



Psychological correlates of career choice of in-school adolescents with hearing impairment in south-South, Nigeria

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Abstract

The study investigated psychological correlates of career choice of in-school adolescents with hearing impairment in south-south, Nigeria. The descriptive survey research design of correlational type was adopted for this study. The population for this study comprised all adolescents with hearing impairment in the selected public senior secondary schools in six states in south-south, Nigeria. These young individuals in the schools, age ranged 10 and 19 years, experience between mild to moderate hearing loss whose condition plays a negative role in their choice of profession or vocation. The sample for the study comprised ninety-five (95) adolescents with hearing impairment who were drawn from six secondary schools in south-south. The researcher adopted multi-stage sampling technique to select the schools for the study. This study utilized four instruments for the collection of data. They are Career choice factors of High School Students by Michael Borchert (2002), Morgan-Jinks Academic Efficacy Scale by Morgan and Jinks (1999), Locus of Control Scale by Rotter (1996), and Self-concept Scale by Liu and Wang (2005). Pearson product correlation was used to answer the research questions while the r coefficient value was subjected to critical alpha level of 0.05 to test all the hypotheses. The results of the study were that; self-concept, academic self-efficacy, and locus of control significantly correlated with career choice of in-school adolescents with hearing impairment. Based on the findings of the study, three recommendations were made among which is that students should be encouraged to become more rational in their everyday activities and express strong beliefs as related to career issues in order to provide the opportunity for personal and cognitive development in career decision making, etc.

Keywords: psychological, correlates, career choice, in-school adolescents, hearing impairment

Introduction

The career choice of adolescents needs to be based on strong knowledge, complete information, and appropriately guided, matching individual personality type and other intrinsic and extrinsic factors. In other words, adolescents need to be oriented on new emerging trends, future opportunities and challenges in the context of career choice options because the stage at which they are is a period of storm and stress a crisis looming period a no man's land characterized by overlapping forces and expectation.

This stage 'adolescence' as stated by Amo- Kehinde (2007) is a period of storm and stress; a crisis looming period a no man's land characterized by overlapping forces and expectation. Similarly, Chauhan (1988) [7] submitted that adolescences is a process rather than a period, a process of achieving the attitude and believes needed for effective participation of an individual in the society. Also, adolescence is a period of transition from childhood to adulthood, this period is characterized by lots of crisis because they have the problem of adolescents to contend with added to the challenges their condition inevitably subjected them to. Adolescence is the period of transition from childhood to adulthood. It involves biological, psychological and sociological changes. In search of identity they are faced with lot of challenges among which are career choice (Falaye,

2001) [10]. A thorough understanding of adolescence in today's society depends on information from various perspectives, most importantly from the areas of psychology, biology, history, sociology, education, and anthropology. Within all of these perspectives, it is safe to say that adolescence is viewed as transitional period whose chief purpose is the preparation of children for adult roles. Historically, puberty has been heavily associated with teenagers and the onset of adolescent development. However, the start of puberty has had somewhat of an increase in preadolescence (particularly females, as seen with early and precocious puberty), and adolescence has had an occasional extension beyond the teenage years (typically males) compared to previous generations.

Adolescence marks the beginning development of complex thinking process (also called formal logical operations including abstract thinking, the ability to reason from known principles, the ability to consider many points of view according to vary criteria) which is crucial for career decision making. Interestingly, adolescents with hearing impairment whose sense of hearing in non-functional for the ordinary purpose of life (Mba, 1995) seems to lag behind in critical and logical reasoning when compare to their peers without hearing loss. Adolescence presents a series of developmental tasks that are mastered with difficulty by hearing students. The adolescents with hearing impairment have sensory deprivation

therefore they have to contend with problems of adolescence added to the problems which their condition inevitably subjects them to (Oyewumi, 2007) ^[23]. The life of adolescents with hearing impairment is plagued with a lot of challenges as a result of their inability to hear or speak. These challenges include choice of career among the individuals.

Career growth, is an ongoing process for some people; they get engaged in different jobs through choosing amongst job opportunities available in the market. Every person undertaking the procedure of choosing opportunities subjective by many factors, context they live in, personal aptitudes, family influence and educational skills (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001) ^[5]. Thus, adolescents with hearing impairment may like to opt for a particular choice of career, while their parents' plan for them is to continue with the family occupation. While Taylor (2004) ^[27] and Hewith (2010) asserted that adolescents with hearing impairment are influenced by their parents, in terms of the careers they favour in order to avoid conflict in their homes, Ahmed, Sharif and Ahmad (2017) stated that adolescents are attracted to different careers for diverse reasons among such are economic buoyancy, opportunity to display talents, the opportunity to work with others, socio-economic status of parents, parental educational background, and occupational attainment by the parents.

According to Ozen (2011), choices that people make related to their career can be categorized to be influenced by two factors that are psychological and social. Social factors are part of an individual's social bonds, their parents, family, history and other characteristics of their environment while psychological factors can be an individual's perception, cognitive and effective intentions, beliefs, ideas, personality and assessments related to forthcoming business environment. Over time, different inquiries on the life of the students have come up with different findings. For instance, the results of a quantitative study conducted by Ferry (2006) in central Pennsylvania among adolescents indicated that influence exerted by an individual's family, society, state of economy, their interpretation of better job and financial constraints were major reasons that can impact their career selection. Similarly, a systematic review of 600 articles published in 2003- 2013 of low-income countries conducted by Puerto's EB (2013) determined intrinsic factors amongst medical students (age, sex, rural background) and extrinsic factors (salaries, governmental institutions, medical institutes reputation, training techniques) influence a medical student's decision to choose a career in primary care; and to establish that some factors were different among students in high-, middle and low-income countries.

As noted by Salami (2010), career choice is a culmination of a series of decisions regarding people's values, tasks and activities of interest, levels of aspirations, how their work roles interact with their non-work roles, and what information to seek and how to seek it are important part of the decision-making processes which are likely to be influenced by the emotional makeup. Emotions experienced in the career decision-making process may influence the career options being considered, tolerance for risky career decisions, amount and type of career exploration activities individuals will engage in the choice process, how much effort to invest in the

process and how the information related to career choice is processed (Emmerling & Cherniss, 2003). Based on the aforementioned influences, it is expected that individual's dissatisfaction with his/her current career choice can motivate the individual to engage in career planning, exploration and decision-making with the aim of finding a more satisfying career. Therefore the role of emotional intelligence in career choice among adolescent seem to be very crucial because it involved the capacity to perceive emotion, assimilate emotion-related feelings, understand the information of these emotions and manage them (Mayer & Salovey, 1999).

Self-concept deals with the way an individual perceives or sees himself, and it is one of the most important psychological constructs affecting human beings in inter-personal relationships. Self-concept is the perception that individuals have of their own worth. This includes a composite of their feelings, a generalized view of their social acceptance, and their personal feelings about themselves. Self-concept develops as a result of one's experiences with the environment and one's evaluations of these experiences. Additionally, opinions of significant others, casual attributions, and concrete feedback play a crucial role in the process of self-concept development (Shavelson, Hubner & Stanton, 1976) ^[26].

Research evidence indicates that an individual's self-concept is intimately related to how he learns and behaves. It would therefore appear logical that negative self-concept, which implies a lack of confidence in facing and mastering environment, would be related to deficiency in one of the most important areas of accomplishment for the adolescents with hearing impairment i.e. deficiency in making adequate career choices. Inasmuch as positive self-concept remains an asset in life, it is important that these individuals should be open to psychological treatment that would be of tremendous assistance to them in improving on this construct.

Academic self-efficacy is conceptualized as a global sentiment of the ability to perform tasks; however, even though there are these overall conceptualizations of self-efficacy an individual's judgment regarding his or her self-efficacy is considered specific to a given task or situation, as such different self-efficacy domains have been posited. Adolescents' career choices are influenced by the community resources available to them, by support of family members, and by their own self-efficacy (Anderson & Brown, 1997) ^[3]. Adolescents with hearing impairment may lack realistic information about occupations and careers on which to base their interests, therefore adolescents with high academic self-efficacy may choose to perform more challenging tasks and explore their environment to become creative and innovative in delivering services. In the view of Oyewumi and Adeniyi (2013) ^[22], the bane of students with hearing impairment is how to discover self, realize potential and take advantage of opportunities. The knowledge and skills that adolescents with hearing impairment possess will determine the career choice they make. Therefore, the ability to generate new ideas is a strong tonic for their career development and having confidence in one's ability to tolerate and to overcome. Career choice related to academic self-efficacy has been shown to positively associate with vocational intention. Baum and Locke (2004) ^[6] submitted that for one to be engaged in other activities around one is a critical predictor of improved

performance and creativity.

In a related development, Maduas, Zhao and Ruban (2008) expressed that adolescents with hearing impairment with high level of academic self-efficacy may be more likely to engage in career-related challenges and use skills to increase their efficiency on the job. This means that having hearing impairment may not necessarily pose a great threat in performing responsibilities or tasks assigned to adolescents.

Evidence indicates that adolescents with hearing impairment who attribute their career choice to their efforts and abilities, rather than external causes experience a heightened level of achievement. Thus, those who perform better in most employment situations generally possess a moderately strong internal rather than external locus of control (LOC) (Akomolafe, 2010) ^[1]. Those adolescents with an internal locus of control generally expect that their actions will produce predictable outcome while those with external locus of control expect that the outcome they receive is due to external variables such as fate, luck, environment and other circumstances. Adolescents with high internal locus of control believe that event results primarily from their own behaviour and actions. Consequently, they are likely to assume that their efforts will be successful and are more likely to be active in seeking information and knowledge concerning their career choice. This is unlike those with a high external locus of control who believe that powerful others, fate or chance primarily determines an event. Research has shown that an individual with more internal expectancies is more likely to be more alert to those environmental aspects which provide useful information for future behaviour, take steps to improve his environmental condition, place greater value on choice or achievement reinforcement and be generally more concerned with his ability, particularly his failure and finally be resistive to subtle attempt to be influenced.

Hence, Harvey and Thomas (2004) ^[11] posited that locus of control has an affiliation with adolescents' performance in the professional realm, as well as health and psychological well-being. The authors further described internal locus of control as having a tendency to perform better on academic task than external form, having more effective coping strategies that could lead to a better psychological adjustment.

This study therefore examined relationship between psychological factors such as self-concept, academic self-efficacy and career choice among in-school adolescents with hearing impairment in south-south, Nigeria.

Empirical review

Self-concept and Career Choice of Adolescents with Hearing Impairment

Self-concept plays a significant role in molding behavior patterns of an individual. It is developed through interaction with the environment. Satisfactory and gratifying performances result into a more positive attitude towards him/her. Self-concept is the cognitive or thinking aspect of self and generally refers to "the totality of a complex, organized and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence" (Alam, 2016) ^[2]. Nasir and Lin (2013) ^[19] states that, "there is a great deal of research which shows that the self-concept is perhaps the basis for all motivated behaviour.

It is the self-concept that gives rise to possible selves and it is possible selves that create the motivation for behaviour". According to Woolfolk (2006), self-concept is an agent of self-development especially among children. A child's development can be observed as they grow since each child is a unique object. As such, co-operation from different parties is required to ensure the development of a positive self-concept in a child.

In a research, Hormuth (2010) ^[13] relates self-concept to self-assessment or self-perception. The concept largely represents the extent of an individual's faith in their own characteristics. This concept also reflects a person's judgment of themselves based on the way they weigh the importance of their success. Prescott (2006) defines self-concept as mental awareness, pre-conception and constant interest of oneself. Components of self-concept encompass the physical, psychological and social well-being of a person which can be influenced by attitude, habits, beliefs and ideas. These components can be summarized to form the concepts of self-image and general self-appreciation.

Some of our self-concepts have relevance to occupations and their attributes. self-concepts have relevance to occupations and their attributes. For example, one's academic self-concept likely has a great deal of overlap with one's vocational self-concept (Landine, 2013) ^[16]. Experience, in the form of practical work experiences such as domestic and overseas term work, has been shown to increase vocational self-concept crystallization (Hannigan, 2001), presumably because it provides students with the opportunity to test the "fit" between their abilities, interests, values and satisfaction with the chosen work environment.

Hargrove, Creagh and Burgess (2002) suggested that greater exposure to a diversity of experiences in the form of different cultures, types of people, work environments, and leisure activities fosters greater self-awareness and knowledge of the world-of-work. With a confident and clear understanding of self, based on developmental experiences, individuals are able to integrate additional information into vocational planning with some confidence (McAuliffe, Pickering, & Calliotte, 1991) ^[18]. In contrast, for individuals whose understanding of self is less clear and whose expectations and cognitive schema are negative about their place in the world-of-work, the provision of self- and occupational information may not be useful and vocational planning may be impeded. For example, a study by Cabral and Salomone (1990) found that well-developed self-concepts enabled individuals to process information that had been unforeseen. This same information was confusing to persons with negative schemata about their own occupational potential.

It has been proposed that one's self-esteem is both a cause and a consequence of one's extrinsic career success, but empirical research examining the direction of these effects is lacking. Kammeyer-Mueller, Judge and Piccolo (2008) ^[15] examined the relationships among self-esteem, education, occupational prestige, and income over a span of seven years during early careers. They used social identity theory to propose that self-esteem will be affected by extrinsic career success, and self-consistency theory to propose that extrinsic career success will be affected by self-esteem. The results, based on a cross-lagged regression design, suggest that self-esteem increases

occupational prestige ($\beta=.22$), and income ($\beta=.22$), but career outcomes did not alter self-esteem. Implications of these results for the study of self-esteem and careers were explored. Warner-Czyz, Loy, Evans, Wetsel and Tobey (2015) investigated the influence of generic factors unrelated to hearing loss (example, age, gender, temperament) and specific factors associated with hearing loss (example, age at identification, communication skills) on how children with hearing loss wearing cochlear implants or hearing aids appraise self-concept. Fifty children with hearing loss wearing cochlear implants or hearing aids participated (Mean age: 12.88 years; mean duration of device use: 3.43 years). Participants independently completed online questionnaires to assess communication skills, social engagement, self-concept, and temperament. Children with hearing loss rated global self-esteem significantly more positively than hearing peers, $t=2.38, p=.02$. Self-concept ratings attained significant positive correlations with affiliation ($r=.42, p=.002$) and attention ($r=.45, p=.001$) temperaments and a significant negative association with depressive mood ($r=-.60, p<.0001$). No significant correlations emerged between self-esteem and demographic factors, communication skills, or social engagement. Because successful communication abilities do not always co-occur with excellent quality of life, clinicians and professionals working with children with hearing loss need to understand components contributing to self-concept to improve identification, counseling and external referrals for children in this population.

Otta and Nkoku (2012) ^[21] examined self-concept and vocational interest among secondary school students in Ohafia Education Zone of Abia State, Nigeria, using a sample of 799 SSII students chosen through purposive random sampling technique. Adolescent Personal Data Inventory (APDI) by Akinboye (1985) and Vocational Interest Inventory (VII) by Bakare (1977) were used for data collection, while regression analysis, ANOVA, Z-test statistics and Pearson Product Moment Correlation were used for data analysis at 0.05 level of significance. Result showed that there is a significant relationship between self-concept and vocational interest.

Nasir and Lin (2013) ^[19] found that there was a significant positive relationship between self-concept and career awareness among students. The study was aimed at examining the relationship between self-concept and career awareness amongst secondary school students. 165 12 – year old students from an international school consisted the sample of the study. Piers – Harris Children’s Self-concept Scale and Career Awareness Inventory were used for data collection. Pearson correlation was used for data analysis at 0.05 alpha level.

Kagu and Mohammed (2007) investigated the self-concept as motivation for vocational interest. Result indicated no significant differences in the opinion of students on motivation for self-concept and vocational interest. Arising from the finding was that students’ education has to be enriched and nourished for them to make realistic vocational interest. Melgosa (2002) in the study of self-concept and vocational choice observed that proper vocational education will equip students to better vocational choice. Balogun (2006) believes that accurate vocational information, seminar, career talk and workshop will promote high vocational

interest. Societal influence also plays social role on the adolescents’ self-concept and vocational interest.

Otta and Njoku (2012) ^[21] examined self-concept and vocational interest among secondary school students in Ohafia Education zone of Abia State. Through purposive random sampling technique, a total of seven hundred and ninety nine (799) SS II students participated in the study. Instruments used in the study were Adolescent Personal Data Inventory (APDI) Akinboye (1985) and Vocational Interest Inventory (VII) Bakare (1977). Regression Analysis, Analysis of Variance (ANOVA), Ztest statistics and Pearson Product Moment were used as statistical tools for data analysis. Moreso, frequency counts, percentages and rank were also used to analyze data. The findings revealed that there is a significant relationship between self-concept and vocational interest. Those adolescents with high vocational interest turned towards scientific, literary, persuasive, computational, and social services interest areas; whereas low vocational interest turned towards outdoor activities, mechanical, musical and artistic areas of interest. There was no significant difference between the male in their vocational interest. Implications of these findings were stressed. It was recommended among others that well-packaged seminars and workshops be organized regularly, including the school-based management committee in various schools to intimate parents, teachers and counsellors on self-concept, interest and needs of the adolescents.

Academic Self-efficacy and Career Choice of Adolescents with Hearing Impairment

Self-efficacy is a cognitive structure created by the cumulative learning experiences in a person’s life that lead to development of belief or expectation that they can or cannot successfully perform a specific task or activity (Bandura, 1986) ^[5]. Self-efficacy as a psychological construct has been well described in career choice models to explain career behaviours (Niles & Sowa, 1992) ^[20]. Isaac, Walters and McLachlan (2015) ^[14] have demonstrated a positive relationship between increased self-efficacy and rural practice interest levels in medical students.

Marr and Bogue (2006) conducted a longitudinal study of women engineering student self-efficacy using data from five institutions across the U.S. The results of their study of 164 women engineering students showed there was a positive increase in self-efficacy among students in three self-efficacy measures (coping self-efficacy, second engineering self-efficacy, and math outcomes expectations) and reduced self-efficacy in feelings of inclusion in engineering. In contrast, Reisberg *et al.* (2010) ^[24] conducted a study analyzing the effect of gender on a range of related supports to explain three dimensions of self-efficacy: work, career, and academic within undergraduate engineering. Their survey respondents totaled in 990 sophomore students, 216 of which were female. Their findings sustain prevailing research results suggesting that women have lower academic self-efficacy than men at the beginning of their undergraduate engineering careers. This is congruence with a study done of 519 undergraduate engineering majors’ self-efficacy belief at a Midwestern university.

Doğan and Bozgyökleğ (2010) examined the effect of

computer assisted career group guidance to levels of self-efficacy of 8th grade elementary school students. Their research work is an experimental study which is based on experiment and control group pre-test and, post-test model. Computer assisted career guidance was made with experiment group students for 5 weeks in two sessions. In total, 10 sessions of career group guidance were made. While computer assisted career group guidance was applied to experiment group, some debates which were chosen from general guidance programme were made with control group students. In the pre-test and post-test phases, levels of career decision making and self-efficacy of experiment and control group students were measured according to Career Decision Making and Self-Efficacy Questionnaire (CDMSEQ). After experimental procedure, independent sample t-test was used in order to determine the significant difference between CDMSEQ pre-test and post-test scores of experiment and control groups. After the analysis, there was a significant difference between pre-test and post-test average scores of the experiment and control groups per three factors. Findings indicated that the computer- assisted career group guidance in the research is effective in increasing levels of career decision making and self-efficacy of 8th grade elementary school students.

Drnovsek, Wincent and Cardon (2010) reviewed and identified gaps in current literature on entrepreneurial self-efficacy, providing a definition of entrepreneurial self-efficacy that addresses some of those gaps, and explore the role of entrepreneurial self-efficacy during the phases of a business start-up process. The research seeks to define entrepreneurial self-efficacy using three sources of dimensionality. The first includes the particular aspect of entrepreneurship to which self-efficacy is applied, whether to business start-up or business growth activities. The second sources of dimensionality refers to the content of self-efficacious beliefs (task or outcome goal beliefs), and the third source to the valence of entrepreneurial self-efficacious beliefs (positive or negative control beliefs). The researchers build from the origins and mechanisms of the self-efficacy construct in social cognitive theory and a synthesis of that work with prior use of self-efficacy in entrepreneurship to propose a definition of entrepreneurial self-efficacy that is context specific and empirically testable. Entrepreneurial self-efficacy is best seen as a multidimensional construct made up of goal and control beliefs, and propositions for how these two different dimensions will play a role during phases in the process of starting-up a new business are developed. A well-defined entrepreneurial self-efficacy construct has significant pedagogical payoffs given that entrepreneurship education should also focus on social-cognitive, psycho-cognitive and ethical perspectives of entrepreneurship.

Renée, Hyde and Creed (2005) ^[25] investigated the career development of hard of hearing high school students attending regular classes with itinerant teacher support. The research work compared 65 hard of hearing students with a matched group of normally hearing peers on measures of career maturity, career indecision, perceived career barriers, and three variables associated with Social Cognitive Career Theory (SCCT): career decision-making self-efficacy, outcome expectations, and goals. In addition, the predictors of

career maturity and career indecision were tested in both groups. Results indicated that (a) the two groups did not differ on measures of career maturity, (b) the SCCT variables were less predictive of career behaviours for the hard of hearing students than for the normally hearing students, and (c) perceived career barriers related to hearing loss predicted lower scores on career maturity attitude for the hard of hearing students. These findings are discussed in the context of career education and counselling interventions that may benefit young people who are hard of hearing.

Neerpal and Renu (2009) found that a low positive association between occupational self-efficacy and organizational commitment. The study assessed the relationship between emotional intelligence, occupational self-efficacy and organizational commitment. 120 employees working in various organizations in India were used for the study. Emotional Intelligence Scale (EIS), Occupational Self-Efficacy Scale and Organizational Commitment Questionnaire were used for data collection, while regression analysis was used for analysis of data at 0.05 alpha level. Walker (2010) explored the relationship between career maturity, career decision self-efficacy, and self-advocacy of college students with and without disabilities. Participants included 347 postsecondary students, 89 of whom reported having a disability. Primarily focused on students with disabilities, this study gathered information regarding postsecondary students' attitudes toward careers, beliefs in their ability to pursue careers, and their self-advocacy knowledge in order to investigate the relationship among them. This study provides empirical support that there is a relationship between career maturity, career decision self-efficacy, and self-advocacy. The results of the correlation, MANOVA, ANOVA, and hierarchical regression analyses provided four major findings and implications. First, there was a positive correlation between career maturity, career decision self-efficacy, and self-advocacy of college students with and without a disability. Second, the results of the study indicated that students without a disability had higher levels of career maturity and self-advocacy than students with a disability; however, the self-efficacy scores were similar for students with and without a disability. Third, the results of the study focusing specifically on students with disabilities indicated that the career maturity of students who had a high level of self-advocacy was higher than for the students who had a low level of self-advocacy. However, there was no difference in levels of self-advocacy and career decision self-efficacy of college students with disabilities. Fourth, the results of the study focusing specifically on students with disabilities indicated that self-advocacy and career decision self-efficacy were the only variables that positively affected career maturity.

Rinat, Rachel, Tova (2015) examined the contribution of hearing loss, social affiliation, and career self-efficacy to adolescents' future perceptions. Participants were 191 11th and 12th grade students: 60 who were deaf, 36 who were deaf or hard of hearing, and 95 who were hearing. They completed the Future Perceptions Scale, the Career Decision-Making Self-Efficacy (CDMSE) Scale, and the Self-Efficacy for the Management of Work-Family Conflict Scale. Results indicated that participants who were deaf reported

significantly higher levels of future clarity and intensity than the other groups. However, no significant differences were found in career self-efficacy. Hearing status and affiliation and the efficacy to manage future conflict between work and family roles were significant predictors of participants' future clarity. CDMSE was a significant predictor of future planning. Rinat, Tova and Rachel (2013) examined the contribution of different types of parental support to career self-efficacy among 11th and 12th grade students (*N* = 160): 66 students with hearing loss (23 hard of hearing and 43 deaf) and 94 hearing students. Participants completed the Career-Related Parent Support Scale, the Career Decision-Making Self-Efficacy Scale, and the Self-Efficacy for the Management of Work–Family Conflict questionnaire. Different aspects of parental support predicted different types of career self-efficacies across the 3 groups. Differences among groups were also found when levels of parental support were compared. The deaf group perceived lower levels of parental career-related modeling and verbal encouragement in comparison with the hard-of-hearing students and higher levels of parental emotional support compared with the hearing participants. No significant differences were found among the research groups in career decision-making self-efficacy and self-efficacy in managing work–family conflict. Implications for theory and practice are discussed.

Locus of Control and Career Choice of Adolescents with Hearing Impairment

McGee (2010) in his study considered how locus of control the degree to which one believes one's actions influence outcomes affects unemployed job search. The model emphasizes that locus of control is neither a skill nor a preference, but a determinant of beliefs about the efficacy of search effort. According to the model, "internal" individuals (who believe their actions determine outcomes) search more intensively than their "external" counterparts (who believe their actions have little effect on outcomes); moreover, "internal" searchers set higher reservation wages than do "external" searchers. The findings also suggested that young job seekers with extreme loci of control are in their approaches to search in different ways, with "internals" holding out for excessively high wages and "externals" searching too little. As a result, both groups spend more time unemployed than individuals with average loci of control.

Murugami (2002) conducted a study to investigate effects of locus of control on self-concept among learners with special needs. Working with a sample drawn from Central Province of Kenya, her sample population comprised 162 learners with special needs. One of the major problems in her study was that the potential of learners with special needs was not realized owing to external and internal factors which could influence their self-concept. The researcher used a correlation research design to investigate the effects of locus of control on self-concept and their relationship on academic achievement, home background, learners' aspiration and gender among learners with special needs. The result of the study revealed that learners with special needs had internal locus of control and positive self-concept to their care.

Research methodology

The descriptive survey research design of correlational type was adopted for this study. The population for this study comprised all adolescents with hearing impairment in the selected public senior secondary schools in six states in south-south, Nigeria. These young individuals in the schools, age ranged 10 and 19 years, experience between mild to moderate hearing loss whose condition plays a negative role in their choice of profession or vocation. The sample for the study comprised ninety-five (95) adolescents with hearing impairment who were drawn from six secondary schools in south-south. The researcher adopted multi-stage sampling technique to select the schools for the study. This study utilized four instruments for the collection of data. They are Career choice factors of High School Students by Michael Borchert (2002), Morgan-Jinks Academic Efficacy Scale by Morgan and Jinks (1999), Locus of Control Scale by Rotter (1996), and Self-concept Scale by Liu and Wang (2005). Pearson product correlation was used to answer the research questions while the *r* coefficient value was subjected to critical alpha level of 0.05 to test all the hypotheses.

Data presentation and discussion of findings

Research Question 1: What is the relationship between self-concept and career choice of adolescents with hearing impairment?

Hypothesis 1: There is no significant relationship between self-concept and career choice of adolescents with hearing impairment.

Table 1: Pearson Product Moment Correlation on Relationship between Self-Concept and Career Choice of Adolescents with Hearing Impairment

Variables	N	Df	r-value	p-val	Remark
Self-Concept (X)	95	93	0.438	0.527	Rejected
Career Choice (Y)					

The hypothesis was tested at 0.05 level of significance and the result on table 1 above shows a significant relationship between the two variables (*r* = .438, *p* < 0.05). Hence, the null hypothesis is rejected. This is an indication that high self-concept is good in fostering career choice among the adolescents.

Research Question 2: What is the relationship between academic self-efficacy and career choice of adolescents with hearing impairment?

Hypothesis 2: There is no significant relationship between academic self-efficacy and career choice of adolescents with hearing impairment.

Table 2: Pearson Product Moment Correlation on Relationship between Academic Self-Efficacy and Career Choice of Adolescents with Hearing Impairment

Variables	N	Df	r-value	p-val	Remark
Self-Concept (X)	95	93	0.687	0.292	Rejected
Career Choice (Y)					

The result above ($r = .687, p < 0.05$) simply depicts that the relationship between academic self-efficacy and career choice was significant at 0.05 level. Based on this result, the null hypothesis is thus rejected. This finding suggests that level of academic self-efficacy of adolescents was one of the major determinants of career choice among them.

Research Question 3: What is the relationship between locus of control and career choice of adolescents with hearing impairment?

Hypothesis 3: There is no significant relationship between locus of control and career choice of adolescents with hearing impairment.

Table 3: Pearson Product Moment Correlation on Relationship between Locus of Control and Career Choice of Adolescents with Hearing Impairment

Variables	N	Df	r-value	p-val	Remark
Self-Concept (X)	95	93	0.369	0.703	Rejected
Career Choice (Y)					

The result above ($r = .369, p < 0.05$) simply indicates that the relationship between the two variables was significant at 0.05 level. Based on this result, the null hypothesis is thus rejected. This finding simply means that locus of control is a determining factor of career choice among the adolescents.

Discussion of findings

Relationship between Self-concept and Career Choice of Adolescents with Hearing Impairment

A cursory look at the result on the table 1 shows a significant relationship between self-concept and career choice among adolescents with hearing impairment. This finding is an indication that high self-concept is good in fostering career choice among adolescents. The finding may be as a result of the fact that adolescents with high self-concept view themselves as being capable of achieving whatever they want in life, hence, their improvement in career choice. This finding corroborates Kammeyer-Mueller, Judge and Piccolo (2008) who found positive and significant relationships between self-concept and career choice among adolescents with hearing impairment. Also, Murugami (2002) remarked that locus of control had positive and significant effect on career choice among adolescents with hearing impairment. Similarly, Otta and Njoku (2012) [21] observed a significant relationship between self-concept and vocational interest. Otta and Njoku (2012) [21] reported that adolescents with high vocational interest turned towards scientific, literary, persuasive, computational, and social services interest areas; whereas low vocational interest turned towards outdoor activities, mechanical, musical and artistic areas of interest. As noted by Landine (2013) [16] self-concepts have relevance to occupations and their attributes. Experience, in the form of practical work experiences such as domestic and overseas term work, has been shown to increase vocational self-concept crystallization (Hannigan, 2001), presumably because it provides students with the opportunity to test the “fit” between their abilities, interests, values and satisfaction with the chosen work environment.

Relationship between Academic Self-efficacy and Career Choice of Adolescents with Hearing Impairment

The finding on table 2 suggests that level of academic self-efficacy of the adolescents with hearing impairment is one of the major determinants of career choice among them. This is not surprising as adolescents with high self-efficacy view tasks as challenges to be faced but not to run away from. Therefore, making crucial decisions is seen as part of the challenges of life to them. The finding is in line with Doğan and Bozgyökleğ (2010) who found that academic self-efficacy exerts significant effect on career aspiration and decision making. In the same vein, Drnovsek, Wincent and Cardon (2010) similarly found that self-efficacy is positively correlated with career decision. As well, Renée, Hyde and Creed (2005) [25] confirmed that academic self-efficacy and career choice and career development of hard of hearing high school students are positively and significantly correlated.

Relationship between Locus of Control and Career Choice of Adolescents with Hearing Impairment

The result on table 3 shows that the relationship between locus of control and career choice among adolescents with hearing impairment is significant. This finding simply means that career choice is positively related to locus of control among the students. This finding is not unexpected as it corroborates Oyewumi and Adeniyi (2013) [22] who found that locus of control is a determining factor of career choice among secondary school students with hearing impairment. Also, Pisheh (2011) reported that the correlation between locus of control and job involvement in public sector organizations is positive and significant. Similarly, Ayodele (2013) [4] established a significant relationship between sex, socio-economic status, age, locus of control, entrepreneurial self-efficacy and entrepreneurial intentions among some Nigerian adolescents.

Recommendations

In order to enhance career choice among secondary school adolescents with hearing impairment, the following recommendations are hereby made.

1. Students should be encouraged to become more rational in their everyday activities and express strong beliefs as related to career issues in order to provide the opportunity for personal and cognitive development in career decision making.
2. Academic values and practices that encourage the development of academic self-efficacy, self-concept, locus of control among others should be encouraged.
3. Furthermore, continuous counselling or psycho-social intervention programmes should be put in place to help guide secondary school adolescents with hearing impairment for them to rediscover their career potential, abilities and capabilities and improve their career decision making.

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