akyeampong, K., Fobih, D., & Koomson, A. (1999). *Ghana Primary School development. Final evaluation of Project Performance.* Accra, Ghana.

Abdul-Rahman, N., Arkoful, V., Basiru, I., & Abdul Rahman, A. B. (2018). Teacher retention motivation strategies in Ghana. *Education Quarterly Reviews, 1*(2), 103-112.

Allan, K. (2006). *Contemporary Social and Sociological Theory*. London, Sage Publications.

Bourdieu, P. & Loïc J. D. W. (1992). *An Invitation to Reflexive Sociology*. Chicago and London: University of London

Bourdieu, P. (1977). *Outline of a Theory of Practice*. London, Cambridge University.

Bourdieu, P. (1990). *The Logic of Practice*. Cambridge, Polity.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, *94*, S95-S120.

Creswell, J. W. (2014). *Research Design Qualitative, Quantitative and Mixed Methods Approaches*. 4th ed. Thousand Oaks, CA: SAGE.

Crossley, N. (2005). *Key Concepts in Critical Social Theory*. London, SAGE.

Edwards, V., & Redfern, A. (2017). *At Home in School (1988): Parent Participation in Primary Education*. London: Routledge.

Evie, Z, Nelly, A., Alexandra, A., Mary, L., Yulie, P., & Lagopoulou, V. (2017). *Democratic School Governance for Inclusion: a whole community approach*. zedang.org/agmlectures/4th.pdf on 31/ 03/ 2019.

Farnell, B. (2000). Getting out of the habitus: An alternative model of dynamically embodied social action. *Journal of the Royal Anthropological Institute*, *6*(3), 397-s418.

Ghana Education Service. (2020). *Ghana District Composite Budget Report*. Nadowli – Kaleo District

Ghana Statistical Service. (2014). *2010 Population & Housing Census*: District Analytical Report, Nadowli-Kaleo District. Accra, Ghana: Ghana Statistical Service.

Nkansa-Akukwe, G. A. (2004). *Sustaining the efforts of school improvement: Community school alliance project, Ghana* (Doctoral dissertation, University of Minnesota).

Mariam, S. (2008). *The Practical Relationship between Schools, Parents and Community in Nigerian Education Systems*. Lagos: Nditla.

Murray, Grant, & Andrew A. (2018). 'Religion and Perceptions of Community-based conservation in Ghana, West Africa'. *PLoS One, 13*(4), 1–15. https://doi.org/10.1371/journal.pone.0195498.

Pang, I. W. (2004). School–family–community partnership in Hong Kong-perspectives and challenges. *Educational Research for Policy and Practice*, *3*(2), 109-125

World Bank. (2008). *Governance, management, and Accountability in secondary education in Sub-Saharan Africa*. Washington: The World Bank accentuating.

Assessing Parental Self-Efficacy in Helping Children Succeed in Primary Schools in Tanzania

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ABSTRACT

The present study assessed factors associated with a parental self-efficacy in helping primary school children succeed in Tanzania. The study assessed how social contextual variables, parents' perceptions of general invitation for involvement from others, parents' valence towards school, parents' skills and knowledge and parents' energy and resources are associated with parents' sense of self-efficacy. The study involved parents of grade two children in four regions in Northern Tanzania. A multilevel model showed that parents' self-efficacy was predicted by parents' perceptions of the invitations from school, parents' knowledge and skills and parents' valence towards school. These findings shed light on the need for interventions to promote teachers' skills in working with parents in primary schools in Tanzania.

Keywords*: Parental involvement, sense of efficacy, self-efficacy, primary school*

INTRODUCTION

In recent years, there has been a massive increase in the enrolment rate in primary schools in Tanzania; most children can easily access primary education. As is well shown in the Tanzania Development Vision 2025, the Government of the United Republic of Tanzania recognizes the central role of education in achieving overall development goal of improving the quality of life for its citizens. It considers the provision of quality universal primary education as the most reliable way of building a sustainable future for the country (UN, 2021). Despite all notable success in increasing enrolment rate, still, Tanzania's education sector remains constrained by several critical factors. Such factors include inequitable access to early learning and primary education for rural marginalized and vulnerable groups, inadequate school learning environments exacerbated by declining financing, and increasing school populations, and a shortage of teachers and low teacher competencies (World Bank, 2021). There are several efforts to boost primary education in the country.

Such efforts include the recent $500 million BOOST Primary Student Learning Programme for Results. This project is aided by the World Bank to make primary schools safer, more inclusive, and child friendly, enhance skills and competencies as well as to strengthen education finance and decentralized service. However, some aspects such as parental involvement and the role of the home environment in children's schooling and learning are not emphasized enough. Despite the positive impact of parental involvement reported by many scholars inside and outside the country (Chowa, Masa, & Tucker, 2013; Hoover-Dempsey et al., 1995; Kigobe et al., 2018; Kigobe et al., 2021), still the education system in Tanzania focuses much on teachers and schools as

primary educators. To date, the education policy is not vocal on the role of parents and the home environment; parental involvement is not clearly stated in a country's education policy (URT, 2014). The Tanzanian government prioritized fee-free primary education to achieve universal primary education and promote social and economic development; however, the role of parents and caregivers is not stated in a fee-free education policy (URT, 2014). With on-going uncertainties on the role of parents and care givers in primary schools, it is imperative to assess socio-cultural factors such as the influence of the home environment and the role of parents and caregivers in children learning.

Although parental involvement is highly acknowledged as having a positive impact on children learning, not much is known about parental involvement in Tanzania. Kigobe et al. (2018) reported that parents have a positive attitude towards involvement; they need to be invited by teachers, schools, and their children. Solomon and Zeitlin (2019) reported that parents in Tanzania want their children's schools to be clean, safe, close, and foster learning. However, it is unclear to what extent parents work with teachers, schools, and education authorities to ensure that schools offer their children what they wish. Literature suggests that parents can efficiently work with schools and teachers when they believe their involvement can yield positive feedback on their children's learning (Anderson & Minke, 2007; Hoover-Dempsey et al., 1995). The decisions of parents to get involved in children's education are dictated by personal and contextual factors which may support or hinder their involvement. This study explored factors associated with parent efficacy in supporting their children in schooling and learning.

Parents Self-Efficacy in helping Children Succeed in Schools

Parental self-efficacy is a specific term used to explain parents' self-belief in their ability and the impact they can make on children's lives. Bandura (1997) explained parental self-efficacy as a critical factor in determining parents' goals and their persistence in working toward them. Two theories explain individuals' self-efficacy; one is a belief in personal ability and control over any activity a person can undertake, and the other is the belief that one will succeed in those activities (Bandura, 1986; 1997). Parent self-efficacy is linked to parents' engagement in children's schooling and other aspects of life such as moral and behaviour development. Hoover-Dempsey (2011) linked these theories to parents' decision-making about active engagement in students' school learning. She suggests that parents are most likely to be motivated to get involved when they believe they can manage and control activities while supporting children's learning.

They believe those activities will indeed "make a difference" in their children's learning. Over the years, researchers in developed countries try to assess what motivates parent's self-efficacy in helping their children succeed in school and the impact of parent self-efficacy in parental involvement (Hoover-Dempsey et al., 2005; Hoover-Dempsey; 2011; Sheldon, 2002; Shumow, 1998). There is research evidence that parents' higher sense of self-efficacy shows confidence in dealing with their children's schooling, commitment and engage more in their children's learning. The stronger and more positive parents' self-efficacy beliefs for helping their children learn and succeed in school, the more robust and effective their involvement in activities will be (Hoover-Dempsey, 2011). Because of its importance in supporting parental involvement, it is

essential to assess the factors influencing parents' self-efficacy. Schools need to identify activities that support the development of solid self-efficacy beliefs among parents and give the children learning benefits of parents' active involvement in children's education (Hoover-Dempsey, 2011). This is to say that self-efficacy can be nurtured, boosted, and developed by parents, communities, teachers, and a favourable school climate. In Tanzania, the majority of children are enrolled in public schools, which are fee-free, and the majority of parents of children in public schools have low incomes and are less educated. Heymann (2000) stipulated that, regardless of income and social class, poor parents have the same opportunity to be involved in their children's education.

However, this does not negate that parents' availability to care for their children is often determined by job benefits and working conditions. It is not easy for low-income parents to work with teachers and schools. First, they spend many hours working for their families' basic needs and might not be confident enough to engage with their children's teachers and schools and even help with children learning. In a context like Tanzania, it is imperative to empower parents to activate and help them develop their self-efficacy. In this study, we assessed factors associated with parents' self-efficacy in Tanzania to understand parents' involvement decisions.

The Model of Parental Involvement

This study employed the Hoover-Dempsey and Sandler (1995; 1997) model of the parental involvement process, as revised by Walker et al. (2005). The model focuses on understanding why parents become involved in their children's education and how their involvement influences student outcomes. The model

explains the mechanisms involved in parental involvement through five levels. Level one explains factors for parents' involvement decisions. Level two explains mechanisms used by parents during involvement; level three discusses students' perceptions of learning mechanisms used by parents; level four explains students' attributes conducive to achievement, and level five is about students' achievement (Walker et al., 2005). Generally, level one of the model, which serves as the basis for the model, includes three broad constructs. The constructs are parental motivational beliefs for involvement, which include parent role construction and sense of efficacy; parents' perceptions of invitations for involvement from schools, teachers, and children; and perceptions of life context (time and energy, skills and knowledge, and family culture). The model suggests that parents' involvement is motivated by two belief systems: role construction for involvement and a sense of efficacy for helping the child succeed in school (Hoover-Dempsey & Sandler, 1995; 1997). According to Liu and Leighton (2021), the direction of influence between role construction and self-efficacy is unknown; it is not explicit in which variable comes first. This might be caused by a lack of research on how parental beliefs are related, because the model only gives direction between levels (Liu & Leighton, 2021). However, it does not offer specific guidance on directional relations among variables within levels. The model is flexible and convenient in assessing variables within levels. With our goal to assess parents' self-efficacy, the model allows us to assess how other constructs and their variables in level one influence parents' sense of efficacy.

The Current Study

The current study assessed factors associated with primary school parents' self-efficacy in Tanzania. Specifically, this study assessed three research questions (1) Do parents' own school experience and level of education relate to their sense of self-efficacy? (2) Are social-contextual variables (time and energy; skills and knowledge) related to parents' sense of self-efficacy? (3) Do parents' perceptions of invitations for involvement relate more to parents' sense of self-efficacy than other social contextual variables?

Methods

Participants

The study participants were parents of grade two children from 55 primary schools in 10 districts of four regions (Mara, Mwanza, Simiyu, and Shinyanga) in northern Tanzania. A total of 1187 participants (52% mothers and 48% fathers) were involved in the study. Among them, 67.7% were married; 27% were unmarried; and 5.3% did not disclose their status. On income, 63.5% had a low income (below 2,000 Tsh); 19.7% of parents had an income of between 2,000-5,000 Tsh; 7.8% % were parents with middle income – having between 5,001-10,000 Tshs; 4.1% had income between 10,001-15,000; 3% had an income of 15,001-20,000 and 1.9% had an income of 20,001 and above. Regarding education, 1.4 % of parents had bachelor's degrees; 0.2% had postgraduate degrees; 3.2% had college certificates and diplomas; 13.9% had secondary education; 70.4% had primary education; and 7.3% were uneducated. Among the families, 22% had only one child; 20.8% of the families two children; 19.6% had three children; 18% had four children; and 14.1% of the families had five or more children.

Procedure

The data of this study was baseline data collected from a large intervention project designed to capacitate teachers in working with parents to stimulate children's literacy development. We selected a sample of 55 schools from lower and higher-performing schools in rural Tanzania. Parents were invited to school to fill out the survey. In these meetings, district and ward educational officers were invited to officiate the meetings. We asked parents to sign a consent form to participate in the study and allow their children to participate. In the data collection, 12 trained research assistants (tutors from nearby resident teacher colleges in the regions) were responsible for the whole exercise. In every school, teachers were asked to help illiterate parents in one interaction to maintain parents' privacy.

Measures

All variables in the study originated from Hoover-Dempsey and Sandler's revised model of parent involvement (Walker et al., 2005). The variables were related to three constructs of the first level of the Hoover-Dempsey and Sandler model of the parental involvement process that focused on understanding factors underlying parents' decision to be involved in their children's education. In this study, five variables were assessed. These are parents' sense of efficacy as the outcome variable, parent valance towards school, parents' perception of general school invitation, teachers' invitations and specific invitation from a child, parents' skills and knowledge as well as parents' time and energy as predictor variables. The reliability test conducted to all scales showed moderate to strong internal consistency, with Cronbach's alphas ranging from .63 to .86.

Parent Sense of Self-efficacy

Parent self-efficacy was measured by a four-item scale. Parents were requested to rate their beliefs on whether or not their involvement is likely to positively influence their children's education (Walker et al., 2005). They (parents) rated their self-efficacy beliefs on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: (a) "I Know how to help my child to acquire reading skills" and (b) "I feel successful about my efforts to help my child to acquire reading skills." Higher scores indicated that parents have a higher sense of efficacy. The two items worded negatively in the scale were deleted since they contributed to low Cronbach's alpha when included. We suspected the misinterpretation or misunderstanding of the items by the parents. The Cronbach's alpha of the two items in the scale was .63, indicating a moderate internal consistency.

Parents' Perceptions of Invitation to be Involved

Parents' Perceptions of Specific Invitations for Involvement from the Child

It included seven items referring to parents' feelings on the specific invitations from their children (Walker et al., 2005). Parents rated their perceptions on a 6-point Likert-type scale ranging from 1 (never) to 6 (daily). Item examples are: (a) "My child asked me to supervise his or her homework," and (b) "My child asked me to talk with his or her teacher." The Cronbach's alpha of this scale was .82, indicating a strong internal consistency.

Parents' Perceptions of Specific Invitations for Involvement from Teachers

It consisted of six items examining how often the child's teachers contact or make any communication with a parent (Walker et al., 2005). Parents rated their perceptions on a 6-point Likert-type scale ranging from 1 (never) to 6 (daily). Item examples are: (a) "My child's teacher asked me or expected me to help my child with homework," and (b) "My child's teacher asked me to attend a special event at school." The Cronbach's alpha of this scale was .86, indicating strong internal consistency.

Parents' Perceptions of General Invitations from School

We measured parents' perceptions of general invitations using six items developed by Walker et al. (2005). Parents rated their perceptions on a 6- point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: (a) "I feel welcome at this school," and (b) "This school lets me know about meetings and special school events." The Cronbach's alpha of this scale was .65, indicating a moderate internal consistency.

Parents' Perceived Life Context
Parents' Perceptions of the Time and Energy

It was measured by six items referring to how parents perceived time and energy in their decision about involvement (Walker et al., 2005). Parents rated their perceptions on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: "I have enough time and energy to (a) communicate with my child about the school day and (b) attend special events at school." The Cronbach's alpha of this scale was .68, indicating a moderate internal consistency.

Parents' Skills and Knowledge

Measurement of this aspect involved six items examining parents' understanding of their skills and knowledge (Walker et al., 2005). Parents rated their perceptions on a 6-point Likert-type scale ranging from 1 (disagree very strongly) to 6 (agree very strongly). Item examples are: "(a) I know effective ways to contact my child's teacher; (b) I know how to supervise my child's homework." The Cronbach's alpha of this scale was .70, indicating a good internal consistency.

Parent Self-Reported Valence towards School

Parent valence was measured by six items assessing the extent to which a parent is attracted to or disliked schools, based on personal previous school experiences. Parents were asked to rate their own experiences at school, their personal experiences with their teachers and school staff, and their general school experience (e.g., "My school 1 = I disliked, 6 = I liked"; "My teachers: 1 = ignored me, 6 = cared about me"). Higher scale scores indicated a stronger attraction to or good experiences with the school. The Cronbach's alpha of this scale was .76, indicating a good internal consistency.

Results

Statistical Analysis

We used SPSS 25 to conduct all the statistical analyses in the study. We assessed the suitability of the data by checking the skewness and kurtosis of all variables in the study. Acceptable values of skewness fall between -3 and +3. It is noted here that kurtosis is appropriate from −10 to +10 when utilizing SEM (Brown, 2006). All seven variables had smaller values than +3 and -3. Parent valence was the only variable with a larger kurtosis value (14.5, *SE*= .14),

indicating a pointy and heavy-tailed distribution for this variable. Next, we assessed the correlation of all study variables in the study. Spearman non-parametric correlations were calculated between parents' characteristics and other variables; Pearson correlations were calculated between all other variables in the study. To assess the association predictor variables (general school invitation, teachers invitation, specific child invitation, parents' skills and knowledge, parents' energy and resources, and parents' school valance) to outcome variable (parents' sense of efficacy), we used multilevel modelling. This decision was relevant since our data were nested with parents rating their child's teachers and schools. We first checked the interclass correlation (ICC) in the null model to assess if there was a possible multilevel variance within the outcome variable. Usually, when the ICC is more than 0.1, the normal regression models are no longer efficient, and multilevel modelling becomes crucial.

Correlation between all Study Variables

The correlation analysis between parent's efficacy and predictors' variables (school invitation, teachers' invitation, child invitation, parents' knowledge and skills, parents' energy and resources, and parents' school valence) showed a strong positive relationship between parents' self-efficacy and all six variables. In the five personal characteristics variables (gender, parents' level of education, income, marital status and number of children in the family), only parents' income showed a correlation with the self-efficacy (See Table 1). Since parents' characteristic variables (gender, level of education, number of children, and marital status) were not related to parents' self-efficacy, they were not included in further   analyses.

Table 1: Correlation between all study variables

Note. * $p< .05$ ** $p< .01$ *** $p< .001$. Spearman non-parametric correlations were calculated between parent's

	1	2	3	4	5	6	7	8	9	10	11	12
1. Parents' Gender												
2. Parents' Education	-.037											
3. Parents 'Income	-.011	.244***										
4. Number of children	-.010	.027	-.096**									
5. Marital status	-.001	-.034	.043	-.242***								
6. Parents self-efficacy	.008	.033	.087**	-.059	.035							
7. School invitation	.001	-.051	.042	-.070*	-.056	.263***						
8. Teacher invitation	-.010	-.014	-.031	.045	-.056	.220***	.323***					
9. Child invitation	-.030	-.025	.025	-.047	-.019	.255***	.405***	.385***				
10. Knowledge and skills	-.030	-.021	.155***	-.129***	.017	.236***	.344***	.166***	.336***			
11. Parents energy and Resources	.019	.061*	.155***	-.056	-.012	.227***	.374***	.147***	.313***	.697***		
12. Parent school valence	.006	-.023	-.051	.016	.034	.135***	.303***	.085***	.094***	.229***	.255***	
M	1.48	1.53	1.69	1.77	2.80	4.28	5.13	3.26	4.29	5.24	5.36	5.80
SD	0.50	0.97	1.64	1.39	1.38	1.20	0.76	1.55	1.38	0.78	0.73	0.48
Cronbach's alpha						.63	.65	.86	.82	.70	.68	.76

characteristics and other variables; Pearson correlations were calculated between all other variables

Predictors of Parent's Sense of Self-efficacy

In the unconditional mean (null model), a one-way ANOVA model with a random effect with no predictor was included. We assessed the interclass correlation to examine individual variation in the outcome variable (self-efficacy). The total number of parameters estimated in the unconditional mean model was three, including the fixed effect of the intercept ($p <$ .001); the ICC was 0.70, suggesting that 70% of the total variation in self-efficacy was due to inter-individual differences. In assessing the ICC, the higher the value, the more significant the differences are between subjects, compared to the differences within subjects; hence, necessitating multilevel analyses over normal regression models.

Next, a two-level model, with school at the first level and parents in the second level, was tested with six predictor variables (general school invitation, teacher invitation, specific child invitation, parents' knowledge, and skills, parents' energy and recourses, and parents' school valence) and parents' sense of efficacy. Among the six predictors, general school invitation, parents' knowledge and skills, parents' energy and resources, and valence towards school were strong predictors of parents' sense of self-efficacy. Among all predictor variables, parents' valence towards school ($b = 0.33$, $SE = 0.06$, $p =$ .001) were the strongest predictors of self-efficacy. This finding indicates that parents who have positive perceptions with a general invitation from school, parents who perceive that they have enough knowledge and skills, and parents with higher valence towards school have a higher sense of self-efficacy to help children succeed in education. Parents' energy and resources ($b = 0.12$, $SE = 0.05$, $p =$ .05) were also significant predictor of parents' sense of self-efficacy, indicating that parents with enough time and resources have a higher sense of self-efficacy. Parents' perceptions of teachers and specific child invitations were insignificant (see

table 2). In the second model, we added parents' economic status as a control variable to see if it affects the relationship between the predictor variables and an outcome variable. The findings indicate that parents' perception of general school invitation, parents' knowledge and skills and parents' valence towards school continued to predict parents' sense of self-efficacy. Parents' economic status was not significant predictor of parents' self-efficacy (b = -0.01, SE = 0.02, p = .62); adding it on the model made parents' energy and resources insignificant (b = 0.11, SE = 0.07, p = .06).

Table 2. Multilevel models for Parents' Self-efficacy

	Model 1	Model 2
Fixed effect		
Intercept	-0.20 (0.40)	-0.20(0.40)
Variance components		
Between schools (level 1)	0.27(0.06)***	0.27(0.06)***
Between parents (level 2)	0.27(0.88)***	0.28(0.88)***
Residual level 1	0.59(0.88)	0.59(0.88)
Schools' invitation	0.23(0.05)***	0.23(0.05)***
Teachers ' invitation	-0.00(0.02)	0.00(0.02)
Child's invitation	0.03(0.02)	0.03(0.02)
Parents' knowledge and skills	0.23(0.06)***	0.23(0.06)***
Parents energy and resources	0.12(0.06)*	0.11(0.07)
Parents' valence	0.33(0.06) ***	0.36(0.07) ***
Parents' income		-0.01(0.02)*
N of parameters	10	11

Note.*p< .05.**p< .01.***p< .001. Parameter estimate standard errors listed between parentheses.

Discussion

Parental self-efficacy (PSE) is a key predictor of parental involvement in children's education. This study explored possible predictors of parents' self-efficacy in helping a child succeed in school in primary schools in Tanzania. The findings showed a strong association between parents' perception of general school invitation, parents' knowledge and skills and parents' valence towards schools with parents' self-efficacy. Parental self-efficacy is a powerful construct in understanding parents' involvement decisions. The parents' beliefs on what they can do and their actions' impact on children's learning are always defined by social and economic factors around them. In the study of Dixon-Elliott (2019), he found that the underlying drivers of parents' low self-efficacy are lack of time, knowledge, and resources. Arguably, these factors can motivate or undermine parents' sense of efficacy. In this study, parents' school valence was the leading predictor of parents' sense of efficacy even though there was no correlation between parents' level of education with parents' self-efficacy.

This might imply that parents' school experience has a vital role in shaping their personal beliefs on the importance of their involvement in children's education than their educational attainment. Given that some parents in the study did not finish primary school and the majority were only primary school leavers, it was unexpected that their school experience could motivate their self-efficacy. The predicting power of parents' valence on their self-efficacy might have many implications. First, parents might use their experience in schooling to motivate their children's future education successes. Second, parents might use their schooling experience to help their children avoid the same mistakes they made as students. Some studies suggested that, with quality

support resources, it is possible for parents who went through challenging situations in their schooling history to possess a motivating desire to continue pursuing educational goals for their children (Barnett & Taylor, 2009; Brown, 2013; Gutman & McLoyd, 2000). Having general school invitation as another strong predictor of parents' self-efficacy, might indicate that the combination of parents' own school experience and a welcoming environment in their children's schools is crucial for parental involvement. A welcoming school environment provides parents with enough confidence and strengthens their self-efficacy on what they can do to help their children succeed in school. Brown (2013) explains that low socioeconomic status combined with strong social support or other factors that promote resilience can lead parents to pursue higher educational goals for their children.

It is argued here that a strong sense of self-efficacy can help a parent find ways to work with their children beyond the involvement opportunities provided by the school at their own pace and energy (Dixon-Elliott, 2019). The lack of association between teacher invitation and specific child invitation with parents' self-efficacy shows minimal interaction between teachers and parents and the lack of interactive activities between children and their parents. Several studies showed a positive relationship between teacher involvement activities and children's invitations on the effectiveness of specific involvement activities (Deslandes & Bertrand, 2005; Epstein & Van Voorhis, 2001; Kigobe et al., 2021; Simon, 2004). The lack of association between teacher invitation and parents' self-efficacy raises concerns since teachers are significant in connecting families and schools. Results revealed the lack of association between parents' energy and resources with parents' self-efficacy. The absence of an association between parents' energy and resources with parents' self-efficacy might

imply that, even with limited time and resources, parents can still find ways to help their children if they receive enough support. This finding is very relevant in the Tanzanian context, where most parents of children in public schools are in non-formal employment, engaging in peasant agriculture and petty trade to sustain their needs. To help these parents, teachers and schools need to be considerate in identifying feasible activities because these parents are also struggling to attend to the basic needs of their families. A study by Dixon-Elliott (2019) revealed that financial challenges often result in lower parental self-efficacy and minimal parental involvement in children's schooling. There is research evidence showing that, with adequate support, parents with limited resources and low self-efficacy can be involved in their children's schooling (Barnett & Taylor, 2009; Brown, 2013; Gutman & McLoyd, 2000; Lott, 2001).

Generally, the study's findings are very promising for the Tanzanian context; having parents' school valence as the strongest predictor of parents' self-efficacy was not only unexpected but also astonishing. Given that most of the parents in this study did not possess higher education, it is impressive that they still had self-efficacy to help their children succeed in education. However, the lack of association between teacher invitation and specific child invitation with parents' self-efficacy raises some concerns about the ability of teachers to work with parents and stimulate learning interaction between parents and their children at home. The findings of this study call for purposeful intervention in preparing pre-service teachers to work with parents in the future and helping in-service teachers to work with parents in schools.

Implications of the Study for Education in Tanzania

This study explored factors associated with parents' self-efficacy in primary schools in rural Tanzania. With minimal parental involvement in Tanzania, this study revealed some possibilities for schools, teachers, and education authorities on how parents can be helped and supported regardless of their social and economic conditions. Assessing Tanzanian parents' self-efficacy is essential in promoting active parental involvement in children's education. This study shows how schools can play a salient role in supporting parents' self-efficacy and maximizing parental involvement. This can be an indication of how schools in Tanzania can use their resources to help teachers to work with parents as well as to facilitate feasible parental involvement activities in schools. Schools can do a lot through teachers and school boards to help parents realize their potential as partners and co-educators in their children's education.

Strength and Weakness of the Study

This study contributes to understanding parents' self-efficacy in Tanzania and the general African context. Mechanisms involved in understanding parental involvement processes are very contextual, and it is not feasible to use studies from western culture to explain the parental involvement process in the African context. Adding parents' valence variable, as suggested by Walker et al. (2005), is also strength of this study. This study involved public schools in rural communities, whose most parents had lower education levels. It is crucial to assess how parents' schooling experience affects their self-efficacy in helping children succeed in education. Adding this variable broadens theoretical and practical perspectives in explaining parental involvement mechanism in Tanzania. Despite the presented strengths, this study has got a

weakness as well. The study used cross-sectional data; thus, we cannot establish a causal effect relationship between study variables. In the future, researchers may consider conducting a longitudinal study to establish factors that develop parents' self-efficacy.

Conclusion

This study explored factors associated with parents' self-efficacy in primary school parents in rural Tanzania. We have seen that parents' valence towards schools, perception of general school invitations, and parents' knowledge and skills were the predictors of parents' self-efficacy. Educators, schools, and teachers must understand the relationship between parent involvement and efficacy and nurture that relationship with feasible activities that boost parents' confidence in the impact they can make on their children's education. It is crucial for policymakers and schools to find possible ways to help parents develop strong efficacy to help their children succeed in education. Schools and school boards need to find ways to increase parent-teacher interaction.

REFERENCES

Anderson, K. J., & Minke, K. M. (2007). Parent involvement in education: Toward an understanding of parents' decision making. *The Journal of Educational Research*, *100*(5), 311-323.

Bandura, A. (1986). *Social foundations of thought and action: A cognitive theory*. Englewood Cliffs: Prentice-Hall

Barnett, M. A., & Taylor, L. C. (2009). Parental recollections of school experiences and current Kindergarten transition practices. *Journal of Applied Developmental Psychology*, *30*(2), 140-148.

Brown, M. (2013). *Deconstructing evaluation in education: The case of Ireland* (PhD Thesis, Dublin City University)

Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford.

Chowa, G., Masa, R., & Tucker, J. (2013). The effects of parental involvement on academic performance of Ghanaian youth: Testing measurement and relationship using structural equation modeling. *Children and Youth Services Review*, *35*(12), 65-72.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: W.H. Freeman.

Deslandes, R., & Bertrand, R. (2005). Motivation of parent involvement in secondary-level schooling. *The Journal of Educational Research*, *98*(3), 164-175.

Dixon-Elliott, B (2019). The exploration of parent self efficacy and parent involvement in early education (Doctoral dissertation, Pepperdine University)

Epstein, J. L., & Van Voorhis, F. L. (2001). More than minutes: Teachers' roles in designing homework. *Educational Psychologist*, *36*(3), 181-193.

Gutman, L. M., & McLoyd, V. C. (2000). Parents' management of their children's education within the home, at school, and in the community: An examination of African-American families living in poverty. *The Urban Review, 32*(1), 1-24.

Heymann, J. (2000). *The widening gap: Why America's working families are in jeopardy-and what can be done about it*. New York: Basic Books.

Hoover-Dempsey, K. V., Walker, J. M. T., & Sandler, H. M. (2005). Parents' motivations for involvement in their children's education. In E. N. Patrikakou, R. P. Weisberg, S. Redding, & H. J. Walberg (Eds.), *School-family partnerships for children's success* (pp. 40-56). New York: Teachers College.

Hoover-Dempsey, K. (2011). Self-efficacy: Up to the challenge. In Redding, S., Murphy, M., & Sheley, P. (Eds.), *Handbook on family and community engagement* (pp. 61-17). Lincoln, IL: Academic Development Institute.

Hoover-Dempsey, K. V., Bassler, O. C. & Burow, R. (1995). Parents Reported Involvement
  In Students Homework: Strategies and Practices. *The Elementary School Journal* 95 (5): 435-450.

Hoover-Dempsey, K. V., & Sandler, H. M. (1995). Parental Involvement in Children's Education: Why Does It Make a Difference? *Teachers College Record* 97 (2): 310-331.

Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why Do Parents Become Involved in Their Children's Education? *Review of Educational Research* 67 (1): 3-42.

Kigobe, J. (2019). *Parental Involvement in Literacy Development of Primary School Children in Tanzania* (Doctoral dissertation, KU LEUVEN).

Kigobe, J., Ghesquière, P., Ng'umbi, M., & Van Leeuwen, K. (2018). Parental involvement in educational activities in Tanzania: Understanding motivational factors. *Educational Studies*, *45*(5), 613-632.

Kigobe, J., Van den Noortgate, W., Ligembe, N., Ogondiek, M., Ghesquière, P., & Van Leeuwen, K. (2021). Effects of a parental involvement intervention to promote child literacy in Tanzania: A cluster randomized controlled trial. *Journal of Research on Educational Effectiveness*, *14*(4), 770-791.

Liu, Y., & Leighton, J. P. (2021). Parental self-efficacy in helping children succeed in school

favors math achievement. *Frontiers in Education*, 6.

Lott, B. (2001). Low-income parents and the public schools. *Journal of Social Issues*, *57*(2), 247-259.

Sheldon, S. B. (2002). Parents' social networks and beliefs as predictors of parent involvement. *The Elementary School Journal*, *102*(4)

Simon, B. S. (2004). High school outreach and family involvement. *Social Psychology of Education*, *7*(2), 185-209.

Shumow, L. (1998). Promoting parental attunement to children's mathematical reasoning through parent education. *Journal of Applied Developmental Psychology, 19*(1), 109-127

Solomon, S., & Zeitlin, A. (2019). What do Tanzanian parents want from primary schools and what can be done about it? RISE Insight. https://doi.org/10.35489/BSG-RISE-RI_2019/009.

Walker, J. M., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal*, 106(2), 85-104.