

An exploration of knowledge, attitudes, and practices regarding course selection among pre-college students: Evidence from selected secondary schools in Arusha, Tanzania

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Abstract

This study explored the knowledge, attitudes, and practices related to course selection among pre-college students in Arusha, Tanzania. A mixed-methods approach was employed, whereas convenience sampling was used to select form four students from both government and private secondary schools, and counsellor teachers were also purposeful selected for the study. In the study therefore 367 students completed survey questionnaires, and 10 counsellor teachers participated in an in-depth structured interviews to gain qualitative insights. The findings indicated that while most students are aware of college entry requirements, knowledge of alternative academic options was limited particularly among students in government schools and non-science streams. Attitudes such as personal interest and motivation significantly influenced course selection, with female and private school students more likely to utilize structured support like career counselling and personal research. The study recommended enhancing access to career guidance and ensuring equal exposure to diverse academic pathways to support informed decision among all students. The study recommended future research to incorporate a broader geographical scope to uncover regional differences in course selection practices and inform inclusive policies. Longitudinal studies are needed to track how students' knowledge and attitudes change over time and influence career outcomes.

Keywords: academic performance, career guidance, course selection, KAP Model, pre-college students

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1. Introduction

Students' course selection is a complex decision-making process influenced by various factors, including personal interests, parental guidance, peer pressure, and perceptions of future career opportunities (Pitan & Adedeji, 2014). It is shaped by both academic and social integration within the institution, highlighting the importance of institutional support in guiding students towards decisions that align with their academic and personal development (Tinto, 1987). Research indicates that students often consider their own interests and intellectual abilities, as well as advice from parents, peers, and teachers, when making career choices (Sadjail, Sansawi, & Matolo, 2022). Additionally, factors such as financial support, academic quality, and job-related prospects play significant roles in shaping students' decisions (Sarkodie, Osei, & Agyemang, 2020).

In many countries, including Tanzania, the process of students' course selection plays a critical role in educational development and often has long-term implications for professional pathways (Shabani & Mtei, 2020). A study by Amani and Mkumbo (2014) exploring on the influence of family background on career choice among undergraduate students in Tanzania pointed out that career preparation begins at secondary education and continues through to the tertiary level. The latter study found that students tend to choose professions like those of their parents, with the influence of biological parents on career decisions being more pronounced than that of other relatives. Similarly, Ndalichako and Komba (2014) reported that students often choose subject combinations based on their parents' preferences or career aspirations. Additionally, research by Smith (2019) conducted in Tanzanian secondary schools informed that many students possess a limited understanding of the full spectrum of available courses and career paths.

On the other hand, in Tanzanian schools, there is limited availability of professional career guidance services. Many schools lack trained counsellors, resulting in students making choices without adequate information about career prospects or alignment with their academic strengths (URT, 2014; Mafuru & Mpehongwa, 2021). Further literatures have shown that students' attitudes towards course selection are often shaped by their perceptions of certain professions. For instance, Yusuf (2020) observed that, some courses are viewed as more prestigious or associated with greater job security. Moreover, Khan (2020) highlighted disparities in the course selection practices of students from different socio-economic backgrounds. The study emphasised that students from wealthier families tend to have greater access to counselling services and are more likely to make decisions based on detailed and reliable information. In contrast, students from lower-income backgrounds often rely on informal sources, such as family or friends, an approach that frequently results in less informed decision-making.

While several studies have explored factors influencing subject selection in Tanzanian secondary schools, most have focused on either institutional limitations or the role of external influencers such as parents, peers, community, and teachers. However, there remains a critical gap in understanding students' knowledge, their attitudes, and the actual practices they engage in during the course selection process.

Research Objectives - The purpose of this study was to explore the knowledge, attitudes and practices regarding course selection among pre-college students, depicting evidence from selected secondary schools in Arusha region, Tanzania. The following specific objectives were studied.

1. To assess the level of knowledge that pre-college students possess regarding course selections.
2. To examine the attitudes of pre-college students regarding various courses and how these attitudes influence course selections.

3. To investigate the actual practices of pre-college students regarding course selections.

Significance of Study - The findings of this study have important practical implications for educators, school counsellors, and policymakers, as they highlight the need for more comprehensive and equitable career guidance programs across both public and private secondary schools in Tanzania. While majority of the students demonstrated awareness of college entry requirements and exhibited positive attitudes toward their course selections, the limited knowledge of alternative academic paths and underutilization of formal guidance services suggest significant gaps in support structures. For practitioners, this underscores the importance of strengthening career guidance initiatives, especially in public schools, and promoting gender-responsive approaches that encourage both male and female students to seek structured support. For students, the study emphasizes the value of early exposure to course and career information, independent decision-making, and personal motivation, which are key drivers of confident and informed course selections. These insights can inform targeted interventions that empower students to make academic decisions that align with their interests, goals, and the realities of the labour market.

2. Materials and Methods

Materials - This study was informed by KAP model which was proposed by American Everett M. Rogers in the later 1950s and early 1960 having three stages: “acquiring knowledge, building attitude, and constructing practice (Launila, 2009). KAP model helps in designing interventions by revealing where breakdowns for example knowledge and practice occur (Kaliyaperumal, 2004). KAP model is used in various health interventions and life skills sessions, for example its application to guidance and counselling in Tanzanian Secondary Schools found that while students may know about subject combinations, attitudes and misinformation significantly shape their decisions (Mfaume & Bilinga (2017).

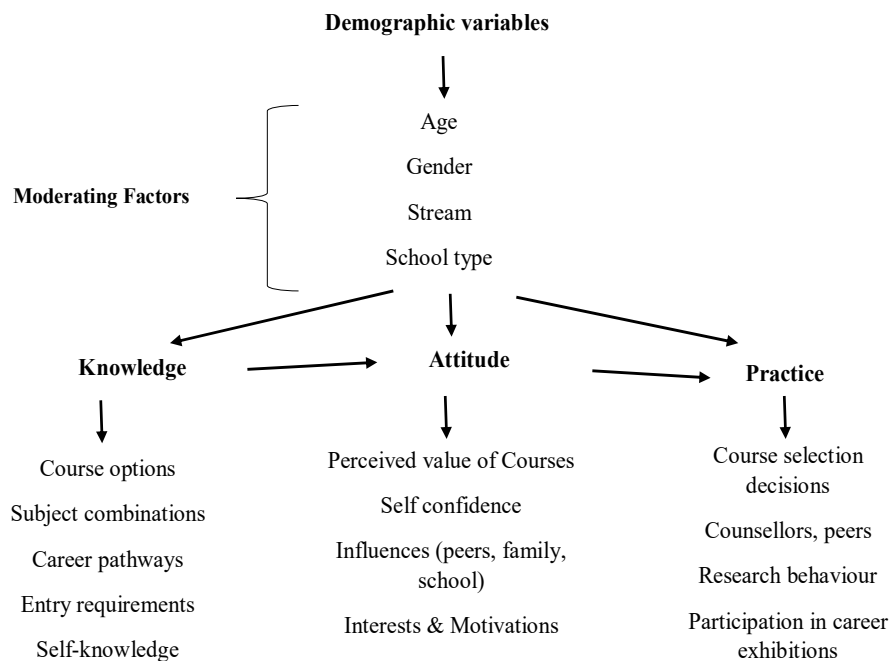


Figure 1. Conceptual Framework of Knowledge, Attitude and Practices (KAP) model for course selection among pre-college students, demographic factors moderate the influence between knowledge, attitudes and practices

Knowledge of Students on Course Selection - This pertains to the awareness and understanding of an individual about a specific matter. It was highlighted by Launila (2009) that without sufficient knowledge, individuals cannot make, informed decisions. According to the latter literature, knowledge constitutes person’s

awareness, understanding, and ability to recall information about a specific information. In the context of this research regarding knowledge on course selection; pre-college students require to have awareness of available courses and programs because limited information about options is one of the most common barriers in career decision making (Gati & Saka, 2001). Meanwhile, access to comprehensive information about academic options enhances self-efficacy and informed decision-making as pointed out by Super (1990) that Students need to understand course content and career relevance leading to match their interests and abilities with the content and demands of the course. Moreover, students need the knowledge of personal interests, strengths, and goals as pointed out by Krumholtz (1996) that lack of self-knowledge often leads to indecision or regret in course and career selection.

Attitudes of Students on Course Selection - Attitude presents a person's belief, emotions and predispositions towards certain ideas or behaviours playing a critical mediating role between knowledge and actual behaviour (Ajzen, 1991). Attitude in the context of course selection includes the beliefs, perceptions, feelings, and predispositions towards a subject, course, or career path. Literature on perception of course value and career outcomes for example Eccles and Wigfield (2002) emphasize that students are more likely to choose courses they believe will lead to meaningful or prestigious careers. Moreover, Bandura (1997) emphasized the role of self-efficacy in shaping academic decisions for example students with high confidence in a subject area are more likely to pursue it meanwhile, Lent, Brown, and Hackett (1994) support this by showing that positive attitudes towards a course increase both interest and the likelihood of selecting it.

Practice of students on Course Selection - According to Green and Kreuter (2005), Practice is the observable behaviours that reflect the internalization of knowledge and the information of attitudes, making it the most tangible outcome of health education efforts. In the context of students Course selection process, It has been emphasized by Hughes (2004) that students who engage in career planning activities are more likely to make confident and relevant course selections. When students apply what they know and value to real decisions, it leads to more satisfying academic pathways (Ferry, 2006).

The researcher opted to use KAP model in this study because it is reasonably easy to design, conduct, analyse, and interpret.

2.1 Methods

The study adopted a mixed research design, integrating both quantitative and qualitative approaches. According to Creswell (2018), mixed methods is a methodology for conducting research that involves collecting, analysing and integrating quantitative and qualitative data in a single study. In this study, the quantitative component provides data on students' knowledge, attitudes, and practices regarding course selection, enabling the identification of trends and correlations. Qualitative approach was used to gather teacher counsellors' opinions and motives regarding the knowledge, Attitudes and practices regarding course selections among pre-college students from their respective schools.

A convenience sampling technique was employed to select Form Four students from both government and private secondary schools in Arusha, Tanzania. This non-probability sampling approach was used due to ease of access and the availability of participants during the data collection period. According to Etikan, Musa and Alkassim (2016) convenience sampling is defined as a non-probability sampling method where participants are selected based on easy access or researcher judgement about who is most appropriate for the study. A total of 367 students who were readily available and willing to participate completed the survey questionnaires. Similarly, ten (10) teacher counsellors were chosen purposefully based on their roles and experience in guiding students in academic and career decisions. Quantitative data was coded and analysed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to summarize key trends, inferential statistics examined differences across gender, school type, and academic stream, and regression analysis assessed how practices predict course selection quality. Qualitative data was analysed thematically to give insights from teacher

An exploration of knowledge, attitudes, and practices regarding course selection among pre-college students counsellors about knowledge, attitudes and practices regarding course selections among the students.

2.2 Informed Consent

All participants were informed about the purpose, procedures, and expected outcomes of the research. Participation was voluntary, and informed consent was obtained prior data collection.

3. Results and Interpretations

3.1 Demographic Characteristics

Demographic characteristics typically include variables such as age, gender, education level, socioeconomic status and other background information that help to describe and segment the study population (Kumar, 2019).

Table 1
Gender Distribution of Respondents (N=367)

Gender	Frequency (n)	Percentage (%)
Male	192	52.3
Female	175	47.7
Total	367	100.0

Source: Field Data (2024)

Table 1 shows that a total number of 367 students participated in the study whereas 192 (52.3) were males while 175 (47.7%) were females. indicating a balanced gender representation.

Table 2
Age of Respondents (N=367)

Age (Years)	Frequency (n)	Percentage (%)
12-16	260	70.8
17-20	69	18.8
21+	38	10.4
Total	367	100.0

Source: Field Data (2024)

Table 2 indicates that 260 students (70.8%) were aged between 12-16, 69 students (18.8%) had the age between 17 -20 and 38 (10.4%) were above 21 years old. This age for most of students who are in form four of secondary schools in Tanzania.

Table 3
School Type of Respondents (N=367)

From School	Frequency (n)	Percentage (%)
Government	204	55.6
Private	163	44.4
Total	367	100.0

Source: Field Data (2024)

Table 3 shows, school type, 204 (55.6%) students were enrolled in government secondary schools, whereas 163 (44.4%) students were from private schools.

Table 4
Class Streams of Respondents (N=367)

From Stream	Frequency (n)	Percentage (%)
Science	138	37.6
Business	86	23.4
Arts	143	39.0
Total	367	100.0

Source: Field Data (2024)

Table 4 further presents the academic streams from the respective schools and found 138 (37.7%) students were pursuing science subjects, 143 (39.0) arts and 86 (23.4%) business studies.

3.2 Knowledge level on Course Selection

Data on knowledge level was analysed using descriptive statistics to summarize overall trends and inferential statistics to explore differences across gender, academic stream, and school type. The descriptive analysis revealed that students demonstrated a moderate to high level of knowledge regarding course selection. Specifically, 76.3% of students were aware of the academic entry requirements for their preferred college programmes (Mean = 3.90, SD = 0.90). However, only 54.8% of students indicated awareness of alternative course options, corresponding to a lower mean score (Mean = 3.42, SD = 1.12). Access to professional career guidance also appeared limited, with 58.9% acknowledging a lack of adequate support (Mean = 3.50, SD = 1.09). Lastly, while 70% of respondents felt generally knowledgeable, their overall score (Mean = 3.72, SD = 1.01) suggests that many students still felt only somewhat prepared when making final course decisions.

To further explore variations in knowledge levels among pre-college students regarding course selection, inferential statistics were conducted. The results showed that female students (M = 3.85, SD = 0.58) reported slightly higher knowledge levels than their male counterparts (M = 3.75, SD = 0.64). However, this difference was not statistically significant ($t(365) = -1.71, p = .088$), indicating that both genders demonstrated relatively similar levels of knowledge. In contrast, a statistically significant difference was observed based on school type ($t(365) = -3.94, p < .001$). Students from private schools (M = 3.92, SD = 0.57) reported significantly higher knowledge scores than those from government schools (M = 3.68, SD = 0.61). Additionally, the results revealed a significant effect of academic stream on knowledge scores ($F(2, 364) = 4.93, p = .008$). Whereas Science stream (M = 3.93, SD = 0.55) had significantly higher knowledge levels than those in the Arts (M = 3.72, SD = 0.60) and Business streams (M = 3.65, SD = 0.63). No significant difference found between students in the Arts and Business streams.

Results from interviews with teachers indicated that students lack comprehensive understanding of how subject choices can impact their future opportunities.

"Many students are unaware of the long-term implications of their course choices. They often select subjects based on peer influence or teacher availability rather than aligning them with their strengths or career aspirations." (Teacher, School A).

Teachers highlighted the need for enhanced guidance and resources to support informed decision and thoughtful course selection among pre-college students.

"There's a noticeable gap in students' awareness about how their subject combinations can affect their future opportunities. Most students don't receive adequate guidance on how to choose subjects that align with their interests and potential career paths." (Teacher, School B)

3.3 Attitudes on Course Selection

Descriptive statistics were used to analyse students' attitudes toward course selection. The findings revealed that students generally held positive attitudes toward their chosen courses. A significant majority (82.5%) agreed that the courses they selected were valuable for their future, reflected by a high mean score ($M = 4.10$, $SD = 0.76$). Likewise, 85.7% expressed strong personal interest and motivation in their chosen field ($M = 4.25$, $SD = 0.68$). Confidence in academic ability was also notable, with 78.1% of students indicating they felt capable of succeeding in their selected courses ($M = 3.95$, $SD = 0.88$). Among external influences, family support emerged as a meaningful factor ($M = 3.85$, $SD = 0.91$), followed by school guidance ($M = 3.62$, $SD = 0.98$). In contrast, peer influence ($M = 3.30$, $SD = 1.10$) and community expectations ($M = 3.20$, $SD = 1.05$) had comparatively lower mean scores, suggesting that although external factors play a role, students' attitudes toward course selection are primarily shaped by personal interest, motivation, and the perceived value of their courses.

To further investigate students' attitudes toward course selection, inferential statistical analyses were conducted across seven key variables: perceived value of courses, self-confidence, peer influence, family influence, school guidance, community influence, and personal interest and motivation. Independent samples t-tests and one-way ANOVA were employed to assess variations in these attitudes by gender, school type, and academic stream. The analysis revealed that female students exhibited significantly more positive attitudes than their male counterparts in several dimensions, including perceived value of courses ($p = .019$), self-confidence ($p = .032$), peer influence ($p = .044$), and family influence ($p = .013$). These findings suggest that female students may place greater value on their selected courses, exhibit higher self-assurance, and rely more on family and peer support in the decision-making process. Regarding school type, students from private schools reported significantly higher scores in school guidance ($p = .003$), community influence ($p = .049$), and personal interest and motivation ($p = .003$), implying that private institutions may provide a more supportive environment for course selection. Furthermore, significant differences were observed across academic streams. Science students demonstrated more favourable attitudes in terms of perceived course value ($p = .017$), self-confidence ($p = .004$), family influence ($p = .011$), and interest and motivation ($p = .002$) compared to their peers in the arts and business streams. Conversely, arts students showed slightly higher susceptibility to peer influence ($p = .039$), while business students consistently reported lower scores across most attitude dimensions.

Responses from interviews indicated a common attitude among students who perceive subject selection as a routine task rather than a significant decision impacting their future.

"Students often approach subject selection with indifference, viewing it as a mere requirement rather than a critical decision for their future. This attitude is prevalent even among those who perform well academically." (Teacher, School D)

Teachers highlighted that students' attitudes on course selections are largely influenced by external factors rather than internal motives.

"There is a tendency among students to choose subjects based on perceived ease or peer influence, rather than genuine personal interests. This often leads to mismatched subject combinations that do not align with their future aspirations." (Teacher, School E)

3.4 Influence of Attitude on Course Selection

To explore the extent to which students' attitudes influence their course selection decisions, a multiple regression analysis was conducted. The overall regression model was statistically significant, $F(7, 359) = 45.32$, $p < .001$, accounting for approximately 47% of the variance in students' course selection decisions ($R^2 = 0.47$). This finding suggests that, collectively, attitudinal factors play a substantial role in shaping students' academic choices.

Among the individual predictors, interest and motivation emerged as the most influential variable ($\beta = .29, p < .001$). This result indicates that students who demonstrate a strong intrinsic interest in their chosen fields and a clear sense of motivation are more likely to make intentional and well-aligned course decisions. Perceived value of courses also contributed significantly to the model ($\beta = .24, p < .001$), implying that students who recognize the relevance and utility of their chosen programs are more confident and purposeful in their selections. Similarly, self-confidence in academic ability was a significant positive predictor ($\beta = .21, p < .001$), suggesting that students who believe in their academic competence are more likely to make secure and informed course decisions. Additionally, family influence ($\beta = .14, p = .021$) was found to significantly affect course selection, highlighting the supportive role of families in guiding students' academic trajectories.

Conversely, peer influence ($p = .195$), community influence ($p = .373$), and school guidance ($p = .051$) were not statistically significant predictors in the model. Although these factors may contribute indirectly to students' decision-making environments, their direct impact on course selection appears to be less noticeable.

3.5 Practices on Course Selection

To investigate the actual practices of pre-college students toward course selection, descriptive statistics were used to summarize key trends and inferential statistics examined differences across gender, school type, and academic stream while regression analysis assessed how these practices predict course selection. Majority (73.3%) of students reported making course selection decisions independently ($M = 3.89, SD = 0.88$), reflecting a strong sense of autonomy in the process. However, only 42.2% reported consulting school counsellors ($M = 3.25, SD = 1.10$), suggesting that formal guidance services remain underutilized. Peer influence was moderately prevalent, with 61.0% of students indicating they sought advice from friends ($M = 3.60, SD = 0.95$). A significant portion (68.1%) engaged in personal research on courses and academic pathways ($M = 3.78, SD = 0.90$), demonstrating a proactive approach to information gathering. In contrast, participation in structured career guidance activities was relatively low, with only 38.4% attending career exhibitions ($M = 3.18, SD = 1.02$).

The inferential analysis of students' course selection practices revealed notable variations across gender, school type, and academic stream. Gender differences indicated that female students were significantly more likely to consult school counsellors ($M = 3.36, SD = 1.07$) compared to their male counterparts ($M = 3.15, SD = 1.11$), $t(365) = -2.02, p = .044$. Although female students also reported slightly higher participation in career exhibitions ($M = 3.28, SD = 1.00$) compared to males ($M = 3.09, SD = 1.03$), this difference was not statistically significant ($p = .068$). Other practices, such as independent decision-making, peer advice, and personal research, did not show significant gender-based differences ($p > .05$).

Regarding school type, private school students exhibited significantly higher engagement in personal research ($M = 3.91, SD = 0.85$) than their government school counterparts ($M = 3.67, SD = 0.93$), $t(365) = -2.72, p = .007$. Furthermore, private school students also reported higher participation in career exhibitions ($M = 3.39, SD = 0.99$) compared to government school students ($M = 3.02, SD = 1.02$), $t(365) = -3.47, p = .001$. However, no significant differences were observed between the two groups in terms of peer influence or counsellor consultation ($p > .05$).

In terms of academic stream, a one-way ANOVA analysis revealed that science students were more likely to engage in personal course research ($M = 3.95, SD = 0.84$) compared to both arts ($M = 3.70, SD = 0.92$) and business students ($M = 3.60, SD = 0.97$), $F(2, 364) = 4.87, p = .008$. While arts students reported slightly higher rates of counsellor consultation ($M = 3.35, SD = 1.06$) compared to their science ($M = 3.18, SD = 1.12$) and business peers ($M = 3.14, SD = 1.15$), this difference did not reach statistical significance, $F(2, 364) = 2.63, p = .073$. Similarly, peer influence did not differ significantly across academic streams ($p = .088$).

A multiple regression analysis was conducted to determine the extent to which students' course selection practices predicted the quality of their course decisions. The overall model was statistically significant, $F(4, 362) = 26.74, p < .001$, accounting for 23% of the variance in decision quality ($R^2 = 0.23$). This suggests that,

collectively, the course selection practices are important predictors of informed and confident course choices.

Independent research emerged as the strongest predictor ($\beta = .31, p < .001$), indicating that students who actively conducted research on their course options were significantly more likely to make well-informed and aligned decisions. Participation in career exhibitions also played a significant role ($\beta = .22, p < .001$), emphasizing the value of exposure to diverse career pathways and related information in improving decision-making. Consulting counsellors was another significant predictor ($\beta = .14, p = .019$), albeit with a moderate effect, suggesting that structured support contributes to more informed course decisions. Conversely, peer influence did not significantly predict course decision quality ($p = .104$), indicating that although peers may be involved in discussions, they do not play a decisive role in influencing final course choices.

In really practice there need a more proactive approach to course selection, where students are encouraged to consider their long-term goals and interests. Counsellor teacher from school F advised that,

"The actual process of subject selection is often reactive rather than proactive. Students frequently make choices based on immediate circumstances, such as teacher availability or class schedules, without considering how these decisions align with their long-term goals." (Teacher, School F)

4. Discussion of the Findings

4.1 Demographic Characteristics

The demographic profile of the study participants indicated a relatively balanced gender distribution, with 52.3% male and 47.7% female students. This balance is crucial for ensuring diverse perspectives in educational decision-making, as argued by Kumar (2019), who emphasized the importance of gender representation in research to minimize potential biases. Such diversity contributes to a more comprehensive understanding of students' academic decision-making processes. The age distribution revealed that most participants (70.8%) were between 12 and 16 years old, reflecting the typical age range for pre-college students in Tanzania. This adolescent stage is critical in students' academic trajectories, where decisions concerning course selection become increasingly important. Moore et al., (2020) have highlighted that adolescents tend to develop a more reflective approach to decision-making, particularly in the context of education. Similarly, Chou, Lee, and Chang (2021) observed that as students mature, they increasingly adopt a self-directed, informed approach to selecting their academic paths.

Concerning school type, 55.6% of respondents attended government schools, while 44.4% were from private institutions. Mwanza, Mbilinyi and Mwaikokeshya (2018) noted that the type of school influences access to key resources such as career counselling, which can significantly affect the academic decisions of students. Moreover, Mwaikokeshya and Mbilinyi (2021) argued that private schools tend to provide more structured guidance systems, which may help students make more informed academic decisions. The distribution across academic streams revealed that 37.6% of students were enrolled in science streams, 39.0% in arts, and 23.4% in business studies. These proportions mirror patterns observed by Ng'wena, Mbilinyi and Mwaikokeshya (2021), who reported that students in different academic streams are exposed to different career options. Healy and Mroczek (2019) similarly observed that students in science disciplines tend to receive more guidance on career pathways compared to those in arts or business streams.

4.2 Knowledge Level on Course Selection

Majority of students (76.3%) demonstrated awareness of the academic entry requirements for their preferred university programs ($M = 3.90, SD = 0.90$). This finding supports the conclusions of Kogot and Akpan (2019), who argued that awareness of entry requirements is integral to informed decision-making in higher education.

Furthermore, Grayson and McLaughlin (2021) suggested that early awareness of entry requirements enables students to approach course selection with greater confidence and precision. Nevertheless, 54.8% of students were aware of alternative course options, highlighting a critical gap in knowledge, corresponding to a lower mean score ($M=3.42$, $SD = 1.12$). Amadhila and Smith (2020) found that many students lack awareness of alternative academic paths, which limits their ability to make well-informed decisions

Private school students ($M = 3.92$, $SD = 0.57$) exhibited higher knowledge levels than their government school counterparts ($M = 3.68$, $SD=0.61$). This discrepancy is consistent with the findings of Mwaikokesya and Mbilinyi (2021), who observed that private institutions tend to offer more comprehensive career guidance. Benson et al. (2021) also reported that students from private schools are more likely to engage with resources and workshops that broaden their understanding of available academic options. The analysis also revealed that science students ($M = 3.93$, $SD = 0.55$) demonstrated higher knowledge levels compared to students in arts and business streams. This finding supports the work of Nguru and Michael (2020), who noted that science students often benefit from a structured academic environment that includes more explicit guidance on course requirements and career options.

4.3 Attitudes on Course Selection

The findings indicated that students possess positive attitudes toward their course selections, with 82.5% agreeing that their chosen courses were valuable for their future ($M = 4.10$, $SD = 0.76$). The findings align with Kamugisha and Msuya (2022), who argued that students who perceive their courses as valuable tend to exhibit higher levels of motivation and academic engagement. The study also found that female students exhibited more positive attitudes than male students in areas such as perceived course value, self-confidence, and family influence. This finding supports Tella, Olayemi, and Ojo (2021), who noted that female students often report higher levels of confidence in their academic capabilities and tend to place more emphasis on familial support.

4.4 Influence of Attitude on Course Selection

Regression analysis revealed that students' attitudes were a significant predictor of the quality of their course selection decisions, explaining 47% of the variance. Among the various attitude variables, interest and motivation emerged as the strongest predictor of course selection decisions ($\beta = .29$, $p < .001$). This aligns with the findings of Pryor, Lapan, and McMahon (2019), who observed that students with a deep personal interest in their chosen field of study are more likely to make confident and well-informed decisions. These results are in line with the conclusions of Kamugisha and Msuya (2022), who found that students who view their courses as valuable and who possess higher levels of self-confidence are more likely to make effective academic choices.

4.5 Practices on Course Selection

The study found that 73.3% of students made their course selection decisions independently ($M = 3.89$, $SD = 0.88$), suggesting a high level of autonomy in this process. Kogot and Akpan (2019) noted that students who make independent decisions are often more satisfied with their academic choices and tend to perform better. However, the limited use of career guidance services, with only 42.2% of students consulting school counsellors ($M = 3.25$, $SD 1.10$). These findings agree with Mwanza et al., (2018), who observed that many students bypass formal guidance in favour of informal decision-making sources, such as peer advice or independent research.

Gender differences were evident, with female students being more likely to consult school counsellors ($M = 3.36$, $SD = 1.07$) compared to their male counterparts ($M = 3.15$, $SD = 1.11$). This trend is consistent with the findings of Tella et al. (2021), who observed that female students tend to seek more structured support throughout their academic decision-making processes. Private school students were more likely to engage in personal research ($M = 3.91$, $SD = 0.85$) and participate in career exhibitions ($M = 3.39$, $SD = 0.99$) compared to their public-school peers who by personal research account ($M= 3.67$, $SD = 0.93$) and participation in career exhibition ($M =3.02$, $SD =1.02$) respectively. This indicates that private schools offer more opportunities for

students to explore various academic and career options. This finding supports the observations of Mwaikokesya and Mbilinyi (2021), who noted that private schools tend to offer more comprehensive career guidance programs. Benson et al., (2021) also emphasized that private institutions typically provide more robust support for career exploration, which may enhance students' engagement in the decision-making process.

5. Conclusion and Recommendations

5.1 Conclusion

This study examined the knowledge, attitudes, and practices related to course selection among pre-college students in Arusha, Tanzania. The findings revealed that while most students were aware of university entry requirements, knowledge of alternative academic options was limited, particularly among government school students and those in non-science streams. Positive attitudes especially those driven by interest and motivation were strong predictors of effective course choices, with female and private school students more likely to seek structured support such as career counselling and exhibitions.

5.2 Recommendations

To address these disparities, it is recommended that structured career guidance and counselling programs be strengthened, especially in public schools, and that students be exposed to a broader range of academic and career options. Schools should encourage both independent exploration and the use of formal support systems, with targeted interventions to ensure gender equity and equal access across school types. Collaborative initiatives between public and private institutions, along with the integration of career education into the curriculum, can help students make more informed and confident academic decisions.

The findings of this study also recommended first, future studies to consider including a wider geographical scope by incorporating participants from other regions of Tanzania because such comparative research could reveal regional disparities and commonalities in course selection processes therefore informing more inclusive educational policies and second, longitudinal research to examine how students' knowledge and attitudes towards course selection evolve overtime and how these shifts impact actual academic and career outcomes. Lastly, the inclusion of student voices through qualitative or participatory methods, such as in-depth interviews or focus group discussions, such approaches could yield richer, context specific insights into students' motivation, challenges and decision-making processes, which may not be fully captured through qualitative methods alone.

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