



## WORK-VALUE CLARIFICATION AND COGNITIVE INFORMATION PROCESSING THERAPIES IN THE MANAGEMENT OF CAREER DECISION-MAKING DIFFICULTY OF SECONDARY SCHOOL STUDENTS IN OSUN STATE, NIGERIA

Omowumi Abeke ILORI

Osun State University, Osogbo, Osun State, Nigeria

ORCID: <https://orcid.org/0009-0000-4820-3323>

[omowumi.ilor@uniosun.edu.ng](mailto:omowumi.ilor@uniosun.edu.ng)

Moses Oluwafemi OGUNDOKUN

Department of Counselling and Human Development Studies, University of Ibadan, Ibadan, Nigeria

ORCID: <https://orcid.org/0009-0006-9862-1893>

[femtopng@gmail.com](mailto:femtopng@gmail.com)

**Received:** March 10, 2024

**Accepted:** June 06, 2024

**Published:** June 30, 2024

### Suggested Citation:

Ilori, O. A., & Ogundokun, M. O. (2024). Work-value clarification and cognitive information processing therapies in the management of career decision-making difficulty of secondary school students in Osun State, Nigeria. *Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG)*, 13(1), 30-45.



Copyright © 2024 by author(s). This is an open access article under the [CC BY 4.0 license](https://creativecommons.org/licenses/by/4.0/).

### Abstract

Career decision-making difficulty is the inability of secondary school students to make correct career decision. Studies have shown that the problem of career decision-making of secondary school students in Osun State, Nigeria is on the increase, which could lead to wrong choice of school subjects and career frustration. Previous studies on career decision-making difficulty have focused largely on emotional intelligence, academic motivation and occupational preferences with little attention paid to interventions such as Work-value Clarification and Cognitive Information Processing Therapy. This study, therefore, was carried out to determine the effects of Work-value Clarification and Cognitive Information Processing Therapies in the management of Career decision-making difficulty of secondary school students in Osun State, Nigeria. The moderating effects of Career self-efficacy and gender were also examined. The study was anchored to Miller-Tiedeman's Life Career Theory, while the pretest-posttest control group quasi-experimental design with a 3x2x2 factorial matrix was adopted. The multistage procedure was used. Simple random sampling technique was used to select three local government areas (Ayedaade, Isokan and Ede) in Osun State. Simple random sampling technique was used to select one senior secondary school from each of the selected local government area. The participants who scored high on Germeijs and Boecks' indecisiveness scale as against the threshold of 50 were selected. The schools were randomly assigned to Work-value clarification Therapy (40), Cognitive Information Processing Therapy (40) and Control (40) groups. The instruments used were career decision-making difficulty ( $\alpha=.78$ ) and career self-efficacy ( $\alpha=.87$ ) scales. The treatments lasted eight weeks. Data were analysed using descriptive statistics, Analysis of covariance and Scheffe post-hoc test at .05 level of significance. Participants' age were  $15.36 \pm 3.51$  years, and 54.2% were females. There was a significant main effect of treatments in the career decision-making difficulty of the senior secondary school ( $F_{(2,119)}=9.26$ , partial  $\eta^2=.15$ ). The participants in the Cognitive Information Processing Therapy ( $\bar{x}=134.97$ ) improved on their career decision-making difficulty better than those in the Work-value clarification Therapy ( $\bar{x}=135.25$ ) and the control ( $\bar{x}=152.55$ ) groups. Work-value clarification and Cognitive information processing therapies were effective in the management of career decision-making difficulty of secondary school students in Osun State, Nigeria, regardless of gender. Counselling and educational psychologists should utilise these interventions to manage career decision-making difficulty.

**Keywords:** Work-value clarification, cognitive information processing therapies, career decision-making difficulty, secondary school students.



## INTRODUCTION

Career is a job which one decides to pursue throughout his lifetime and it is a path or course of the occupation. It is also the arrangement of the important place engaged by a person all over his life and the entire work being done by an individual in his life span. According to Kuzgun (2000), career involves all an individual's roles before beginning a career, throughout the course of a career, and after retiring from a career. Picking a career includes the initiation of an exact profession or successful action, while career development includes every one of the exercises that happen throughout a career (Baruch, Szucs, & Gunz, 2015).

Making career-decision is a very difficult task for secondary school students because it determines their future. Briska and Dislere (2018) confirmed that secondary school students are unable to decide important career-decisions for themselves because of dearth of knowledge of their satisfactions, skills and desires, the existence of several alternatives, and worth in addition to the effect of one's socioeconomic situation for decision making. He added that several secondary school students do not understand what career to choose.

Similarly, Ottu and Idowu (2014) acknowledged that in Nigeria and other parts of the world, many adolescents encounter great difficulty in making career decision. They added that wrong career decisions have often led to unproductive or unacceptable careers. This has been compounded by inadequate counselling and poor gradual observational documentation of children's aspirations through play and more objective undertakings (Ottu & Idowu, 2014). These have in turn led to the wrong career decision as observed often times among Nigerian secondary school students. This problem is deeply pervasive among youths even with the claim by many schools that Counselling psychologists are in place to give guidance to secondary school students.

Slaten and Baskin (2014) stated that career decisions directly influenced job performance, life satisfaction, and income of an individual. Career are selected in order to meet the students' needs which must be guided by information and awareness about career and occupation before making the decision for this selection (Mabula, 2012). Many students find themselves not fulfilled even after their secondary school education because of wrong decisions made when taking decisions on career. Studies showed that the majority of secondary school students offer wrong subjects because of friends, parental influence, prestige, etc. (Fizer 2013).

According to Ottu and Idowu (2014) making a career decision in Nigeria appear to have been greatly influenced by conformity and familiarity as most teenagers often desire to pick careers that run in their family of origin or career that is being respected by the society. Though, prestige tends to show the upper hand as it has been discovered that even children of persons with less appreciated vocations still reject their parent's occupations. Making a career decision has been seen as a difficult task for secondary school students. According to Ellis (2006) difficulty in making a career decision has been ascribed to dearth of association as well as problem of handling the process of choice making, pressures from external forces, choosing from a diversity of choices and personal inconsistency.

Some of the difficulties experiences by secondary school students during the time of choosing a career are the absence of information about self, deficiency of information about what they want. Kshetrimayum (2018) revealed that the choice of a career can be affected by the school, the type of derived learning competencies. The future of the students can be modified by the school environment and the teachers in the course of recognizing their talents, interests and ambitions. Media and global trends also Influence the career choice of students. Kshetrimayum (2018) suggested that pressure of media on today's youth cannot be under



predictable. The emergence of television, internet and mobile smart phones as the most significant development and the world have shrunk through these facilities being accessible to students.

Students experience the problem of matching their career preferences with their skills in educational achievement when they try to make career selections (Julius, Jacob, Daniel, Samson, Joseph, Betty, & Hassan 2016). Student that chooses inaccurate career decision as a result of difficulties experienced during the time of making a career decision will have a decline in his/her mode of study. Students that make good or right career decision will also have his/her mental ability boost up and committed to his/her study because he/she will have an interest in all the assignments. While a student with the wrong career decision may not have an interest in his class work also in all the assignments and their level of commitment may not be high.

In addition, the importance of education may be defeated, if a student makes wrong career decision as a result of difficulties experienced during the time of taking career decision. The importance of education is to acquire appropriate knowledge, but a student who made the wrong career decision may only read to pass the examination and obtain the certificate. The essence of education may not be achieved because such student may not understand or master the subject. Mashige and Oduntan (2011) reported lifelong consequences of wrong career selection as underachieving and the origin of inefficiency for themselves, their household and also for the society as a whole. The difficulties experience by the secondary school students should be addressed before taking a career decision so that they will be able to choose the career preferences that match their abilities, aptitude, and personality characteristics in order to increase their performance.

Consequences of career decision problem have been an issue for the individual and the society. Students who do not have the focus of what he/she want to do will find it difficult to choose the right career that matches their academic performance in schools. Therefore, it is imperative to find a way of assisting the students to understand themselves and to have all information needed to know about the available career. The period for selecting a career is at senior secondary school and at this stage student should be able to know what he/she want to become in the future and start planning towards achieving it. This period had been a critical period in the life of students because choosing a career among diverse alternative has been described as a difficult task.

The students especially Senior Secondary School 1 (SSS I) students are expected to choose subjects which they will like to pursue till university levels like Art, Sciences and Commercial. This has been a critical period for the students because of diverse alternatives and a lot of other factors that hinder them from making the most appropriate career choice. According to Migunde, Othunans and Mbagaya (2015) students are progressively looking for career counselling in order to express career ideas.

Also, there is a need to look for ways of removing or preventing some of the difficulties experienced earlier and in the phase of making career decision. Therefore, the researchers made use of the Work-value Clarification (WvC) and Cognitive Information Processing (CIP) therapies in the management of career decision-making difficulty of secondary school students in Osun State. Work-value clarification aimed to assist persons overcome work-value mix-up and become more confident, focused, and creative, as well as to have an enhanced understanding of the work. Researchers (Beck, Harsh, & Sullivan, 2008) described work-value clarification as a means of encouraging students to apply the processes of valuing in their own lives and apply these valuing processes to previously formed beliefs, behaviour designs, and those still developing.

Beck, Harsh, and Sullivan (2008) defined value clarification as a treatment method that can assist to enhance an individual understanding of any values to have an impact on the standard of living, resolutions, and



actions. This method can offer an opening for one to think of individual decent problems and permit values to be scrutinized and spell out. It may be effective for personality improvement, improved pleasure, and dealings with others. It offers an opportunity for assessment, explanation. Work-value clarification plans to ease emotional pain and encourage optimistic actions through corroboration. Work-value clarification assists in the identification and clarification of values that influence individual decisions and behaviour that individuals are also encouraged to develop on their strengths and inner resources. An individual who has discovered his/her private values in treatment is frequently capable to recognize what will allow him/her to successfully perform in life and be capable to produce more self-focused selections.

Another intervention that could be of help to students in making a good career decision is cognitive information processing therapy. Cognitive information processing therapy hypothesised that vital career decision-making difficulty can only come about when dysfunctional cognitions are also tackled (Sampson, Peterson, Lenz, Reardon, & Saunders, 1999). Cognitive information processing therapy intends to help people in making suitable career selections in the course of teaching and decision-making skills (Lauren, 2014). This therapy is designed from the cognitive theory of therapy and tries to combine both career requirements with likely emotional obstacles. The cognitive information processing therapy approach states that abnormal career opinions can distract career decision-making difficulty (Sampson, et al., 1999). Actions have been established to evaluate these non-adaptive/maladaptive occupation feelings and these actions have been exposed to be connected with hopeful career intervention results (Sampson, Peterson, Lenz, Reardon, & Saunders, 1999).

Ebenehi, Rashid, and Bakar (2016) found out that the most statistically significant predictor of career adaptability skills among students in Nigeria was career self-efficacy. Also, Di Fabio and Kenny (2011) affirmed that career self-efficacy and gender are favourable variables of decision-making processing in a career. For that understanding, career self-efficacy is thought to be a necessary part of the effective decision-making process in career.

Therefore, the researchers used career self-efficacy and gender as moderating variables. According to Akpochafo (2011), human achievement and personal happiness are enhancing in many ways by a high sense of self-efficacy. She added that persons that maintain strong commitment when experiencing challenging goals are those with high self-efficacy. Contrarily, people who do not believe in themselves will run away from challenging task which they see as being intimidating and have little ambitions and feeble responsibility to achieve the career of their choice. In the prospect of this, it is probable to think that people with an excessive feeling of career self-efficacy may be more devoted to their profession than those with low experience of career self-efficacy.

The second moderating variable for this work is gender. Gender has been described as the positions, impression, and actions that certain society links to a person's natural sex. Bravo-Baumann (2000) defined gender as a way in which a culture or society defining privileges, tasks, and the identities of males and females in relation to one another.

## Hypotheses

The following null hypothesis were tested at 0.05 level of significance.

- i. There is no significant main effect of treatments on the career decision-making difficulty of secondary school students;
- ii. There is no significant main effect of gender on the career decision-making difficulty of secondary school students;



- iii. There is no significant main effect of career self-efficacy on the career decision-making difficulty of secondary school students;
- iv. There is no significant interaction effect of treatments and gender on career decision-making difficulty of secondary school students;
- v. There is no significant interaction effect of treatments and career self-efficacy on career decision-making difficulty of secondary school students;
- vi. There is no significant interaction effect of gender and career self-efficacy on career decision-making difficulty of secondary school students; and
- vii. There is no significant interaction effect of treatments, gender and career self-efficacy on career decision-making difficulty of secondary school students.

## METHOD

### Design

This study adopted a pretest-posttest control group quasi-experimental design with a 3×2×2 factorial matrix. This involved two experimental groups (WvC and CIP) and the control group. Gender and Career self-efficacy were used as the moderating variables. Both variables were measured at two levels. Gender varies at male and female while career self-efficacy varies at two levels, namely: high and low. Treatments were given to the two experimental groups while the control group had no treatment.

### Participants

The participants in this study were Senior Secondary School students selected from two secondary schools from three Local Governments Areas in Osun State, Nigeria. A total of 120 students participated in the study which was carried out in three Local governments (Ayedaade, Isokan and Ede South Local Governments Areas) out of thirty local governments in Osun State.

A simple random sampling technique was used to select three local government areas (Ayedaade, Isokan and Ede South Local Governments) in Osun State. Simple random sampling technique was used to select one senior secondary school from each of the selected local government areas. The participants who scored high on Germeijs and Boecks' indecisiveness scale as a screening tool against the threshold of 50 were selected. The schools were randomly assigned to Work-value clarification Therapy (40), Cognitive information processing (40) and Control (40) groups.

### Sample and Sampling Techniques

Participants who scored 50% and above on the screening instrument were regarded as those that were suffering from career decision-making difficulty. Simple random sampling was used to select 40 senior secondary school students by using ballot system. The schools were randomly assigned to into the two experimental groups and control group based on the recommendation of the screening scale. (45%) participants were males, while (54.2%) of participants were females their age ranged between 13 and 15 years.

### Instrumentation

Three instruments were used for the collection of data in the study. They are:

1. Indecisiveness Scale by Germeijs and Boeck (2002). This was used as the screening instrument to identify the participants suffering from career decision-making difficulty that were included in the study.
2. Career Decision Making Difficulty Scale (CDMDS) by Gati, Krausz and Osipow (1996)
3. Career Self-Efficacy Scale (CSES) by Adeyemo (2000)



### **Indecisiveness Scale (IS)**

Indecisiveness Scale developed by Germeijs and Boeck (2002) was adopted as a screening instrument to determine those that were suffering from career decision making difficulty. *The scale was a 22-item questionnaire with a 7- point Likert scale ranging from “Strongly Disagree to Strongly Agree”.* Typical items of the scale are: *“I find it easy to make decisions” “It is hard for me to come to a decision”.* The instrument has a reliability of .92 as reported by the author. The instrument has been found to be useful and suitable for Nigerian sample. Participants respond by indicating their extent of agreement with each of the twenty-two statements. The instrument yielded .76 Cronbach alpha coefficients when tested for reliability.

### **Career Decision Making Difficulties Scale (CDMDS)**

This study was based on the students’ reaction to the adopted Career Decision Difficulties Scale (CDDS) developed by Gati, Krausz and Osipow (1996) which comprises 34 statements of attitudes to and beliefs about Career Decision Making. The participants were asked to specify their level of conformity with these statements on a 9-point scale, ranging from 1 - “Does not describe me”, to 9 - “Describes me well”. Typical items of the scale are: *“I expect that through the career I choose I will fulfil all my aspirations” “I find it difficult to make a career decision because I still do not know which occupations interest me”.* The reliability coefficient of the scale as reported by the author was .85 and the one established by the researchers was .81. The scale was used to measure the dependent variable at the pretest and the posttest point of the treatments.

### **Career Self-efficacy (CSES) Scale**

The career self-efficacy Scale by Adeyemo (2000) was used to determine the amount of confidence or belief students have to attain success in their proposed careers. The career self-efficacy scale comprises 5 subscales; self-appraisal, collecting information about occupation, selection of goals, making prospective tactics, and solving the problem. The total items for the test are thirty-eight (38), but for this study, it had been adapted to 33 items. The career self-efficacy scale adapted is a 5-point scale ranging from 1 (If you are Not Sure) to 5 (If you are Very Much Sure). Examples of the items are *“I know the requirements for my proposed course of study and the subjects I’m offering now are relevant to my proposed career”* Total career self-efficacy scale scores were calculated by summing the ratings for the 33 items with a maximum score of 165. The author reported a reliability coefficient of .89 for the instrument. The scale was also pilot-tested and its test-retest reliability established for this study was .87 Cronbach’s alpha. The scale was used to measure the level of career self-efficacy of the SSSs and to divide them based on the two-level of career self-efficacy that is low and high.

### **Procedure**

The researchers were granted permission to carry out the study in the selected schools, the participants were also orientated on the study and they were encouraged to cooperate with the researchers in order to make the training efficient and effective. They were also made to understand the benefit of the training to their academic and personal lives.

The treatments lasted for eight weeks for the two experimental groups (Work-value Clarification and Cognitive Information Processing therapies), each week, and the training section lasted for 40 minutes in each of the experimental group. While the control group was not given any treatment. Participants in the three groups (Work-value Clarification, Cognitive Information Processing, and Control) were exposed to a pre and post-test using the instruments in the study. The control group was not

### **Summary of the Treatment Package**

The summary of the treatment package is given as follows:



## **Experimental Group 1 Work-value Clarification (WVC)**

**Session One:** General orientation and administration of pretest instrument.

At this session, the therapists welcomed all participants and initiated rapport among them through self-introduction by each member. The therapists briefed the participants on the purpose of the session. The therapists administered pre-test instruments using 25 items Career Decision Self-Efficacy Scale-Short Form (CDSSES-SF) to obtain the pre score.

**Session Two:** Explanation on what career is all about.

At this session, the participants were taught the meaning of career, evaluated by asking them to explain what career is and the reasons for taking a career decision.

**Session Three:** Discussion of what career decision-making difficulty is?

At this session, the therapists explained the meaning of career decision-making difficulty as anything that hinders the participants from making the most appropriate career decision. Some of the reasons that make decision-making difficult when choosing a career were discussed.

**Session Four:** Explaining the consequences of making wrong career decision.

At this session, the therapists discussed with the participants some of the consequences of making a wrong career decision:

**Session Five:** Discussion of the meaning of work-value clarification.

At this session, the therapists explained the meaning of work-value clarification to the participants and evaluated by asking the participants to explain what they understand by work-value clarification.

**Session Six:** Teaching the participants, the phases of work-value clarification.

**Session Seven:** Discussing the types of Work-value.

**Session Eight:** Summary of all activities in the previous session and administration of instrument for post-treatment measures.

## **Experimental Group Two Cognitive Information Processing (CIP)**

**Session One:** General orientation and administration of pretest instrument.

At this session, the therapists welcomed all participants and initiated rapport among them through self-introduction by each member. The therapists briefed the participants on the purpose of the session. The therapists administered pre-test instruments using 25 items Career Decision Self-Efficacy Scale-Short Form (CDSSES-SF) to obtain the pre score.

**Session Two:** Explanation of what a career is.

At this session, the participants were taught the meaning of career, evaluated by asking them to explain what career is and the reasons for taking a career decision.

**Session Three:** Discussing what career decision-making difficulty is.

At this session, the therapists explained the meaning of career decision-making difficulty as anything that hinders the participants from making the most appropriate career decision. Some of the reasons that make decision-making difficult when choosing a career were discussed.

**Session Four:** Explaining the consequences of making wrong career decision.

At this session, the therapists discussed with the participants some of the consequences of making a wrong career decision:

**Session Five:** Discussion of what cognitive information processing therapy is.

At this session, the therapists explained the meaning of cognitive information processing therapy to the participants and evaluated by asking the participants to explain what they understand by cognitive information processing therapy.

**Session Six:** Explaining the aims of cognitive information processing

**Session Seven:** Narrating the fundamental ways of cognitive information processing model.

**Session Eight:** Summary of all activities in the previous session and administration of instrument for post-treatment measures.

### Method of Data Analysis

Data were analysed using Analysis of Covariance (ANCOVA) and Bonferroni Post hoc, Analysis of covariance was used to analysed the data generated from the participants response to the instruments in order to determine the effect of the treatments, on the experimental groups. The ANCOVA was also used to establish the relationship between the participants pre-treatments and post-treatment scores. All the hypotheses were tested at 0.05 level of significance to determine the effects of treatment on Career Decision-Making Difficulty of the participants.

## RESULTS

The results of co-variance analysis regarding the pretest scores of secondary school students are given in Table 1.

**Table 1.** Summary of 3x2x2 Analysis of Covariance (ANCOVA) Post-Test CDMD of the secondary school students.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	13059.947 <sup>a</sup>	12	1088.329	2.494	.006	.219
Intercept	88066.456	1	88066.456	201.847	.000	.654
Pre	1892.279	1	1892.279	4.337	.040	.039
Trtgrp	8079.557	2	4039.778	9.259	.000	.148
Gender	44.889	1	44.889	.103	.749	.001
CSE	75.278	1	75.278	.173	.679	.002
Trtgrp * Gender	1325.979	2	662.989	1.520	.223	.028
Trtgrp * CSE	128.369	2	64.185	.147	.863	.003
Gender * CSE	122.508	1	122.508	.281	.597	.003
Trtgrp * Gender * CSE	576.665	2	288.332	.661	.519	.012
Error	46684.378	107	436.303			
Total	2442927.000	120				
Corrected Total	59744.325	119				

R Squared = .219 (Adjusted R Squared = .131)



In order to determine the group(s) causing significant difference, a control group based on Bonferroni Post-hoc analysis was performed. The Bonferroni Post-hoc analysis result is given in Table 2.

**Table 2.** The significant difference among various treatment groups and the control group based on Bonferroni Post-hoc analysis.

Treatment Group	N	Subset for alpha = .05	
		1	2
Cognitive Information Processing	40	134.9750	
Work-Value Clarification	40	135.2500	
Control	40		152.5500
Significant		.953	1.000

The results from table 1 showed that there is significant main effect of treatments on the career decision making difficulty of the secondary school students ( $F_{(2, 107)}=9.259, p<.05, \eta^2=.148$ ). This means that there is a significant difference in the mean scores of the career decision making difficulty of the secondary school students exposed to work-value clarification when compared with the control group. Hence, the hypothesis one is significant. It was therefore concluded that there is significant main effect of work-value clarification in reduction of career decision making difficulty of the secondary school students. This implies that work-value clarification is effective in reducing career decision making difficulty of the secondary school students.

To further provide information on the reduction of career decision making difficulty of the secondary school students among the three groups (Cognitive Information Processing, Work-value Clarification and Control), it is important to determine the course of the variation and establish the significance of the mean scores of the participants in each of the treatment and the control groups as presented in Table 2.

Following observation were made in table 2:

- i. There was no statistically significant difference between the post-hoc tests mean scores in reducing career decision-making difficulty of the secondary school students in the Cognitive Information Processing therapy and Work-value Clarification groups. However, the participants in the Cognitive Information Processing (Mean=134.975) benefited better than those in the Work-value Clarification (Mean=135.250). This is most probable because Cognitive Information Processing is a counselling method that embraces an attitude closer to the exercise of psychotherapy that affirms the inherent price of the man or woman and also responds appropriately and correctly to the character at the affective, behavioural, cognitive and physiological degrees of functioning. It is more impacting on the participants than Work-value Clarification as shown in the result of the tests.
- ii. There was a significant difference in the post-hoc mean test scores in reducing career decision making difficulty of the secondary school students exposed to Cognitive Information Processing and Control Group. The participants in Cognitive Information Processing (Mean = 134.975) reduced the career decision-making difficulty significantly better than those in the Control Group (Mean = 152.550). The Control Group was not subjected to any of the psychological sessions as



to give a change of orientation to the participants concerning their attitude to career decision making difficulty.

iii. There was a significant difference in the post-hoc test mean scores in reducing the career decision-making difficulty of the secondary school students exposed to work-value clarification and control group. The participants in Work-value Clarification (Mean = 135.250) reduced the career decision-making difficulty of the secondary school students significantly better than those in the Control Group (Mean = 152.550). Instead of exposing the participants to the instruments provided in order to bring about a behaviour that will reduce career decision-making difficulty, the students were only given a lecture on a non-psychological session. The adolescents were only lectured on “Moral behavior”.

iv. These observations from the results of the tests imply that there are significant differences among the mean scores of participants in Cognitive Information Processing, Work-value Clarification and those in the Control Group. The Cognitive Information Processing and Work-value Clarification are more effective than the Control Group, and that the Cognitive Information Processing had the greater potency on career decision-making difficulty among the participants than Work-value Clarification.

The results from Table 1 showed that there is no significant main effect of gender on career decision making difficulty of the secondary school students ( $F_{(1, 119)} = 0.103, p > 0.05, \eta^2 = 0.001$ ). This means there is no significant difference in the mean scores of the gender on career decision-making difficulty of the secondary school students in male and female when compared with each other. Hence, hypothesis two was not significant.

The results from Table 1 also showed that there is no significant main effect of Career Self-Efficacy on career decision-making difficulty of the secondary school students ( $F_{(1, 107)} = .173, p > .05, \eta^2 = .002$ ). This means that there is no significant difference in the mean scores of the Career Self-Efficacy on career decision-making difficulty of the secondary school students in high and low Career Self-Efficacy when compared with each other. Hence, hypothesis three was not significant.

The results from Table 1 also revealed that there is no significant interaction effect of treatment and gender on career decision making difficulty of the secondary school students ( $F_{(2, 107)} = 1.520, p > .05, \eta^2 = .028$ ). This means there is no significant interaction effect between treatment and gender on career decision making difficulty of the secondary school students. Hence, hypothesis four was not significant.

The results from Table 1 showed that there is no significant interaction effect of treatment and Career Self-Efficacy on career decision making difficulty of the secondary school students ( $F_{(2, 107)} = .15, p > .05, \eta^2 = .003$ ). This means there is no significant interaction effect between treatment and career self-efficacy on career decision making difficulty of the secondary school students. Hence, hypothesis five was not significant.

The results from Table 1 showed that there is no significant interaction effect of gender and career self-efficacy on career decision-making difficulty of the secondary school students ( $F_{(1, 107)} = .281, p > .05, \eta^2 = .003$ ). This means there is no significant interaction effect between genders and career self-efficacy on career decision-making difficulty of the secondary school students. Hence, hypothesis six was not significant.

The results from Table 1 showed that there is no significant interaction effect of treatment, gender and career self-efficacy on career decision-making difficulty of the secondary school students ( $F_{(2, 107)} = .661, p > .05, \eta^2 = .012$ ). This means there is no significant interaction effect between treatments, gender and career



self-efficacy on career decision-making difficulty of the secondary school students. Hence, hypothesis seven was not significant.

## DISCUSSION, CONCLUSION, and SUGGESTIONS

The results of the study revealed the effects of both therapies (Work-value Clarification and Cognitive Information Processing) in the management of career decision-making difficulty of secondary school students. Work-value clarification training and cognitive information processing therapy were found to be effective in the management of career decision-making difficulty of secondary school students. This finding corroborates Cook and Maree (2016) who affirmed that the treatments (Work-value Clarification and Cognitive Information Processing) helped the participants from both groups to accumulate information about themselves, make career choices, simplify their values, work ethic improvement, obtain information about career, interests' clarification and optimistic aspects of their lives is identified. The finding of this study is also in harmony with Eremie and Ibifari (2018) who revealed that interventions like career guidance and counselling, identification of career goals, giving the necessary knowledge about the career in future, making career decisions, assistance in the assessment of self, and career planning by individual, assisted students to make a better career choice. Therefore, many Counselling Psychologists in Nigeria use it more than any other interventions.

The study also revealed no substantial effect of gender on the career decision-making difficulty of secondary school students. This implies that no substantial dissimilarity in the mean score of males and females on career decision-making difficulty of secondary school students. This indicates that gender difference has no significant impact on the career decision-making difficulty of secondary school students. This finding was supported by Mtemeri (2017) who reported no significant influence of gender on career choices. The finding is also in accordance with Kazi and Akhlaq (2017) who revealed that gender was not significant on career decision. They reported that the participants do not perceive gender as hindrance to their career choice. Chung, (2002); Fouad and Smith, (1997) stated that there is no substantial dissimilarity between male and female in career decision making self-efficacy. Also, Yang (2008) discovered that there were no substantial differences among male and female regarding academic achievement and that both genders put in the same efforts to achieve in their academic pursuits. Saleem, Aly and Gul (2017) affirmed that there was no substantial dissimilarity in male and females in the modern era where the sense of competition is high and both male and females have career orientation and plans. The explanation could be on the grounds that the two treatments (work-value clarification training and cognitive information processing therapy) engaged have to do with training and information about career paying little respect to their gender.

The study also revealed that there was no critical principal impact of career self-efficacy on the career decision-making difficulty of secondary school students. This basically implies that there was no huge distinction in the career decision-making difficulty of school adolescents on the degree of their career self-efficacy. This supports the findings of Bounds (2013) who uncovered that there is an irrelevant relationship between career decision self-efficacy and scholastic accomplishment.

Abesha (2012) also asserted that self-efficacy was not altogether related to instructive achievement. Likewise, Crisan and Sebastian (2015) guaranteed that a few examinations have demonstrated unpleasant connection between self-efficacy and career decisions making. Creed; Patton and Prideaux (2006) presented that adjustment in career self-efficacy of High school students doesn't have any critical association with their career decision-making difficulty. Likewise (Betz & Luzzo, 1996; Betz, Klein & Taylor, 1996) revealed negative relationships between self-efficacy and career decision-making difficulty. This might be because of set up reality that the degree of career self-efficacy doesn't have any impact on the career

decision-making difficulty of students. Students consider difficulties to be typical things that one has to go through, yet the degree of introduction, information and direction will decide how one will survive and support accomplishment.

Arif, Iqbal, and Khalil (2019) also discovered that self-efficacy experiences do not influence career decision-making among students in south-south, Nigeria. Studies revealed career self-efficacy as negatively related to career decision-making difficulty (Amir & Gati, 2006; Creed, Patton, & Bartrum, 2004). The feasible explanation behind the outcome of this study might be on the grounds that the two meditations or therapy include instructions on the most proficient method to understand self, knowing one value, and regardless of the degree of self-efficacy, the students were encouraged on how to understand their own value and the essential information given. This may likely build their effort in completing things.

The results also demonstrated that no significant interaction effect of treatments (work-value clarification and cognitive information processing) and gender in the career decision-making difficulty of secondary school students. The outcome is in harmony with Joshua, Terungwa and Saanyol (2018) who affirmed that gender does not have a significant difference in career decision. In addition, it shows that there were other factors that affect career decision among students. Also, Lam (2016) discovered that the intervention did not reveal significant changes in career decision-making difficulty (career decision-making difficulty) related to lack of incentive for both male and female students. This meant that gender does not have influence on career decision among secondary school students. This finding may be because of the fact that the ability of male and female to manage situation in most cases did not differ significantly. This indifference in the abilities to manage a situation did not have an influence on the reactions of male and female students to the rigidity of the intervention they were exposed to during the course of the intervention. The results also showed no substantial interaction effect of gender and career self-efficacy on the career decision-making difficulty of secondary school students. This simply means that gender and career self-efficacy did not moderate the effect of the treatments (Work-value Clarification and Cognitive Information Processing) on the career decision-making difficulty of secondary school students.

The finding of this study opposed Agbaje and Agbaje (2014) study who found that career self-efficacy and gender are the moderating factors that have an influence on the causal link between the intervention programmes and the criterion measures. Also, Fouad and Byars-Winston (2009) found that the increase in career self-efficacy leads to significant decreases in career decision-making difficulties. They proposed that major decreases in career decision-making difficulty can be ascribed to the inclusion of career assessments to clarify interests and enhancing students to research various careers and majors. This could be that work-value clarification and cognitive information has to do with identification of value and given information that might enhance the confidence and boost the achievement regardless of their career self-efficacy.

The results obtained showed that no significant interaction effect of treatments, gender and career self-efficacy on career decision making-difficulty of secondary school students. Consequently, the null hypothesis was accepted. This result is in consonance with the findings of Brown, George-Curran and Smith (2003) who affirmed that gender was not a mediator of the relationship between factors of emotional intelligence, career commitment, occupational investigation and career decision-making self-efficacy. Also, George-Curran and Smith (2003) and Salami (2001) studies discovered no significant relationship between gender and career behaviors. The probable reasons for this are that students irrespective of their gender, schools, class, location and level of career self-efficacy were exposed to related school experiences and same educational school policy, but have different level of career self-efficacy.



## Conclusion

This study was set up to examine the effectiveness of work-value clarification therapy and cognitive information processing therapy in the management of career decision-making difficulty of secondary school students in Osun State, Nigeria. Gender and career self-efficacy were the moderating variables. In view of this, the selected participants undergone therapeutic interventions for eight (8) weeks, respectively; the data collected were carefully analysed using appropriate statistical tools which revealed the result of the study. Sequel to the findings of the study, the following conclusions are made: work-value clarification training and cognitive information processing therapy were effective in the management of career decision-making difficulty of secondary school students. This means that appropriate usage of the principles essential to these psychological interventions ought to generate the related outcome. Nevertheless, cognitive information processing therapy was more efficient than work-value clarification in the management of career decision-making difficulty of secondary school students.

This study also discovered an insignificant interaction effect of gender and career self-efficacy in the management of career decision-making difficulty of secondary school students. The present study further revealed an insignificant interaction effect of treatments, career self-efficacy, and gender on the career decision-making difficulty of secondary school students. The findings show that in the aspect of work-value clarification training and cognitive information processing therapy on career decision making the difficulty of secondary school students in this study, the interventions are not gender-biased and therefore could be applied to students of both genders to improve their knowledge as regards deciding on career and difficulty in career decision-making. In addition, the finding also revealed that career self-efficacy did not have a significant influence in the management of career decision-making difficulty when using the work-value clarification and cognitive information processing therapies.

## Implication for Counselling

- The fact that work-value clarification and cognitive information therapies were effective in the management of career decision-making difficulty of the students, the principles embedded in the interventions should be incorporated into the orientation training package for the students before chosen point in their educational activities such as, at the end of the Primary school certificate examination, Junior secondary Examination and Senior secondary Examination. These will better equip the pupils to effectively manage challenges experience before, during and after career decision;
- The counselling centre with the aims of helping students to overcome difficulty experience in making career decision should maximise the rudiments of psychological interventions used in this study to assist students in reducing or managing career decision-making difficulty;
- The effectiveness of the interventions has also developed career management skills, rather than only helping people to solve immediate career problem and to make immediate decisions.
- Counselling and educational psychologist should be given the proper place in public secondary schools. Their attention should also be extended to parents rather than being limited to students. They should be saddled with the responsibility of using counselling principles and skills to manage the difficulty of career decision-making.

## REFERENCES

- Abesha, A. G. (2012). *Effects of parenting styles, academic self-efficacy, and achievement motivation on the academic achievement of university students in Ethiopia* (Unpublished doctoral thesis). Edith Cowan University.

- Adeyemo, D. A. (2005). Parental involvement, interest in schooling and school environment as predictors of academic self-efficacy among fresh secondary school student in Oyo State, Nigeria. *Electronic Journal of Research in Educational Psychology*, 5(3), 163-180.
- Agbaje, A. A., & Agbaje A. O. (2014). Understanding problems of vocational counselling information seeking behaviour in the modern Nigeria. *Journal of Humanities and Social Science*, 19(5), 50-57.
- Akpochafo, G. O. (2020). Career decision-making difficulty among secondary school students in Nigeria. *Universal Journal of Educational Research*, 8(11B), 5918 - 5925.
- Akpochafo, G. O. (2011). Emotional Intelligence and Self-Efficiency as correlates of Career commitment in Nigeria, *African Research Reviews*, 5(1), 212-225
- Amir, T., & Gati, I. (2006). Facets of career decision-making difficulties. *British Journal of Guidance and Counselling*, 34(4), 483-503.
- Arif, S., Iqbal, J., & Khalil, U. (2019). Factors influencing students' choices of academic career in Pakistan. *FWU Journal of Social Sciences*, 13(1), 12-20.
- Arif, S., Ejaz, A., & Yousaf, N. (2017). Career aspirations and opportunity for FWAs: Perceptions of Pakistani Women. *Journal of Management and Research*, 4(1), 1-28.
- Baruch, Y., Szűcs, N., & Gunz, H. (2015). Career studies in search of theory: The rise and rise of concepts. *The Career Development International*, 20(1), 3-20.
- Betz, M.E., & Hackett, G. (2009). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28(5), 399-410.
- Betz, N. E. Klein, K., & Taylor, K. M. (1996). Evaluation of a short form of the career decision-making self-efficacy scale. *Journal of Career Assessment*, (4), 47-57.
- Bounds, P. S. R. (2013). Examining the relationship between career decision self-efficacy, ethnic identity, and academic self-concept and achievement of African American high school students [University of Iowa]. <https://doi.org/10.17077/etd.lav4h3g0>
- Brown, S. D., & Krane, N. E. R. (2000). Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counseling. In S. D. Brown & R. W. Lent (Eds.), *Handbook of Counseling Psychology* (pp. 740–766). John Wiley & Sons, Inc.
- Bravo-Baumann, H. (2000). Livestock and gender: A winning pair, working document, swiss agency for development and cooperation bern. [www.siyanda.org/docs/genie/sdc/Gender\\_and\\_Livestock.doc](http://www.siyanda.org/docs/genie/sdc/Gender_and_Livestock.doc).
- Briska, L., & Dislere, V. (2018). *Guidance model for promoting self-directed career decision-making by secondary school students*. In V. Dislere (Ed.), *The Proceedings of the International Scientific Conference Rural Environment. Education. Personality (REEP)*, 11.Jelgava: LLU TF, 344-350.
- Brown, C., George-Curran, R. & Smith, M. L. (2003). The role of emotional intelligence in the career commitment and decision-making process. *Journal of Career Assessment*, 11(4), 379-392.
- Chung, T. J. (2002). *Computational fluid dynamics*. Cambridge University Press, 1012 pp. ISBN 0 521 59416
- Cook, A., & Maree, J. G. (2016). Efficacy of using career and self-construction to help learners manage career-related transitions. *South African Journal of Education*, 36, 1-11.
- Creed, P. A., Patton, W., & Prideaux, L. A. (2006). Causal relationship between career indecision and career decision-making self-efficacy: A longitudinal cross-lagged analysis. *Journal of Career Development*, 33(1), 47-65.
- Creed, P. A., Patton, W., & Bartrum, D. (2004). Internal and external barriers, cognitive style, and the career development variables of focus and indecision. *Journal of Career Development*, 30(4), 277-294.
- Crisan, C., & Sebastian T. (2015). The connection between the level of career indecision and the perceived self-efficacy on career decision-making among teenagers. *Social and Behavioural-Sciences*, 209, 154-160.
- Di Fabio, A., & Kenny, M. E. (2011). Promoting emotional intelligence and career decision making among italian high school students. *Journal of Career Assessment*, 19(1), 21–34.

- Ebenehi, A. S., Rashid, A. M., & Bakar, A. (2016). Predictors of career adaptability skill among higher education students in Nigeria. *International Journal for Research in Vocational Education and Training (IJRVET)*, 3(3), 212-229.
- Ellis, N. (2006). Cognitive perspectives on SLA: The associative-cognitive CREED. *AILA Review*, 19(1), 100-121.
- Eremie, M. D., & Ibifari, B. (2018). Factors influencing students' career choice in secondary schools in Rivers State: Implication for career counselling. *International Journal of Innovative Education Research*, 6(4), 93-100.
- Fizer, D. (2013). Factors Affecting Career Choices of College Students Enrolled in Agriculture (Unpublished master's thesis). USA: University of Tennessee.
- Fouad, N. A., & Byars-Winston, A. M. (2005). Cultural context of career choice: Meta-analysis of race/ethnicity differences. *The Career Development Quarterly*, 53(3), 223-233.
- Fouad, N. A., Smith, P. L., & Enochs, L. (1997). Reliability and validity evidence for the middle school self-efficacy scale. *Measurement and Evaluation in Counseling and Development*, 30, 17-31.
- Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology*, 43(4), 510-526.
- Germeijs, V., & Boeck, P. D. (2002). A measurement scale for indecisiveness and its relationship to career indecision and other types of indecision. *European Journal of Psychological Assessment*, 18(2), 113-122.
- Joshua, Z. D., Terungwa, A. S., & Saanyol, D. B. (2018). Correlates of career choice among senior secondary school students in Tarka LGA of Benue State, Nigeria. *International Journal of Education and Evaluation*, 4(8), 53-66.
- Julius, K., Jacob, B., Daniel, R., Samson, K., Joseph, O. O., Betty, K., & Hassan, N. (2016). Factors influencing career choices among undergraduate students in public Universities in Kenya: A case study of University of Eldoret. *International Journal of Contemporary Applied Sciences*, 3(2), 51-6318.
- Kazi, A. S., & Akhlaq, A. (2017). Factors affecting students' career choice. *Journal of Research and Reflections in Education*, 2, 187-196.
- Kshetrimayum, B. D. (2018). Preparing for career in adolescence. *Journal of Humanities and Social Science*, 23(12), 2279-2845.
- Kuzgun, Y. (2000). *Theories and Practice in Career Counseling*. Ankara, Turkey: Nobel Yayin Dagitim
- Lam, M. C. (2016). *Effects of a career course on students' career decision-making self-efficacy, indecision and difficulties* (Unpublished PhD Thesis). University of Nottingham, Malaysia Campus.
- Lauren, K. O. (2014). Using a cognitive information processing approach to group career counselling with visually impaired veterans. *The Professional Counsellor Volume*, 4(2), 150-158.
- Mashige, K. P., & Oduntan, O. A. (2011). Factors influencing South African optometry students in choosing their career and institution of learning. *African Vision and Eye Health. South African Optometrist*, 70(1), 21-28.
- Migunde, Q., Othuon, L., & Mbagaya, L. (2015). Career maturity and career decision making status of secondary school students in Kisumu Municipality, Kenya. *Educational Research*, 6(3), 50-54.
- Mtemeri J. (2017). Variables influencing the choice of career pathways among high school students in Midlands Province, Zimbabwe. [http://uir.unisa.ac.za/bitstream/handle/10500/23174/thesis\\_mtemeri\\_j.pdf?sequence=1&is](http://uir.unisa.ac.za/bitstream/handle/10500/23174/thesis_mtemeri_j.pdf?sequence=1&is)
- Mabula, N. (2012). Career services provision to secondary school students in Tanzania: is it a dream or reality? *International Journal of Learning and Development*, 2(2), 242-257.
- Ottu, I. F. A., & Idowu, O. O. (2014). Openness to experience, conscientiousness and gender as personality indicators of career maturity of in-school adolescents in Ibadan, Nigeria. *European Journal of Educational Studies*, 6(1), 1-12.
- Salami, K. A. (2001). Basic statistics and data processing in education. In A. Adeyanju, (Ed.), *Introduction to educational management* (p.155-182) Oyo: Green Light Press & Publisher.
- Sampson, J. P., Peterson, J. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1999). A cognitive information processing approach to problem solving and decision making. *Career Development Quarterly*, 48, 3-18.



Turkish International Journal of Special Education and Guidance & Counseling 2024, volume 13, issue 1

Saleem, T., Gul, S., & Aly, M. (2017). Career decision making self-efficacy, goal stability and academic achievement among university students. *European Journal of Pharmaceutical & Medical Research*, 4(8), 20-25.

Slaten, C. D., & Baskin, T. W. (2014). Examining the impact of peer and family belongingness on the CDMD of young adults: A path analytic approach. *Journal of Career Assessment*, 22, 59–74.

Yang, L. (2008). The real determinants of asset sales. Retrieved from <https://doi.org/10.1111/j.1540-6261.2008.01396.x>.

TIJSEG