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-Fonlllem 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

<table>
<thead>
<tr>
<th>Response</th>
<th>Form Two</th>
<th>Form Three</th>
<th>Form Six</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>15</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>NO</td>
<td>35</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>35</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Response</th>
<th>Form Two</th>
<th>Form Three</th>
<th>Form Six</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YES</strong></td>
<td>18</td>
<td>09</td>
<td>13</td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td>32</td>
<td>41</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>50</td>
<td>35</td>
</tr>
</tbody>
</table>

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
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

<table>
<thead>
<tr>
<th>Teachers’ response</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>School D</th>
<th>School E</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>NO</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

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.
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