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## Nicotine Addiction Control and Coconut Juice

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RESEARCH PROPOSAL

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RESEARCH PROPOSAL

### Abstract

**Introduction:** Relapses from nicotine and addictive substances of drugs prevent people from quitting. Consequences are mental health, academics, and increase in risk taking. Objective: to determine whether coconut juice can aid persons addicted to drug and alcohol successfully quit. **Methods:** an experimental study, which will recruit and assign samples of participants to groups using systematic random sampling. Three groups will be involved, the control group I and two experiment groups II and III Group II receives treatment of coconut water and group III receives nicotine chewing gum treatment/ nicotine cessation vape, and standard alcohol and drug addiction treatment. Both Groups I, II and III form the comparison groups. Participants to use recording journal for treatment received, and amount of alcohol and drug taken during the experiment. Only individuals willing to quit will be included, and otherwise excluded to reduce mortality. Data analysis is by SPSS statistics. Two-Way ANOVA used to determine the within- and between group means. Tukey HSD will used to determine significance differences if any. Bivariate regression analysis to be used to determine relationship and direction of causation. **Results:** Error margin is 5% at 95% CI. P value set at .05. P value above .05 ( $p \geq .05$ ), null hypothesis ( $H_0$ ) will be accepted and alternate rejected because there is no relationship. P value below .05 ( $p \leq .05$ ),  $H_0$  is rejected and the alternate accepted because there is a relationship. **Conclusion:** to be based on whether there is a significant difference and a relationship.

### Introduction

Nicotine is a psychoactive ingredient of tobacco and it is addictive. There is high prevalence of tobacco consumption among children, youth and adult (Ebisike et al., 2004; KelogluIsler & Erdogan, 2007; Nadaf, 2007; Anggadiredja, Barlian, Pinang & Anggrae-ny, 2011). This is an experimental study designed to determine whether the consumption of coconut juice will help persons

addicted to substances such as drug and alcohol who desire to quit but cannot successfully quit, because of the relapses caused by nicotine and addictive substances of drug and alcohol. Author will randomly select Samples and randomly assign samples to groups. It will have a control group and two treatment groups to provide

the basis for comparison. The treatment will last for 30 days and participants will use questionnaires and recording journals to collect data. The hypotheses: null ( $H_0$ ) and alternate ( $H_a$ ) will be determined using two-way ANOVA. The study will use ANOVA to determine the mean squares, the degrees of freedom for between group tests, within group tests and the overall degrees of freedom. If the intercept between vertical and horizontal axis is more than zero (0), the total will be adjusted by subtracting the value of the intercept from the total value. This study will use SPSS statistical instrument to perform the analyses. The p value will be set at .05, therefore, the null will be accepted and the alternate rejected, if p value obtained is above ( $p \geq .05$ ), because that will be an indication of no relationship. But, if p is equal or below ( $p \leq .05$ ) then, there is a relationship, and the null will be rejected and the alternate accepted because there is a relationship. The degree of freedom is 95%, and error margin 5%. Since this study will involve more than one independent variables, Tukey HSD test will be conducted to determine whether the observed differences are significance or not (testing whether the statistical tool used in determining the mean difference is reliable or not). The conclusion will be based on whether a relationship was established, or not, and if yes, whether the relationship is significance or not.

**Background** Coconut is a plant from the tropics and its botanical name is *cocos nucifera* belonging to the family Arecaceae. (Ge, Ng, Tan & Yong, 2009; Nutrition- and-you.com, n.d; Alleyne, Roache, Shirly & Thomas, 2005). Many scientific research studies revealed that coconut flesh, oil and juice have high health and pharmaceutical value. Many scientific research studies on the composition of coconut juice (CJ) found that it contains versed minerals, vitamins, electrolytes and phytochemicals, which give it high potentials for healing body defects including cancer and high blood pressure among others (Ge, Ng, Tan & Yong, 2009; Nutrition- and-you.com, n.d; Alleyne, Roache, Shirly & Thomas, 2005). Researchers have revealed that CJ is an effective antidote (Elijah, Nnamdi, Nwodo, & Ozoemena, 2010). Individuals addicted to smoke, drug and alcohol find it very difficult to quit smoking because it contains nicotine and other addictive substances (DiFranza, Dugas, Eisenberg, Gervais, Loughlin & Wellman, 2007). Since scientific studies have identified relapses among persons addicted to drug and other substances who have attempted or are attempting to quit but experience relapses along the line, (DiFranza, Dugas, Eisenberg, Gervais, Loughlin & Wellman, 2007); researchers have the obligation to determine ways of assisting persons addicted to substances to overcome addiction in order to successfully and sustainably quit. It is a common native practice in Nigeria to uses Coconut Juice to neutralize adverse effect of ingested poison, and medicines that showed adverse reactions on family members. This study therefore seeks to determine quantitatively whether Coconut Juice or coconut water possess a capacity to aid persons addicted to substances to overcome the addiction successfully and sustainably quit and cease to use substances, which they have decided to quit, each time addictiveness of nicotine stand in the way.

**Fig 1.** Image of Coconut



**Statement of the problem** People are introduced to drug sometimes very early in life at a very young age (8 years) by people in their immediate environment such as school, home, and street. There are many kinds of drugs namely, alcohol, marijuana, cannabis, cocaine, heroin, meth- amphetamine, methadone, morphine, dilaudid, talwin, Ritalin, oxycodone, ampheta- mines, barbiturates, acid, ecstasy, angel dust, mushroom, fentanyl, tranquilizer, painkillers, demerol, opium, gasoline/solvents, crack, and PCP (Wylie, 2005). The most addictive of all are, nicotine found in tobacco, barbiturates (for anxiety and sleep), cocaine, alcohol and heroin, respectively (Juergens, 2016). Persons suffering from addiction are often unemployed or have precarious incomes such as temporary or part-time jobs, employment insurance, pension, government support, prostitution, support from family and friends, stealing and selling stolen items (boosting), pam handling (street begging) (Wylie, 2005). In 2023, 400 people lost their lives to addiction in Manitoba, Canada (CBC News, 2023). And 1,011 were hospitalized on account of addiction in Manitoba from January 1 - March 31, 2019 (Gov.mb.ca, 2019). Addiction has cost wastes and loss of many lives all over the world. In Canada, addictions are blamed for moral decadent, school dropout, mental illness, drug and alcohol abuse and so forth (Goddard, 1990). (Abernathy, Massad, & Romano-Dwyer, 1995). In 2019, 10.4% of Nigerians smoke and one in every ten Nigerian smoke (Adeloye et al., 2019). In the United States, 22.7 million (8.6%) are addicted to alcohol and drug (Juergens, 2016). In 2021, it was reported that 1.3 million persons smoke and in every 8 seconds, one person dies in the world for complications caused by smoking and addictive substances and 31.9% of adult population in North Eastern Nigeria smoke (Bademosi & Chijioke, 2021). Smoking leads individuals to taking risks. (Statistics Canada, n.d.). Smoking and addiction is associated with stress, depression, and other psychological factors that affect an individual's health (Carvajal, Koval, McGrady, Mills, & Pederson, 2002). Women who are smoking are on the increase in Canada more than the men; (Barr, & Greaves, 1999); and the bulk of the responsibility of raising children are in the hands of women. About 45,000 people die each year in Canada due to smoke-related reasons. And smoking has placed huge economic burden on various governments including Canada (Diener, 2000). Academic performance and school someone attend is associated with smoking. (Statistics Canada, n.d.; Fallus, Janosz, Mariano, Morin, & Rodriguez, 2011). Smokers are having serious problem quitting smoking because, it contains addictive substance called nicotine (DiFranza, Dugas, Eisenberg, Gervais, Loughlin & Wellman, 2007; Ebisike, Ayejuyo, Sonibare, Ogunkunle & Ojumo 2004; Keloglu-Isler & Erdogan, 2007). High dose of Coconut Juice was revealed to be effective in neutralizing the hematological

effect of paracetamol (Elijah, Nnamdi, Nwodo & Ozoemena, 2010). Although prevention is always a more cost effective, more life-saving and more sustainable, (DiFranza, Dugas, Eisenberg, Gervais, Loughlin & Wellman, 2007); still there is a need to find lasting solution to effectively and sustainably help those who are struggling with addiction to quit permanently, when they desire to do so. Nicotine is forcefully trapping people to keep smoking and drinking against their wishes, which is an unlawful approach to life. Drug including tobacco and alcohol consumption increases the health risks of its users namely, cancer and cardiovascular diseases (Anggadiredja, Barlian, Pinang & Anggraeny, 2011; Hang & Chen, 2011; Nourbala et al., 2011). Crime rate, which is a consequence of addiction is 50% higher in Winnipeg more than mega cities like Calgary and even double that of Toronto in 2004, which is nearly four times bigger than Winnipeg in population. Outcome of research evidence stands as a blue print for effective intervention, treatment, and recovery of addiction (Soberity.ca Foundation, 2023). Based on the above submission, this study was deemed worthwhile and it was designed to determine whether Coconut Juice can assist individuals struggling with addiction to overcome the relapses caused by addictive substances in smoke, drug, and alcohol to allow desiring user to permanently quit.

### **Purpose**

The purpose of this research is to help individuals addicted to smoke, drug and alcohol to permanently overcome addictive substances with the aid of coconut water consumption whenever they desire to do so.

### **Research question**

Is there a relationship between Coconut Juice consumption and overcoming of addiction?

### **Statement of Hypotheses**

Null1: HO

HO1: There is no relationship between consumption of coconut Juice and overcoming of addiction.

Alternate: HA

HA1: There is a relationship between consumption of coconut Juice and overcoming of addiction.

HO2

Coconut juice is not more effective than nicotine chewing gum in overcoming nicotine addiction.

HA2

Nicotine chewing gum/vape is more effective than coconut juice in overcoming nicotine addiction.

## **Design of the Study**

This is a quantitative experimental study, which will randomly sample, and assign participants to the treatment and control groups. The study variables are: dependent - addiction (addictive substance) overcoming, and the independent variable – coconut juice consumption. Quasi-experiment or Crosssectional design will not be used because it will not give room for random sampling. It will not support an establishment of relationship between the independent variable and the dependent variable or the cause and effect without having any other rival variables or factors that can influence the dependent variable other than the independent variable under study (Frankfort-Nachimias & Nachimias, 1996, p.148). That will not allow for extrinsic and intrinsic or rival

control or other explanations other than the independent variables that influence the result or the dependent variable (FrankfortNachimias & Nachimias, 1996, p.148). It will not allow the Author to manipulate the independent variables. It cannot allow the Author to determine the direction of the causation except only if it is logical or theoretically supported. Also, both the CrossSectional and Quasiexperiment has weak internal validity, and for this study to be credible with minimum flaws, Author needs to control the extrinsic and intrinsic variables, which threatens internal validity, and this is the prime condition for generalizability (Frankfort-Nachimias & Nachimias, 1996, p.148).

### **Definition of Terms**

**Smoking:** Tobacco consumption

**Addiction:** Chemical composition of tobacco, alcohol and drug that cause relapses and making it difficult for people to give up addiction permanently even when they are determined to quit.

**Overcome:** able to get over or stop to smoke or consum alcohol.

**Consumption:** To take into the body by way of eating or drinking, or smoking or inhaling, or injection.

**Permanently:** Forever stop smoking as desired.

**Coconut Juice:** The fluid, or water found inside the coconut when it is cracked open.

### **Theoretical Perspective**

This study is supported by the theory of traditional medicine or native science. For example; the theory of Native American Medicine that holds a belief that the individual health occurs once there is harmony between an individual's inner self, lifestyle, emotions, social, and natural environments. (Fonfa, 2003; healthandhealingny.org, n.d.). And Johnson, (2012), described the belief as the balance between the microcosm (the chemistry of the internal body), and the macrocosm (external environment) such as: the cosmological, spiritual, and the ecological environments. It follows the laws of the physical nature in bringing healing to the body. Herbal medicine includes: bone setting, Midwifery, or counselling. (Fags, n.d.). ative herbs are used for healing stomach, colon, nasal passage, kidney, lungs, liver, skin pores, bones, and reproductive organs. Others are: cold, fever, antiseptic for allergies, burns, throat and others. (Fags, n.d.). The traditional American medicine uses boiled cedar fruits and leaves to cure cough. (Fags, n.d.). Generally, plants in its natural state are rich source of vitamins, minerals and plants contain hundreds of phytochemical compounds (Ahajumobi, et al, 2022, 2023). Phytochemical compounds have no food value but they have properties that make them act like medicine, such properties as; chemotherapeutic action. While medical chemotherapy destroys bone marrow, Plant's chemotherapeutic action does not destroy the bone marrow. Some of the properties are anti-cancer, such as: indole-3- carbinol, calcium D-glucarate, and sulforaphane. Also, there are some cruciferous plants that have anticarcinogenic properties namely: Kale, cauliflower, collards, broc- coli, collards, and sprout. (Mercola.com, 2012). Similarly, there are many African native medicinal plants that clinical evidence have linked with strong healing potency against several chronic diseases essentially, the ones that do not have effective treatment with modern medicine (Ahajumobi, 2017, 2018, 2022; Ahajumobi et al., 2022, 2023, 2024). Additionally, this study is also supported by the causal process theory of axiom, because it seeks to determine whether the independent variable (coconut juice) can effect the dependent

variable (overcoming the addictive effect of nicotine, drug and alcohol). It seeks to establish a causal relationship between the independent and dependent variables. (Reynolds, 1971, p.97). This will also be supported by experimental theory because treatment will be given, samples randomly selected, and assigned to treatment and control groups, and the control group will form the comparison group. Theory of comparison, and theory of measures of central tendency will be involved in conducting this study. And the Pre-testing theory will be involved in this study because the measurement instruments need to be pretested before use to ensure that the tools are in good working conditions. Additionally, it will provide a comparison group.

## Literature Review Literature

**Search Strategies** The Literature review of this study was obtained from past studies on coconut juice and smoking conducted within the past ten years. However, valuable evidence from studies conducted within 10 years, any evidence that can support this study will be used. As many as 45,000 people die every year in Canada for smoking related causes and it places huge economic burden on the government of Canada, and her provinces, because of chronic diseases co-morbidity of smoking (Diener, 2000); and the consequences of smoking on the youth academic performance, since smoking is associated with school and academic performance (Statistics Canada, n.d.; Fallus, Janosz, Mariano, Morin & Rodriguez, 2011). Coconut juice (CJ) significantly lowers systolic and diastolic blood pressure (Alleyne, Roache, Shirly & Thomas, 2005). Alcohol, drug inclining smoke are addictive because of nicotine and addictive substance in them. Nicotine and addictive substances make it hard for persons using the product quit even when they desire to quit. Addiction force users to use the product against personal wish and desire (DiFranza, Dugas, Eisenberg, Gervais, Loughlin & Wellman, 2007).

Before the policy on tobacco de-normalization tobacco was socially acceptable, however, after the smoking denormalization policy, smoking became socially unacceptable, but the task remains on how to help smokers successfully and sustainably quit smoking (Borland, Fong, Hammond, Thratcher & Zanna, 2006). Coconut Juice is rich in five main electrolytes that balances the imbalance in the body, namely: sodium, potassium, calcium, magnesium, and manganese. Coconut Juice is also rich in cytokines and cytokines has anti-cancer properties (Ge, Ng, Tan & Yong, 2009). Young coconut juice (YJC) is sweet and sterile. YJC contains chemicals such as, sugar, vitamins, minerals electrolytes, enzymes, amino acids, cytokines, and phytohormones. These chemicals are good for diarrhea and for hydration. Cytokines such as: kinetin, and transzeatin have anti-aging, anti-thrombotic, and anticarcinogenic properties (Ge, Ng, Tan & Yong, 2009; Nutritionand- you.com, n.d.). Coconut Juice contain bioactive enzymes, which aid metabolism, and digestion in the human body, namely: acid phosphatase, catalase, dehydrogenase, diastase, peroxidase, RNA-polymerases and others. Coconut Juice contain higher quantities of iron, calcium, manganese, magnesium, and zinc than orange (Ge, Ng, Tan & Yong, 2009; Nutrition- and-you.com, n.d.).

Coconut Juice is rich in B-complex vitamins namely: riboflavin, niacin, thiamin, pyridoxine and foliates. Coconut Juice is rich in electrolytes namely: potassium (K), 100ml of coconut water contains 250mg of potassium, and 105mg of sodium, and this is excellent for replenishing electrolytes after diarrhea. Coconut Juice contain antioxidant namely: vitamin C. 100ml of Coconut Juice

contain 2.4mg of vitamin C (Ge, Ng, Tan & Yong, 2009; Nutrition- and-you.com, n.d.). Coconut Juice was effective in neutralizing hematological substance (high dose of paracetamol consumption) (Elijah, Nnamdi, Nwodo & Ozoemena, 2010). In a study conducted with laboratory animals, pure virgin coconut oil (VCO) was found to significantly prevent nicotine addiction and relapses caused by nicotine when administered through the veins. It was argued that the fat nature of VCO and its arachidonic acid cascade component was key to VCO success (Anggadiredja, Barlian, Pinang & Anggraeny, 2011). Also, coconut water (CW) when administered to Laboratory animals, showed to be effective in significantly lowering the effect of nicotine induced male reproductive dysfunction among male laboratory animals. The effectiveness of CW was attributed to its high content of aminoacid named L-arginine, and ascorbic acid and high minerals, which lower blood namely, magnesium and calcium (Gopalakrishnan, Sandhya, Thankappan, 2014).

With the thought in mind about how researchers suggested that coconut VCO and CJ were effective in lowering the effect of nicotine, neutralizing effect of drug in laboratory animals, respectively, it is worthy of mentioning that all these studies were not conducted in Canada or Nigeria. It is innovative to perform Coconut Juice study in Canada and Nigeria with human beings since, it is highly nutritious, and refreshing with lots of healing properties, individuals who are addicted to substances such as, tobacco, drug and alcohol who are willing to quit from addictions to give the study Nigerian or Canadian/North American face (Alleyne, Roache, Shirly & Thomas, 2005; Anggadiredja, Barlian, Pinang & Anggraeny, 2011; Elijah, Nnamdi, Nwodo & Ozoemena, 2010; Gopalakrishnan, Sandhya, Thankappan, 2014; Ge, Ng, Tan & Yong, 2009; Nu- trition- and-you.com, n.d).

## Methodology

This a quantitative study design with a control group, because samples will be randomly selected and randomly assigned to groups, and treatments will be given to the experiment groups, and placebo given to the control groups.

**Population** The population of persons facing smoke, drug and alcohol addictions in Owerri, Nigeria or resident in a shelter or rehabilitation clinic in Winnipeg or any addiction rehabilitation centre or clinic, who are willing to quit. The ages of the sample are between 18 and 65 years. The population of persons facing addictions in Winnipeg, MB, Canada are yet to be determined but the population of smokers in Alberta, the Province from which Calgary come is 21.7% in 2011 of the total population of the province. This is slightly higher than the population of smokers in Canada as a nation, which is 19.9% in 2011 (Statistics Canada, 2012). Prevalence of people aged 15 and above in 2011 is 17% in Canada (Health Canada, 2012). Author will determine the population of smokers willing to quit who are patronizing the sports and recreation centre, by standing at the entrance doors and taking the inventory of all guest visiting the centre for a period of 30 days. Author will use the inventory list made from there to form my frame of list and the samples will be selected from the list frame using systematic random sampling (World Health Organization, 2004). Author is yet to determine the population of people addicted to substances mentioned above patronizing the sport and recreation centre.

It is presumed that this study will make a sample of 60 participants and from there nine groups will be formed group Ia, b, c or the

control groups (placebo), group II-a, b, c is the treatment groups 1 and groups III is the treatment groups 2, using systematic random sampling. This will involve individuals addicted to smoke, alcohol and drug who are willing to quit, aged 18 to 65. The treatment groups 1. II a-c will receive Coconut Juice and treatment group 2. III- a, b, c will receive nicotine chewing gum, or any standard addiction cessation treatment, and the placebo or control group I will receive no treatment or water treatment.

### **Sampling**

This study will employ probability sampling to recruit participants.

#### **Type of Sampling**

My study will use probability sampling for participants' selection, precisely, systematic random sampling method.

Sample size Getting complete sample size is always a challenge; however, if researchers can get 480 population and we will need a sample of 30, then the sampling interval will be  $480/30$  this is equal to 16. Then we will write 1 to 16 names in the 16 pieces of paper. We will fold the papers and one of papers containing the name of an individual that we will choose will determine the starting point. If 8 is selected then, Author will select participants from every sixteenth individual starting from the eighth (8th) person on the list. Meaning that the samples will constitute: 16, 32, 48, 64, 80, 96 and so forth (World Health Organization, 2004). The participants to be included in the sample are persons addicted to smoke, alcohol and drug who are willing to quit. The reason only those willing and ready to quit will be recruited is to ensure adequate participation and to lower the rate of drop out or mortality, because the experiment will last for four weeks. Researchers will include persons struggling with addiction, who are living in Owerri.

#### **Why chose systematic sampling.**

Author chose to use systematic random sampling because it is easy to use, and it takes less time to use if population is large (World Health Organization, 2004).

#### **Weakness of this Study**

The weakness usually encountered in using systematic sampling is that if the sampling interval coincides with the systematic variation of the frame used for sampling, bias could occur, however, this might not occur in this study because the population will be recruited 30 days straight in a month from 9.00am to 9.00pm (21hr.00) (World Health Organization, 2004).

How to determine the sample size. Three factors affect the sample size namely: prevalence, confidence interval and margin of error. The confidence interval would be 95% (1.96) and error margin will be 5% (0.05). The sample size is generally calculated as: Sample size  $(n) = t^2 \times (1-p)$

The participation is voluntary. The voluntary participants would be given consent form to complete if they are willing to participate, and will be assured that signing the consent form does not compel them to remain as participants till the end of the study, that they can withdraw from participating any time they want. The consent form has to be simple with fourth-sixth grade level of English such that all participants can read and understand. To further ensure that each participants understand the message, Author will read and interpret the content to all participants, and request them to ask question of any statement that is unclear to them, and reassuring them that the study is for their own good and for the good of the community and that it is for peaceful purpose and no harm will be

caused. This study will use questionnaire and treatment journal to collect data from the treatments, and the control groups of how many times and how severe the urge pressed them to return to smoking. It will collect data on how many times (number of cigarette sticks) they smoked while the treatment was going on within 28 days. It will determine the percentage of cigarette sticks the participants smoked within 30 days, calculate the mean number of cigarette sticks taken by each group namely: group I-a, b, c, group II-a, b, c and group III-a, b, c, compare and analyze similarities and differences. The study will also determine whether the differences were significance. The Analytical instrument is SPSS statistical software.

This study will use One-way analysis of variance to make comparisons, and to determine whether there are differences among the three different groups of each substance: the two treatments groups and the control group. Tukey HSD test would be used to determine the significance of the relationship between Coconut Juice and overcoming addiction and Author hope to increase the reliability of the measurement instruments. The study will use measures of central tendency to determine the mean, percentages, and the degree of freedom set at 95% and error margin set at 5% p value (.05) to of the instruments. And use Likert measurement scale of three: low, moderate, and high (representing 1, 2, 3) to scale to scale the responses.

#### **To increase the validity of the study**

The study will ensure to provide right definitions to contents and the key words. If adolescents are involved, due to physiological changes and growth, this study needs to control for maturation. It needs to control for selection and regression – randomly selecting, and randomly assigning of the participants to specific treatment groups and control groups. This study needs to control for diffusion by blinding of participants, and control for mortality by ensuring that the sample size is large enough (Creswell, 2011, p.163; Campbell, Cook & Shadish, 2002). Additionally, this study will control for age because the age range of the participants is wide, ranging from 17 to 42, by adjusting the age. Also, This study will need to control for extraneous or spurious variables by randomizing he samples selection and assignment to groups. It will control for intrinsic variables or factors using the control group and control for extrinsic variable by matching – making sure that the variables in experiment groups are equal with the variables in the control group in all conditions possible with human beings (FrankfortNachmias & Nachimias, 1996, The study has to ensure that Coconut Juice and pharmaceuticals nicotine gum are used consistently, and scores are recorded accurately (Creswell, 2011, p.149). The Coconut Juice, nicotine gum and other standard addictive cessation substances must be obtained from the same store and be the same brand.

#### **To increase instrument validity**

To achieve real differences in measurement outcomes of the three groups and sub-groups, we need to avoid illusory differences as much as possible by exercising caution over the numbers or scores assigned to the study variables, because sometimes measurement show differences that happened due to the error that occurs in the measurement, and when the difference is caused by any other reason that is not the real difference in the variable measures it is called measurement error (Frankfort-Nachimias & Nachimias, 1996, p.164). Many errors exist in measurement instrument but the most common errors that occur are: 1. when the obtained scores is related to the variable attributes; 2. due to differences in temporal

conditions such as mood or health, the difference; 3. due to interviewer's settings namely age, race, culture, and gender differences; 4. differences caused by the measurement instruments administration such as: tired interviewer, noise; and lighting; 5. differences caused by processing errors – occurring when the different data coder codes similar answers to the same questions differently (Frankfort-Nachimias & Nachimias, 1996, p.165). 6. Interpreters error – occurring when two different research colleagues erroneously interpret the measurement tool in a different way All these errors are generally grouped as either systematic error or random error. Systematic error occurs whenever the measurement instrument is used and it occurs constantly between cases and the research (Frankfort-Nachimias & Nachimias, 1996, p.165). Random error – occurs conversely to systematic error each time the measurement instrument is used in a different way. Having known that all of these errors threaten the validity and reliability of research studies, therefore, as a researcher, I must endeavour to avert these errors in to increase the validity of the study (Frankfort-Nachimias & Nachimias, 1996, p.106). Study validity means – ensuring that the study measures consistently what it supposed to measure. Validity could be grouped into three namely: content-, empirical-, and construct validities. In content validity: Action takes two forms, namely face validity - the researcher evaluates the measuring instruments qualitatively and determined the level of confidence in the researcher in saying that the measuring instrument is the right, and in good condition; and sampling validity – Here we need to determine whether the sample to be used for the study is truly a fair representatives of all the characteristics variables that exists in the large population that is being studied. In this study, I need to ensure that the sample is a fair representation of persons struggling with addiction in Imo State, Nigeria (Frankfort-Nachimias, & Nachimias, 1996, p.98). Empirical validity – directed to ensure that there is a strong relationship between the measuring instrument and the result. Often the predictive validity is used to predict the result prior to the study outcome. It will determine the degree of correlation or relationship between the predicted result and the actual or obtained result. It is also called correlation coefficient. This is similar to research design because it is used to logically establish the relationship between the independent variable and the dependent variables in order to make inference or not (Frankfort-Nachimias & Nachimias, 1996, p.98). In this study researcher needs to determine whether there is relationship between consumption of coconut juice and the overcoming of nicotine addiction, and the quantity of the coconut juice that caused that to happen. Construct Validity: encourages researchers to establish or back up the measurement tool with the theoretical framework or foundation. Just like the research design provides the framework that the researcher adopted to perform this study (Frankfort-Nachimias & Nachimias, 1996, p.98).

### **Limitations**

The study will ensure to provide right definitions to contents and the key words. If adolescents are involved, due to physiological changes and growth, this study needs to control for maturation. It needs to control for selection and regression – randomly selecting, and randomly assigning of the participants to specific groups of control and treatments. This study needs to control for diffusion by blinding of participants, and control for mortality by ensuring that the sample size is large (Creswell, 2011, p.163; Campbell, Cook & Shadish, 2002). Additionally, this study will control for age because the age range of the participants is wide, ranging from 18 to 65, by

adjusting the age. Also, This study will need to control for extraneous or spurious variables by randomizing the samples selection and assignment to groups. It will control for intrinsic variables or factors using the control group, and control for extrinsic variable by matching – making sure that the variables in experiment groups are equal to the variables in the control group in all conditions, which are humanly possible (Frankfort-Nachimias & Nachimias, 1996, p.110). The external validity of this study would be threatened because this being an experimental design means that it cannot be conducted in real life or natural environment. Participation is by volunteering, so only those that volunteered would be recruited, therefore, really getting a fair representation of the population characteristics may be hard. This reduces the scope of the study result and prevents the generalizability of the result (Frankfort-Nachimias & Nachimias, 1996, p.148). Fund and time are limitations hence why a study proposed since 2018 is only attempting a pilot study because, that was how much my resources can afford at the moment. This study will establish a relationship between Coconut Juice consumption and alcohol; and Coconut Juice consumption and smoke and drug addiction. Further studies will be encouraged to repeat this study in different environments using the same parameters to support or debunk the result. More studies are encouraged to determine exactly the duration of consumption of Coconut Juice before the addiction could be neutralized completely using large sample sizes.

### **Ethical Concerns**

This study involves human subjects so high level of prudence is required of the Author to conduct this study following the ethical guidelines provided for study involving human subjects. Author needs to assure participants that the study is for peaceful purpose, and would pose no threat to the participants' health. Author will inform the participants that any person on regular medication might not participate, because the consumption of Coconut Juice might neutralize the effect of the drug. Researchers need to inform the population that participation in the study is purely voluntary, and that anybody interested in participating is required to complete the consent form. Author will inform the participants that signing of the consent form does not compel them to remain as participants till the end of data collection, and that they can withdraw from participating any time they want. The consent form has to be simple as fourth - sixth grade level of English so that all participants can read and understand. To further ensure that each participant understands the message. Author will read, and explain the content to all participant, request them to ask questions of any statement that is not clear to them, and reassure them that the study is for the good of the community, and that it is for peaceful purpose and no harm will be caused or intended, but rather on account of rich mineral and vitamin concentration of the juice, its consumption will amount to better health and body healing. Participants on regular dependent medication will be excluded in the treatment because, Coconut Juice being an antidote, will neutralize the effect of drug. Author's curiosity is that if, researchers have suggested that Coconut Juice neutralize the effect of medicine as an antidote, it could also have effect on addictive substances such as nicotine. And since it is a nutritious and refreshing drink containing lots of vitamins and minerals, even if it did not lower the effect of addictive substances, it will nourish the bodies of participants and lower their health risks thus, informing them on the need to higher their consumption of Coconut Juice for body nourishment (Ahajumobi, Oparaocha, Eteike, & Felix, 2022; Ge, Ng, Tan & Yong, 2009; Nutrition- and-you.- com, n.d.).

## Significance of the Study

If the outcome of this study comes in the favour of coconut juice, it will be directly important to persons addicted to smoking, alcohol drinking and drug. It will contribute to the body of scientific knowledge regarding addiction and nicotine in Africa, Canada, and North America. Its outcome lessons will be beneficial to addiction rehabilitation service providers, and to public health service providers and decision makers. If people willing to quit succeeds in quitting, that could keep people healthy and safe, and increase the public health and safety of the local and global communities. It could save huge amount of money for the local and global governments, which could otherwise be spent on the endless rehabilitation and health deterioration of those affected (Ahajumobi, 2017). It will help them to make good use of their lives, which could result in increase in productivity and government revenue through corporate and income taxes. It could help to increase human resources usually lost to addiction and mental illness and huge cost spent by the government to rehabilitate and support them (Ahajumobi, 2017, 2018; Ahajumobi, & Anderson, 2020) When individuals are healthy, happy, and safe, this will increase the health and safety of the public. It will rescue persons essentially childre tricked to smoking and drug use who desire to quit but, cannot due to nicotine addiction and relapses. It could lower school dropout, and mental illnesses amounting from addiction of all kids. A reduction of moral decadents, jail sentences and hospital emergencies stands to benefit from use of nourishing Coconut Juice to prevent addiction and relapses (Ahajumobi, 2017). It can reduce the rate of mental illness.

## Conclusion

The result to be presented in details with tables, and figures for illustrations comparative analysis. The outcome will define the result and discussion will be in synthesis with comparison groups and information in literature and conclusion will be based upon the findings, whether there is a relationship or no relationship between coconut consumption. A rejection of null hypothesis if there is a relationship between coconut water consumption and nicotine addiction overcoming. Otherwise, it will be an acceptance of alternate hypothesis if there is no relationship between coconut water consumption and nicotine addiction overcoming. Anticipated is a very significant social change impact on the local and global communities, public health, researchers, students and to deal with addiction, which is a major local and global public health nuisance with no nation exempted, both rich nations and poor ones bearing a heavy brunt of economic and health burden of mental health an d related diseases, school drop outs and broken homes, disabilities, and untimely death as direct and indirect consequences of addiction.

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