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Self-Efficacy as a Predictor of Career Decision Making Among Secondary School Students in Busia County, Kenya

Joel Peter Ogutu Peter Odera Samuel N. Maragia
Department of Educational Psychology, Masinde Muliro University of Science and Technology
P.O. Box 190 – 50100, Kakamega, Kenya

Abstract
The most common constrain to career progression among youth in Kenya is the inability to make informed career decisions. Majority of high school students suffer from excitement for attaining university degree self-actualization rather than taking up career that enhances development of talents and skills that are job market driven. This study aimed at examining the influence of self-efficacy in career decision making among secondary school students. The participants in the study consisted of 364 fourth form secondary school students in Busia County, Kenya. Gender, age and school type were used as controller variables of self-efficacy on career decision making. Scales to measure self-efficacy and career decision making was developed. Spearman correlation coefficient and multinomial logistic regression techniques were used in data analysis. The results of spearman correlation demonstrated that self-efficacy significantly correlated with students' career decision making (r_s = -0.236, p = 0.001) while coefficient of determination (R^2) in multinomial logistic regression models (one to four) accounted for 30.5%, 31.3%, 33.1% and 35.6% variations respectively on student career decision making. These implied the remaining 69.5%, 68.7%, 66.9% and 64.4% respectively unexplained were largely due to variation in other variables outside the regression models. The overall likelihood ratio of the regression model was statistically significant X^2 (60, N = 364) = 105.984, P=0.001. When controller variables were fitted into the multinomial logistic models the relative risk ratio increased or decreased but the p-value remained statistically significant. This implied that factors within self-efficacy variable contributed significantly in the relationship between self-efficacy and career decision making. On the basis of the findings, it was recommended that career decision making should be enhanced in schools using career guidance and counseling strategies
Keywords: Self-efficacy, Decision making, secondary school students, Controller variables, Multinomial logistic regression, Kenya

Introduction and Literature Review

1.1 Introduction

The process of aligning career decision making with educational requirements has increasingly become complex with evolution of advanced technology in the world today than before (Onoyase & Onoyase, 2009). Globally 75.8 million young people as compared to other age groups were unemployed, mainly due to career mismatch (United Nations, 2012). This trend suggests that the world is entering the age of unparalleled talent inadequacy which may put a brake on economic growth and ultimately change the approach to workforce challenges. Several studies show that secondary school students all over the world face dilemma in making career decisions (Issa & Nwalo 2008; Macgregor, 2007; Watson, McMahon, Foxcroft & Els, 2010). Each individual undergoing the process of making career decision is influenced by such factors as the context in which they live, their personal aptitudes, and educational attainment (Watson *et al*., 2010).

Prior studies have indicated that without career guidance, secondary school students are usually insecure about career decision making (Despina, Kostas, Argyropoulou & Tampouri, 2012; Jamali *et al.*, 2015; Ikediashi, 2010; Austin, 2010). For example, International Labour Organization (ILO), (2011) attribute the inadequacy of knowledge amongst youth about the world of work and career decision making to fault school curriculum that do not address early career preparation of the learners. The International Labour Organization (ILO, 2011) further warns that the forbidding job market position for youth in African nations causes desperation that become a recipe for intolerable social behaviours (insecurity, robbery, drug trafficking) and a cause for socio-political contest in their communities.

Studies done in America showed that 20% to 60% of new students joining institutions of higher learning are usually undecided over their supposed career choices (Onoyase & Onoyase, 2009; Adedunni & Oyesoji, 2013). In Lebanon, many University graduates undertake certain career paths that mismatch their college majors (Abouchedid & Goff-Kfouri, 2008). However, in Africa, sources of career decision making challenges among students in secondary schools are majorly inadequate information, ignorance, customs and lack of exposure to career outlets (Austin, 2010; Stikkelorum, 2014). In Kenya Career decision making has remained a constant challenge for students due to lack of appropriate policy and its developmental nature (Maraya, 2011). For example, studies conducted in Kenya showed that people get employment in areas that are neither in line with their careers nor professional training but go for what is available rather than what is in their personal interest, value, ability or skills (Godia, 2009; Muigai, 2007; Machio, 2007). When such people are

employed they experience job frustration due to deficiency in career self-efficacy. Thus their career productivity is affected. Additional study in Kenya by Ochieng (2015) on self-efficacy and academic achievement among secondary school students revealed that Kenyan secondary schools students lack sufficient sense of self–efficacy necessary to demonstrate persistence on tasks when faced with the career challenges. Thus they do not adequately engage in self-regulating processes. However, since secondary school students prepare to enter career path at the completion of their secondary education, there was need to examine the influence of self-efficacy, on career decision making among secondary school students in Busia County, Kenya.

1.2 Literature Review

Self-efficacy is a fundamental concept describing one's basic capacity to achieve (Lent & Brown, 2008; Austin, 2010; Adika, Adesina & Oriyomi, 2013). Bandura (2001) defines self-efficacy as one's belief in ability to accomplish a task in particular perspective. Prior studies show that students who demonstrate greater senses of self-efficacy are more likely to confront stressful academic situations compared with individuals who have lower levels of self-efficacy (Tang, Pan & Newmeyer, 2008; Yuhsuan & Jodie (2014).

Self-efficacy in career decisions making represents the confidence of the individuals in which they can engage in activities associated with choosing appropriate career path (Crisan & Turda, 2015). For example, studies have found positive correlation between self-efficacy in career decisions making and vocational identity (Crisan & Turda (2015). Contrarily, some studies have shown negative correlation between self-efficacy and career decisions making (Crisan & Turda, 2015). For instance, Yuhsuan & Jodie (2014) examined the relationships among self-efficacy, coping, and job satisfaction on a sample of Taiwanese nurses using a Structural Equation Modeling (SEM) analysis. The purpose of the study was to examine whether coping mediates the relationship between self-efficacy and job satisfaction. The findings revealed that higher self-efficacy was associated with higher job satisfaction. It was concluded in the study that higher self-efficacy leads to higher confidence that assists in handling problems more effectively. This study was conducted on job satisfaction amongst employed nurses while the current study was on career decision making among students.

In a study on the relationship between career decision self-efficacy on mathematics and science self-efficacy, math and science self-efficacy and interests were found to significantly predict math and science career-related behaviors and goal intentions (Austin, 2010; Byars- Winston & Fouad, 2008). Contrary to the past studies, that examined career behavior and self-efficacy, the current study focused on influence of self-efficacy and career decision making among students. Conversely, empirical studies have indicated that self-efficacy is influential in career decision making. For example, Bounds (2013) examined the difference in career decision self-efficacy and academic self-concept between high- and low-achieving African American high school students. The study employed a non-experimental quantitative research design. With a sample size of 104 respondents, the researcher hypothesized that students with higher levels of academic achievement demonstrate higher levels of career decision self-efficacy. The research findings revealed insignificant association between career decision self-efficacy and academic achievement. The limitation of this study was that it made use of a small sample size of 104 respondents inadequate to support the hypothesized study. Nevertheless, the current study employed correlational research design with a large sample size of 364 respondents, representative enough for generalization to the target population.

A study conducted in Spain by Ortega, Olmedilla, Baranda & Gómez (2009) examined the relationship between the levels of self-efficacy of the players with in Basketball game. To evaluate the levels of self-efficacy, a questionnaire was administered to 187 players from the under-16 age category. The results revealed that players with high levels of self-efficacy presented higher values in different performance and participation variables than the players with low levels of self-efficacy. Whereas this study was on self-efficacy in basketball game as a specialty, the current study focused on career decision making as a broad spectrum in education.

Kolo, Munira & Nobaya (2017) examined the relationship between self-efficacy beliefs and students' academic performance among final year students' in Nigerian college of education. Questionnaire with 5-level Likert scale was used for data collection. A total of 339 respondents were sampled by means of stratified and simple random sampling techniques. Correlational research design was employed. The respondents were between the ages of 19 to 34 years old with mean age of 23.19. Data were analyzed using descriptive statistics and Pearson's correlation. The findings revealed that, 80.82% of the respondents had higher levels of academic self-efficacy in the College. The findings further established a statistically significant relationship between self-efficacy beliefs and students' academic performance ($r=0.342$, $p<0.01$). The study recommended need to expose students to self-efficacy intervention program in order to develop high level of confidence on academic performance. The current study targeted on students in secondary school with age range of 14-20 years.

Abesha (2012) conducted a study on academic self-efficacy, and achievement motivation on the academic achievement of university students in Ethiopia. Data on academic self-efficacy and achievement motivation were collected through self-report questionnaires from a sample of 2116 (763 females and 1353 males) undergraduate first year students selected with help of multi-stage cluster random sampling technique. A

one-way Multivariate Analysis of Variance (MANOVA) was used analyze the data. The results of MANOVA indicated that there were insignificant association between female and male students in academic self-efficacy and achievement motivation.

A study in Kenya by Odanga, Raburu & Aloka (2015) revealed that there was no statistically significant influence of gender on teachers' self-efficacy. The study employed the mixed method approach with a sample size of 327 teachers was drawn using stratified random sampling. Questionnaires and interview schedule were used to collect data. Besides, Ochieng (2015) carried a study in Nyakach Sub-county, Kenya to determine the relationship between self-efficacy and academic achievement among male and female secondary school students. The study employed descriptive research method with a sample size of 390 secondary school students. The results showed that male students had a higher self–efficacy than their female counterparts. Whereas, these studies employed descriptive statistically techniques to analyse the data, the current study made use of rigorous statistical analysis with hope to provide different results.

From the previous researches it is evident that self-efficacy has received considerable attention in the career literature over the years. However, much of the research has focused on college and university samples. Given that secondary school level is a stage where more emphasis is placed on students to begin formalizing and crystallizing post-secondary career plans, it was essential for the current research to examine the relationship between self-efficacy and career decision making with view triggering dynamic approach to career counseling in schools. Further quantitative research is needed on more diverse sampling populations that consist of secondary school students from various school backgrounds.

Methodology

2.1 Research Design

The study adopted the correlational research design and causal-comparative research design. Correlational research design enabled the researcher to investigate possibility of relationship between the study variables without manipulation of the same variables. The design allowed the researcher to determine the direction and strength of the relationship between the variables (Gupta, 2008). Causal-comparative research design was used to determine cause-and-effect relationships between the study variables and extend to which they exerted influence to one another (Fraenkel & Wallen, 2010). The research design further aided the researcher to collect data through use of questionnaire and interview guide from a large sample size.

2.2 Sampling Procedures and Sample Size

Purposive sampling, stratified random sampling, and simple random sampling techniques were used in selecting respondents from the target population. The researcher purposively selected form four students to participate in this study because being in the final year of secondary education they were believed to hold key information on career decision since they were found be more focused on what career they intended to pursue after graduating from secondary schools.

Stratified sampling was used to stratify schools according to sub-county administrative units and category of schools in order to attain homogeneity of strata. In this study a stratum consisted of school category namely, boys schools, girls schools and mixed schools while administrative units were the seven sub-counties that comprises Busia County. In each sub county schools were further stratified as boys' schools, girls' schools and mixed schools. After creating the strata, schools that participated in the study from each sub county were selected from each stratum by proportionate random sampling. At school level, mixed schools were also stratified into boys and girls. The respondents from each stratum were selected by proportionate random sampling. Stratified random sampling was found suitable for this study because it classified the study population into homogenous subgroups with similar characteristics for purpose of equitable representation of the sample study. According to Kerlinger (2004), an ideal sample should be between 10% and 30% of the target population. For this study, stratified random sampling technique was employed to select 20% (28) schools out of 138 public secondary schools from the three categories.

After selecting 28 schools through stratified random sampling, simple random sampling technique was employed to select a total of 364 students from the three categories of schools (boys, girls and mixed gender) to participate in the study. In schools that had more than one stream of form four classes, simple random sampling was used to select the stream to be included in the study. The lottery method of simple random sampling was used. This was done by assigning a number to each stream. A number was than written on each of a piece of paper. The papers were than folded and placed in a container then rotated. By blindfold, the researcher picked one of the pieces of paper from the container. The stream corresponding to the number picked was the one sampled for the study. Simple random sampling was further used to sample respondents from the selected stream in each sampled school. This was done by writing numbers on pieces of paper equivalent to the number of respondents. The papers were than folded and placed in a container then rotated. Each student was then guided to pick piece of paper from the container. The respondents who picked the first top numbers corresponding to the

number required to participate in the study were selected to take part in the study. The same procedure was used in mixed schools, however each gender was assigned separate container. Simple random sampling technique was used because it is free from sampling bias and it gave each member of the population an equal chance of being selected.

Sample Size was obtained using Krejcie and Morgan (1970) sample size determination Table. Since the total population of form four students was 6973 in the Busia County, it falls within Krejcie & Morgan population of 6001-7000 that recommends a sample size of 364.

In every school, simple random sampling technique was used to sample students from form four. In every 2 boys schools selected for this study, 38 form four students were randomly picked. This gave rise to 76 students picked from boy schools. In each of the first 4 school to be visited 20 girls were selected to participate in this study while the remaining 18 respondents were randomly picked from the last school to be visited giving rise to a total of 98 respondents from the girls school category. In 21 mixed category schools, a total of 106 boys against 84 girls were selected to participate in this study. This represented 20% of the population for each gender in mixed secondary schools as recommended by Kerlinger (2004). Six male respondents were picked from the first school on the random list while five male respondents were selected from each of the remainder 20 schools. On the other hand, 4 girls from each of the 21 mixed secondary schools were randomly selected to participate in the study. In total 106 boys and 84 girls were picked from mixed secondary schools in Busia County. The final total sample of respondents who participated in the study consisted of 364 (182 boys, 182 girls as shown in Table 1.

Table 1: Sample Size for the Respondents

Category	Gender Male	Female	Total student sample size
Boys school	76	-	76
Girls school	-	98	98
Mixed school	106	84	190
Total	182	182	364

Source: Field Data, 2016

2.3 Instrumentation

Instruments used to collect data in this study consisted of a questionnaire. The questionnaire was appropriate for collecting data because it allowed the researcher to collect data from a large sample size of respondents within a convenient time. It was also a convenient instrument for collection of data from a large sample of respondents since all respondents are asked the same questions, thus speed up the process of data analysis (Mouton & Prozesky, 2010). The questionnaire was administered after obtaining informed consent from the respondents. The questionnaire consisted of a modified Self-Efficacy Scale to examine the influence of students' self-efficacy on career decision-making while Career Decision Making Scale was used to measure career decision making among students. Both had a five point Likert- type scale.

2.4 Data Analysis

Data collected were coded and entered into the computer. Data cleaning was done to get rid of outliers and to ensure that all entries were correctly done. Statistical Packages for Social Sciences (SPSS) version 20.0 was used to analyze data. Spearman rank order correlation coefficient and Multinomial Logistic Regression (MLR) were employed to measure the influence of independent variables (self-efficacy on dependent variable (career decision making). Prior to use of MLR in data analysis, Spearman correlation was first used to establish the strength, direction and significance of the relationship between the independent and dependent variables. The use of Spearman's correlation coefficient was anchored on the assumption that data was on an ordinal scale, and did not meet normality of data distribution. MLR was also appropriate where the assumptions of regression analysis such as normality, homogeneity and linearity are violated (Garson, 2010). The MLR model also assigns a reference group to which all other levels of the dependent variable are compared. In this study, it helped in understanding the factors that increase or reduce the Relative Risk Ratio (RRR) of choosing a particular category of student career decision making rather than the referent category (strongly disagree).

The RRR of the alternatives were estimated simultaneously by comparing the choice of disagree, undecided, agree and strongly agree with strongly disagree which was the reference category. If the RRR is less than 1, then the relative risk of choosing the comparison category of student career decision making compared to strongly disagree is reduced controlling for other variables in the model. If the relative risk ratio is greater than 1, then the relative risk of choosing the comparison category of student career decision making compared to strongly disagree is increased controlling for other variables in the model. This helps in understanding the factors that increase or reduce RRR of choosing other alternatives (disagree, undecided and agree over the referent group (strongly disagree) or vice versa. This study adopted four models for the purpose of analyzing the

interaction effects of the three control variables (gender, age and type of school attended) in the study. The significant level was set at *P*= 0.05.

Results and Discussions

4.1 Hypothesis testing of Self-efficacy on career decision making among secondary school students

The Null hypothesis tested the influence of self-efficacy no career decision making among secondary school students. Two statistical tests namely spearman correlation coefficient (*r)* and Multinomial Logistic Regression (MLR) were employed to test the hypothesis. The Spearman's rank correlation coefficient was zero tested at α = 0.05. The results of Spearman's rank correlation coefficient analysis are presented in Table 2

Table 2: Correlation matrix between self-efficacy and Student career decision making

Spearman's rho		Self-efficacy	Career Decision
Self-efficacy	Correlation Coefficient	1.000	
	Sig. (2-tailed)	.	
	N	364	
Career Decision	Correlation Coefficient	-.236**	1.000
	Sig. (2-tailed)	.000	.
	N	364	364

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field data, 2016

The results in Table 2 showed that there was weak negative statistically significant correlation between self-efficacy and student career decision making (r_s = -0.236, p = 0.001). This study therefore rejected the null hypothesis. This result implied that there is inverse proportional relationship between student self-efficacy and career decision making such as students' self-efficacy increases, their career decision making decreases significantly in the opposite direction. The findings are in agreement with Adeyemo, (2007) who argued that students with high self-efficacy level perform better in academics than their counterparts with low self-efficacy. However, these results are contrary to Abesha (2012) who asserted that self-efficacy was insignificantly related to academic achievement. The difference could arise due to that factor that this study was conducted among students in post-secondary institutions in developed nations, with different educational background and exposure, unlike the current study whose sample study consisted of form four students in secondary schools in developing nation where the secondary school national examination is considered critical for future post-secondary career placement and education. The self-efficacy variable that significantly qualified to be included in the MLR model fit after analysis are indicated in Table 3.

Table 3: Self-efficacy Variables included in the Multinomial Logistic Regression Model Analysis

Variable Label	**Variable Name**
1b	How confident can you seek help from teachers on career decision making?
2b	How confident can you express your opinion when other classmates disagree with you on your career choice?
3	How confident do you succeed in cheering yourself up when an unpleasant event has happened regarding your career choice?
4	How confident can you study when there are other interesting things to do?
5	How confident do you succeed in becoming calm again when you are very scared of career option?
6b	How confident can you become friends with other students discussing your career?
9b	How confident can you work in harmony with your classmates regarding career decision?
10b	How confident can you control your feelings about career decision making?
15b	How confident can you tolerate fun from peers regarding your career decision?
17b	How confident do you succeed in suppressing unpleasant thoughts about your career decision?
18b	How confident can you proudly talk about your future career?
19b	How confident do you succeed in withstanding arguments with other students about your career choice?
20b	How confident do you overcome worries about things that might happen about your career decision?
Age 1	14-15 years
Age 2	16-17 years
Age 3	18-19 years
Male	Male students in either boys' or mixed schools
Female	female students in either girls' or mixed schools
SCT1	Boys schools
SCT2	Grls schools

Source: Field data, 2016

This study further employed MLR in modeling the data to find out the influence self-efficacy factor scores in career decision making among secondary school students in Busia County. The results for MLR are

presented in Table 4.

Table 4: Multinomial logistic regression analysis of the Self-efficacy and career decision making

Variable	Model 1	Model 2	Model 3	Model 4
		Disagree versus Strongly Disagree		
2b	0.520*(0.288- .940)	0.519*(0.286-0.941)	.505*(0.276-0.923)	.549#(0.299-1.006)
6b	1.344#(0.956-1.889)	1.339#(.951- 1.885)	1.380#(0.972-1.959)	1.336(0.933-1.913)
9b	0.588#(0.344-1.006)	.607#(.354- 1.042)	0.608#(0.354-1.045)	0.638(0.370-1.100)
19b	0.552*(0.311-0.874)	.520*(.307- .882)	0.510*(0.297-0.877)	0.543*(0.316-0.933)
Male		65656	0.506(0.222-1.156)	.480(0.114-2.015)
Age-1				
Age-2			1.124(0.357-3.538)	.750(0.228-2.468)
Age-3			.804(0.249-2.594)	.471(0.134-1.661)
SCT1				.254#(0.064-1.014)
SCT2				.335#(0.092-1.217)
		Undecided versus strongly Disagree		
2b	0.332***(0.179-0.614)	.328***(0.176-0.608)	.315***(0.168-0.591)	.340**(0.181-0.640)
6b			1.440#(0.956-2.167)	
9b	0.498*(0.279-0.890)	.515*(0.287-0.924)	.508*(0.283-0.913)	.532*(0.295-0.958)
10b	1.604#(0.945-2.724)	1.559(0.915-2.657)	1.616#(0.943-2.770)	1.561(0.911-2.674)
18b				.599#(0.340-1.057)
19b	0.471**(0.271-0.816)	0.469**(0.267-0.823)	.454**(0.255-0.807)	.486**(0.274-0.865)
Female		.678(0.260-1.771)	.690(0.262-1.816)	.550(0.112-2.697)
Age-1				
Age-2			.817(0.222-3.012)	.509(0.130-1.994)
Age-3			.513(0.136-1.937)	.279#(0.066-1.178)
SCT1				.189*(0.038-.943)
SCT2				.371(0.085-1.621)
		Agree vs strongly Disagree		
1b	0.366*(0.137-0.972)	0.355*(0.131-0.960)	.320*(0.111-.924	.249*(0.071-0.878)
2b	0.290*(0.107-0.788)	0.286*(0.105-0.778)	.249*(0.090-0.692)	.328*(0.111-0.966)
6b	8.597*(1.194-61.887)	8.647*(1.177-63.546)	8.057#(0.9870-65.777)	5.394(0.451-64.522)
15b	2.587#(0.856-7.815)	2.623#(0.864-7.961)	2.515(0.820-7.715)	2.474(0.756-8.091)
17b	2.461#(0.884-6.855)	2.477#(0.878-6.984)	2.419#(0.857-6.829)	2.537(0.813-7.918)
18b	0.357*(0.134-0.951)	.356*(0.133-0.952)	.398#(0.148-1.071)	.241*(0.066-.870)
20b	0.409#(0.142-1.173)	.401#(0.137-1.176)	.386(0.123-1.216)	.320#(0.089-1.154)
Female		.695(0.090-5.362)	.535(0.066-4.346)	.714(0.062-8.269)
Age-1				
Age-2				.023(0.000-2.127)
Age-3				
Pseudo R-square	0.305	0.313	0.331	0.356
		X^2 (60, N = 364) = 105.984, P=0.000		

Note: # p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001; 95% confidence interval in parentheses

Source: Field data, 2016

From Table 4, the coefficient of determination (R^2) indicate that variables in the first model accounted for 30.5% of variation, model two accounted for 31.3%, model three 33.1% and model four 35.6% variations for student career decision making in Busia County. These implied the remaining 69.5%, 68.7%, 66.9% and 64.4% respectively unexplained was largely due to variation in other variables outside the regression models. The overall likelihood ratio of the regression model was statistically significant X^2 (60, N = 364) = 105.984, P=0.001.

Model 1 fitted the association between the independent variable (self-efficacy factors) and dependent variable (career decision making). Models 2, 3 and 4 controlled for gender, age and type of school attended by students respectively. Choices for dependent variables were disagreeing, undecided or agree against strongly disagree (referent variable). Strongly agree disappeared because it insignificantly fitted in the models.

Disagree versus strongly Disagree

Model 1 in Table 4 points out those self-efficacy score factors 2b and 19b had some influence on career decision making. The Relative Risk Ratio (RRR) of choosing disagree over strongly disagree decreased by (1-0.520) 48% and by (1-0.552) 44.8% with $P<0.05$ respectively. Interestingly when gender was controlled for in model two the relative risk ratio of choosing disagree over strongly agree increased slightly from 48% to 48.1% for 2b while reduced from 44.8% to 48% for 19b but was still significant ($P<0.05$) in differentiating between respondents who chose disagree versus those who chose strongly disagree from disagree agree. The results in model 2 implied that gender had statistically significant influence in determining self-efficacy factors (2b & 19b) in relation to career decision making among students.

From model 3 when age of students was controlled, (2b) and 19b were still statistically significant

(P<0.05) with relative risk ratio increased from 48% to 49.5% and 44.8% to 49.0% respectively in differentiating between respondents who chose disagree over those who chose strongly disagree. It can be discerned from these results that age of the student played a statistically significant role in determining the influencing of self-efficacy in career decision making among students. From Model 4 which controlled for type of school attended by student, (2b) was statistically insignificantly (P>0.05) while 19b was statistically significant (P<0.05) with the odds ratio increased from 44.8% to 45.7% in differentiating between disagree and strongly disagree. This suggests that the type of school attended was critical in 2b and 19b determining influence of self-efficacy on career decision making among secondary school students.

Undecided versus Strongly Disagree.

Model 1 on undecided versus Strongly Disagree point out that 2b had some effect on career decision making. The relative risk ratio of choosing undecided over strongly disagree increased by 66.8% (p<. 01) with regard to career decision making. The results of the factor score 9b and 19b were significant (p<0.05) in distinguishing between respondents who chose undecided from respondents who chose strongly disagree in relation to their career decision making but likelihood ratio decreased to 50.2% and 52.9% (p <0.05). In model 2 when gender (female) was controlled for, 2b and 9b were still significant (P<0.05) in differentiating those who strongly disagree from undecided group. The relative risk ratio in career decision making for 2b increased from 66.8% to 67.2% and surprisingly reduced for 9b from 50.2% to 48.5%. Gender played a statistically insignificant (P>0.05) role in differentiating the respondents who were in the category of undecided from the respondents who were in the category of strongly disagree in relation to career decision.

In model 3 when age of students was controlled for, the relative risk ratio of choosing undecided over home strongly for 2b increased from 66.8% to 68.5%, (P<0.01). Similarly, 9b increased from 52.9% to 54.6%, (P<0.05). Surprisingly, 19b reduced from 50.2% to 49.2%, (P<0.01). Age of students played a statistically insignificant (P>0.05) role in differentiating the respondents who were in the category of undecided from the respondents who were in the category of strongly disagree in relation to career decision. As observed in model four, when type of school attended was controlled for, RRR of respondents choosing undecided over strongly disagree for 2b decreased from 66.8% to 66.0% (P<0.01) while in 9b reduced from 50.2% to 46.8% (P<0.05). However, the odds ratio for choose undecided as compared to strongly disagrees in 19b increased from 52.9% to 51.4% at p< 0.01. It may be suggested that the type of school attended played a statistically significant in career decision making.

Agree versus strongly Disagree

As observed in model 1, when type of school attended was controlled for, RRR of respondents choosing agree over strongly disagree decreased by 63.4%, 71.0% and 64.3%, (p <0.05) for 1b, 2b and 18b respectively while there was a drastic increase for 6b by 8.597 times (p <0.05), relative risk ratio of choosing disagree over strongly disagree increased by 63.4% to 64.5%, 2b increased from 71% to 71.4% 18b increased from 64.3% to 64.4% and 6b increased from 8.589times to 8.647 times in distinguishing between respondents who chose agree over the respondents who chose strongly disagree in relation to their career decision making. In model 2 when gender was controlled for, RRR self-efficacy factor scores; 1b, 2b, 6b and 18b were statistically significant (p <0.05) with relative risk ratio for 1b increased from 63.4% to 64.5%, 2b increased from 71% to 71.4% 18b increased from 64.3% to 64.4% and 6b increased from 8.589 times to 8.647 times in distinguishing between respondents who chose agree over the respondents who chose strongly disagree in relation to their career decision making.

In model 3 when we control for age of students, 1b and 2b, was still significant (P<0.05) in differentiating those who strongly disagree from agreeing group. The relative risk ratio in career decision increased from 63.4% to 68.0% and 71% to 75.1% respectively. Interestingly, 18b was insignificant (P>0.05) in distinguishing between agree and strongly disagree groups. These results suggest that age of students played a statistically insignificant (P>0.05) role in differentiating the respondents who were in the category of agree from the respondents who were in the category of strongly disagree in relation to career decision making. From model 4 RRR increased from 63.4% to 75.1% and from 64.3% to 75.9% and from 64.3% to 75.9% for 1b, 2b and 18 respectively. The results indicate that school type was statistically insignificant (P>0.05) in differentiating the respondents who were in the category of agree from the respondents who were in the category of strongly disagree in relation to career decision making.

This study was conducted to examine the influence of self-efficacy on career decision making among secondary school students. The main effects self-efficacy on career decision making were tested after controlling for gender, age and type of school attended by students. From the result, the null hypothesis was rejected.

These results are consistent with previous study by Kolo, Munira & Nobaya (2017) who examined the relationship between self –efficacy beliefs and students' academic performance among final year students' in

Nigerian college of education. Questionnaire with 5-level Likert scale was used for data collection. A total of 339 respondents were sampled by means of stratified and simple random sampling techniques. Correlational research design was employed. Data were analyzed using descriptive statistics and Pearson's Correlation. The findings revealed that, 80.82% of the respondents had higher levels of academic self-efficacy in the College. The findings further established a statistically significant relationship between self-efficacy beliefs and students' academic performance ($r=0.342$, $p<0.01$). The findings also concur with study by Moustafa & Sudhir (2013) in Egypt on the role of self-efficacy as a mediator variable between perceived academic climate and academic performance. The participants in the study consist of 272 undergraduate students. Data collected were analyzed using both descriptive and inferential statistics. The preliminary results indicated significant positive relationship between self-efficacy and academic performance ($\beta =0.586$, $p < 0.05$). However, these findings are contrary to Abesha (2012) who found out that self-efficacy was not significantly related to academic achievement. The difference could be that this study was conducted among students in post-secondary institutions in developed nations unlike the current study whose sample study consisted of form four students in secondary schools in a developing nation.

Conclusions and Recommendations

5.1 Conclusions

One of the main findings of this study is that self-efficacy influence career decision making. This has been shown by a statistically significant relationship between self-efficacy and career decision making when spearman correlation was run and also when MLR was employed. The controller variable (gender, age and type of school attended by students) also affect career decision making either negatively or positively.

5.2 Recommendations

These findings suggest that self-efficacy, gender age and type of school are critical constructs in career decision making among secondary school students in Busia County. Therefore measure could be taken to improve on self-efficacy strategies that may bear positive impact on career decision making among students in secondary schools.

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