Correlation between classroom atmosphere and language competency as academic achievement among Secondary Schools in Arusha District, Tanzania

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This study sought to establish the relationship between English Language competency and classroom atmosphere among secondary schools in Arusha District. Through survey design, a sample of 180 students filled the questionnaire. Analysis of data involved Descriptive statistics, T-test and Pearson Correlation. The study established that female students had significantly higher mean score in language competency than male students. Students in classes with 40 or less members had significantly higher mean score than those in classes with more than 40 students. Teachers give necessary support to students for maximized learning outcome and classrooms are clean and orderly, have ideal sitting arrangement and are free from external and internal noise. Language competency is positively influenced by classroom infrastructure and effective teachers’ support. The more the teachers give support, the more the learners are motivated to support one another in the process of teaching and learning, thus, likelihood for maximized learning outcome. While teachers need to add more effort to enhance language competency to male students, school administration needs to ensure reduced number of students in classrooms and maintain classroom cleanliness and orderliness for maximized learning outcome.

Key words: English, Language, competency, classroom atmosphere, infrastructure, Tanzania.

INTRODUCTION

Language competency is a prerequisite for successful learning. It is a powerful tool through which knowledge, concepts and ideas are transferred into the mind of the learners in order to bring about desirable change of behavior. Unless learners master the medium of instruction, language barrier will interfere with the quality of teaching and learning and as a result, intended learning outcomes may not be fully realized (Ngussa and Lyimo, 2019). Tanzania uses English language as medium of instruction. Yet, competency in English is one of major challenges facing post primary education in the country (Kikoti, 2004; Mtallo (2015). This is because Kiswahili is used as medium of instruction in Primary Education such that upon reaching secondary level, one needs to switch the medium of instruction from Kiswahili to English. Therefore, it is imperative for teachers of English language to do their part effectively in helping learners of secondary schools in the country to master English language in order to sail well in the learning of other subjects which use English as a learning tool. Therefore, English competency is one of most...
important academic achievements secondary school students in Tanzania need to attain in order to be successful in their education.

According to Ngussa and Gundula (2019), learning achievement is the extent to which students attain their educational goals which are measured through practical application of acquired knowledge and skills. In the context of English subject in Tanzanian Secondary Schools, intended learning achievement can be indicated by learners’ ability to use English language effectively as a medium of instruction. Therefore, it is imperative for teachers of English, educational administrators and policy makers to be aware of factors that enhance language competency among learners of secondary schools and do everything possible to make sure that students attain the highest English language competency for them to sail well in the teaching and learning process. While there are myriad factors and situations that can determine students’ language proficiency, this study investigated on the correlation between classroom atmosphere and English Language Competency with an assumption that healthy classroom atmosphere enhances competence in language.

Various authors have defined learning achievement in different ways. According to Su and Wu (2016), for instance, it is the degree to which learners attain higher level thinking, the ability of the learners to transform passive learning into active learning and the ability for them to utilize the acquired skills into practical situations. Classroom atmosphere, on the other hand, is defined by Kausar et al. (2017) as intellectual, social, emotional and physical environment in which learners acquire knowledge, skills and values. It includes teachers’ delivery approaches, classroom infrastructure, students’ involvement, interaction factor and school location. It is one of the most important factors that can affect the teaching-learning process and consequently students’ learning achievement. According to Hannah (2013), there are many factors which constitute classroom atmospheres. These include physical elements such as wall art, arrangement of desks and other teaching and learning resources. These factors also include intangible elements such as the energy in the classroom, the rules, sounds within the room (noise) and class cleanliness. Each of these factors can impact a student’s learning achievement in a positive or negative way. Therefore, it is important for school management to ensure appropriate classroom atmosphere so that intended learning achievement can be maximized. According to Malik and Rizvi (2018), classroom atmosphere is formed with physical components and human component. While the physical component comprises of all material objects present in the classroom such as chalkboard, furniture, lightings, books, desks, computers and others, the human component includes the role of teachers and learners in making the teaching and learning process a success.

Studies have indicated that classroom atmosphere is an important aspect in making sure that students achieve their learning goals. Young (2014), for instance argues that, positive classroom atmosphere makes learners feel a sense of belonging, trust others and feel encouraged to tackle challenges, contribute ideas, take risks, interact with peers and ask questions. Such an environment provides relevant content, clear learning goals and feedback, opportunities to build social skills and strategies to help students succeed. According to Guyana (2016), creating a positive classroom atmosphere is essential for success in the classroom. This is because positive classroom atmosphere makes students feel safe and willing to share, feel equally treated and respected. Similarly, Ofoghi et al. (2016) postulated that, classroom atmosphere has a direct relationship with students’ learning achievement.

Worldwide, much has been investigated about classroom atmosphere and students’ learning achievement. A study by Egeberg and McConney (2018) in Western Australian high schools, for instance, revealed that students are not passive recipients of teacher’s actions but they choose to resist or comply and make decisions to ignore, avoid, sabotage or question teachers' inputs based on the nature of classroom atmosphere. Similarly, Bélanger et al. (2019) conducted a study in Mexico and their results indicate an existing relationship between classroom atmospheric factors and students’ learning achievement. The findings particularly revealed that when classroom atmosphere is appropriate, teaching and learning become effective, hence promotion of students’ learning achievement.

In Nigeria, a study by Ekpo et al. (2009) indicated that teachers who allow students to be involved in selection of learning and classroom activities propel cooperation and foster student’s greater learning achievement. They further established that students from democratic classroom environment significantly perform better than those from autocratic classroom environment. Finally, they concluded that classroom atmosphere significantly influences students’ academic achievement. Similarly, In Uganda, studies have revealed a significant association between classroom atmosphere and students’ perceived learning achievement. The study of Opolot-Okrut, (2010), for instance, revealed that leaning is achieved more when the classroom atmosphere allows a sense of inclusions, participation, proper tasks, organization and teachers’ support. Furthermore, in Kenya, a study by Ngugi and Thinguri (2018) found that when classrooms have adequate space to accommodate all the learners and to allow the teacher to move freely, students’ leaning achievement is enhanced.

Like other countries, in Tanzania, studies have been conducted about classroom atmosphere in secondary schools. A study by UNESCO (2016), for instance, indicates that Tanzanian classroom atmosphere in selected schools are not good enough to promote students’ learning achievement due to overcrowded situation that not only hampers students’ freedom and teacher’s movement but also minimizes the possibilities of practical sessions or group work. As a result, teachers become unable to cope up with the large number of learners, hence concentrate on a few bright learners at the expense of the rest of learners. Siperto (2018) also conducted a study in Buchosa District
in Mwanza region and the results revealed that appropriate classroom atmosphere plays a significant positive effect toward maximized leaning achievement. The results further reveal that classes that have supportive relationship, proper organization of instructions, students’ engagement and the use of appropriate interventions to assist students with behavior problems, positively affect learning achievement as compared to classes that have no such features.

Furthermore, a study by Kikungwe (2015) indicates variation in students’ leaning achievement among schools. While in some schools students’ leaning achievement is higher than in other schools, it is not clearly known why such variations exist. The present study therefore investigates on the effect of selected classroom atmosphere on students’ English Language Competency. The study was propelled by the fact that language competency is a prerequisite for successful learning. Therefore, the study was guided by the following research questions:

What is perceived English Competence among Secondary School students in Arusha District?

Is there significant difference in perceived language competency by students categorized according to their gender and number of students in classroom?

What is the perception of students on teachers’ support during teaching and learning process?

What is the perception of respondents on students’ support during teaching and learning process?

What is the perception of students on classroom infrastructure for learning effectiveness?

Is there significant relationship between classroom atmospheric factors and perceived English language competency?

**Theoretical Framework**

Despite the fact that there are different theories on classroom atmosphere in relation to students learning achievement, Glassers’ Choice Theory remains to be one of the most widely referenced frameworks for the effect of classroom atmosphere on students learning outcome. The theory calls for making education enjoyable and effective through modifying the learning environment, which includes classroom atmosphere (HUO, 2019). Understanding this theory helps teachers to determine their classroom atmosphere and make decisions about how to best approach interactions with students, hence promote maximized learning achievement. The theory suggests that almost every behavior is chosen and we are driven by genetic factors to satisfy five basic needs: survival, love and belonging, power, freedom and fun. In this theory, the most important need is love and belonging. Connectedness with others is required as a basis in satisfying all other needs. The classroom should therefore be a needs-satisfying place for the learners. That is to say, for effective learning to take place and for students’ learning achievement to occurs, the classroom atmosphere should be a need satisfying place where students feel free to lean (Doring, 2017).

The theory further identifies teachers as managers who need to work effectively if they want to successfully teach their students. Therefore, teachers need to guide students through developing positive classroom atmosphere through strengthening relationships with learners, creating active and relevant learning experiences, making sure the classroom is clean and arranged in a way that it supports learning, students are able to connect, feel a sense of competence and power, have freedom, and they enjoy themselves in a safe, secure environment.

**Conceptual Framework**

In Figure 1, classroom atmosphere is the independent variable while learning achievement, expressed through competency in English language, is the dependent variable. The apparent relationship of the two is that, if the
Academic achievement is defined by authors in various ways. Ngussa and Gundula (2019), for instance, defined it as the extent to which students attain their educational goals which are usually measured through paper examinations and effective application of intended skills which lead to fulfillment of one’s dreams. According to Lous et al. (2010), academic achievement is the expectation of educational stakeholders including teachers. They also maintain that academic achievement can be affected by the school leadership and classroom environments. According to Cunningham (2012), while it is not easy to define or describe academic achievement, the most common indicator for academic achievement is students’ academic performance and other behavioral aspects. Blomeke et al. (2016) add that academic achievement is indicated by how the students engage in various school related activities and how they demonstrate application of acquired knowledge and skills in solving their own problems.

Steinmayer et al. (2017) argue that academic achievement represents performance outcomes that indicate the extent to which a student has accomplished specific goals that were the focus of activities in the classroom. Additionally, Riswanto and Aryani (2017) consider academic achievement in terms of competence in knowledge, skills and experience of learners in relation to learning objectives from the school curriculum. Therefore, in this study, academic achievement is indicated by learners’ competency in English Language. According to Bahar (2016), academic achievement can be affected or influenced by numerous factors including classroom atmosphere. Therefore, it is essential for teachers to do everything possible to ensure that school environment and classroom atmosphere, in particular, favors the interest of learners for maximized learning achievement to be realized.

Gratz (2001) describes academic achievement as an absolute attainment of students on a defined scale, whereby students of a certain age or class are ranked according to their scores with the aim of determining whether or not students have reached the expected level of competency. In the context of language competency, achievement of the learners can be measured by learners’ ability to speak and write effectively in a language of interest. Other writers believe that academic achievement is measured through mastery of academic content a student acquires at a particular level and it increases when quality instruction takes place in the classroom (Carter, 2018). Yu et al. (2018) further proposed some factors that can be used to assess students’ learning achievements including critical thinking ability, creativity, intellectual skills, problem solving skills and ethical development within and outside the school.

Factors Associated with Academic Achievement

While Acharyya (2018) considers academic achievement as what a student possesses as expected by the policy makers, curriculum designers, teachers, the community and the students themselves, Bertolini et al. (2012) maintain that academic achievement may be affected by number of factors including the school administration, classroom atmosphere and the way students interact with teachers and peers. Ng et al. (2013) further mention several factors that can affect students’ academic achievement. These include quality of teachers, learning strategies, class atmosphere and the type of school leadership. According to Huit et al. (2009), positive classroom atmosphere enhances students’ achievements. Similarly, Gyamfi and Pobbi (2018) reported that academic achievement is strongly influenced by school environment and is exhibited by active participation in the lesson. Therefore, to enhance learning achievement, there should be supportive school and classroom atmosphere for students to be comfortable and free to learn (Quintero, 2015).

Classroom Atmosphere and Learning Effectiveness

Various authors have discussed about classroom atmosphere and its importance for learning effectiveness. According to Turano (2005), classrooms settings play a serious role in the success or failure of the learners. They argue that learning achievement cannot take place without an atmosphere that fosters that possibility. They further postulate that the classroom environment is not a one specific entity. Rather it consists of several factors such as physical environment, time management and teachers’ effectiveness. They conclude that when implemented properly, these factors may positively affect the students’ learning achievement. Fraser and Goh (2002) also affirm that creating positive classroom atmosphere is vital because it affects learning achievement in a positive or negative way, depending on the nature of the classroom.

Cox (2018) and Ezike (2018) argue that proper room arrangement provides good results in the process of learning. Particularly, Perks (2002) has it that classroom furniture and number of student in a classroom may significantly affect the rate of learning achievement. Ezike (2018) adds that physical and social factors are essential variables for academic achievement. While the physical aspect includes arrangement of chairs, tables, painting, lighting and ventilation, the social aspect includes the leadership exhibited by the teacher as well as students’ participation and interaction in the classroom.

According to Suleiman and Hussein (2014), there are various issues which constitute classroom atmosphere. These include visual factor, acoustic factor, thermal factor,
spatial factor and time factor. Visual factor, for instance, refers to the quality of lighting in the classroom, which is determined by the level of natural and artificial light available in the classroom. It is therefore important for school administrators to ensure proper lighting for teachers and learners to be able to read effectively, since reading is one of major activities that take place in classrooms. Umar (2017) argue that classroom atmosphere makes a noticeable impact on students’ learning achievement. This can have a variety of details such as structure of the classroom, the ventilation, the classroom size, the learning resources, or even the colors of the classroom walls and decoration or pictures. All these can play a role in determining whether the classroom will be conducive for learning.

Ngugi and Thinguri (2018) have it that apart from physical arrangement of the classroom, psychological environment is essential for effective teaching and learning to take place. They argue that proper psychological environment is brought by effective interaction among key players in the classroom, namely students and teachers. Therefore, it is important to ensure students’ psychological needs are met. According to Jerome (2013), psychological needs have to do with giving and receiving love and belongingness. According to Lunenburg and Ornstein (1991), psychological needs can also be referred to as social needs. Therefore, when students feel loved and cared by teachers and fellow learners, they will feel sense of belonging and be motivated to effectively participate in the teaching and learning process. Grayson (2017) postulated that a classroom which is well arranged, visually interesting and free from unwanted disruptions enhances learning effectiveness.

Another study by Vanguard (2018) indicated that number of students in the classroom may determine learning effectiveness. The more the class is overcrowded, the more it becomes difficult for learners to participate in the teaching and learning process. Moreover, the study by Chacha (2014), considered manageable class size as one of the classroom atmosphere factors that have positive effect on students’ learning achievement. According to UNESCO (2018), instructional practices may work better in classrooms with manageable number of learners. This is because when the number of students is manageable, learners can afford to pay attention while teaching and learning process takes place and teachers can use small group discussion as an instructional tool for learning effectiveness and as the result, maximized learning achievements can be realized.

According to Postholm (2013), when students are involved in classroom activities and decisions, there is a possibility for them to achieve more in learning even if there are some physical challenges. Barr (2016) mentions seven elements for a positive classroom as follows:

- **Personalization:** The teacher provides opportunities for student-teacher interaction and expresses concern for every student.
- **Involvement:** This is when the teacher encourages active participation in class whereby each student is encouraged to play various roles in the teaching-learning process.

**Cohesiveness:** The class is characterized with a situation where students know one another, help one another, and are friendly to one another.

**Satisfaction:** Students enjoy class when the class is well arranged with attractive programs.

**Task orientation:** Class activities must be clear and well organized and each student must be aware of his part to play during the teaching and learning process.

**Innovation:** This is when the teacher comes up with unique teaching methods and activities. According to Wan and Cheng (2018) well organized content and pedagogy create conducive classroom atmosphere for effective learning.

**Individualization:** Students are permitted to make decisions and treated differentially based on individual differences, ability and interest.

**RESEARCH METHODOLOGY**

This section discusses the methodology used in this study. The study employed quantitative research approach. According to Creswell (2003), quantitative methods involve the processes of collecting, analyzing, interpreting and writing the results of a study using various designs including survey and experimental research design. He further adds that quantitative research is a means for testing objective theories by examining relationships among variables which can be measured by instruments, so that numbered data can be analyzed using specific statistical procedures.

**Research Design**

This study employed survey Research design. Survey is defined by Creswell (2009) as an approach which provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. The study therefore used a specific sample to gather information in quantitative form through questionnaire, which was analyzed through descriptive and inferential statistical tools.

**Population and Sampling**

Kothari (2004) defined population as the totality of subjects to which a researcher wants to generalize results. It may involve a larger group of people, institution or things that have one or more characteristics in common. It consists of all cases of individuals or elements that fit a certain specification. The population for this study included students from 52 secondary schools in Arusha District. While sampling is a process used in statistical analysis whereby a predetermined number of observations are taken from a larger population (Tuovila, 2019), the researchers used 12% of 52 schools as sample, thus, to
Table 1. Reliability Analysis Report

<table>
<thead>
<tr>
<th>SN</th>
<th>Variable In Question</th>
<th>No. of Items</th>
<th>Cronbach’s Alfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Language Competency</td>
<td>9</td>
<td>.752</td>
</tr>
<tr>
<td>2.</td>
<td>Teacher Factor</td>
<td>6</td>
<td>.692</td>
</tr>
<tr>
<td>3.</td>
<td>Students Factor</td>
<td>5</td>
<td>.687</td>
</tr>
<tr>
<td>4.</td>
<td>Classroom Atmosphere</td>
<td>9</td>
<td>.759</td>
</tr>
</tbody>
</table>

Table 2. Perception of Students on their Competence in English Language

<table>
<thead>
<tr>
<th>SN</th>
<th>Item in the Questionnaire</th>
<th>N</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>English learning achievement meets my expectations</td>
<td>176</td>
<td>3.33</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>I manage to reach the highest learning achievement in English subject</td>
<td>173</td>
<td>3.17</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>English knowledge increases my problem solving ability</td>
<td>176</td>
<td>3.07</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>I perform well in English subject</td>
<td>176</td>
<td>3.10</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>I speak English well in normal conversations with fellow students</td>
<td>178</td>
<td>2.91</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>I am competent in writing in English Language</td>
<td>174</td>
<td>3.08</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>I get concepts very well in class when teachers use English language</td>
<td>178</td>
<td>3.22</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>I prefer listening and watching news in English to Kiswahili language</td>
<td>174</td>
<td>3.09</td>
<td>Agree</td>
</tr>
</tbody>
</table>

OVERALL MEAN 3.18 AGREE

have six selected schools. From each selected school, one stream of form three students was picked and 30 students were randomly selected from each to constitute the sample, thus to have the sample of 180 students who filled the questionnaire.

Validity and Reliability

Expert judgment approach was employed to determine the validity of the questionnaire. The two researchers sat down looking into the content of the questionnaire against research question and hypotheses to ensure that the questionnaire content meets the needs of specific research questions that guided the study. After data collection, the questionnaire responses were coded and pretested in SPSS software to determine acceptable reliability before actual data analysis took place with hope that items that lower reliability would be deleted. Good enough, no item in the questionnaire lowered reliability coefficient, and therefore, no item was deleted. Reliability results for variables under investigation appear in Table 1.

Statistical Treatment of Data

Treatment of data employed both descriptive and inferential statistics. Through descriptive statistics, mean scores were calculated to determine the perception of respondents regarding various aspects in the questionnaire. The questionnaire had four options for respondents to indicate their level of agreement or disagreement as follows: 1= Strongly Disagree, 2= Disagree, 3= Agree and 4 = Strongly Agree. The mean scores therefore were interpreted as follows: 3.50-4.00 = strongly agree, 2.50-3.49 = agree, 1.50-2.49 = disagree and 1.00-1.49 = strongly disagree. T-test was used to determine difference in perception among respondents in terms of gender and number of students in classrooms. Pearson correlation, on the other hand, was used to determine interrelationships among variables. Nature of existing correlations between the variables would be either positive or negative and was interpreted based on the following criteria: ≥ .70 = strong relationship, ≥ .50 = moderate relationship and ≤ .50= weak relationship.

Presentation and Analysis of Results

Presentation of results was done according to research questions that guided the study. Four questions were descriptive in nature while two questions called for hypothesis testing and therefore were analyzed using inferential statistics.

Research Question 1: What is perceived English Competence among Secondary School students in Arusha District?

This research question sought to establish perceived English competency among secondary school students in Arusha District. As seen in Table 2, number of respondents in this variable ranged between 173 and 178 with the overall mean score of 3.18 which is between 2.50 and 3.49 meaning respondents generally agreed with statements in this variable. Response to specific items also ranged within the same zone denoting agreement. Particularly, respondents agreed that English Language achievement meets their expectations, they manage to meet the highest achievement in English subject, English knowledge increases their problem solving ability and
Table 3. T-test for Language Proficiency by Gender and Class Size

<table>
<thead>
<tr>
<th>Mean Score by Demographics</th>
<th>Levene’s Test for Equality of Variance</th>
<th>T-Test for Equality of Means</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.31</td>
<td>.849</td>
<td>Eq. Var. Assumed</td>
</tr>
<tr>
<td>Female</td>
<td>3.07</td>
<td></td>
<td>Eq. Var. not Assumed</td>
</tr>
<tr>
<td>Class Size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 and Below</td>
<td>3.34</td>
<td>.835</td>
<td>Eq. Var. Assumed</td>
</tr>
<tr>
<td>Above 40</td>
<td>3.04</td>
<td></td>
<td>Eq. Var. not Assumed</td>
</tr>
</tbody>
</table>

Table 4. Perception of Students on Teachers’ Support

<table>
<thead>
<tr>
<th>SN</th>
<th>Item in the Questionnaire</th>
<th>N</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>My English teacher meets me at the point of my needs</td>
<td>179</td>
<td>3.08</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>My English teacher uses strategies that encourage participate in learning</td>
<td>177</td>
<td>3.28</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>My English teacher is sensitive to detect personal problems and assist</td>
<td>178</td>
<td>3.16</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>I feel accepted and supported by my English teacher</td>
<td>179</td>
<td>3.37</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>My English teacher is friendly and approachable</td>
<td>175</td>
<td>3.44</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>My English teacher considers individual differences of learners</td>
<td>176</td>
<td>3.16</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>OVERALL MEAN</td>
<td>170</td>
<td>3.25</td>
<td>AGREE</td>
</tr>
</tbody>
</table>

actually they perform well in English subject. Further, they agreed that they read concepts successfully in English language, they speak English well in normal conversations with fellow students, they are competent in writing in English language, they get concepts very well in class when teaches use English language and they actually prefer listening and watching news in English to Kiswahili language. Therefore, it is clear that respondents perceived to be competent in the use of English language.

Research Question 2: Is there significant difference in perceived language competency by students categorized according to their gender and number of students in classroom?

Having determined perceived language competency, it was necessary to find out difference in English competency by respondents categorized according to their demographic characteristics in terms of gender and number of students in classrooms as reflected in Table 3. This research question called for testing of a null hypothesis which states: There is no significant difference in perceived language competency by students categorized according to their gender and class size.

As far as gender is concerned, mean score for perceived level of English language competency for female students was 3.31 while that of male students was 3.07. Test for equality of means yielded the Sig. of .009 which is lesser than the critical value of .05, leading us to reject the null hypothesis and maintain that there is a significant difference in language competency by students categorized according to their sex, female students having higher means score as compared to male students.

As far as class size is concerned, mean score for perceived level of English language competency for students in classes of 40 or less students was 3.34 while that of students in classes of above 40 students was 3.04. Test for equality of means yielded the Sig. of .001 which is lesser than the critical value, leading us to reject the null hypothesis and maintain that there is a significant difference in language competency by students categorized according to class size, students in classes of 40 and below members having significantly higher mean score than those whose classes had more than 40 students. Therefore, class size is a determining factor for language competency.

Research Question 3: What is the perception of students on teachers’ support during teaching and learning process?

As indicated in the literature review, teachers’ support is an important factor for students to realize intended academic achievement. This question therefore sought to establish perception of students regarding the support from their teachers.

As indicated in Table 4, the overall mean score for students perception toward teachers’ support was between 2.50 and 3.49 meaning respondents generally agreed with statements in this variable. Response to specific items also ranged within the same zone which means respondents agreed with all statements in this variable. Particularly, they agreed that their teachers meet them at the point of needs, use strategies that encourage learners to participate and are sensitive to detect learners’ personal problems and assist. Furthermore, they agreed that they
feel accepted and supported by their teachers, teachers are friendly and approachable and that teachers consider individual differences of learners in the teaching and learning process.

**Research Question 4:** What is the perception of respondents on students’ support during teaching and learning process?

While teachers’ support for maximized learning outcome is important, this question went further to test the perception of respondents whether their fellow students offer any support for learning outcomes. Table 5 indicate the overall mean score of 3.28 which is between 2.50 and 3.49 meaning respondents generally agreed with statements in this variable. Specific items also ranged in the same range meaning students agreed with all statement in this section of the questionnaire. Particularly, they agreed that they feel acceptable and supported by classmates, fellow students collaborate in the learning process and they feel comfortable during class discussion. Furthermore, they agreed that classmates are friendly and approachable and that their nearest members are supportive in the learning process. Therefore, students perceived that their fellow learners are supportive in the course of struggling to reach intended learning achievement.

**Research Question 5:** What is the perception of students on classroom infrastructure for learning effectiveness?

This research question sought to determine perception of students on classroom infrastructure for learning effectiveness.

This was due to the fact that regardless of teachers’ and students’ support toward learning effectiveness, orderliness and ideal arrangement of the classroom is vital for maximized learning outcome.

The overall mean score for students’ perception on classroom infrastructure in Table 6 was 3.09 which is between 2.50 and 3.49 meaning respondents generally agreed with statements in this variable. Mean score to each item in the table is also within the same range, denoting that students agreed with all statements in this section of the questionnaire. In particular, students agreed that their classrooms were clean and orderly, have ideal sitting arrangement and are free from external and internal noise. Furthermore, they agreed that chalkboards are visible and readable from their seats, there is sufficient space from one student to another, class spacing allows teachers’ movement from one student to another and that their desks and chairs are ideal for effective learning. Therefore, students considered their classroom infrastructure to be ideal for learning effectiveness.

**Research Question 6:** Is there significant relationship between classroom atmospheric factors and perceived English language competency?

Having determined perception of students on language competency, teachers’ support, students’ support and classroom infrastructure, it was necessary to establish interrelationship among variables under investigation. Research question number six was therefore constructed to meet this objective. The question was analyzed through

### Table 5. Perception of Students on Students’ Support

<table>
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<tr>
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<td>177</td>
<td>3.16</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Fellow students collaborate with me in the learning process</td>
<td>178</td>
<td>3.28</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>I feel comfortable during group discussion</td>
<td>176</td>
<td>3.36</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Classmates are friendly and approachable</td>
<td>176</td>
<td>3.32</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>My nearest classmate is supportive in the learning process</td>
<td>176</td>
<td>3.26</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td><strong>OVERALL MEAN</strong></td>
<td>173</td>
<td>3.28</td>
<td>AGREE</td>
</tr>
</tbody>
</table>

### Table 6. Perception of Students on Classroom Infrastructure

<table>
<thead>
<tr>
<th>SN</th>
<th>Item in the Questionnaire</th>
<th>N</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>My classroom is clean and orderly</td>
<td>175</td>
<td>2.91</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>My classroom has ideal sitting arrangement</td>
<td>175</td>
<td>3.10</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>My classroom is free from external noise</td>
<td>175</td>
<td>2.58</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>My classroom is free from internal noise</td>
<td>175</td>
<td>2.84</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>The chalkboard is visible and readable from my seat</td>
<td>174</td>
<td>3.14</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>The class space is big enough to accommodate students</td>
<td>174</td>
<td>3.19</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>There is sufficient space from one student to another</td>
<td>176</td>
<td>3.27</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>Class spacing allows teacher’s movement from one student to another</td>
<td>175</td>
<td>3.40</td>
<td>Agree</td>
</tr>
<tr>
<td>9.</td>
<td>My desk and chair are good enough for effective learning</td>
<td>175</td>
<td>3.19</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td><strong>OVERALL MEAN</strong></td>
<td>166</td>
<td>3.09</td>
<td>AGREE</td>
</tr>
</tbody>
</table>
Pearson Correlations and therefore called for testing of the following null hypothesis: there is no significant relationship between classroom atmospheric factors and perceived English language competency.

As seen in Table 7, this question had one dependent factor namely Language Competency, which is and indicator for learning achievement in English language class against three dependent variables namely teachers’ support, students’ support and classroom infrastructure. The table indicates a significant positive yet weak correlation between English Language competency and teachers’ support (r=381, Sig= .000), students’ support (r=291, Sig= .000) and infrastructure (r=358, Sig= .000). Therefore, the null hypothesis is rejected and we conclude that there is a significant relationship between classroom atmospheric factors and perceived English language competency.

The researchers went further to test interrelationships among independent variables. As the table indicates, there is a significant positive yet moderate correlation between teachers’ support and students’ support (r=500, Sig= .000). This implies that the more the teachers give support to the learners, the more the learners are motivated to support one another in the process of teaching and learning, thus, likelihood for maximized learning outcome.

Furthermore, there is a significant positive yet weak correlation between teachers’ support and classroom infrastructure (r=399, Sig= .000), as well as between students’ support and classroom infrastructure (r=447, Sig= .000), meaning that the better the classroom infrastructure, the more the teachers are motivated to extend their support to the learners and fellow learners, respectively.

Conclusions and Recommendations

Based on findings in this study, the researchers came up with six conclusions with regard to classroom atmosphere and English language competency:

- Students perceived themselves to be competent in English language and believed to have reached their expectation as far as language use is concerned.
- Female students had significantly higher mean score in language competency than their male student counterparts. Similarly, students in classes with 40 or less members had significantly higher mean score in language competency than their counterparts in classes with more than 40 students.
- Teachers give necessary support for maximized learning outcome. They meet students at the point of needs, they use strategies that encourage learners to participate, and they are sensitive to detect learners’ personal problems and assist.
- Likewise, students give necessary support for maximized learning outcome to their fellow learners. They feel acceptable and supported by classmates and that their desks and chairs are ideal for effective learning.
- Language competency is positively influenced by effective teachers’ support, students’ support and classroom infrastructure. The more the teachers give support to the learners, the more the learners are motivated to support one another in the process of teaching and learning, thus, likelihood for even more maximized learning outcome. Likewise teachers’ support and students’ support are positively correlated with classroom infrastructure, meaning, the better the classroom infrastructure, the more the teachers and learners are motivated to extend their support toward maximized learning outcome.

### Table 7. Correlation between Classroom Atmosphere and Classroom Atmosphere

<table>
<thead>
<tr>
<th></th>
<th>Competence Pearson Correlation</th>
<th>Teacher’s Support Pearson Correlation</th>
<th>Students’ Support Pearson Correlation</th>
<th>Infrastructure Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.381**</td>
<td>.291**</td>
<td>.358**</td>
<td>.399**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>179</td>
<td>179</td>
<td>178</td>
<td>176</td>
</tr>
<tr>
<td><strong>Students’ Support</strong></td>
<td><strong>.500</strong></td>
<td>1</td>
<td>.447**</td>
<td>.500**</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.291**</td>
<td>.500**</td>
<td>.447**</td>
<td>.500**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>179</td>
<td>179</td>
<td>178</td>
<td>176</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td><strong>.399</strong></td>
<td>.447**</td>
<td>1</td>
<td>.447**</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.358**</td>
<td>.399**</td>
<td>.447**</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>1</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>176</td>
<td>176</td>
<td>176</td>
<td>176</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
Based on these conclusions, the researchers give the following recommendations for maximization of learning outcomes:

- Teachers of English need to add more effort to enhance language competency to male students and school administration needs to ensure reduced number of students in classrooms as recommended by the ministry of education for maximized learning outcome in terms of language competency.
- Teachers of English should continue to encourage students to give support to one another in the process of teaching and learning as this practice enhances and maximizes language competency.
- School administration need to continue maintaining classroom cleanliness and orderliness as these situations increase learning effectiveness and achievement in language competency. Further, chalkboards should be visible and readable and there should be sufficient space from one student to another and class spacing which allows teachers' movement from one student to another.
- Teachers of English in schools under investigation need to be recognized and motivated by school administration for them to continue giving more support for maximized learning outcome in English language, which is the medium of instruction in Tanzanian secondary schools.
- Likewise, students' support and appropriate classroom infrastructure need to be maintained as the situation have significant influence toward maximized learning outcome and consequently academic achievement.

Conflict of interests

The authors declare that they have no conflict of interests.

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