# Relationship Between Career Interest and Career Decision-Making of Grade 12 Learners in Township Secondary Schools in South Africa

By Oluwakemi B Ajayi\*, Moeniera Moosa\* & Peter JO Aloka°

This study examined the relationship between career interests and career decision-making of grade 12 learners in township secondary schools in South Africa. The correlational survey research design was adopted. The sample size comprised 204 grade 12 learners selected from six township secondary schools. The career interest and career decision-making scales were used to collect data from the learners. The inferential statistics such as Pearson correlation, Analysis of Variance (ANOVA), and regression analysis were used to analyse data. The results indicated that the correlation between enterprising career interest and career decision-making was established to be the strongest (r=0.535, n=204, p<0.001), followed by the relationship between adventurous career interest and career decision-making (r=0.465, n=204, p<0.001), but operational career interest had the least relationship with career decision-making, r (204)=0.284, p<0.001. The study concludes that the career interest model, F (9, 194)=17.403, p<0.01, is a significant predictor of career decision-making among the 12th grade learners. The study recommends that school psychologists should do early assessment of learners to ascertain their career interests.

*Keywords:* Career interest, career decision-making, secondary school, grade 12 learners, township schools

### Introduction

Career is a lifetime process that entails decision making that is linked to an individual's general experience. A career is a series of connected vocational knowledge and activities that are extend over an individual's life (Dobson, Gardner, Mertz, & Gore, 2014). Kaur (2016) describes career decision making as a process that entails individual's choice when choosing a career. Career decision-making is a complicated and delicate process that individuals experience in life. A prudent career decision making could be acknowledged as a decision that took place after a thorough analysis of all career preferences and personal capabilities necessary to function in a career of choice (Kaur, 2016). Making a career decision has recently developed into an extremely complex science; bearing in mind that many aspects in life affect this. However, choosing the correct career is essential in leading a satisfying life, and accomplish outstanding vocational output that sets the platform for organizational growth and development (Sovet et al., 2018). To this end, career interest is the process through which individuals investigate, explore and examine

-

<sup>\*</sup>PhD Student, University of the Witwatersrand, South Africa.

<sup>&</sup>lt;sup>±</sup>Senior Lecturer, Wits School of Education, University of the Witwatersrand, South Africa.

Senior Lecturer, Wits School of Education, University of the Witwatersrand, South Africa.

their interest prior to making a career decision. However, choosing the right career is a challenge for most people because converting personal interest into a practicable career could be overwhelming sometimes. Moreover, career interest is a person's inclination regarding vocational activities and environments. Nevertheless, the understanding of one's capabilities, skills, beliefs, personality and interests could help when making career decision. Exploring a probable career requires knowledge of what a person takes pleasure in doing, what they are good at and what serves as an inspiration to a person in their environment as a key factor for career motivation (Nyamwange, 2016). Therefore, it is crucial for individuals to be conscious of aspects that affect, that motivate such a significant decision from a position of adequate understanding (Nyamwange, 2016).

Recognizing one's career interest assists individuals to make informed and a more logical decision regarding career. By an individual understanding their career interests and choosing a career in this regard means that they are able to identify their strength and ability to pursue a vocation that complement their ability and supporting it with morals and principles (Bartlett, MCllveen, & Perera, 2015). Since an individual's career interest could transform eventually, it is therefore essential to identify vocational information regularly. Given that individuals preferences concerning career and vocational duties differ, based on individual interaction and integration in the environment. Career interest could take diverse forms and shapes. The knowledge of various forms of career interest could assist learners in identifying their career interest as they progress in their studies. In this study, the different areas and forms of career interest that was examined include artistic, biotic, conventional, expressive, investigative, operational, social, enterprising and adventurous career interests. In South Africa, at the time of apartheid, education was separated across racial lines to maintain white dominance (Mahlomaholo, 2012). This uneven system of education also presented the discrepancy in the provision of career guidance at schools (Buthelezi, Alexander, & Seabi, 2009) and to the world of work where jobs were set aside for whites. The function of career counselor in schools was controlled by the apartheid regulations, and the counselors need to get acquainted to the established rules and regulations, in order to provide suitable career guidance to learners as stipulated by the law (Buthelezi, Alexander, & Seabi, 2009).

It seems that learners in affluent areas of South Africa had access to career guidance compare to learners in township schools, with little or no access to career information services (Maree, 2013). Mudhovozi and Chireshe (2017) assert that career decision making among learners in South Africa is dependent on the category of school attended, parent level of education and parental income. The study further reported that schools in affluent community present learners with more career opportunities and options that are relevant to demands in the job market while schools in disadvantaged communities associated career decisions to the traditional careers, such as, nursing and teaching. In view of the above, most learners seek help from people around them, such as, parents, teachers, career officers or career counselor, who offers career guidance to learners in their professional capacity (Buthelezi, Alexander, & Seabi, 2009). Unfortunately, a number of learners in township secondary schools do not have access to the

professional service of a career guidance and counseling, which could assist them to explore their career interest before making a career decision that could favour their future (Buthelezi, Alexander, & Seabi, 2009). Plausibly, the importance of career decision-making could be emphasized by the direct influence that a good career choice has on an individual's standard of living and status in the society. Therefore, it is imperative to connect one's interest to their choice of career because deciding on a career will possibly influence individual all through their lives. Willner, Gati, and Guan (2015) concur that life is meaningfully expressed with lucidity and precision in individual's career. Therefore, suitable career decisionmaking could be effective when the individual is equipped with adequate information and proper career guidance. The world of work is transforming on a daily basis, which requires an individual to develop their skills as part of the requirement for an area of interest and specialization in the work place, which makes it more intimidating for the individual to decide on a certain career. Consequently, the present study examined the relationship between career interest and career decision making of grade 12 learners in township secondary schools in South Africa.

#### **Theoretical Framework**

This study was informed by the Holland's theory of career choice. Holland's (1959) theory of career choice asserts that individuals prefer to choose vocations that give them the opportunity to be around others and relate with people of like minds. Individuals look for environments that support their skills and knowledge, where they can express personal principles and values, while engaging in pleasurable activities to solve problems. The theory proposes that individual's behavior is a result of their personality and environment in which they live, which inform their values and interest through personal experiences and career choices (Holland, 1992). Therefore, Holland classified human personality into six different types: realistic, investigative, artistic, social, enterprising and conventional, and clarifies how each personality type is appropriate for specific interest and work environment (Sharf, 2013). This theory informed the study because it argues that each individual has own unique personality which influence their tendency to choose certain careers. Therefore, the theory was relevant to this study because at one time or another, individuals are faced with the challenge of work-related decision and most individuals are confronted with this issue especially when they are in secondary school and are required to choose their subject combinations at grade 10 level, which determines the career that they want to pursue in the future.

#### **Literature Review**

Research studies have indicated that some of the factors accountable for an individual's career decision-making include personality, career interests, role models, ethnic background, level of education and accessibility to essential

resources such as, finances and information (Vosh & Schauble, 2014; Enache & Matei, 2017). Moreover, Etiubon, Ugwu, and Ado (2018) assert that many individuals are influenced greatly by their parent's vocations, or the career that suits their educational achievements, still, professions that present high income and remuneration are influencing other people. However, there are individuals, who pursue careers that go with their interest and passion irrespective of the financial benefits, for the purpose, that everyday life revolves around one's career as a vital component to determine an individual's every day practice. In reality, a career influences every aspect of one's whole being. However, there are distinctions, as an individual's differs. Generally, influences on career decision-making mostly differ from one person to another, according to an individual's environment and interest. This is probably as a result of experience and support attainable in the community (Etiubon, Ugwu, & Ado 2018). Similarly, Curran, (2019) study reported that career interest is a significant predictor of the decision-making process among students and that most students highlighted their preference of keeping their personal interests and hobbies separate to their future careers.

Brown and Crace (1996) affirm that high priority values are more critical to decision making than low-priority values, and if values are not fully crystallized or the outcomes are unclear, difficulties arise and the choices made are tentative. Sagiv (2002) reported that enterprising interests were positively correlated with power and achievement and negatively correlated with universalism. Sagiv (2002) also found that enterprising interests were positively correlated with power, whereas social interests were negatively correlated with power. The study suggested that social and enterprising interests reflect similar abilities and skills but differ in the underlying motivation. In another study, Smith and Campbell (2009) reported that conventional and realistic interest types had similar value profiles, with the values of support and working conditions being the two highest values; investigative and artistic interest types had similar value profiles, with the values of achievement and independence being the two highest values; and social and enterprising interest types had similar value profiles, with relatively flat value profiles, except that the social interest type had a solitary peak on the relationships value. Smith and Campbell also found substantial canonical correlations between four of the six linear composites of interests and values. Akosah-Twumasi et al., (2018) reported that personal interest was highlighted as the major factor that influenced career choice in individualistic settings, and the youth were more independent in their career decision making and that most career decisions of students are based on their personal interests. Similarly, Bennett, Knight, Bawa and Dockery (2021) reported that students' career decision making in science oriented careers is guided by their interest in the subject.

In another study, Kazi, Nimra, and Nawaz (2017), revealed that interest in the subject is the most dominant factor influencing career choices of business students and that interest in the subject is also related and has some linkage with personality type. A study by Atitsogbe et al., (2018) reported that Swiss students are more influenced by personal interests in career decision making and that, interest differentiation was significantly associated with self-identity. Similarly, Su, (2018) study in Burkina Faso reported that vocational interest information focuses on

individuals' traits and their match to particular careers, rather than seeing interest as something that can grow and develop with appropriate support. Moreover, Gallup (2019) study reported that graduates who experienced a sense of purpose in their work were more likely to align their work with their interests, values, and strengths and participate in a programme or class that helped them think about pursuing meaningful work. Most recently, Abe and Chikoko (2020) study concluded that career interest is important in the decision-making process of students and has implication for policy decisions. In another study, Siddiky and Akter (2021) reported that the students' career choice and career preferences are determined by their personal interests to a great extent. Similarly, Anovunga, Nyelbi, and Akpadago (2021) reported that career interest of an individual greatly affects their preferred vocational choice or development. Moreover, Jemini-Gashi and Kadriu (2022) reported that personal interest for a certain academic field was among the facilitating and determining factors for them during their process of career decision-making. In south Africa, Chinyamurindi, et al., (2021) study showed that learners' career decisions were highly influenced by academic experiences, personal interests and self-efficacy. Finally, Quinlan and Renninger (2022) reported that most students who were studying science in university had a well-developed interest that had motivated their choice of programme, and their subject interest and career decidedness were linked. The study further reported that students' interest in their subject was a significant predictor of career decidedness, mediated by students' desire to pursue that interest in their career.

From the reviewed studies, it is evident that even though studies have been carried out with objectives related to the current study, a research gap still exist because most of these studies examined career interest and basic values, but few were on career decision making. In South Africa, prior to career decision-making, learners are presented with the opportunity to choose their subjects combination in grade 10, according to their performance from their previous grade. However, learners in township schools do not have the capability to discern the subjects that could lead them to their career interests and choices. Consequently, the choices that learners make are based on their previous performance and their view of the perfect profession without considering their interest, as a result of a lack of adequate information and support in the form of career guidance and counseling. Consequently, the current study examined the relationship between career interest and career decision-making.

# The Present Study

This study examined the relationship between career interests and career decision-making of Grade 12 learners in township secondary schools in South Africa.

# **Research Hypotheses**

The following null hypotheses were tested:

Ho1: There is no significant relationship between career interest and career decision-making of grade 12 learners in township secondary schools

Ho2: The career interest model is not adequate predictor of career decision-making among the 12<sup>th</sup> grade learners in township secondary schools

## **Methods**

# Research Design

The study was located within the quantitative research paradigm and specifically, the correlational survey research design was adopted. This is a research design that involves observing two variables in order to establish a statistically corresponding relationship between them. The aim of correlational research is to identify variables that have some sort of relationship do the extent that a change in one creates some change in the other (Creswell, 2015). In this design, the purpose is to determine the relationship between the construct under investigation and takes a broad view of the obtained results of a chosen sample from the total population (Creswell & Plano Clark, 2018). Furthermore, the selected sample was similar to the population in a way necessary for the subject under investigation.

# **Study Participants**

The target population for this study was 720 learner participants, with 120 learner participants from each of the six selected township secondary schools. The stratified random sampling technique was employed to select 204 grade 12 learners as the sample size for this study. This method was important, in order to deal with the disparity that occurred in the number of participants selected from each school. In addition, the stratified random sampling technique assisted the researcher to obtain an impartial number of participants regarding their gender, to ensure equal representation of each school in this study. Consequently, the established sample size of 204 learners was considered to be appropriate according to the recommendation by Krejcie and Morgan (1970).

#### **Research Tools**

The career interest and the career decision-making scales were used to gather the requisite data for this study. The career interest scale had 9 factors on it identified as artistic, biotic, conventional, expressive, investigative, operational, social, enterprising and adventurous. Each of the 9 interest sub-scales had 5 items. Some items in the operational career interest sub-scale include "i maintain a computer network", and "I shape metal or plastic with tools". Some items in the

conventional career interest sub-scale include "I regularly make neat or update an address book", and "I check paperwork or products for errors or flaw". The response scale for career interest scale was a 5-point Likert scale for the respondents to indicate the extent to which they agree or disagree with the statements such as; Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). The career decision-making scale had 18 items some of which include; "I have decided on a career and feel comfortable with it", "I also know how to go about implementing my choice". The response format was on a four point Likert scale such as, "exactly like me" (4); "very much like me" (3); "only slightly like me" (2) and "not at all like me" (1). The internal validity of the questionnaires was ensured by using the Kaiser-Meyer Olkin (KMO) measure adequacy and Bartlett's Test of Sphericity. The internal validity results indicated that all sub-scales in the career interest and the career decision-making scales have KMO values above 0.5 and Bartlett's tests for Sphericity are highly significant (p<0.05), implying adequate internal validity. Moreover, Cronbach's alpha was used to ascertain the reliability of the questionnaires and the results are presented in Table 1.

*Table 1.* Internal Consistency: Cronbach's Alpha Results for the Questionnaires

Scales	No. of Items	Cronbach's alpha	Decision	
Career decision making scale	18	0.842	Excellent	
Carer interest scale				
Artistic career interest	5	0.793	Good	
Biotic career interest	5	0.755	Acceptable	
<ul> <li>Conventional career interest</li> </ul>	5	0.762	Good	
<ul> <li>Expressive career interest</li> </ul>	5	0.741	Acceptable	
<ul> <li>Investigative career interest</li> </ul>	5	0.816	Excellent	
Operational career interest	5	0.835	Excellent	
Social career interest	5	0.821	Excellent	
Enterprising career interest	5	0.822	Excellent	
Adventurous career interest	5	0.789	Good	

The reliability results in Table 1 indicate that, on career interest scale, all the sub-scales had their Cronbach's values within the appropriate range, with the least being expressive career interest at alpha=0.741 and the highest being career operational at 0.835. Likewise, career decision-making sub- scale had excellent internal consistent reliability, as interpreted from Cronbach's alpha value of 0.842. The reliability co-efficient for the two scales were considered to be appropriate because according to Madan and Kensinger (2017), the coefficients of scales that yield above 0.7, are considered acceptable, and coefficients yield above 0.8, are considered very good.

## **Procedure**

In a research process, sufficient care should be ensured when conducting research that involves human beings, by making sure that, the participants are safe and that injury and harm are avoided (Polit & Beck, 2014). First, ethical approval

was obtained from the University of the Witwatersrand Human Research Ethics Committee. Thereafter, to access the sampled secondary schools, the researcher obtained ethical clearance from the Gauteng Department of Education (GDE). Additionally, permission to access schools was obtained from the selected schools' principals. Confidentiality, anonymity, voluntary participation, and freedom to withdraw from participation were strictly adhered to. Consequently, the researcher observed all COVID-19 protocols; the questionnaires were delivered to the six schools and handed over to life orientation teachers' in-charge of grade 12 learners, who assisted in administering the instrument. The questionnaire completion procedure and necessary information for guiding the learners in completing the questionnaire appropriately was provided to the teachers by a telephonic conversation. Furthermore, the completion process was monitored telephonically to eradicate ambiguity; the completed questionnaires were collected from the schools with COVID-19 protocols duly observed. Each learner participant took an average of 30 minutes to fill in the questionnaires after which they were collected and handed back to the researchers.

# **Data Analysis**

Responses from the administered questionnaires were converted from the raw data into a structure after which the data analysis began. The data was then scored and assigned numerical values to each response by creating special categories (Miles, Huberman, & Saldana, 2014). The researchers employed descriptive statistics such as frequencies and percentages to analyse data, which are applied for labeling, summarizing and creating sense of a specific set of data (Creswell & Plano Clark, 2018). Recording and collating was performed using the statistical package for the social sciences (SPSS) computer program version 24. The null hypotheses were tested at the 0.05 level of significance. Inferential statistics such as Pearson product moment correlation were used to analyze the relationship between career interests and career decision-making. Moreover, multiple regression analysis was used to analyse the associations between two or more independent variables and structural equation modeling was used to analyze the structural relationship between variables.

#### Results

# Relationship Between Career Interest and Career Decision-Making

This study sought to ascertain the relationship between career interest and career decision-making. Career interest was operationalized using nine sub-themes which included artistic, biotic, conventional, expressive, investigative, operational, social, enterprising and adventurous. In testing the hypothesis that, "there is no significant relationship between career interests and career decision-making of grade 12 learners in township secondary schools", the data was analysed using Pearson product moment correlation and regression analysis. The career interest

was the predictor variable while career decision-making was the response variable. First, the correlation between the aspects of career interests and career decision making was calculated to determine the direction and magnitude of the linear relationships, as shown in Table 2.

Table 2. Correlations Between Career Interest and Career Decision-Making

Career Interest	N	Pearson Correlation		
		Career Decision-Making		
Artistic career interest	204	0.412**		
Biotic career interest	204	0.296**		
Conventional career interest	204	0.342**		
Expressive career interest	204	0.353**		
Investigative career interest	204	0.303**		
Operational career interest	204	0.284**		
Social career interest	204	0.428**		
Enterprising career interest	204	0.535**		
Adventurous career interest	204	0.465**		

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

As presented in Table 2, a Pearson product-moment correlation coefficient which was computed to assess the relationship between the variables indicate that there is generally a direct and positive relationship between career interest and career decision-making among the 12<sup>th</sup> grade learners. However, the magnitude of the relationships varied among the aspects of career interest. For instance, the correlation between enterprising career interest and career decision-making was established to be the strongest (r=0.535, n=204, p<0.001), followed by the relationship between adventurous career interest and career decision-making (r=0.465, n=204, p<0.001), but operational career interest had the least relationship with career decision-making, r(204)=0.284, p<0.001). Equally, all other aspects of career interests had statistically significant positive relationship with career decision-making among the 12<sup>th</sup> grade learners. Overall, there was a plausible positive correlation between career interests and decision-making on career choice. This suggests that generally a higher career interest is associated to a faster decision making on career choice among grade 12 learners. Further, model summary and regression equations were generated where the predictor variables were the individual aspects of career interest and dependent variable being decision making on career choice. Table 3 shows summary of regression analysis results.

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 3. Regression Results on Career Interests and Career Decision-Making

Career Interests	В	Std.	Beta	t	Sig.	Part
(Constant)	1.745	0.088		19.868	0.001	
Artistic career interest	0.119	0.042	0.17	2.805	0.006	0.07
Biotic career interest	0.058	0.045	0.077	1.302	0.195	0.065
Conventional career interest	0.052	0.043	0.078	1.224	0.222	0.075
Expressive career interest	0.054	0.039	0.084	1.397	0.164	0.056
Investigative career interest	0.04	0.038	0.064	1.05	0.295	-0.004
Operational career interest	-0.003	0.039	-0.005	-0.082	0.935	0.103
Social career interest	0.077	0.04	0.123	1.927	0.045	0.195
Enterprising career interest	0.146	0.04	0.251	3.659	0.003	0.168
Adjusted R <sup>2</sup>	0.421					
F-ratio	17.403**	df1=9 df2=194				

As indicated in Table 3, using the enter method, it was found out that the model was able to account for 42.1% (Adjusted R Square=0.421) of the variance in career decision-making among the 12<sup>th</sup> grade learners. To assess the statistical significance of the result, a multiple regression Analysis of Variance (ANOVA) results was interpreted with the null hypothesis being that multiple R in the population equals 0. The results of the study show that the model reached statistical significance, F(9, 194) = 17.403, p < 0.01, suggesting that the career interest model is a significant predictor of career decision-making among the 12<sup>th</sup> grade learners. However, exploration of Beta values indicates that the individual aspects of career interest varied in their level of influence on career decision-making. For instance, of these eight variables, enterprising career interest makes the largest unique contribution (beta=0.251). This suggests that when a learner's enterprising career interest rise by one standard deviation, the learners' ability to make career decision improves by 0.251 standard deviations. Equally, rise in the level of social career interest by one standard deviation, would results into improvement of career decision-making by .125 (beta=-0.125) standard deviations.

The other potentially useful piece of information in this regression results is the part correlation coefficients, which gives an indication of the contribution of each of the aspect of career interest to the total R squared. For instance, the results showed that artistic career interest has a part correlation coefficient of 0.150, biotic career interest of 0.070, conventional career interest of 0.065, expressive career interest of 0.075, investigative career interest of .056, operational career interest of -0.004, social career interest of 0.103, enterprising career interest of 0.195 and adventurous career interest had part correlation of 0.168. Squaring these values indicates how much of the total variance in the career decision-making is uniquely explained by the variable and how much R squared would drop if it wasn't included in the model. For example, enterprising career interest which has the largest contribution to the model uniquely explains 3.8% and adventurous career interest uniquely explains 2.8% of the variance in career decision-making. However, operational career interest only accounted for a negligible amount (<0.001%) of the variance in career decision-making. Its noteworthy that total R Squared value for the model (0.421 or 42.1 per cent explained variance) was not equal to all the squared part correlation values added up because overlaps or shared variance were removed.

In addition to these findings, the regression equations were extracted to help predict the influence of career interest on career decision-making among the 12<sup>th</sup> grade learners. The study was guided by a general regression prediction model as follows:

Career Decision-Making =  $\beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \epsilon$ 

Where;  $X_1$ =Artistic,  $X_2$ =Biotic,  $X_3$ =Conventional,  $X_4$ =Expressive,  $X_5$ =Investigative,  $X_6$ =Operational,  $X_7$ =Social,  $X_8$ =Enterprising and  $X_9$ =Adventurous and  $\varepsilon$  being error term. Thus, the predicated optimum level of career decision making among  $12^{th}$  grade learners in secondary school was represented by:

Career Decision-Making=1.745 units + 0.119  $X_1$  units + 0.058  $X_2$  units + 0.052  $X_3$  units + 0.054  $X_4$  units + 0.040  $X_5$  units - 0.003  $X_6$  units + 0.077  $X_7$  units + 0.146  $X_8$  units + 0.121  $X_9$  units + error

From the model, the coefficients indicate how much career decision making changes with a change of an aspect of career interest when all other variables are held constant. However, the results of the study show that whereas some of the aspects of career interest had significant change on career decision-making when increased by one unit, others did not cause any significant change. For instance, those with significant unstandardized coefficient values included artistic career interest (B=0.119; t=2.805, p=0.006), social career interest (B=0.077; t=1.927, p=0.045) and enterprising career interest (B=0.146; t=3.659, p=0.003), implying that change on career interest by one unit causes a significant increase on career decision-making. On the other hand, the coefficients values for biotic career interest (B=0.058; t=1.302, p=0.195), conventional career interest (B=0.052; t=1.224, t=0.058)p=0.222), expressive career interest (B=0.054; t=1.397, p=0.164), investigative career interest (B=0.04; t=0.1.05, p=0.295) and operational career interest (B=-0.003; t=-0.082, p=0.935) were not significant, suggesting that change in them by unit would not make any significant change in career decision making regression model. However, the model was statistically significant F (9, 194)=17.403, p<0.01,  $R^2$  Adjusted=0.421. This indicates that the model is a significant predictor of career decision-making among the 12th grade learners.

Using a multiple regression analysis, the investigated null hypothesis was that  $H_0$ :  $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = 0$  and the corresponding alternative hypothesis being  $H_1$ : at least one  $\beta_{i \neq 0}$ . If the null hypothesis is true, then from  $E(Y) = \beta_0 + \beta_{i=1-9}$   $X_{i=1-9}$  the population mean of Y is  $\beta_i$  for every X value, which indicates that X (career interest) has no influence on Y (career decision-making) and the alternative being that career interest has statistical significant influence on career decision-making. Based on the findings of the regression equation in Table 3, the null hypothesis which stated that, there is no significant relationship between career interest and career decision-making of grade 12 learners in Township secondary

schools, was rejected. Hence, the alternative hypothesis which states that career interest has significant effect on career decision-making among 12<sup>th</sup> grade learners was adopted. It was therefore concluded that career interest has a significant positive effect on career decision-making among the 12<sup>th</sup> grade learners in secondary schools.

#### **Discussion**

This study sought to ascertain the relationship between career interest and career decision-making. The study indicated that, the correlation between enterprising career interest and career decision-making was established to be the strongest, followed by the relationship between adventurous career interest and career decision-making, but operational career interest had the least relationship with career decision-making. Equally, all other aspects of career interests had statistically significant positive relationship with career decision-making among the 12<sup>th</sup> grade learners. In overall, there was a plausible positive correlation between career interests and decision-making on career choice. This suggests that generally a higher career interest is associated to a faster decision making on career choice, and that learners with artistic career interest, social career interest and enterprising career interest, reported significant effect in their career decision-making. This finding supports Holland's (1959) theoretical assertion that individuals prefer to choose vocations that give them the opportunity to be around others and relate with people of like minds. Individuals look for environments that support their skills and knowledge, where they can express personal principles and values, while engaging in pleasurable activities to solve problems. Similarly, Holland (1992) also argue that individual's behavior is a result of their personality and environment in which they live, which inform their values and interest through personal experiences and career choices. Moreover, Willner, Gati, and Guan (2015) concur that, suitable career decision-making could be effective when the individual is equipped with adequate information and proper career guidance. Similarly, Enache and Matei, (2017) also indicated that some of the factors accountable for an individual's career decision-making include career interests. In agreement, Abe and Chikoko (2020) concluded that career interest is important in the decisionmaking process of students and has implication for policy decisions. Similarly, Siddiky and Akter (2021) reported that the students' career choice and career preferences are determined by their personal interests to a great extent. In addition, Anovunga, N-yelbi, and Akpadago (2021) reported that career interest of an individual greatly affects their preferred vocational choice or development. Moreover, Jemini-Gashi and Kadriu (2022) reported that personal interest for a certain academic field was among the facilitating and determining factors for them during their process of career decision-making. In agreement, Chinyamurindi, et al., (2021) showed that learners' career decisions were highly influenced by academic experiences, personal interests and self-efficacy.

The results of the study also showed that the career interest model is a significant predictor of career decision-making among the 12<sup>th</sup> grade learners, and

that enterprising career interest which has the largest contribution to the model and adventurous career interest accounted for a small variance in career decisionmaking. However, operational career interest only accounted for a negligible amount of the variance in career decision-making. This finding supports Etiubon, et al., (2018) which assert that there are individuals, who pursue careers that go with their interest and passion irrespective of the financial benefits, for the purpose, that everyday life revolves around one's career as a vital component to determine an individual's every day practice. Etiubon, et al., (2018) further argues that, influences on career decision-making mostly differ from one person to another, according to an individual's environment and interest. This is probably as a result of experience and support attainable in the community. Moreover, Brown and Crace (1996) affirm that high priority values are more critical to decision making than low-priority values and that, if values are not fully crystallized or the outcomes are unclear, difficulties will arise and the choices made will be tentative (choosing liberal arts major). In agreement, Sagiv (2002) reported that enterprising interests were positively correlated with power and achievement and negatively correlated with universalism. the study also found that enterprising interests were positively correlated with power, whereas social interests were negatively correlated with power. In addition, Smith and Campbell (2009) reported that conventional and realistic interest types had similar value profiles, and that there are substantial canonical correlations between four of the six linear composites of interests and values. Moreover, Gallup (2019) reported that students who experienced a sense of purpose in their work were more likely to align their work with their interests, values, and strengths and participate in a programme or class that helped them think about pursuing meaningful work. Finally, Quinlan and Renninger (2022) reported that students' interest in their subject was a significant predictor of career decidedness, mediated by students' desire to pursue that interest in their career.

# **Conclusions**

The study concludes that the career interest model is a significant predictor of career decision-making among the 12th grade learners. Moreover, enterprising career interest had the largest contribution but the operational career interest only accounted for a negligible amount of the variance in career decision-making. The learners with artistic career interest, social career interest and enterprising career interest, also reported significant effect in their career decision-making. Overall, the career interest model accounted for 42.1% of career decision making among learners, which means that career decisions made by learners is greatly influenced by career interests that are exhibited by learners. Therefore, it is concluded that career interest plays a major role in influencing carer decisions among learners in secondary schools. This indicates that, career interest being an internal factor among learners, it implies that their personality could be possible influencers because the two are closely interrelated.

# **Implications**

The findings have implications for teachers, school principals, school psychologists and parents. This study contributes to significant developments in the education sector and may assist in facilitating learners' career opportunities and support learners towards achieving career success after secondary schools. The study recommends that school psychologists should do early assessment of learners to ascertain their career interests because it informs best career decision making practices among learners. This is important because early identification of career interests would lead to the most appropriate career decisions among learners and this would eventually minimize the shift from one career to another as a result of mismatch between an individual and career. The study also recommends that teacher counsellors should utilize the career interest results to provide guidance on career decision making among learners. This would ensure that learners are guided on to choosing carers that are in line with their personal interests. Moreover, the study recommends that school psychologists should adopt therapy strategies in career decision making for learners which has the steps such as: identification, awareness, and reframing. This would assist learners with dysfunctional career decision making styles. Further studies could examine home and school related factors influencing career decision making among learners.

#### Limitations

The study has one limitation in that it was quantitative in nature and this left out the in-depth qualitative results on career interests and carer decision making among learners. A qualitative approach could be adopted to explore the interplay between the variables. Moreover, the research was only carried out in one district in south Africa, and a survey covering schools within Gauteng province would bring a bigger picture of career decisions among learners.

#### References

- Abe, E. N., & Chikoko, V. (2020). Exploring the Factors that Influence the Career Decision of STEM Students at a University in South Africa. *International Journal of STEM Education*, 7(Dec), 60.
- Akosah-Twumasi, P., Emeto, T. I., Lindsay, D., Tsey, K., & Malau-Aduli, B. S. (2018) A Systematic Review of Factors that Influence Youths Career Choices—The Role of Culture. *Frontiers in Education*, *3*(Jul), 58.
- Anovunga, A. A., N-yelbi, J., & Akpadago, J. (2021). Career Decision Making Among Young Adults in Ghanaian Secondary Schools Using Super's Career Choice Theory as a Lens. *International Journal of Psychology and Counselling*, 13(3), 41-51.
- Atitsogbe, K. A., Moumoula, I. A., Rochat, S., Antonietti, J. P., & Rossier, J. (2018). Vocational Interests and Career Indecision in Switzerland and Burkina Faso: Cross-Cultural Similarities and Differences. *Journal of Vocational Behavior*, 107(Aug), 126-140.
- Bartlett, C., MCllveen, P., & Perera, H. (2015). A Short Form of Career Interest Test. *Journal of Career Assessment*, *5*(3), 25-40.

- Bennett, D., Knight, E., Bawa, S., & Dockery, A.M. (2021). Understanding the Career Decision Making of University Students Enrolled in STEM Disciplines. *Australian Journal of Career Development*, 30(2), 95-105.
- Brown, D., & Crace, R. K. (1996). Values in Role Choices and Outcomes: A Conceptual Model. *The Career Development Quarterly*, 44(3), 211–223.
- Buthelezi, T., Alexander, D. & Seabi, J. (2009). Adolescents' Perceived Career Challenges and Needs in a Disadvantaged Context in South Africa from a Social Cognitive Career Theoretical Perspective. *South African Journal of Higher Education*, 23(3), 505-520.
- Chinyamurindi, W. T., Hlatywayo, C. K., Mhlanga, T. S., Marange, C. S., & Chikungwa-Everson, T. (2021). Career Decision-making Amongst High School Learners: A Descriptive-exploratory Study from South Africa. *Cypriot Journal of Educational Sciences*, 16(1), 129-147.
- Creswell, J. (2015). Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research. New York Pearson.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research*. 3rd Edition. Thousand Oaks, CA: SAGE Publications.
- Curran, D. (2019). An Investigation of the Relevance of Using a Career Interest Instrument with Transition Year Students in the Decision-making Process for Future Career Exploration. Unpublished M.A Thesis. University of Limerick.
- Dobson, L. K., Gardner, M. K., Mertz, A. J., & Gore, P. A Jr. (2014). The Relationship Between Interests and Values in Career Decision Making: The Need for an Alternative Method of Measuring Values. *Journal of Career Assessment*, 22(1), 113-122.
- Enache, R. G., & Matei, R. S. (2017). Study on Self-awareness and Vocational Counselling of High School Students. *Agora Psycho-Pragmatica*, 11(1), 57-64.
- Etiubon, R. U., Ugwu, A. N., & Ado, I. B. (2018). Career Choice Determinants and Academic Achievement of First Year Science Education Students of University of Uyo, AkwaIbom State, Nigeria. *International Journal for Innovation Education and Research*, 6(7), 136-147.
- Gallup (2019). Forging Pathways to Meaningful Work: The Role of Higher Education. Washington, D.C.: Gallup.
- Holland, J. L. (1959). A Theory of Vocational Choice. *Journal of Counseling Psychology*, 6(1), 35-45.
- Holland, J. (1992). *Making Vocational Choice: A Theory of Vocational Personalities and Work Environments*. 2nd Edition. Florida: Psychological Assessment Resources, Inc.
- Jemini-Gashi L, & Kadriu E. (2022). Exploring the Career Decision-making Process During the COVID-19 Pandemic: Opportunities and Challenges for Young People. *SAGE Open*, (Jan-Mar), 1-9.
- Kaur, S. (2016). Career Decision Making of Secondary Students in Relation to Their Peer Group Influence. *International Education and Research Journal*, *3*(1), 118-120.
- Kazi A. A., Nimra, S., & Nawaz, A. (2017). Factors Influencing Students' Career Choices: Empirical Evidence from Business Students. *Journal of Southeast Asian Research*, (Mar), 1-15.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Journal of Educational and Psychological Measurement*, *30*(3), 607-610.
- Madan, C. R., & Kensinger, E. A. (2017). Test–retest Reliability of Brain Morphology Estimates. *Brain Informatics*, 4(Jan), 107-121.

- Mahlomaholo, S. (2012). Early School Leavers and Sustainable Learning Environments in Rural Contexts. *African Journals Online*, *30*(1), 101-110.
- Maree, J. G. (2013). Counselling for Career Construction. Connecting Life Themes to Construct Life Portraits: Turning Pain into Hope. *Journal of Student Affairs in Africa*, *1*(1-2), 89-91.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Quantitative Data Analysis: A Methods Source Book*. 3rd Edition. SAGE Publications.
- Mudhovozi, P., & Chireshe, R. (2017). Socio-demographic Factors Influencing Career Decision-making Among Undergraduate Psychology Students in South Africa. *Journal of Social Sciences*, *31*(2), 167-176.
- Nyamwange, J. (2016). Influence of Student's Interest on Career Choice Among First Year University Students in Public and Private Universities in Kisii County, Kenya. *Journal of Education and Practice*, 7(4), 96-102.
- Polit, D. F., & Beck, T. C. (2014). *Essentials of Nursing Research. Appraising Evidence for Nursing Practice*. 8th Edition. Philadelphia: Lippincott Williams & Wilkins.
- Quinlan, K. M., & Renninger, K. A. (2022). Rethinking Employability: How Students Build on Interest in a Subject to Plan a Career. *Higher Education*, (Jan), 1-22.
- Sagiv, L. (2002). Vocational Interests and Basic Values. *Journal of Career Assessment*, 10(2), 233-257.
- Sharf, R. (2013). *Applying Career Development Theory to Counseling*. 3rd Edition. Australia: Brooks/Cole Thomson Learning.
- Siddiky, R., & Akter, S. (2021). The Students' Career Choice and Job Preparedness Strategies: A Social Environmental Perspective. *International Journal of Evaluation and Research in Education (IJERE)*, 10(2), 421-431.
- Smith, T. J., & Campbell, C. (2009). The Relationship Between Occupational Interests and Values. *Journal of Career Assessment*, 17(1), 39-55.
- Sovet, L., Annovazzi, C., Ginevra, M.C., Kaliris, A., & Lodi, E. (2018). *Life Design in Adolescence: The Role of Positive Psychological Resources*. Springer International Publishing.
- Su, R. (2018). The Three Faces of Interests: An Integrative Review of Interest Research in Vocational, Organizational and Educational Psychology. *Journal of Vocational Behavior 116*(Part B), 103240.
- Vosh, J. F. & Schauble, L. (2014). Is Interest Educationally Interesting? An Interest Related Model of Learning. The Role of Interest in Learning and Development. New York: Psychology Press.
- Willner, T., Gati, I, & Guan, Y. (2015). Career Decision-making Profiles and Career Decision-making Difficulties: A cross-cultural Comparison Among US, Israeli, and Chinese Samples. *Journal of Vocational Behavior*, 88(Jun), 143-351.