







CAREER ASPIRATION IN RELATION TO ACADEMIC ACHIEVEMENT AMONG UNDERGRADUATE STUDENTS OF MBEYA UNIVERSITY OF SCIENCE AND TECHNOLOGY, TANZANIA

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Academic achievement and career aspirations are pivotal in preparing youth for socio-economic participation. This study investigated the relationship between the career aspirations and academic achievement of 217 randomly selected undergraduate students, utilising a cross-sectional survey design and the career aspirations scale (Gregor & Brien, 2016). Results showed that students had moderate career aspirations (Median=3.29) and academic performance (Median=3). Statistical analysis using the Mann-Whitney U Test indicated no significant gender differences in career aspirations ($U=5895$, $z=.117$, $p=.91$) but a significant difference in academic achievement ($U=4775.50$, $z=-2.57$, $p=0.01$), suggesting that career aspirations predict academic success. The findings highlight the need for academic support services to enhance student performance and career goals, emphasising career aspirations as critical for academic success and a central concern for educational policy.

KEYWORDS: Academic Achievement, Career Aspirations, Career Awareness, Self efficacy, Social Cognitive Career Theory

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INTRODUCTION

Career aspiration is a person's ambition and preparation to engage in various career options in socio-economic development ([International Labour Organization \(ILO\), 2020](#)). It is a person's inner desire to follow a specific potential job opportunity through their chosen course of study and training ([Gregor & Brien, 2016](#)). They explain that career aspiration is a person's ambitions for general life, leadership, and educational achievement. In career choice and development, career aspiration is an expression of one's self-concept ([Arhin, 2018](#)). It entails assessing one's capacity to participate in socio-economic activities. This is evident in education and training institutions where students acquire skills, knowledge, attitudes, and experiences for participation in socio-economic activities. Equally, higher education institutions are hubs for preparing human capital through education and training for socio-economic development ([Zaleniene & Pereira, 2021](#)). They clarify that people with relevant education and training credentials are competent and work productively.

Moreover, career aspiration motivates students' academic achievement and future careers ([Oracion & Abina, 2021](#)). [Wilcox and Nordstokke \(2019\)](#) argue that academic achievement is essential for students to enter different job opportunities in the employment market. Career aspiration is an indispensable motivation for students to engage in education and training through which they develop their socio-economic identity. In the same view, [Choy and Yeung \(2022\)](#) elaborate that high career aspirations reflect positive self-concept and academic performance. Choy and Yeung add that students with high career aspirations demonstrate high academic achievement. Similarly, the study by [Amani \(2022\)](#) with primary school students in Tanzania showed that students are more willing to participate in subjects when they perceive them to meet their career goals.

The surveyed studies have shown that students' educational and career goals feature career aspirations. However, career aspirations and undergraduate students' academic achievement in Tanzania must be documented. Therefore, the study examined the relationship between career aspirations and academic achievement among Mbeya University of Science and Technology undergraduate students in Tanzania. The study findings would inform policymakers, educators, and counsellors about career aspirations and academic achievement among students in higher education, hence deploying support services.

THEORETICAL FRAMEWORK

The Social Cognitive Career Theory (SCCT) ([Lent et al., 1994](#)) is a theoretical lens of the present study. According to SCCT, career development is an

interaction between personal factors such as self-efficacy, goals, interests, and outcome expectations and environmental factors such as support and barriers. Bandura et al. (1977) define self-efficacy as self-judgement of the ability, effort, and resources to execute a particular activity. In practice, people with tremendous self-confidence about completing tasks will likely achieve their goals. In addition, several studies draw on the critical aspects of SCCT to explain career aspirations and academic achievement. For example, the study by Ansong et al. (2018) reports a positive association between self-efficacy, career aspirations and academic achievement. It is a motivational, through which individuals are attracted to a particular activity. Certainly, people do things because they believe in accomplishing them. Likewise, students with high self-efficacy are likely to achieve their academic and career expectations (Al-Abyadh & Azeem, 2022).

Moreover, SCCT (Lent et al., 1994) assumes that a goal orients a person towards performance behaviour and realising the outcome. The theory postulates that goals give a clear picture of accomplishing a task in line with one's values, personality, interests, and accomplishment ability. Goal orientation instils perseverance in a person when focusing on academic and career options. Regarding goals and academic achievement, Lüftenegger et al. (2016) found that goals motivate academic achievement. Also, Grigg et al. (2018) found that a goal for studying mathematics related to mathematics achievement. Grigg and colleagues clarify that student's expectations of mathematics arouse their interest in learning the subject. However, Wang et al. (2022) establish that setting goals for future educational and career pathways is subject to environmental factors such as culture and socio-economic situation.

Another element of SCCT is an anticipated outcome concerned with the prospects of engaging in a particular activity. The expected outcome is essential in career development because it motivates engagement and the recurrence of the behaviour (Napolitano et al., 2020a). Also, people are confident about participating in a particular action when anticipating positive results. Similarly, students are motivated to work hard when they expect positive outcomes. Appling et al. (2022) maintain that students aspire to career routes in which their outcomes are congruent with their academic and personal attributes and expected gain. From Appling and colleagues, we can say that outcome expectations underlie academic achievement and career aspirations.

Moreover, support and barriers are contextual factors affecting education and career success. According to SCCT, internal or external barriers can affect career expectations and academic achievement (Lent et al., 1994). Internal barriers are related to a person's negative perceptions or low efficacy in accomplishing specific responsibilities. In contrast, external barriers such as financial constraints and other cultural practices can be socio-economically constructed.

For example, the study by [Chan \(2022\)](#) revealed that female students perceived themselves as inadequate and incapable of studying science, technology, engineering and mathematics (STEM) subjects and entering the related fields compared to male students. In such a scenario, students need social support from parents, significant others, and other members of society to attain their educational and career goals. The study by [Al-Bahrani et al. \(2020\)](#) elaborates that parental education motivates students' academic and career aspirations. Also, the study found that students from less educated families reported low career aspirations. On the other hand, psychosocial factors and cultural practices may nurture or limit the student's career aspirations ([Olmos-Gómez et al., 2021](#)). The situation suggests that helping students reduce obstacles to achieving educational and career goals is crucial.

In sum, self-efficacy, goals and expected outcomes reinforce people to engage and sustain in a particular activity ([Appling et al., 2022](#); [Lent et al., 1994](#); [Napolitano et al., 2020b](#)). The literature shows that self-efficacy, interests, goals, and expected outcomes underlie a person's desire for achievement. So, career aspiration features a willingness to realise educational and career goals, motivating students to engage in studies. Therefore, the SCCT is an appropriate theoretical lens to explain undergraduate students' career aspirations concerning academic achievement.

CAREER ASPIRATIONS AMONG STUDENTS

Psychosocial environments, such as parental support, peers, gender, and significant others, primarily contribute to the perceptions of various educational and career pathways ([Carrico et al., 2019](#)). The interaction between student-environmental factors is crucial because, through interactions, students get experiences to raise their career aspirations. In addition, [Makarova et al. \(2019\)](#) found a gender gap in STEM among secondary school students in Switzerland. The study findings indicate that stereotypes among students in STEM fields affected their career ambitions. The same findings were reported by [Leaper and Starr \(2019\)](#), who found that low career aspirations among female university students were related to gender bias in opting for STEM subjects. The findings underscore the importance of providing career information and support to students to enhance their career aspirations. However, the study by [Makransky et al. \(2020\)](#) with Danish secondary school students revealed no significant gender difference in science career aspirations. Makransky and colleagues suggest that supportive teaching and learning environments provide fair chances for career aspiration between male and female students.

Similarly, the study by [Barone and Assirelli \(2020\)](#) in Italian secondary schools showed low career aspirations among female students in STEM-related

disciplines. The findings suggest nurturing students through academic and career aspirations services to minimise the gender gap. However, the difference in subject choices and career ambitions is attributed to values, beliefs, and cultural set-up (Dicke et al., 2019). The findings are in line with the study by Lacey et al. (2022), who found that grouping students based on their ethnic background worsens career aspirations as those from disadvantaged groups are marginalised. The findings show that socio-cultural and school practices contribute to students' perceptions of academic domains and career ambitions.

Moreover, studies in Tanzania have found that students with positive career attitudes demonstrate high career aspirations and vice versa (Amani & Mkumbo, 2016). In addition, a lack of relevant career information is reported to hinder career aspirations. For example, the study by Amani and Mkumbo (2018) revealed that family backgrounds, such as education, occupation, socio-economic status, and expectations, affect career choice among university students in Tanzania. The findings are crucial because family is a primary socialisation agent through which students get academic and career motivations. It is a critical concern as students from families with low socio-economic status, interests, and aspirations experience difficulties in realising their educational and career goals (Fray et al., 2020). The findings imply that adolescents require social, economic and career guidance and counselling support services to streamline their academic and career ambitions.

CAREER ASPIRATION AND ACADEMIC PERFORMANCE AMONG STUDENTS

Several studies have reported the association between career aspirations and academic performance. For instance, a survey conducted by Nduta and M (2020) with secondary school students in Kenya found that career aspirations significantly influenced academic performance, even though the students' career aspirations were low. Al-Bahrani et al. (2020) study in Oman revealed that students with career goals showed high academic achievement. The study findings suggest that goal setting is essential for academic achievement and career aspirations. Also, the findings signify that students' academic achievement motivates career aspirations.

On the contrary, the study by Oracion and Abina (2021) with senior high school students in the Philippines revealed a weak and insignificant correlation between career aspirations and academic achievement. Nevertheless, in the study, students demonstrated high career aspirations and moderate academic achievement. On the other hand, high academic performance and interest in a particular academic do not necessarily signify career aspirations (Ogunde

et al., 2017). Ogunde and colleagues, in their study with undergraduate students in New Zealand and the United Kingdom, the students showed high academic performance in Chemistry. However, they were not attracted to career opportunities related to the subject. Nevertheless, Krannich et al. (2019) report different findings that students' academic performance influences career aspirations. Krannich and colleagues found that students' positive self-concepts underlie academic performance and career aspirations. Besides that, the student's home environment, especially the parents' education and occupation, should not be disregarded in academic performance and career aspirations (Gao & Eccles, 2020). Also, the studies revealed that parental education significantly impacted students' academic performance and career aspirations. The studies suggest that the family environment is a precursor for academic performance and career aspirations.

The reviewed studies have reported career aspirations and academic achievement. However, less attention was paid to the relationship between career aspirations and academic achievement among undergraduate students in Tanzania. Therefore, the present study aimed to find the relationship between career aspirations and academic achievement among undergraduate students at Mbeya University of Science and Technology in Tanzania.

OBJECTIVES OF THE STUDY:

The following objectives guided the study:

1. To examine the relationship between career aspirations and academic achievement of Mbeya University of Science and Technology undergraduate students.
2. To examine whether career aspiration predicts academic achievement among Mbeya University of Science and Technology undergraduate students.
3. To assess whether undergraduate students of Mbeya University of Science and Technology differ in their career aspirations by gender
4. To assess whether Mbeya University of Science and Technology undergraduate students differ in their academic achievement by gender.

HYPOTHESES OF THE STUDY:

H1: There is a significant relationship between career aspirations and academic achievement among Mbeya University of Science and Technology undergraduate students.

H2: Career aspiration predicts the academic achievement of Undergraduate Students of Mbeya University of Science and Technology.

H3: Undergraduate students of Mbeya University of Science and Technology differ significantly in career aspiration by gender.

H4: Undergraduate students of Mbeya University of Science and Technology students differ significantly in academic achievement by gender.

RESEARCH METHODOLOGY

Research Design

The study used a cross-sectional survey design to assess the career aspirations of undergraduate students at Mbeya University of Science and Technology in relation to academic achievement.

Participants

The study was delimited to second-year students pursuing bachelor’s degrees in the Department of Technical Education in the College of Science and Technical Education at Mbeya University of Science and Technology for 2022-2023. The department offers Diploma, Bachelor’s, and Postgraduate Diploma programs in Technical Education. Through systematic random sampling, 217 students were selected for the study. Among the selected students, 118(54.4%) were males and 99(45.6%) were females. Most respondents ranged between 21 and 25 years old ($M_{Age}=22.27$ years; $SD= 2.63$). Table 1 represents the demographic information of the participants.

Table 1
Demographic Profile of the Participants (N=217).

		Count	Percentage (%)
Gender	MALE	118	54.4%
	FEMALE	99	45.6%
Age (Years)	15-20	10	4.6%
	21-25	191	88.0%
	Above 30	16	7.4%
Academic Achievement (GPA)	2.0-2.6	12	5.5%
	2.7-3.4	87	40.1%
	3.5-4.3	109	50.2%
	4.4-5.0	9	4.1%

Instrument Used

Career aspiration and academic performance were independent and dependent variables of the study, respectively. The study used the student's academic performance of the previous academic year (2021-2022) in Grade Point Average (GPA) classified as 2.0-2.6= "Pass", 2.7-3.4= "Lower Second", 3.5-4.3=Upper Second and 4.4-5.0= "First Class". The study used a Likert Scale developed by [Gregor and Brien \(2016\)](#). The scale consists of three factors with a total of 24 items. The three sub-scales of the scale showed adequate reliability: Leadership Aspirations ($\alpha=.74$), Achievement Aspirations ($\alpha=.79$) and Educational Aspirations ($\alpha=.87$). The scale ranged from 0- Not at all true of me, 1- Slightly true of me, 2- Moderately true of me, 3- Quite a bit true of me, 4- Very true of me. The scale has been widely used in several studies. For example, the study by [Gregor et al. \(2022\)](#) yielded Cronbach's Alpha ranging from .91 to .90, respectively. [Khan and Sherwani \(2018\)](#) studied career aspirations and career satisfaction among employees in India. In the study, the overall scale Cronbach's alpha was .83. Also, [Gregor et al. \(2019\)](#) studied career aspirations among young men in the USA in which the sub-scales were reliable as Achievement Aspirations, $\alpha =.80$; Leadership Aspirations, $\alpha =.84$; Educational and Aspirations, $\alpha =.89$. In the present study, the Gregor and Brien scale and sub-scales showed adequate reliability at Cronbach's Alpha: Leadership Aspirations ($\alpha=.73$), Achievement Aspirations ($\alpha=.78$), and Educational Aspirations ($\alpha=.82$) and the overall scale $\alpha=.78$.

DATA ANALYSIS

The study used Statistical Package for Social Sciences (SPSS) version 26.0 for data analysis. The test of normality Kolmogorov-Smirnov and Shapiro-Wilk tests for normality yielded significant results ($p<0.05$), signifying a non-normality [Field \(2018\)](#). However, career aspiration showed skewness=-.245 and kurtosis=-.370, while academic performance showed skewness=-.252, and kurtosis= -.155. In addition, the data were ordinal as they were collected using a five-point Likert scale, opposing the assumptions of parametric analysis, which requires interval and ratio scale data. For these reasons, the study adopted a non-parametric test. The non-parametric statistical analysis involved median, Spearman's rho for examining correlations of variables, and Mann-Whitney U-test for testing the two independent samples. Ordinal regression tested the association between career aspirations and academic performance. It is used in the non-parametric test, predicting an outcome variable from categorical or continuous variables ([Field, 2018](#)).

RESULTS OF THE STUDY

In the descriptive analysis, the respondents showed moderate career aspiration (Mdn=3.04) and academic achievement (Mdn=3). Whereas in inferential statistics, the formulated hypotheses were tested as follows:

H1: A significant relationship exists between career aspirations and academic performance among Undergraduate Students of Mbeya University of Science and Technology.

The study used Spearman's rho correlation to assess the correlation between career aspiration and academic achievement. The statistical test showed a significant positive correlation between career aspiration and academic achievement ($r=.23^{**}$, $p=.001$) at a 0.01 significant level (two-tailed). The correlation implies that enhancing students' career aspirations increases academic achievement. According to the statistical test, the formulated hypothesis that there is a significant relationship between career aspiration and academic performance was supported.

H2: Career aspiration predicts the academic achievement of Undergraduate Students of Mbeya University of Science and Technology.

Furthermore, the study used an ordinal logistic regression analysis to examine whether students' career aspiration significantly predicts their academic performance. The statistical test revealed model fit information: $X^2(1) = 6.63$, $p=.01$. Also, the goodness-of-fit was non-significant; Pearson $X^2(2) = 2.93$, $p=.23$ implying the adequacy of the model to explain the data set. In addition, the test of parallel lines as one of the critical assumptions of the ordinal regression showed insignificant results: $X^2(2) = 3.90$, $p=.14$. The test result for parallel lines signifies no variation of the parameters across the data set. As Tabachnick and Fidell (2007, p.504) write, parallel lines are about the constancy of the effect of independent variables on the dependent. Table 2 shows the statistical test analysis of the association between career aspirations and academic achievement (GPA). The statistical test revealed that career aspiration significantly predicts academic achievement; $B=-.85$, Wald $X^2(1) = 6.22$, $p=.01$ with odds ratio, (OR)=.43 at 95% confidence Interval (CI) of -1.52 to -.18. The OR implies that the odds of higher academic achievement is .43 times higher than the students with low career aspirations. The estimated value (B)=-.85 indicates that students with low career aspirations will likely demonstrate lower academic achievement than students with high career aspirations. Therefore, from the regression analysis, career aspiration significantly predicts students' academic achievement. Hence, the hypothesis that career aspiration predicts academic achievement was supported.

Table 2

Ordinal Regression.

		Est.	EXP (B)	SE	X ²	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[GPA = 1]	-3.06	0.05	0.32	94.37	0.00	-3.68	-2.44
	[GPA = 2]	-0.34	0.71	0.15	5.15	0.02	-0.64	-0.05
	[GPA = 3]	3.02	20.57	0.34	77.83	0.00	2.35	3.70
Location	[Career Aspirations_1=1]	-0.85	0.43	0.34	6.22	0.01	-1.52	-0.18
	[Career Aspirations_1=2]	0						

SE: Standard Error Est.: Estimate df (1,0)

H3: Undergraduate students of Mbeya University of Science and Technology differ significantly in career aspiration by gender.

Researchers used the Mann-Whitney U-test to evaluate the career aspirations of higher education students by gender. The Mann-Whitney U Test revealed no significant difference in career aspirations between male and female students (n=217, U=5895, z= .117, p=.91), with Mean Rank=108.54 for male students and Mean Rank=109.55 for female students. Figure 1 and Table 3 represent respondents’ differences in career aspirations by gender. Therefore, the formulated hypothesis was not supported. Moreover, Table 3 summarises the test of the hypothesis.

Table 3

Hypothesis Test Summary.

Null Hypothesis	Test	Sig.	Decision
The distribution of Career Aspiration is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	0.907	Retain the Null Hypothesis.

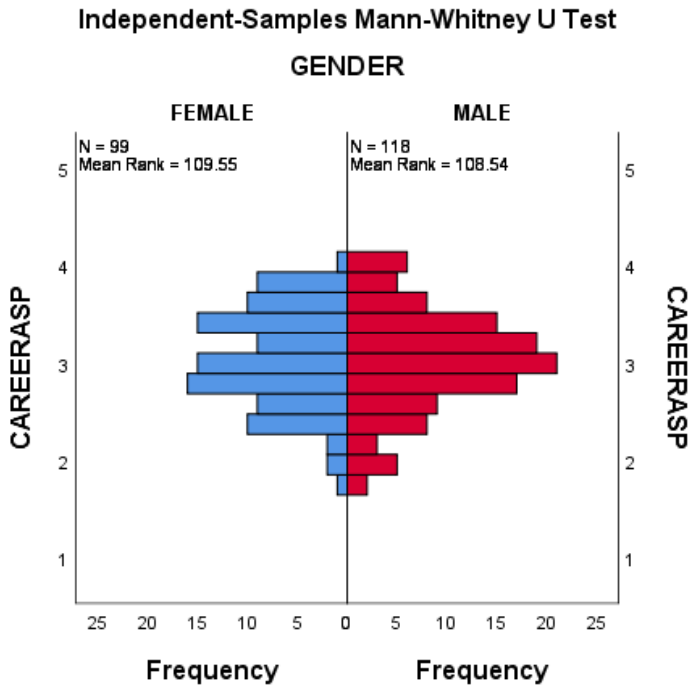


Figure 1. The Mean Ranks of Male and Female Students.

H4: Undergraduate students of Mbeya University of Science and Technology students differ significantly in academic achievement by gender.

The study employed the Mann-Whitney U test to evaluate the difference in academic performance by gender among respondents. The test showed a significant difference in academic achievement between male and female students, $n=217$, $U=4775.50$, $z= -2.57$, $p=0.01$, in which male students ranked higher (Mean Rank =118.3) than female students (Mean Rank=98.24). Therefore, the formulated hypothesis was supported. Figure 2 and Table 4 show the differences in academic achievement among respondents by gender.

Table 4

Hypothesis Test Summary.

Null Hypothesis	Test	Sig.	Decision
The distribution of Academic Achievement is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.010	Reject the Null Hypothesis.

Asymptotic significances are displayed. The significance level is .050.

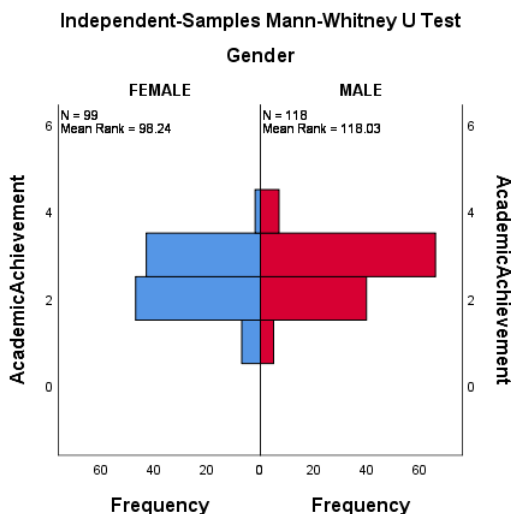


Figure 2. Mean Ranks of Academic Achievement by Gender.

DISCUSSION

The study focused on the relationship between career aspiration and academic achievement of undergraduate students in higher education institutions in Tanzania, taking Mbeya University of Science of Technology as a case study. The descriptive data analysis revealed moderate career aspiration (*Mdn*=3.04) and academic achievement (*Mdn*=3) among students. Moderate career aspiration and academic achievement imply that students need career and educational support. As highlighted by the extant studies ([Amani &](#)

Mkumbo, 2018; Fray et al., 2020), diverse environments, such as family socioeconomic status and education, limit access to career and education information, consequently affecting student's career and educational goals. The situation echoes the assumption of SCCT that contextual factors such as support from parents and significant others are essential for determining the student's educational and career goals (Lent et al., 1994). The findings show that students need more support to enhance their academic performance and career aspirations.

Moreover, the study used Spearman's *rho* correlation to examine the relationship between career aspiration and academic achievement among Mbeya University of Science and Technology undergraduate students. The findings showed a significant positive correlation ($r=.23^{**}$, $p=.001$) at a 0.01 significance level (two-tailed). According to the statistical test, the formulated hypothesis that there is a significant relationship between career aspiration and academic achievement was supported. The study findings are consistent with Nduta and M (2020) in Kenyan and Al-Bahrani et al. (2020) that career aspiration is associated with academic achievement among students in education settings. The findings imply that enhancing students' career aspirations promotes academic achievement among students. On the other hand, the findings are inconsistent with Oracion and Abina (2021), who found a weak and insignificant correlation between career aspiration and academic achievement among senior high school students in the Philippines.

In addition, the study used ordinal regression to examine whether career aspiration predicted the academic achievement of Mbeya University of Science and Technology. The statistical test showed that career aspiration significantly predicted the student's academic achievement; $B=-.85$, $Wald X^2(1)=6.22$, $p=.01$ with odds ratio, (OR) of .43 at 95% confidence Interval (CI) of -1.52 to -.18. The OR implies that the odds of higher academic performance is .43 times higher than the students with low career aspirations. The estimated value (B)=-.85 indicates that students with low career aspirations will likely demonstrate lower academic achievement than students with high career aspirations (See Table 2). According to the regression analysis, career aspiration significantly predicts the student's academic achievement. It implies that students with high career aspirations will likely demonstrate higher academic achievement than those with low career aspirations. The study findings are congruent with the previous studies (Al-Bahrani et al., 2020; Nduta & M, 2020) which showed a significant association between career aspirations and academic performance. The study findings imply the intertwining of career aspirations and academic achievement.

Furthermore, the study findings show that career aspiration keeps students focused on their educational and career goals. The present study's

findings reflect the questions concerning self-perceptions among students about educational and career pathways: “Who am I?” “Where will my educational experiences take me?” It appears that embracing career aspirations gears academic achievement, preparing young people for responsible adulthood. It can also be reflected by the key aspects of SCCT (Lent et al., 1984), namely self-efficacy, goals, and anticipated outcomes that motivate a person to engage in a particular course of action. Likewise, the present study’s findings show that undergraduate students have moderate career aspirations, implying that they have the efficacy to engage in academics and, hence, academic achievement. The findings are in line with Ansong et al. (2018) who found that self-efficacy underlies people’s engagement in a particular activity. In addition, the study findings show average career aspirations and academic achievement, suggesting that respondents have goals and expected outcomes. The findings are consistent with previous studies (Al-Bahrani et al., 2020; Nduta & M, 2020) which found that the student’s goals and expectations drive career aspirations and academic achievement. According to the study findings, we can conclude that students’ career aspiration motivates academic achievement. However, is essential to support students in minimising barriers to their streamlining educational and career goals.

In addition, the study examined whether higher education students differ in career aspirations by gender. The researchers used the Mann-Whitney *U* test, which revealed no significant difference in career aspirations between males (*Mean Rank*=108.54) and females (*Mean Rank*=109.55) with statistical test values: $n=217$, $U=5895$, $z=.117$, $p=.91$ at the significance level of .05 (See Fig. 1 & Table 3). The findings are consistent with the experimental study by Makransky et al. (2020), who found no significant difference in science career aspirations among Danish secondary school students by gender. However, the findings differ from those of Makarova et al. (2019) in Swiss secondary schools, which found that female students ranked lower than male students in STEM subjects. Differences in career aspirations can be attributed to early experience in education and career aspirations among students. For example, Leaper and Starr (2019) report that students’ early perceptions of studies impact academic achievement and career aspirations, eventually disparity in professionalism and employability in the employment market. Hence, the present study’s findings do not support the hypothesis that undergraduate students differ significantly in career aspirations by gender. The previous studies were conducted on secondary school students with limited educational and career experiences, hence the difference in career aspirations between male and female students. The similarity in career aspirations among undergraduate students in the present study may be ascribed to openness to educational and career experiences as they have already chosen degree programs as their career paths. However, in the present

study, moderate career aspirations and academic achievement signify that students need support to understand the linkage between their education pursuits and career opportunities in the labour market.

Moreover, the study assessed whether undergraduate students differ in academic achievement by gender. The Mann-Whitney *U* Test revealed a significant difference between male and female students in academic achievement ($n=217$, $U=4775.50$, $z= -2.57$, $p=0.01$) at the significance level of .05. The statistical test showed that male students ranked higher (*Mean Rank* =118.3) than female students (*Mean Rank*=98.24). Hence, the hypothesis that male and female students differ significantly in academic achievement by gender was supported. The study findings are in line with the findings by [Gao and Eccles \(2020\)](#), who found that student's backgrounds, such as cultural practices, education and occupations render differences in career aspirations and academic achievement. The findings suggest that students' academic support programs should be in place to promote study behaviour, ultimately improving academic achievement among undergraduate students in Tanzania. As highlighted by some studies in Tanzania ([Amani & Mkumbo, 2016](#)) supportive environments are the impetus for career aspirations and academic achievement. Students come from diverse backgrounds and need general and individual support to realise their educational and career potential.

LIMITATIONS OF THE STUDY

The researchers experienced limitations in conducting the study, but the limitations may pave the way for further research. A similar study with more institutions might be conducted to generalise the findings to a broader context, as the present study only involved one high-learning institution. The study used a quantitative approach and cross-sectional survey design to study the problem, so other techniques, such as a mixed approach, can be used.

CONCLUSION

The study examined the relationship between students' career aspirations and academic achievement of Mbeya University of Science and Technology in Tanzania undergraduate students. The study has revealed a significant association between undergraduate students' career aspirations and academic achievement at Mbeya University of Science and Technology. In addition, the study showed no significant difference in career aspiration among students by gender. However, male and female students differed in academic achievement, with male students ranked higher than female students. The research findings have addressed the gap in the literature about the potential relationship

between undergraduate students' career aspirations and academic achievement. The study findings connote that students' academic and career support is crucial to motivating their learning and helping them achieve their educational and career goals. The study results have broad implications for developing career plans, career pathways awareness programs, career guidance initiatives and career clinics.

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