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Psycho-cognitive Stress Management Approach for Enhanced Spousal Relationship within Families in Katsina State, Nigeria

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Abstract

The study focused on psycho-cognitive stress management approach for enhanced spousal relationship within families in Katsina State. Two research questions guided the study while two null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. The population of this study was the entire 986,453 spouses in Katsina State. Instrument for data collection was *Psycho-cognitive Spousal Stress Management Approach Questionnaire (PSSMAQ).* Data were analyzed using mean and t-test. Findings include 17 psycho-cognitive related causes of spousal stress and 18 psycho-cognitive stress management approaches that can be adopted by spouses in Katsina State. There were no significant differences in the mean ratings of the responses of husbands and wives on the psycho-cognitive related causes of spousal stress and psycho-cognitive stress management approaches. It was recommended that: there should be periodic awareness campaign about causes of stress among spouses in the State and that there should be regular organizations of seminars and workshops by the government and concerned NGOs on psycho-cognitive stress management approaches and how spouses could be helped to adopt them for stress management in their homes.

Keywords: Spouse; Stress; Families; Psycho-cognitive; Relationship

Introduction

Spouses are two adult male and female that are legally married and maintain a socially approved sexual relationship (Ikulayo, 1999). Stinnett, Stinnett, Defrain and Defrain (2000) noted that spouses normally work and function together in unity to continuously meet their needs and those of the family members. In their efforts to meet these needs, spouses are often confronted with various forms of challenges that make enormous demands on them. In the process of responding to the demands by members of the family, spouses experience various forms of pressures, frustrations, tensions and anxieties, even conflicts which give rise to stress.

Stress is a dynamic condition in which an individual is confronted with opportunities, constraints or demands related to what he or she desires and for which the outcome is perceived to be both uncertain and important (Robbins, 2009). Stress is a physical or psychological stimulus that can produce mental tension or physiological reactions that may lead to illness (Melin and Birch, 2005). In the opinion of Ezeilo (2005), stress could lead to family disintegration, separation or divorce, breakdown in productivity, sub-standard school performance of children, tense emotional atmosphere, mistrust, doubt, fear, sense of isolation, less feeling of closeness, sharing, intimacy, affection and impaired communi-cation. Stress can cause a significant state of disequilibrium and disorganization which can lead to a discontinuity in the family's trajectory of functions. Nayak (2008), observed that stress occurs when the challenges of the spouses exceed their adjusting capacity or resources needed for management.

Stress management are appropriate coping actions, beha-viours or attitudes which spouses exhibit when faced with certain psychological, physiological and social demands that tax their adaptive resources (Oboegbulem, 2010). It comprises various measures taken to cope with stress, so that a state of psychological and physiological equilibrium is re-established and subsequently maintained. Cooper (1995) stated that the measures for coping with or managing stress could imply either altering the situation or altering one's perception of or adaptation to the situation. Thus, Cooper (1995) identified three basic ways of managing stress which include: eliminating or modifying the stress producing situations, removing the individual from the situation or allowing the individual to adjust to the situation personally and changing the situation to fit the individual concerned and strengthening the individual's personal resistance to stress. In the opinion of Clarke (1995), stress could be managed through social and personal engineering techniques, relaxation and other general techniques. Sharing a holistic view, Payne, Hahn and Mauer (2005) stated that spousal stress management strategies can be grouped into physical, communication, environ-mental, time management, social and psycho-cognitive.

Psycho-cognitive technique, according to Anderson (2010), involves mental processes such as attention, language use, memory, perception, problem solving, creativity and thinking. Papathanassoglou (2015) described psycho-cognitive approach of stress management to include relaxation, guided imagery, touch and cool music listening. Insel and Roth (2004) noted that psych-cognitive stress management strategies use both cognitive self talk and deep breathing approaches. Stress can be generated from ideas, beliefs, perceptions, faulty conclusions, misinterpretations and expectation of worst things to happen. Deep breathing is a relaxation response which is characterized by a feeling of warmth and quiet mental alertness which is physical and psycho-cognitive in nature (Awo, 2013). The timely adoption of effective stress management approach by spouse is imperative due to the damaging effects of unmanaged stress condition.

The effects of unmanaged stress situations according to Koshiba and Helgerson (1999) include high blood pressure, aches and pains, internal heat, palpitation, poor memory, sleeplessness (insomania), poor appetite, lack of concentration, depression, fear, anxiety, anger, hostility and bad dreams. Maisamari (2002) stated further that physical stress can be accompanied by high blood pressure, digestive problem, ulcers and indigestion, palpitation, chest pain, skin disorder, muscle tension, headache, loss of appetite, restlessness, shutdown of menstrual cycle, impairment of fertility among males, depletion of vitamins C, B and D in the body, and in extreme cases, high blood pressure leading to stroke and death (Groiler, 2006). Sharing similar views, Azubuike (2005) and Maisamari (2002), submitted that the consequences of unmanaged stress could be manifested in unhealthy physiological, psychological and behavioural change. Psychological or mental stress may be accompanied by anger, anxiety, depression, nervousness, irritability, tension and boredom.

Spousal stress is a common household phenomenon among families around the world, Nigeria inclusive. For instance, the observations in Katsina State, show that spouses are faced with numerous stress related challenges of poverty, unemployment, threat of insecurity such as the *Boko Haram* bombings and killings. Other challenges include inadequate financial resources to cater for their large family size (polygamous families), the demands of children education and upbringing, among others. These situations have led to the observed high cases of insomnia, depression, frustration, exhibition of maladaptive behaviours, drunkenness, illness and untimely death among spouses in the state which are signals of unmanaged stress condition. The maladaptive behaviours include excessive drinking of alcohol, smoking, nagging, withdrawal from partner and keeping late nights. These behaviours are unhealthy stress management approach. Hence, there is need to guide spouses in the state towards a more healthy stress management approach. It is based on this background that this study was conducted to identify psycho-cognitive stress management approach for peaceful coexistence among spouses in Katsina State, Nigeria.

Purpose of the Study

The major purpose of this study was to investigate psycho-cognitive stress management approach for peaceful coexistence among spouses in Katsina State, Nigeria. Specifically, the study sought to:

1. Identify the psycho-cognitive related causes of stress among spouses in Katsina State.
2. Determine psycho-cognitive stress management approach for peaceful coexistence among spouses in Katsina State.

Research Questions

Based on the specific purposes, the study answered the following research questions:

1. What are the psycho-cognitive related causes of stress among spouses in Katsina State?
2. What are the psycho-cognitive stress management approaches for peaceful coexistence among spouses in Katsina State?

Hypotheses

The following null hypotheses were tested in this study at 0.05 level of significance.

$H0_1$: There is no significant difference in the mean ratings of literate spouses (male and female) on the psycho-cognitive related causes of stress among spouses in Katsina State.

$H0_2$: There is no significant difference in the mean ratings of literate spouses (male and female) on the psycho-cognitive stress management approach for peaceful coexistence among spouses in Katsina State.

Methodology

Design of the study: Descriptive survey research design was adopted for the study.

Population for the Study: This was made up of literate husbands and wives (spouses) who live together in the urban and rural areas of Katsina State. They were married for at least five years or more. It was expected that the spouses must have had experiences of stress and its management.

Sample for the Study: A sample of 900 spouses (450 each of husbands and wives). Purposive, multistage and random sampling techniques were used in the drawing of the sample. In case of polygamous families, the first wives who are likely to ve stayed more in the marriage were selected.

Instrument for data collection: This was structured 35-item questionnaire titled: "Psycho-cognitive Spousal Stress Management Approach Questionnaire (PSSMAQ). The instrument was face-validated by four Home Economists and a medical doctor.

Cronbach Alpha reliability method was used to establish the reliability of the instrument. Reliability coefficient of 0.78 was obtained. Based on the geographical spread of the population across the State, six research assistants who were also key informants in compiling the list of literate spouses were hired for data collection while the researcher coordinated the activities of the six research assistants and collated the retrieved questionnaire after two weeks of administration.

Data collection and analysis techniques: a total of the 900 copies of the questionnaire administered by hand, only 846 copies were completely filled and returned representing 94% return rate. The data collected were analyzed using means for answering the research questions while t-test was used in testing the null hypotheses at 0.05 level of probability. Mean value of 3.00 and above was used as basis for decision-making.

Results

Research Question One and Hypothesis One

What are the psycho-cognitive related causes of stress among spouses in Katsina State?

H0$_1$: There is no significant difference in the mean ratings of literate spouses (male and female) on the psycho-cognitive related causes of stress among spouses in Katsina State.

The data for answering research question one and testing hypothesis one are presented in Table 1.

Table 1: Mean Ratings and t-test Analysis of the Responses of Literature Spouses on Psycho-Cognitive Related Causes of Stress among Spouses in Katsina State

SN	Psycho-cognitive related causes of stress	$\overline{X_1}$	$\overline{X_2}$	$\overline{Xg}$	SD	p-value	Remarks	
1	Persistent nagging by either/both the husband and wife.	4.49	4.42	4.46	0.72	0.45	A	NS
2	Unbelief or lack of faith by either of the spouse	4.52	4.42	4.47	0.72	0.73	A	NS
3	Comparing one's partner with others such as the friends or neighbour's partners.	4.23	4.26	4.25	0.96	0.35	A	NS
4	Opposition to marriage from in-laws.	3.85	3.52	3.68	0.98	0.02	A	S*
5	Lack of quality time to relax by either of the spouse	4.42	4.30	4.37	0.96	0.70	A	NS
6	Father or mother in-laws/(parents) having dominant influence on husband or wife.	4.19	4.02	4.10	0.69	0.01	A	S*
7	Pessimistic attitude of spouse	4.42	4.37	4.40	1.08	0.63	A	NS
8	Marriage outside the same faith e.g Christian married to Muslim.	4.23	4.26	4.45	0.96	0.35	A	NS
9	Unforgiving spirit of either of the spouse	4.52	4.49	4.51	1.04	0.33	A	NS
10	Commitment of only one spouse to religious services and activities.	4.11	3.97	4.05	1.13	0.83	A	NS
11	Spouses not praying together as a family.	4.30	4.23	4.27	0.85	0.21	A	NS
12	Lack of time by spouse to meditate on family related issues	4.39	4.28	4.23	0.84	0.77	A	NS

13	Incompatible religious doctrines e.g orthodox and Pentecostal or Islamic religious sects.	4.33	4.35	4.34	0.92	0.37	**A**	**NS**
14	Differences in depth of spirituality of spouses.	4.14	4.15	4.14	0.65	0.91	**A**	**NS**
15	Excessive surprise and nervousness by trouble or problems.	4.32	4.39	4.36	0.86	0.17	**A**	**NS**
16	The feelings of cultural dominance of men in decision making.	3.24	4.31	3.78	0.47	0.02	**A**	**S***
17	Inability to accept mistakes easily and manage them with the family	4.28	4.27	4.28	0.59	0.66	**A**	NS

Key: $\bar{X}_1$ = Mean of Husband; $\bar{X}_2$ = Mean of Wives; **Xg** = Overall mean; **SD** = Standard Deviation; No of the respondents = 846; **A** = Agreed, **D** = Disagreed; **S*** =significant; **NS** = Not Significant.

Table 1 on research question one reveals that the grand mean ratings of the responses of the respondents (spouses) on the 17 items ranged between 3.68 to 4.51 which are all greater than the cut-off point value of 3.00. This showed that the respondents (spouses) agreed that all the 17 items are psycho-cognitive related causes of stress among spouses in Katsina State. The standard deviation values for the entire 17 items in the table ranged between 0.68 to 1.08 indicating that the responses of the respondents are close to one another and to the mean.

Table 1 on hypothesis one shows that 14 out of the 17 items had their p-values ranged between 0.17 to 0.91 which are all greater than 0.05 level of significance. This indicated that there were no significant differences in the mean ratings of the responses of literate husbands and wives on the 14 psycho-cognitive related causes of spousal stress in Katsina State. Therefore, the null hypothesis of no significant difference in the mean ratings of the responses of the two groups of respondents is accepted on the 14 identified items. The p-values of the remaining 3 items in the table, that is items 4, 6 and 16 were 0.02, 0.01 and 0.02 respectively which are less than 0.05 level of significance. This indicated that there were significant differences in the mean ratings of the responses of literate husbands and wives on the 3 psycho-cognitive related causes of spousal stress in Katsina State. Hence, the null hypothesis of no significant difference in the mean ratings of the responses of the two groups of respondents is rejected on the 3 items.

Research Question Two and Hypothesis Two

What are the psycho-cognitive stress management approaches for peaceful coexistence among spouses in Katsina State?

$H0_2$: There is no significant difference in the mean ratings of literate spouses (male and female) on the psycho-cognitive stress management approach for peaceful coexistence among spouses in Katsina State.

The data for answering research question one and testing hypothesis one are presented in Table 1.

Table 2: Mean Ratings and t-test Analysis of the Responses of Literate Spouses on Psycho-cognitive Stress Management Approach for Adoption by Spouses.

SN	Psycho-cognitive stress management approach	$\overline{X_1}$	$\overline{X_2}$	$\overline{Xg}$	SD	p-values	Remarks	
1	Build faith in God	4.49	4.42	4.46	0.72	0.45	**A**	**NS**
2	Relax by listening to music or watching appropriate television programmes	4.37	4.37	4.37	0.87	0.23	**A**	**NS**
3	Make adjustment to cope with pleasant and unpleasant situations	4.47	4.47	4.47	0.84	0.64	**A**	**NS**
4	Regular practice of meditation by focusing at a pleasant event.	3.71	4.05	3.88	0.89	0.01	**A**	**S***
5	Use of biofeedback machine/gadgets assist spouses to cope with stress.	4.47	4.45	4.46	0.68	0.40	**A**	**NS**
6	Be optimistic always about family related issues.	4.80	4.78	4.79	0.46	0.75	**A**	**NS**
7	Share wealth and talent with spouse and others in the family.	4.42	4.37	4.40	1.08	0.63	**A**	**NS**
8	Accept mistakes easily and manage them with the family.	4.76	4.79	4.77	0.61	0.67	**A**	**NS**
9	Practice forgiveness	4.49	4.42	4.46	0.72	0.47	**A**	**NS**
10	Spend a few minutes each day in meditation on family related issues	4.37	4.37	4.37	0.87	0.64	**A**	**NS**
11	Get the right perspective of a problem or an issue by discussing with spouse.	4.47	4.47	4.47	0.83	0.91	**A**	**NS**
12	Create an impression that most family problems are temporary and manageable.	4.16	4.02	4.09	1.00	0.36	**A**	**NS**
13	Remind yourself that you have managed problems with your spouse successfully before.	3.92	3.92	3.93	0.72	0.22	**A**	**NS**
14	Keep a list of lifetime accomplishments close and reflect over them.	4.12	4.02	4.08	0.83	0.87	**A**	**NS**
15	Practice positive thinking	4.17	4.04	4.11	0.89	0.25	**A**	**NS**
16	Develop the habit of not being surprised or worried by trouble or problems.	4.20	4.25	4.23	0.84	0.85	**A**	**NS**
17	Adopt filtering method by paying attention to the positive and disregarding the negative situations.	4.22	4.36	4.29	0.71	0.87	**A**	**NS**
18	Develop and leave a life full of meaning and purpose with spouse.	4.23	4.32	4.28	0.94	0.31	**A**	**NS**

Key: $\overline{X}_1$ = Mean of Husband; $\overline{X}_2$ = Mean of Wives; $\overline{X}g$ = Overall mean; **SD** = Standard Deviation; No of the respondents = 846; **A** = Agreed, **D** = Disagreed; **S*** =significant; **NS** = Not Significant.

Table 2 on research question two shows that the grand mean ratings of the responses of the respondents (spouses) on the 18 items ranged between 3.88 to 4.79 which are all greater than the cut-off point value of 3.00. This showed that the respondents (spouses) agreed that all the 18 items are psycho-cognitive stress management approaches that could be adopted by spouses in Katsina State. The standard deviation values for the 18 items in the table ranged between 0.46 to 1.08 indicating that the responses of the respondents are close to one another and to the mean.

Data presented in Table 2 on hypothesis two shows that 17 out of the 18 items had their p-values ranged between 0.25 to 0.87 which are all greater than 0.05 level of significance. This indicated that there were no significant differences in the mean ratings of the responses of literate husbands and wives on the 17 psycho-cognitive stress management approaches that could be adopted by spouses in Katsina State. Therefore, the null hypothesis of no significant difference in the mean ratings of the responses of the two groups of respondents is accepted on the 17 identified items. The p-values of the remaining 1 item in the table, that is item 4 was 0.01 which was less than 0.05 level of significance. This indicated that there was significant difference in the mean ratings of the responses of literate husbands and wives on item 4. Therefore, the null hypothesis of no significant difference in the mean ratings of the responses of the two groups of respondents is rejected on item 4 in the table.

Discussion of Results

The findings of this study showed that the major psycho-cognitive related causes of spousal stress in Katsina State include: persistent nagging by either/both the husband and wife, unbelief or lack of faith by either of the spouse, comparing one's partner with others such as the friends or neighbour's partners, opposition to marriage from in-laws, pessimistic attitude of spouse, unforgiving spirit of either of the spouse, spouses not praying together as a family, lack of time by spouse to meditate on family related issues and incompatible religious doctrines e.g orthodox and Pentecostal or Islamic religious sects. The findings of this study conformity with the findings of Angadi (2008) who studied emotional intelligence and stressors among working couples and found out that spousal level of intimacy, unbelief or lack of faith by either of the spouse, pessimistic attitude of spouse, relationship with extended families and child related issues are the major causes of stress among families. The findings of the study also agreed with that of Chechet (2011) who carried out a study on sources and management strategies of stress among female workers in Zaria metropolis in Kaduna State and found out that religious differences, traffic congestion, opposition to marriage from in-laws, pessimistic attitude, conflict at home and noise causes stress among people.

The findings of this study as regards psycho-cognitive stress management approaches showed that the respondents (spouses) agreed that building faith in God, relaxing by listening to music or watching appropriate television programmes, making adjustment to cope with pleasant and unpleasant situations, regular practice of meditation by focusing at a pleasant event, using biofeedback machine/gadgets assist spouses to cope with stress, being optimistic always about family related issues, sharing wealth and talent with spouse and others in the families, practicing forgiveness, getting the right perspective of a problem or an issue by discussing with spouse and practicing positive thinking among others could be adopted by spouses to manage stress. The findings of this study supported that of Nayak (2008) who investigated stress management strategies among teachers and found out that stress management techniques such as offering prayer to God, positive thinking, working in-group, avoiding painful reminders, delegating tasks and listening to songs were practiced to manage mental stress. The findings of this study also agreed with the findings of Chechet (2011) who found out that labour saving devices and listening to soft music are all significantly correlated to stress management strategies. The findings of this study is in support of that of Ballesteros and Whitlock (2010) who found out that taking a walk, playing a video game, taking a bath and having a quiet time to meditate in a conducive environment are effective stress management strategies. Oboegbulem (2002) reported that strategies such as medication, deep breathing exercises, watching television and video could help to significantly reduce stress between spouses.

Conclusion

Spousal stress has become a common household problem in all human societies. The case of spouses in Nigeria and Katsina state in particular is not an exemption. Spouses in Katsina state are faced with numerous stress related challenges such as the issue of social and religious crisis, insufficient financial resources to cater for family responsibilities among others. These issues result into spousal stress and have negative implications on family's health, trajectory functions, harmony and productivity. Such negative health consequences may include chronic blood pressure which can lead to death, anxiety, depression, sleeplessness (insomamia), absenteeism, hostility, psychosis, aches and pains among many others. This calls for the need to properly manage spousal stress using psycho-cognitive approach to enhance marital wellbeing and family cohesion. It was based on this yardstick that this study was carried out to identify psycho-cognitive stress management approach for peaceful coexistence among spouses in Katsina State, Nigeria. Based on the data collected and analysed, the study identified 17 psycho-cognitive related causes of spousal stress and 18 psycho-cognitive stress management approaches that can be adopted by spouses in Katsina State.

Recommendations

1. There should be periodic awareness campaign about causes of stress among spouses in the State through proactive effort of local and state government at both urban and rural areas of the state.
2. There should be regular organizations of seminars and workshops by the government and concerned NGOs on psycho-cognitive stress management approaches and how spouses could be helped to adopt them for stress management in their homes.

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Utilitarian Attributes of Functional Apparel Product Developed for Cosmetologists: Users' and Beholders' Assessment

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Abstract

This study determined the utilitarian attributes of functional apparel developed for cosmetologists in Lagos, Nigeria. Specifically it examined the mean ratings of small, medium and large sized consumers on the utilitarian attributes of functional apparel and that of the beholders (judges) on the same parameter. Three research questions and two hypotheses guided the study. The study area was Lagos, Nigeria. The study design was descriptive and exploratory. Population comprised 3,820 cosmetologists and 151 judges. Functional Apparel Design Assessment questionnaire was used for the study. Descriptive statistics, and t-test and one-way ANOVA were used for data analysis. Major findings showed that there were slight differences in the mean ratings of cosmetologists and judges on all indicators on the general utilitarian attributes scale. It was recommended among others that findings of the study be made available to beauty academia.

Keywords: Utilitarian Attributes, Functional Apparel, Cosmetologists, Assessment

Introduction

There are many persons working in the cosmetology industry all over the world. In the United States alone, according to the United States Board of Labour Statistics (2008), over 825,000 people are registered as workers in the cosmetology industry either as barbers, skin care specialists or nail technicians. In Nigeria, the National Directorate of Employment (NDE) in collaboration with Ministry of Labour and Productivity reported an estimated 24,020 registered cosmetologists. Out of this number, Lagos State alone registered 3,820 cosmetologists (Thompson & Anyakoha, 2012). With an ever increasing demand for quality beauty and cosmetic services, cosmetology remains a huge enterprise in large, densely populated cities and states. Even the smallest towns can have at least one barber shop or salon. As cosmetologists continue to encounter challenges with the demand of new techniques in beauty care, their services are considered important by many members of the society.

It has been observed that cosmetologists in Nigeria in addition to their professional tasks maintain clean work areas and sanitize all work implements. They work for extended periods including evenings and into the night. In urban centres, beauty salons are busy during weekends and public holidays. Due to these long hours of operation, many of them go to work with packed meals. Cosmetologists constantly get exposed to hair, nails, body and other chemicals in their practice. In addition they encounter problems in the practice which include minor discomfort with regular clothing, water and chemical splash on body and clothes, problems with handling of tools, repeated movements around the workroom, standing for long periods, lifting of buckets of water, and general cleaning of the work areas. This constitutes a major challenge in apparel selection and usage. Special care must be taken to select and use apparel that reduces workers' exposure to the hazardous chemicals and also address these challenges. This implies using functional apparel. Functional apparel is apparel designed to meet the needs of persons in various occupations and in physical, environmental and socio-psychological conditions.

According to Barker (2007), functional apparel or garment (clothing) serves as protection for the wearer from environmental conditions as well as work or task-related conditions that expose wearers to certain risks in operation. Task-related protection requires a wide variety of clothing, each designed for a specific end use. Shishoo (2002) asserts that protective clothing specifications often pose additional challenges to the designers and textile scientists. In order to achieve both protection and portability in apparel design several factors are taken into consideration. These include, issues relating to existing clothing form, human body itself, and the environment. The relationship among the factors poses a big challenge to the apparel design researcher who aims at designing apparel that meets the complexity of clothing needs facing an individual in a specific situation (Alexander, 1998).

The development or design of prototype functional apparel requires more than just creativity. Prototype apparel here refers to the first design of an apparel product from which other forms can be copied. It is cut and sewn from the first pattern obtained for the product to evaluate the styling and fit (Glock & Kunz, 2000). Frings (2003), refers to it as simply a trial garment or sample. A designer should also seek out, absorb and apply information regarding the wearer's needs and expectations (Fowler, 2003). A systematic approach or process is often used in functional clothing research to help designers incorporate all aspects of design development. This process is the design process. The process takes the designer step-by-step from the initial idea through an evaluation of the final idea (Dejonge, 1984).

With the increase in the number of practitioners of cosmetology in Lagos, Nigeria, there is a need to ensure that occupational hazards are controlled and that practitioners become aware of their identity and the usage of appropriate clothing to enhance performance and safety on-the-job. This will ultimately promote productivity within the cosmetology occupation.

The advent of the television and the film industry has resulted in the current trend towards fashion and beauty care regardless of gender or profession. Consequently, there is a high demand in cosmetology related services globally. In Nigeria, cosmetologists both male and female are making tremendous entry into the cosmetology occupation and actually staying in it.

Within this work environment, manufacturers are required to make accommodations that are compliant with user needs and technological interfaces that are helpful in allowing an individual to function better on the job. Most times these accommodations are centred on buildings and furniture and not on clothing. Thus, clothing is another and often overlooked facet of the work environment despite the fact that it is believed to be the most important artefact in proximity to the body and it has potential impact on a person's immediate bodily comfort. This informed the research into the development of functional apparel for cosmetologists in Lagos, the biggest commercial city of Nigeria.

In Lagos State alone there are about 3,820 registered cosmetology practitioners. They operate in a free market situation where laws and regulations guiding the industry operations are not enforced. As a result, this industrial sub-sector is flooded with all kinds of workers; both formally and informally trained who are exposed to various environmental hazards that may impede job performance. There is therefore a need for a corporate identity in the choice of apparel for workers in this industrial sub-sector to address occupational identity and functionality of clothing. The functionality indices of such clothing includes comfort, safety, fit, suspension of tools, easy accessibility, aesthetics, facilitation of motion and activities, adjustability and other needs which should be provided for optimum performance.

In a typical working day, a cosmetologist performs such duties and tasks of shampooing, cutting, colouring and styling of hair, lightening and darkening of hair colour, manicures, pedicures, scalp and facial treatments. These tasks and duties expose the worker to chemicals used for the hair, nails and other parts of the body. This may cause serious irritation and injuries to the workers when appropriate safety measures are not taken to handle chemicals and tools properly. Other problems encountered in the practice include water splash on the body and clothes, problems with handling of tools, discomfort with regular clothing and repeated movements around the workroom, standing for long periods, chemical spills on clothes and body, as well as lifting of buckets of water. In addition, they are responsible for the general cleaning of the work areas. Protective measures, including functional apparel, should be capable of maximizing protection from these hazards as well as minimizing metabolic heat stress, which causes discomfort.

Providing protection against chemical hazard is a unique problem and also incorporating other needs into apparel ensemble poses another major challenge in research. The emphasis on research concerning functional apparel for different groups of people or occupations requires that the apparel design researcher either looks at a clothing problem from the standpoint of evaluation of an existing clothing form for possible modification, or the development of a prototype based on overall user needs (Shaw, Cohen and Wicke, 2000). Observation shows that the occupation of cosmetology as practised in Lagos does not lay emphasis on dress code to cater for the activities and professional image of the trade. Consequently, cosmetologists in Lagos lack existing functional apparel for their operations. To meet this challenge, there is a need to develop functional apparel for this occupation using the different activities in the cosmetology workroom as reference point. This will project a corporate identity for this workforce as well as maintaining safety, performance, comfort and heightened productivity.

Development of functional apparel for cosmetologists in Lagos, Nigeria, derived its foundation from the integration of clothing theories in realization of the fact that apparel products are developed based on a complex set of motives, all of which are interdependent and arise out of varied physical, socio-psychological and environmental conditions to meet user needs.

The findings of the study will however be used to design new functional apparel products for apparel manufacturing companies within the industrial garment sub-sector. These products will then be systematically field-tested, evaluated and refined until they meet specified criteria of effectiveness, quality, or similar standards. This study therefore sought to examine general utilitarian attributes of functional apparel developed for cosmetologist which include such attributes as: Care – Cleaning and storage, Cost, Durability, Quality, Accessibility – Availability of product to potential consumers, Production – Mass production, masscustomisation, or custom made, Performance – Product enhances or hinders performance, Ease of donning and doffing. The final design and production of functional apparel for cosmetologists anchored on these criteria.

Purpose of the Study

The major purpose of the study was to find out the utilitarian attributes of functional apparel product developed for cosmetologists in Lagos, Nigeria. Specifically the study:

- examined the mean ratings of small, medium and large sized consumers on the utilitarian attributes of functional apparel.
- determined the mean ratings of judges on the utilitarian attributes of functional apparel.

Research Questions

1) What are the mean ratings of cosmetologists on general utilitarian attributes of the prototype apparel?
2) What are the mean ratings of judges on general utilitarian attributes of the prototype apparel?
3) What are the differences between the mean ratings of cosmetologists and judges on general utilitarian attributes of the functional apparel?

Hypotheses(HOs)

HO_1: There is no significant difference in the mean ratings of small, medium and large size-based users on general utilitarian qualities of the functional apparel.

HO_2:There is no significant difference between the mean ratings of cosmetologists and judges on the general utilitarian qualities of the functional apparel.

Methodology

The study design was descriptive and exploratory and was carried out in Lagos, Nigeria.

Population for the Study**:** Two sets of population were used in the study. This comprised 3,820 cosmetologists and 151 judges consisting of Home Economics lecturers, cosmetology instructors, apparel producers and students.

Sample for the study**:** Purposive sampling technique was utilized to select 22 judges and 24 cosmetology models to assess the functional apparel products based on the utilitarian variables outlined for the study.

Instrument for data collection**:** The Functional Apparel Design Assessment instruments (FADAC and FADAJ) which were a 5 point semantic differential rating scales made up of 12 items each were used by cosmetologists and judges to assess the general utilitarian variables of the functional apparel. Cronbach alpha coefficient was used to determine reliability for the rating scale.

Data collection and analysis techniques**:** Each of the 24 cosmetologists' models and 22 judges were given the FADAC and FADAJ instrument to go through before completion. After the interview session, subjects were allowed independent time to rate the functional apparel product on the general utilitarian qualities in a laboratory and field setting on the parameters outlined for evaluation. All copies of the instruments were given back to the researcher after the two rating sessions. The responses from the cosmetologists and the judges were collated and the average score was used for the analysis.

Method of data analysis: Descriptive statistics made up of mean and standard deviation was used to analyse the data obtained from the research questions and t-test and one-way ANOVA were used to test the two hypotheses at .05 level of significance.

Findings of the Study

Mean ratings on general utilitarian attributes show that 9 items received scores ranging from 4.00 – 4.33 while 3 received scores ranging from 3.70 – 3.92. This shows that the functional apparel design is somewhat successful, but could be subjected to further improvements to elicit a higher satisfaction rate (Refer to table 1). Judges' mean ratings showed higher values than the cosmetologists with values ranging from 4.32 – 5.00. Judges' mean score on item 3 "easy to put on/hard to put on" had the maximum mean rating of 5.00 indicating that the functional apparel was perceived to be easy to put on and of a high quality ($\bar{x}$ = 4.77). This shows general acceptability.

Table 1: Mean Ratings of Cosmetologists on General Utilitarian Apparel Attributes

S/n	General utilitarian apparel attributes	$\bar{X}$	SD	Remarks
1	High quality/Low quality	4.08	.776	Positive
2	Enhance performance/Not enhance performance	4.25	.737	"
3	Easy to put on/Hard to put on	3.92	1.139	"
4	Easy to take off/Hard to take off	4.33	.637	"
5	Durable/Not durable	4.17	.381	"
6	Adjustable/Not adjustable	4.00	.417	"
7	Ease of production/Difficulty in production	4.00	.834	"
8	Easy to care for/Difficult to care for	3.75	.737	"
9	Affordable/Not affordable	4.00	.722	"
10	Fits well/Does not fit well	4.17	.565	"
11	Overall satisfied/Overall dissatisfied	4.17	.702	"
12	Acceptable/Unacceptable	3.42	.654	"

Note: Variables were rated on a 5-point semantic differential scale where "5" was very positive and "1" very negative.

Table 1 indicate that 12 adjective sets were used to assess the general functional apparel attributes on a 5-point semantic differential scale ("5" = very positive, "1" = very negative). The bipolar adjective sets included:

"high quality/low quality" which was rated with a mean value of 4.08. SD = .776, "enhance performance/not enhance performance ($\bar{x}$ =4.25, SD = .737), "easy to put on/hard to put on" ($\bar{x}$ =3.92, SD = 1.139), "easy to take off/hard to take off" ($\bar{x}$ 4.33, SD=.637) "durable/not durable" ($\bar{x}$ =4.17, SD = .381), "adjustable/not adjustable" ($\bar{x}$ =4.00, SD =.417). Other items on the scale include "ease of production/difficulty in production" ($\bar{x}$ = 4.00, SD = .834); "easy to care for/difficult to care for" ($\bar{x}$ = 3.75, SD = .737), "affordable/not affordable" ($\bar{x}$ = 4.00, SD = .722), "fits well/does not fit well" ($\bar{x}$ = 4.12, SD = .565), "overall satisfied/dissatisfied" ($\bar{x}$ 4.17, SD = .702), "acceptable/unacceptable" ($\bar{x}$ = 3.70, SD = .654). Since the functional apparel was rated with a mean value of 3.70 in the "acceptable/unacceptable" item, it illustrates that overall the functional apparel design is somewhat successful, but could be subjected to further improvements to elicit a higher satisfaction rate.

Table 2: Mean Ratings of Judges on General Utilitarian Apparel Attributes

S/n	General utilitarian apparel attributes	$\bar{X}$	SD	Remarks
1	High quality/Low quality	4.77	.528	Positive
2	Enhance performance/Not enhance performance	4.59	.666	"
3	Easy to put on/Hard to put on	5.00	.000	"
4	Easy to take off/Hard to take off	4.55	.739	"
5	Durable/Not durable	4.32	.716	"
6	Adjustable/Not adjustable	4.45	.739	"
7	Ease of production/Difficult in production	4.32	.716	"
8	Easy to care for/Difficult to care for	4.55	.671	"
9	Affordable/Not affordable	4.32	.746	"
10	Fits well/Does not fit well	4.77	.429	"
11	Overall satisfied/Overall dissatisfied	4.50	.740	"
12	Acceptable/Unacceptable	4.55	.739	"

Note: Variables were rated on a 5-point semantic differential scale where "5" was very positive and "1" very negative.

Table 2 shows the mean ratings of judges on general prototype apparel function. The table also shows that the 12 variables measured were very positively scored. The table further indicates that the judges perceived the apparel product "very easy to put on" with the maximum mean rating of 5.00. Other items presented had mean scores ranging from 4.32 to 4.77 with low variance on all items. This indicates that the functional apparel was generally accepted, but could be improved. Again, the rating was done on a 5-point semantic differential scale where "5" = very positive and "1" = very negative.

Table 3: Mean Ratings of Cosmetologists and Judges on General Utilitarian Apparel Attributes

S/n	General Utilitarian Apparel Attributes	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	Remarks
1	High quality/Low quality	4.08	.776	4.77	.528	Positive
2	Enhance performance/Not enhance performance	4.25	.737	4.59	.666	"
3	Easy to put on/Hard to put on	3.92	1.139	5.00	.000	"
4	Easy to take off/Hard to take off	4.33	.637	4.55	.739	"
5	Durable/Not durable	4.17	.381	4.32	.716	"
6	Adjustable/Not adjustable	4.00	.417	4.45	.739	"
7	Ease of production/Difficult in production	4.00	.834	4.32	.716	"
8	Easy to care for/Difficult to care for	3.75	.737	4.55	.671	"
9	Affordable/Not affordable	4.00	.722	4.32	.746	"
10	Fits well/Does not fit well	4.17	.565	4.77	.429	"
11	Overall satisfied/Overall dissatisfied	4.17	.702	4.50	.740	"
12	Acceptable/Unacceptable	3.70	.654	4.55	.739	"

Note: $\overline{X}_1$ = Mean ratings of cosmetologists on general prototype apparel attributes
$\overline{X}_2$ = Mean ratings of judges on general prototype apparel attributes

Table 3, shows there were differences in the mean ratings of the cosmetologists and judges on all the items on the general utilitarian attributes scale. Item 3 had the greatest variability with the cosmetologists scoring a mean value of 3.92 while the judges got the maximum mean value of 5.00. Other differences noticed were on item 8 with mean value of 3.75 for cosmetologists and 4.55 for judges. Item 12 further shows a noticeable difference between the cosmetologists' mean rating and that of the judges with mean values of 3.70 and 4.55 respectively.

HO_1: No significant difference was identified in seven items on the general utilitarian scale in the ANOVA results. The null hypothesis was therefore accepted at $P > .05$. However, for the remaining five measured variables, there was an indication of a statistically significant difference between the variables with p-values $< .05$. Null hypothesis 7 was therefore rejected in these variables (Table 4).

Table 4: Result of one-way ANOVA of Cosmetologists' Rating on General Utilitarian Qualities of the Functional Apparel

S/n	Source of variation	Sum of Squares	Df	Mean Square	f-cal	Sig. .05	Decision

1	High quality/Low quality	Between Groups	.333	2	.167	.259	.774	A
		Within Groups	13.500	21	.643			
		Total	13.833	23				
2	Enhance performance/Not enhance performance	Between Groups	7.000	2	3.500	13.364	.000	R
		Within Groups	5.500	21	.262			
		Total	12.500	23				
3	Easy to put on/Hard to put on	Between Groups	.583	2	.292	.209	.813	A
		Within Groups	29.250	21	1.393			
		Total	29.833	23				
4	Easy to take off/Hard to take off	Between Groups	1.333	2	.667	1.750	.198	A
		Within Groups	8.000	21	.381			
		Total	9.333	23				
5	Durable/Not durable	Between Groups	.333	2	.167	1.167	.331	A
		Within Groups	3.000	21	.143			
		Total	3.333	23				
6	Adjustable/Not adjustable	Between Groups	1.000	2	.500	3.500	.049	R
		Within Groups	3.000	21	.143			
		Total	4.000	23				
7	Ease of production/Difficulty in production	Between Groups	1.000	2	.500	.700	.508	A
		Within Groups	15.000	21	.714			
		Total	16.000	23				
8	Easy to care for/Difficult to care for	Between Groups	9.000	2	4.500	27.000	.000	R
		Within Groups	3.500	21	.167			
		Total	12.500	23				
9	Affordable/Not affordable	Between Groups	7.000	2	3.500	14.700	.000	R
		Within Groups	5.000	21	.238			
		Total	12.000	23				
10	Fits well/Does not fit well	Between	4.333	2	2.167	15.167	.000	R

		Groups	3.000	21	.143			
		Within	7.333	23				
		Groups						
		Total						
11	Overall satisfied/Overal dissatisfied	Between	2.333	2	1.167	2.722	.089	A
		Groups	9.000	21	.429			
		Within	11.333	23				
		Groups						
		Total						
12	Acceptable/Unacceptable	Between	.333	2	.167	.368	.696	A
		Groups	9.500	21	.452			
		Within	9.833	23				
		Groups						
		Total						

Table 4 shows that twelve items make up the general utilitarian scale. Out of these 12 items, 7 have the P-values >.05 while 5 have the P-values <.05. The items on the table that have the P-values >.05 include "high quality/low quality", "easy to put on/hard to put on", "easy to take off/hard to take off", "durable/not durable", "ease of production/difficulty in production". Others include "overall satisfied/overall dissatisfied", "acceptable/ unacceptable". This implies no significant difference. Therefore the null hypothesis was accepted in these seven variables. However, five of the variables – "enhance performance/not enhance performance", "adjustable/not adjustable", "easy to care for/difficult to care for", "affordable/not affordable", "fits well/does not fit well" – have the P-value <.05. This shows that there was significant difference; therefore the null hypothesis was rejected.

HO_2 : There were no significant differences found in six items while there were significant differences found in the other six items on the general utilitarian scale. The significant differences (t-cal > t-tab) were found in such items like "high quality/low quality", "adjustable/not adjustable". The null hypothesis was rejected and accepted in the remaining six variables which had t-cal. < t-tab (Refer to Table 5).

Table 5: Result of t-test Analysis showing the differences between Cosmetologists' and Judges' Mean Ratings on the General Utilitarian Attributes of Functional Apparel

S/n	General utilitarian attributes	n_1	n_2	$\overline{X}1$	Std.D_1	$\overline{X}2$	Std. D_2	t- cal	Df	Sig. (2-tailed) .05	Decision
1	High quality/Low quality	24	22	4.08	.776	4.77	.528	-3.491	44	0001	R
2	Enhance performance/Not enhance performance	24	22	4.25	.737	4.59	.666	-1.640	44	.108	A
3	Easy to put on/Hard to put on	24	22	3.92	1.139	5.00	.000	-4.457	44	.000	R
4	Easy to take off/Hard to take off	24	22	4.33	.637	4.55	.739	-1.046	44	.301	A
5	Durable/Not durable	24	22	4.17	.381	4.32	.716	-.907	44	.370	A
6	Adjustable/Not adjustable	24	22	4.00	.417	4.45	.739	-2.598	44	.013	R
7	Ease of production/Difficulty in production	24	22	4.00	.834	4.32	.716	-1.382	44	.174	A
8	Easy to care for/Difficult to care for	24	22	3.75	.737	4.55	.671	-3.815	44	.000	R
9	Affordable/Not affordable	24	22	4.00	.722	4.32	.746	-1.569	44	.124	A
10	Fits well/Does not fit well	24	22	4.17	.565	4.77	.429	-4.070	44	.000	R
11	Overall satisfied/Overall dissatisfied	24	22	4.17	.702	4.50	.740	-1.568	44	.124	A
12	Acceptable/Unacceptable	24	22	3.70	.654	4.55	.739	-5.498	44	.000	R

Note: n_1 = mean ratings of cosmetologists, n_2 = mean ratings of judges, Std. D_1 = Standard deviation for cosmetologists, Std. D_2 = Standard deviation for judges

Table 5 shows 12 items were assessed on the general utilitarian rating scale. Out of the 12 items, there were significant differences in six items. These items include "High quality/low quality", "easy to put on/hard to put on", "adjustable/not adjustable", "easy to care for/difficult to care for", "fits well/does not fit well", "acceptable/unacceptable". In these cases the t-calculated was > t-tabulated, therefore the null hypothesis was rejected. Items 2, 4, 5, 7, 9, 11 had t-calculated values <t-tabulated values. The null hypothesis was therefore not rejected in these variables.

Discussion

The general utilitarian attribute scale received positive ratings from both the cosmetologists and judges with mean scores > 3.70 on a 5-point semantic differential scale (Table 1, 2, & 3). Three of the items "easy to put on/hard to put on", "easy to care for/hard to care for" and "acceptable/unacceptable" received positive scores < 4.00. No significant difference was identified in seven items on the general utilitarian scale in the ANOVA result. The null hypothesis was therefore accepted at P>.05. However, there was an indication of a statistically significant difference observed in five variables with p-values <.05 (table 4). This may be attributable to the modular composition of the functional apparel which was strange to the study participants. They perceived that since the functional apparel parts are detachable, they may experience difficulty in putting on the apparel which may result in an apparel product that is difficult to care for and therefore unacceptable. This was very surprising because wearer preference assessment results revealed that the majority of the cosmetologists had actually preferred modular design (a design in which separate elements can be linked in different configuration to achieve a different function or appearance). A total of 102 (52.3%) had chosen a combination of long/short sleeve shirt and 162 (83.1%) opted for ankle/below knee length pants. To address these issues, the researcher simply dealt with the fragmentation and styling using a fastening system (separating zipper) to support Armstrong's (2000) and Watkins' (1995) claim that fastenings are used to address the issues of opening and closing a garment to enhance ease of donning and doffing, converting a garment into a multipurpose outfit or it could be used to fit a garment closely to the body. Issues of extra ease at the pants' waistline were also tackled using elastic and button/tab to fit the size ranges of cosmetologists' population. This again supports the finding of Ashdown (2001) and Aldrich (2002) on size categorization based on fastening system to satisfy a large population of consumers.

Conclusion/Recommendation

Cosmetologists require functional apparel to address the complexities of needs in their occupation. Mean ratings of both cosmetologists and judges indicated that the criteria established for a meaningful and promising product for this population was actualized and therefore product accepted. However, since some of the variables received a little above neutrality rating, there is room for improvement in the styling and fabrication of the functional apparel product.

Since many of the subjects, both from the cosmetologists and judges population, expressed satisfaction with the functional apparel attributes, there is need to make available the findings of the study to beauty academia and other cosmetology organisations to create awareness about current research in the cosmetology workforce.

The findings of this study should be made available to apparel manufacturing industries in Nigeria to encourage the production of functional apparel products in other occupations.

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Investigation of Behavioural Modification Techniques among Street Children in Makurdi Metropolis

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Abstract

This study investigated behavior modification techniques among street children. The descriptive survey design was adopted. Three research questions and one hypothesis guided the study. A sample of 104 street children was randomly selected from four central areas in Makurdi, namely Wurukum, High-Level, Wadata and North Bank. Questionnaire titled (ABMTAA) was used for data collection, mean and t-test were used for data analysis Findings revealed that behavior modification techniques help in character reformation and alleviation of behavioural problems of street children (102df) = 000,p>.05). The result shows that poverty is the major cause of street life in Makurdi metropolis. Based on the findings, it was concluded that, street children can be reintegrated with their families through adequate behavior modification techniques so that they became very useful citizens of the nation. Recommendations were made based on the findings of this work that poverty is the major cause of street life, therefore household suffering from poverty should embrace entrepreneur skills to improve on their standard of living. Parenthood education should include strategies for behavior modification that is preventive and rehabilitative procedures for child upbringing.

Key Words: Behaviour, Modification, Techniques, Street children misbehavior.

Introduction

The general perception about child's misbehavior is traced to the home background that is why most parents encourage children to be good ambassador of the family and home (Fakoya, 2009). Santrock(2005), Kembe (2005) and Nnachi (2007) asserted that environmental factors directly influence the behavior of an individual. Unfavourable environ-mental stimulations, for instance are manifested in many social vices such as delinquency, corruption among public office holders, armed robbery, violence, mob actions, cultism, sexual misbehavior with attendant consequences on the development and well being of the individual (Kembe 2005). Earlier on, Ebigbo (2003) had reported that the major cause of street children misbehavior is poverty which is described as any situation of serious deprivation or lack of resources and materials necessary for living. Fakoya (2009), reported that the persistent problem of street life is worsened by the social problems of poverty, ignorance and political mismanagement. This means that, these children have no reasonable provision to meet basic needs and therefore learn survival lifestyles from the streets. Dewees and Klees (2005) described street children as those growing up in unfavourable condition, who live on the street and derive their livelihood from the street. These street children abound in Makurdi metropolis. They constitute various forms of problems to themselves, their families and the society.

Ziegler and Stevenson (2007), stated that most street children share common problems which range from social, physical and psychological. Social problems include poverty and illiteracy, discrimination and lack of access to resources, hostile and violent environment and stigmatization (Oluwatayo 2008). Physical problems include lack of adequate nutrition, sexual and reproductive health problems and common diseases such as skin diseases, parasitic diseases, tuberculosis and dental problems (Jones *et al* 2003). Psychological and mental problems can be activated by a stressful past, transitory life-styles, and drug and alcohol abuse.

UNICEF (2004) revealed that children separated from their families and homes are likely to be malnourished, stigmatized, abused and uneducated. Thus, if the society is indifferent to the plight of street children, it could in turn produce violence, high rate of robbery, theft, thuggery and other forms of deviant behaviours.

Ebigbo (2003), and Gorman (2011) asserted that for children to learn and mature, they must be given physical care including food, shelter and protection from harm, care and affection. These provisions will improve social and emotional stability that will help children overcome deviant behaviours. Mather and Goldstein (2010) revealed that all behaviors could be maintained, changed, or shaped by the consequences of such behavior. This means that if a child is well nurtured, protected, taught, given counsel, and guided in behavior. When these occur, the child's self esteem to a large extent is improved. This has to do with the principle of behaviour modification.

According to Nnachi (2007), human behaviour is an observable and measurable construct which is in response to environmental stimulation. Santrock, 2005 and Adanyi, 2008 stated that behaviour modification is a way in which children with behavioural problems can be helped in using psychological approaches in changing certain behaviours that are considered to be unacceptable in the society.

Ekpo and Adelekan (2012) highlighted two broad behaviour modification techniques, these are preventive and rehabilitative. Preventive techniques are associated with extinction of unwanted behaviour through the use of selective reinforcements to bring out the desired change in behaviour (Bahago, 2004). This is achieved through habit formation and role modeling. This would occur for instance, where parents develop a positive lifestyle with positive values, beliefs and attitudes, and high moral standards. These may manifest in the parents coping with their physical, psychological, social and economic environments on a day-to-day basis. These behaviours of the parents constitute what their children do and become (Giddens, 2006; Kembe and Ifejika, 2013).

According to Kembe and Okonkwo (2013), rehabilitation technique includes institutionalization, counseling, acquisition of vocational and daily living skills. Developing appropriate skills help street children mentally, socially and economically and offers them the opportunity for self-reliance. Skills such as bead and soap making, sewing, dyeing, laundry work, snacks making, carpentry and joinery, metal work and fabrication, electrical installations, interior and venue decorations and small scale businesses are profitable ventures that are productive. Therefore, it is vital that both preventive and rehabilitative measures be identified and adopted to reduce the incidence of street life among children in Benue State.

Objectives of the Study

The general objective of the study was to investigate behavioural modification issues relating to street children in Makurdi metropolis. Specifically, the study:

1. identify factors that give rise to occurrence of street children in Makurdi Metropolis.
2. identify the behavioural problems associated with street children in Makurdi Metropolis.
3. determine effective behaviour modification techniques that could be applied to street children in Makurdi Metropolis.

Research Questions

The following research questions guided the study:

1. What are the dimensions of street children in Makurdi metropolis?
2. What are behavioural problems of street children in Makurdi metropolis?
3. What are the effective behaviour modification techniques used for the rehabilitation of street children in Makurdi metropolis?

Methodology

***Design of the study*:** Survey Research design was considered appropriate for the study.

Area of the Study: The research was conducted in Makurdi Local Government Area of Benue State. Makurdi Metropolis is divided into designated government approved areas namely: High-Level, Wadata, Wurukum, and North-Bank.

***The Population of Study*:** The population of the study comprises children under the age of 18 years in Makurdi metropolis in Benue State. The target population was estimated 6,590 street children (Benue State Ministry of Women Affairs 2012).

Sample and Sampling Procedure: Multistage sampling techniques: Stratification, purposive and random sampling techniques were used to select 140 street children from the population. First, High-Level Zone was stratified into two (2) Low-Level and High-Level urban. Secondly, Wadata was purposely selected while North Bank and Wurukum Zones were randomly selected. Low-level (15 respondents), high level urban (20), Wadata (35), North bank (35), Wurukum (35) to get a total sample size of 140 respondents

Instrument for Data Collection: A structured questionnaire was the instrument used to collect data for the study. The instrument was fitted (IBMTASC) investigation of behavioural modification techniques among street children. The questionnaire was divided into two sections A and B. Section A sought information on Bio-data of the respondents while section B sought information to answer the three research questions. A 5 – point Likert scale was used 5 (strongly agreed) 4 (agreed), 3(slightly agreed), 2 (disagreed) and 1 (strongly disagreed) mean of 2.50 was used for deciding level of acceptance. The instrument was subjected to validation by two experts from the department of Home Science and Management University of Agriculture, Makurdi.

Method of Data Analysis: Data collected were analyzed using frequencies, percentage and mean. Any mean score of or above 2.5 level indicates acceptance while below 2.50 was read as rejected.

Results

Demographic information showed that out of 140 respondents, 63% were within the ages of 14 – 18 years, while 37% are within the ages of 10 – 13 years.

Table 1: Mean of the responses on the dimensions of street children in Makurdi Metropolis.

Reasons of street children	Mean	Remark
Poverty	2.58	Significant factor
Parental separation	2.69	"
Escape from conflict/abuse	2.73	"
Cultism	2.62	"
To earn money	2.77	"
To live independently/peer pressure	2.77	"
Death of both parents	2.52	"
Abandonment	2.54	"

SF = significant factor NF = Not a factor

Table 1 shows that all the eight items are significant factors with mean score of 2.5 and above. This means that all the eight items are factors (reasons) that give rise to the occurrence of street children in Makurdi Metropolis.

Table 2: Mean Responses on Behavioural Problems Associated with Street Children in Makurdi Metropolis.

Behavioural problems of street children	Mean	Remark
Smoking and drug abuse	2.58	Problem
Alcoholism	2.58	"
Cultism and thuggery	2.54	"
Touting	2.51	"
Gambling	2.49	"
Early sex initiation	2.78	"
Multiple sex partners	1.62	Not problem
Petty stealing	2.53	problem

Table 2 shows the behavioural problems associated with street children in Makurdi metropolis. Items with the highest mean of 2.78 is early sex initiation followed by smoking and drug abuse with mean score of 2.58. The only problems not encountered by street children is multiple sex partners with mean value of 1.62.

Table 3: Mean responses on Techniques for behaviour modification of street children in Makurdi metropolis.

Behaviour modification strategies	Mean	Remark
Formal education	2.53	Strategy
Group counseling/therapy	2.56	"
Handicaps/skill acquisitions	2.56	"
Gardening	2.49	"
Music and sporting activities	2.53	"
Information and computer related skills (ICT)	2.54	"
Provision of care giving skills (nannies).	2.51	"

Table 3 reveals the techniques of behaviour modification with all the seven factors being significant.

Discussion of Findings

The findings of this study show that the menace of street children is a social problem arising from poverty. Table 1 reveals that street children are family breakdown (x = 2.69) and poverty (x = 2.58) and other social problems cause the occurrence of street children. This finding is consistent with Fakoya (2009), who reported that the persistent problem of street life is worsened by the social climate of poverty, ignorance which manifest in two interacting deprivations – physiological and social. Physiological deprivation describes the inability of children to meet or achieve basic materials. Physiological needs can be measured either as a lack of income, which limits access to food, education, health, housing, water and sanitation services.

Social deprivation refers to absence of elements that are empowering such as autonomy, time, information, dignity and self- esteem. UNICEF (2004) reports that street children are separated from their families and homes and are likely to be malnourished, stigmatized, abused and uneducated. Onyenka (2009) revealed that petty stealing, cultism and political thuggery activities are some of the social problems associated with street life. Ebigbo (2003) and Ekpo and Adelekam (2012) stated that street children in order to survive become defenseless victims of violence, open to criminal activities and political thuggery. Thus, if the society is indifferent to the plight of street children the outcome is insurgency as witness in our society today. In modifying street children bevaviour, Mather and Goldstein (2010) stated that behaviour can be maintained, changed or shaped, these is in line with Nnachi (2007) who stated that behaviour is an observable and measurable construct and response to environmental stimulations, therefore behaviour modification of street children will curb the social problems associated with street life. In line with the above, the report of Kembe and Okonkwo 2013, "rehabilitation of street children in orphanage homes involves adjustment and skill building programmes such as entrepreneurship, special trade, including welding, wood work/ Joinery and other forms of training in life skills" will be a relevant strategy for behaviour modification.

Conclusion

The plight and behavioural challenges of street children in Makurdi metropolis continues to be a traumatic concern to the society. The dimensions of street life ranges from abandonment, escape from family abuse, parental separation (Divorce), peer pressure, death of both parents and poverty.

Behaviour modification therapy has proved to be a remedy in curbing some of these behavioural problems of street life it is therefore concluded that with behaviour modification strategies, street children can be restored into productive lifestyle for personal, community and societal development.

Recommendation

1. Children are very crucial set of people in the society and their issues cannot be treated with laxity. Based on the findings of this work, poverty is the major cause of street life; therefore household suffering from poverty should embrace entrepreneur skills to improve on their standard of living.
2. Parenthood education should include strategies for behavior modification that is preventive and rehabilitative procedures for child upbringing.

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Effect of Fermentation on the Nutrient, Anti-nutrient and Phytochmical Composition of Orange Flesh Sweet Potato

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Abstract

This study was carried out to assess the nutrient, anti-nutrient and phytochemical composition of raw and fermented orange-flesh sweet potato. The sample was divided into five portions. One was analysed raw and the other four portions were fermented by soaking in water for 24, 48, 72 and 96 hours respectively. Both the raw and the fermented samples were subjected to nutrient, phytochemical and anti-nutrient analysis using standard procedures. Results showed that apart from moisture, proximate values decreased with increase in fermentation period. The vitamins, mineral, phytochemical and anti-nutrient content also decreased as the fermentation period increased. The anti-nutrients which include oxalate and phytated decreased from 16.80 to 3.36 and 87.5 to 12.5mg respectively. Fermentation did not have a positive effect on nutrients and phytochemical composition of orange-flesh sweet potato. Other processing methods that can eliminate the anti-nutrients and at the same time preserve the nutrients and phytochemical composition of orange-flesh sweet potato should be explored.

Key words: Nutrients, anti-nutrients, phytochemicals, fermentation, Orange-flesh sweet-potato

Introduction

Sweet potato (*Ipomoea batatas*) belongs to the *Convolvulaceae* family. It is one of the world's important food crops and is a major food crop in developing countries. It ranks as the world's seventh most important food crop after wheat, rice, maize, potato, barley, and cassava (International Potato Center, 2000). According to FAO (2011), sweet potato is one of the seven crops in the world producing over 105 hundred million metric tonnes of edible food products in the world annually. With the report of an annual production of about 933,500 tonnes, Nigeria is one of the major producers of sweet potatoes in Sub Saharan Africa (FAO, 2012). Sweet potato is mainly produced in marginal soil systems of developing countries where it is a major food crop and it is consumed in low-input subsistence families in large quantities. It is an important staple food crop in Rwanda. It is quickly becoming an important supplementary staple in Eastern and Southern part of the African continent (Tumwegamire, 2004).

Sweet potato (*Ipomoea batatas*) is the second most important root tuber and the seventh most important food crop of the world. Although categorized as "poor man's food" or "famine crop," it has tremendous potential to contribute to a food based approach to promote food security, to alleviate poverty and to supplement as an alternative staple food for the resource poor farmers. This is because of its diverse range of positive attributes like high yield with limited inputs, short duration, high nutritional value and tolerance to various production stress (Mitra, 2012). Idowu *et al*., (2013) have observed that sweet potatoes are vegetable crops which have been grossly underutilized in Nigeria and therefore efforts at promoting their utilization should be encouraged.

Sweet potato is a staple food source for many indigenous populations in China, Central and South Americas, Ryukyu Islands and Africa. It serves as an important protein source for many world populations (Bovell-Benjamin, 2007) and is an important source of starch and other carbohydrates. In Comparism with other tubers, sweet potato contains an average amount of proteins and carbohydrates mainly starch. They also contain some free sugars which gives the tuber its sweet taste (Ingabire and Hilda, 2011).The energy value of sweet potato exceeds that of cassava and other known tubers (Janssens, 2001). Sweet potato contains various micro-nutrients, Substantial quantity of vitamin C, moderate quantities of thiamin (vitamin B_1), riboflavin (vitamin B_2) and naicin (vitamin B_3). It also contains some quantities of pantothenic acid (vitamin B_5), pyridoxine (vitamin B_6), folic acid and satisfactory quantities of vitamin E. It also contains some essential minerals and trace elements having especially high quantity of iron. Two other important minerals present are potassium and calcium (Woolfe, 1992). Moderate quantity of zinc, sodium, magnesium and manganese are also present (Antia *et al.*, 2006; Suda, Yoshimoto and Yamakawa, 1999). According to Oke and Workneh (2013), the nutritional quality of sweet potatoes can be enhanced by developing new varieties from available germ plasm. Orange-fleshed sweet potato is now emerging as an important member of the tropical tuber crops having great possibility of being adopted as regular diet of the consumer food chain to tackle the problem of vitamin A deficiency. Apart from cheap source of energy, the tubers are rich in starch, sugars, minerals and vitamin A in the form of β-carotene. Thus, the poor people having only limited access to the expensive vitamin A rich animal foods like fish oil, egg, milk and butter, can meet the daily requirement of vitamin A along with some other essential nutrients through increased consumption of these tubers (Mitra, 2012). The major contribution which sweet potato makes to human nutrition is the beta-carotene present in orange-fleshed varieties. Beta-carotene is converted to vitamin A in the human body. Dark-orange varieties can contain up to 20 000µg beta-carotene per 100g fresh storage root weight (Woolfe, 1992; Bovell-Benjamin, 2007). Other crops such as maize, rice and wheat contain very little beta-carotene. Orange-fleshed sweet potato is used in food diversification programs for the alleviation of vitamin A deficiency (VAD). It has an advantage over most vegetables in that it can supply significant amounts of vitamin A and energy simultaneously thus helping toddlers that have VAD and under nutrition (Teow *et al.*, 2007). Studies have shown that daily intake of 100g of orange flesh sweet potato prevent vitamin A deficiency in children and lactating mothers (Anbuselvi and Balamurugana, 2012)

Orange-flesh sweet potato is an example of a bio-fortified crop in which the micronutrient status of staple foods is enhanced through plant breeding to the point where impact on micronutrient status can be achieved (Buzz, 2013). Since the poorest households typically obtain over 60% of their energy needs from food staples, this strategy is particularly suited to poor rural households that cannot access or purchase fortified food products but could grow orange flesh sweet potato. The intensity of the orange color reflects the amount of beta-carotene present in the sweet potato. White-fleshed varieties dominate and contain no beta-carotene, light orange varieties contain at least 250RAE/100gms (30µg/g), medium-intensity varieties at least 458RAE/100gms (55µg/g) and dark-orange-varieties at least 833RAE/100gms (100µg/g).

Fermentation is one of the oldest technologies used for food preservation. Over the centuries it has evolved and has been refined and diversified. Today a large variety of foods are derived from this technology which is used in household small scale food industries and the large commercial enterprises (Omoruyi, Dilworth and Asemota, 2007). Fermentation is the process by which complex organic compounds such as glucose are broken down by the action of enzymes into simpler compounds without the use of oxygen. Fermentation results in the production of energy in the form of two Adenosine triphosphate (ATP) molecules and produces less energy than the aerobic process of cellular respiration. Fermentation is the process of preserving food. Leaving the food on the counter gives more time for the activity to increase which in turn lowers pH and prevents spoilage. Aerobically (with oxygen), the yeast in the ferment can be oxidized to form acetic acid (vinegar) (Kristen 2012). Fermentation also allows residual hydrocyanic acid to diffuse out, making the product safer for human consumption. The International Potato Centre (2000) suggests that optimal hydrocyanic acid reduction can be achieved through a combination of fifteen minutes soaking and two minutes blanching. Fermentation of orange-flesh sweet potato can add value to its products. However information on the chemical composition of fermented orange flesh sweet potato is lacking, hence the need for this study.

Objective of the study

The general purpose of the study was to investigate the effect of fermentation on the nutrient, anti-nutrient and phytochemical composition of orange-flesh sweet potato. Specifically, the study determined;

1. proximate, mineral and vitamin composition of raw samples of orange-flesh sweet potato and samples fermented for 24, 48, 72, and 96 hours respectively.
2. phytochemicals composition of raw samples of orange-flesh sweet potato and samples fermented for 24,48,72 and 96 hours respectively.
3. anti-nutrient composition of raw samples of orange flesh-sweet potato and samples fermented for 24, 48, 72 and 96 hours respectively.

Materials and methods

Sample procurement and preparation: The orange-flesh sweet potatoes used in this study were purchased from Ogige market in Nsukka local Government area of Enugu State. The sample was washed, peeled and rewashed. The cleaned samples were quartered, homogenized and divided into five equal portions. One portion was analyzed raw (fresh) while the remaining four portions were soaked in water separately and allowed to ferment for 24, 48, 72, and 96 hours respectively. Both the fermented and raw samples were sent to the analytical laboratory in the Department of Home Science, Nutrition and Dietetics, University of Nigeria Nsukka for chemical analysis.

Chemical analysis

***Nutrients*:** The proximate values of the samples were determined using standard procedure. Moisture content of the samples was determined by hot air oven method of Pearson (1976). The sample was dried at 100^{o}c and the dry weight was subtracted from the sample's initial weight.

Fat was determined using the soxholet extraction method as described by Association of Analytical Chemists, (1995). Crude protein content was determined using the Micro-kjedahl method of AOAC, (1995). This involved digestion, distillation and titration. The acid hydrolysis method of AOAC (1995) was used for crude fibre determination. Ashing was also done in a hot air oven at 100^{o}c as described by AOAC (1995). The dish plus the sample was place in a cool muffle furnace and the temperature of the furnace was maintained until its content (residue) appeared grayish white. This was cooled and weighed. The percentage total ash content of the sample was then calculated. Carbohydrate was determined by difference that is 100-(a+b+c+b+d+e). Where a = % moisture, b= % fat, c=% protein, d= % fibre and e = % ash.

For the vitamins and mineral content determination, the samples were prepared using the method described by Pearson (1976). After the preparation, the exact wave length for each sample was used to measure absorbance in a spectrophotometer. β-carotene, vitamin C, iron, calcium, and zinc absorbance, were measured at 328m, 420nm, 500nm, 425nm and 420nm respectively

Anti-nutrients: Oxalate and phytate were determined by photometric method of Pearson (1976) and Lata and Eskin (1980) respectively. Readings were then taken in a spectrophotometer at 490nm for Oxalate and 500nm for phytate.

Photochemicals: For alkaloid determination, Harborne, (2000) method was used. Five grams of the sample was weighed and 10% oxalate in ethanol was added. It was filtered and concentrated. Ammonium hydroxide was added drop wise until precipitation was complete. The precipitate was collected washed and the residue filtered.

The method used for saponin determination was described by Obadoni and Ochuko (2001`). Twenty grams of the sample was weighed and heated at 55^0c. The mixture was filtered and the residue extracted. About 20ml of diethyl ether was added to the concentrate and shaken vigorously. The aqueous layer was recovered and n-butanol added. It was then washed and heated. After evaporation, the sample was dried in the oven to a constant weight.

The total flavonoid content was determined using the method of Pearson, (1976). The sample was diluted, mixed with reagents and allowed to incubate at room temperature for 30 minutes. Absorbance of the mixture was measured at 415nm in a spectrophotometer.

Results

Table 1: Proximate composition of raw and fermented orange-flesh sweet potato in grams

Hours	Moisture	Ash	Fat	Protein	Fibre	CHO.
0hr/Raw	51.15±38.09^a	0.50±0.00^d	0.44±0.01^b	4.93±0.01^e	0.67±0.01^d	42.3±0.10
24hrs	77.85±0.22^b	0.50±0.01^d	0.10±0.00^a	4.13±0.01^d	0.38±0.03^c	17.04±001
48hrs	80.85±0.05^c	0.34±0.01^c	0.11±0.01^a	4.04±0.10^c	0.36±0.02^c	14.3±0.01
72hrs	81.15±0.01^d	0.31±0.01^b	0.10±0.01^b	0.25±0.01^b	0.25±0.01^b	14.32±00l
96hrs	84.07±0.02^c	0.15±0.01^a	0.11±0.01^a	3.02±0.10^a	0.20±0.01^a	12.64±0.01

Means ± S. D of triplicate Mean with different superscript on the same column are significantly different (P < 0.05).

Table 1 shows the proximate composition of raw and fermented orange flesh sweet potato samples in grams. It can be seen that the moisture content varied from 51.15 - 84.07g. The sample fermented for 96 hours had the highest value (84.07g) while the fresh sample had the least moisture content (51.15g). The ash content varied from 0.15 - 0.50g. The raw sample and the sample fermented for 24 hours had the same value (0.50g) and this was the highest. The sample fermented for 96 hours had the least ash value (0.15g). The fat content ranged from 0.10 - 0.44. The fresh sample had the highest value (0.44g) and the sample fermented for 24hours and 72 hours had the least value (0.10g). The samples fermented for 48 and 96hours had the same fat value (0.11g) which was higher than the one fermented for 24 and 72 hours respectively. The protein content ranged from 0.25 - 4.93g. The raw sample had the highest value (4.93g) while the ones fermented for 72 hours had the least value (0.25g).The fibre content ranged from 0.20 – 0.67g.The raw sample had the highest value (0.67g) while the one fermented for 96 hours had the least value (0.20g).The carbohydrate content ranged from 12.64 - 42.3g. The raw sample had the highest value (42.3g), the one fermented for 96 hours had the lowest value (12.64g) while the sample fermented for 24 hours was higher than the one fermented for 48 and 72 hours respectively.

Table 2: Mineral composition of raw and fermented orange flesh sweet potato in milligrams

Hours	Magnesium	Iron	Calcium	Zinc
0 hrs/Raw	0.04 ± 0.06^{b}	0.52 ± 0.67^{a}	4.02 ± 0.02^{c}	4.00 ± 10.0^{d}
24 hrs	0.01 ± 0.06^{a}	0.09 ± 0.00^{a}	3.20 ± 0.03^{d}	3.01 ± 0.15^{c}
48 hrs	0.02 ± 0.01^{a}	0.05 ± 0.01^{a}	2.31 ± 0.08^{b}	3.00 ± 0.31
72 hrs	0.02 ± 0.04^{a}	0.05 ± 0.01^{a}	2.38 ± 0.02^{c}	2.01 ± 0.31
96 hrs	0.02 ± 0.04^{a}	0.05 ± 0.20^{a}	0.78 ± 0.03	1.04 ± 5.78^{a}

Means ± S.D of triplicate. Mean with different superscript on the same column are significantly different ($P<0.05$).

Table 2 shows the mineral composition of raw and fermented orange-flesh sweet potato in milligram. The magnesium content varied from 0.01-0.04mg. The raw sample had the highest value (0.04mg) while the sample fermented for 24 hours has the least value (0.01mg). The samples fermented for 48, 72 and 96 hours had the same value (0.02mg). Iron content varied from 0.05-0.52mg. The raw sample had the highest value (0.52mg) while the ones fermented for 48, 72 and 96 hours respectively had the same and the least value (0.05mg). Calcium content varied from (0-78-4.02mg). The raw sample had the highest value (4.02mg) while the sample fermented for 96 hours had the least value (0.78mg).

Table 3: Vitamin composition of raw and fermented orange-flesh sweet potato in milligrams

Hour	Beta-carotene	Vitamin C
0 hrs/Raw	28.35±0.01^{d}	137±0.1
24 hrs	23.63± 0.01^{c}	96±0.01^{c}
48 hrs	14.18±0.01^{b}	56±0.15^{b}
72 hrs	14.7±0.01^{b}	55±0.02^{b}
96 hrs	9.45± 0.01^{a}	42± 0.01^{a}

Means ± S.D of triplicate. Mean with different superscript on the same column are significantly different (P<0.05).

The sample fermented for 24 hours had a value (3.20mg) which was higher than those fermented for 48 and 72 hours respectively. Zinc content varied from (1.04- 4.00mg), the raw sample had the highest value (4.00mg) while the sample fermented for 96 hours had the least value (1.04mg).

Table 3 shows that the raw sample had the highest beta-carotene (28.35mg). The sample fermented for 96 hours had the least value (9.45mg) while the sample fermented for 24 hours (23.63mg) was higher than the ones fermented for 48 and 72 hours respectively. The table also showed that the raw sample had the highest vitamin C value (137mg) while the sample fermented for 96 hours had the least value (42mg).

Table 4: Phytochemical composition of raw and fermented orange-flesh sweet potato in grams

Hours	Alkaloid	Flavonoids	Saponin
O hrs/Raw	1.4±0.03^{a}	6.10±0.04^{a}	0.85±0.01^{a}
24 hrs	1.2±0.05^{a}	4.4±0.01^{a}	0.75±0.02^{a}
48 hrs	1±0.15^{b}	2.15±0.02^{a}	0.43±0.0^{a}
72 hrs	0.9±0.03	1.45±0.02^{a}	0.3±0.01^{a}
96 hrs	0.78±0.02^{a}	0.5±0.05^{a}	0.15±0.01^{a}

Means ± S.D of triplicate. Mean with different superscript on the same column are significantly different (P<0.05).

Table 4 shows that the alkaloid content varied from 0.78g – 1.4g. The raw sample had the highest value (1.4g) while the one fermented for 96 hours had the least value (0.78g). Flavonoid values varied from 0.5g – 6.10g .The raw sample had the highest value (6.10g) while the sample fermented for 96 hours had the least value (0.5g). Saponin values varied from 0.15 -0.85g. The raw sample had the highest value (0.85g) while the sample fermented for 96 hours had the least value (0.15).

Table 5: Anti-nutrient composition of raw and fermented orange-flesh sweet potato in miligrams

Hours	Oxalate	Phytate
O hrs/Raw	16.80	87
24 hrs	13.44	62
48 hrs	10.08	50
72 hrs	10.08	37
96 hrs	3.36	12

Means ± S.D of triplicate. Mean with different superscript on the same column are significantly different (P<0.05).

Table 4 shows that the oxalate content varied between 3.36 – 16.80mg. The raw sample had the highest value (16.8mg) while the sample fermented for 96 hours had the least value (3.36mg).The phytate content varied between 12 – 87mg. The raw sample had the highest value (87mg) while the sample fermented for 96 hours had the least value (12mg).

Discussion

The result revealed that the moisture content was higher in fermented orange flesh sweet potato than in raw sample from (73.15-84.07). This could be attributed to the absorption of water by the tuber during fermentation. This finding is in line with Treche and Agbor-Egbe, (1995) who observed that in 72 hours of fermentation the moisture content tends to increase. There was reduction in the ash content of fermented orange flesh sweet potato, compared with the raw samples. It is believed that the process of fermentation might have contributed to the reduction in the ash content. This result agrees with the work of Talaro, (2002) who found out that the ash content of sweet potato decreased from (2.52 – 1.78) after 72 hours of fermentation. It is possible that some available mineral are utilized by the fermenting organism in the sweet potato mesh. According to Oyewole and Odunfa (1990), the reduction is due to combination of leaching into the soaking water and microbial utilization. The more the minerals are leached into the water the more the reduction in the ash value. The crude fiber content of orange flesh sweet potato decreased with increase in fermentation period from (0.65-0.20) this is in line with other studies. According to (Oluwole *et al.*, 2012) 72 hours of sweet potato fermentation resulted in the reduction of crude fiber from (0.73 – 0.06). The result of this study indicate that increase in hours of fermentation appear to have effect on the crude protein content. The crude protein decreased with increase in fermentation period from (4.93-0.25g). Appiah, Oduro and Elis (2011) however observed a marginal increase in crude protein from (3.80-4.43%) after 24 hours of fermentation. The differences observed in these studies could be attributed to different fermenting medium and or analytical errors. The carbohydrate content of raw orange flesh sweet potato was higher than the fermented samples. This agrees with the work of Achimba (2010) that fermentation reduced the carbohydrate content of tubers. However, Ogunjobi, Adebayo and Adenike, (2005) posit that the low carbohydrate in sweet potato is an advantage for it is medically recommended for diabetic patients. This study revealed that the crude fat content of orange flesh sweet potato decreased with increase in fermentation period from (0.45-0.10), this agrees with the work of (Oluwole *et a*l., 2012). In his study 72 hours of fermentation decreased the crude fat from (0.59 – 0.21) as the hours increased.

The mineral content of orange flesh sweet potato, which includes zinc, magnesium and calcium decreased with increase in fermentation period. This could be as a result of decrease in the ash content. According to Odunfa, (1999) the reduction could be due to leaching into the soaking water and microbial utilization .Talaro, (2002) have also reported that some available minerals are utilized by the fermentation organism in the potato mesh. According to Oyarekua, (2013) the minerals decreased with increase in fermentation period due to utilization of these minerals by the various microbes in the sample.

The vitamin C and beta-carotene content of orange flesh sweet potato became lower as the fermentation period increased from (137.5 to 41.2) and (85.106-28.365) respectively. According to Hacineza *et al*., (2010) fermentation of sweet potato for 72 hours, decreased vitamin C content from (50.17 – 47.9). It could be that some of the vitamin C, being water soluble, might have dissolved into the fermenting liquid. Hacineza *et al*., (2010) also attributed the reduction of beta- carotene in the fermented samples to oxidative effect of oxygen and light on beta-carotene.

The phytochemicals comprising of flavonoid, alkalnoids and saponin decreased as the fermentation period decreased ranging from (6.10-0.50), (1.40-0.78) and (0.85-0.15) respectively. This finding is in line with existing literatures since several researchers have found out that fermentation and processing lead to reduction in phytochemicals of root crops (Zielinski Mishalska, Amigo-Benavent, Dei Castillo and Piskula, 2009; Makins and Rossiter, 2011).

Raw samples of orange flesh sweet potato had the highest level of phytate but decreased as fermentation period increased. This reduction could be due to phytase activity, which is known to be affected by a wide range of microflora. This study agreed with other studies which have revealed that phytate can be reduced by natural fermentation (Bishnoi *et al*., 1994 ; Sharma and Kapoor, 1996).There was reduction in oxalate content of orange flesh sweet potato as the fermentation period increased from (16.80-3.6). This agreed with the studies of Bolarinwa (2012) which stated that the decrease of oxalate during fermentation could be attributed to the effect of enzyme/acid hydrolysis or the starch granule during fermentation. According to Iwuoha (1995), the reduction could be due to effect of leaching and enzyme/acid hydrolysis of starch granule during fermentation.

Conclusion

This study revealed that fermentation had a positive effect on the anti-nutrient as the anti-nutrient content of the samples were decreasing as the fermentation progressed. For the nutrients and phytochemical composition of orange flesh sweet potato, negative effect was observed (as the hours of fermentation increased, there were continuous decrease in the nutrients and phytochemimcal content of the samples). This implies that fermentation though an age long acceptable food processing technique should not be recommended for orange flesh sweet potato since it results to appreciable nutrients and phytochemical losses. Twenty four (24) hours fermentation could however be permitted because it led to marginal nutrients and phtytochemical losses and appreciable losses of anti-nutrients which hinder nutrient absorption.

Recommendation

Based on the finding, the following recommendations are made.

1. Orange flesh sweet potato should not be fermented beyond 24 hours so as to minimize nutrient and phytochemical losses as much as possible.
2. Fermentation as a food processing method should be employed in anti- nutrient reduction of orange flesh sweet potato.
3. Other processing methods that can reduce or totally eliminate the anti-nutrients while preserving the nutrients and phytochemicals should be explored.

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Capacity Building Needs of Agricultural Science Teachers in Handling Students with Hearing Impairment in Secondary Schools in South-West Nigeria

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Abstract

The study focused on capacity building needs of Agricultural science teachers in handling students with hearing impairment in Secondary Schools in South-West Nigeria. Survey research design was adopted for the study. The population of the study consists of 51 Agricultural science teachers. All the 51 Agricultural science teachers were used in the study. Collection A 42 item questionnaire was developed for gathering the data. The instrument was validated by five experts. Cronbach alpha was used to determining the reliability of the instrument. The instrument yielded reliability coefficient of 0.83. 51 copies of the questionnaire were administered to the respondents with 100% return rate. It was found out that agricultural teachers science require capacity building in Handling students with hearing impairment in Secondary School in South-West Nigeria. It was recommended that the identified areas where agricultural science teachers needed capacity building be packaged into a retraining programme to be utilized in re-training agricultural science teachers in secondary schools through seminars and workshops.

Key words: Capacity Building, Needs, Hearing, Impairment.

Introduction

Special need students are those children who might need extra help because of a medical, emotional, or learning problem. Gbegbin (2007) described special need students as those having significant difficulty in coping with children of the same age. Ozoji(2005) observed that such persons include the hearing impaired, visually impaired, mentally retarded, learning disabled, physically impaired, gifted or talented, and emotionally disabled. Special need learners according to Okuyinbo (2004) are those adult and children having any restriction or lack resulting from impairment of ability to perform an activity in a manner within the range considered normal for human being. Such students suffer disabilities, which reflect disturbances at the level of customarily expected activities concerning their performance and behavior. Examples of such disabilities include, inability to walk or awkward inefficient gait, communication problems due to speech disturbances or hearing loss, difficulties in self care and daily living activities such as bathing, feeding, strange behaviour, mobility problems due to blindness or physical impairments. In the context of this study, special need students are those students who have educational or behavioural characteristics manifested either as significant learning assets or difficulties who offer agricultural science as a subject in secondary schools in South-West Nigeria.

Federal Republic of Nigeria (FRN 2009) The *National Policy on Education* recognizes the situation of the special need students and stipulates the following objectives for their education to:

- give concrete meaning to the idea of equalizing educational opportunities for all children (students), their physical, sensory, mental, psychological or emotional disability notwithstanding;
- provide adequate education for all people with special needs in order that they may contribute their own quota to the development of the nation;
- provide opportunities for exceptionally gifted and talented children to develop their talents, natural endowments and traits at their own pace in the interest of the nation's economic and technological development and
- design a diversified and appropriate curriculum for all beneficiaries.

These objectives are in line with the stipulations of the Salamanca statement and framework for Action on Special Needs Education (UNESCO1999).

This statement, among others, stressed that all children must be accommodated in a regular school system so that they can attend school in their neighborhood. It also stressed the need to ensure the accommodation of special need children in ordinary schools, the presence of physical, intellectual, social, emotional, linguistic or other conditions notwithstanding. It further declared that regular school with inclusive orientation are the most effective means of combating discrimination, creating welcoming communities, building an inclusive society and achieving education for all. Moreover, they provide effective education to the majority of students and improve efficiency and ultimately the cost effectiveness of the entire education system.

Inclusive education according to Ozoji (2005) means that all students attend and are welcome by their neighborhood schools in age-appropriate, regular classes and are supported to learn, contribute and participate in all aspects of the life of the school. Meynert (2014) explained that inclusion is about the rights of children to participate fully in general curricular activities of the school, and a respect for their social, civil, and educational rights.

Ozoji (2005), explained that inclusion is an education option or programme carefully designed to educate special need learners (students) within the structured mainstream of school community. The key purpose of designing inclusive education is to accommodate all learners including students with special need to learn in neighborhood schools. Also Eniolorunda (2007) stated that, not only does inclusive education for special need students bring improved academic performance, it also offers them opportunity for socialization with their peers without disabilities in general education classroom.

Furthermore, because of Education for All as projected in inclusive education, the education and accommodation of special need students have become a common occurrence in agricultural science classrooms. . Hallahan and Kauffman (1991) in Salami and Salami (2005) classified them as follows: the mentally retarded, visually impaired ,learning disabled, physically and health impaired, behaviorally and emotionally disturbed ,speech and communication disordered, intellectually gifted and talented, multiple handicapped and the hearing impaired.

Hearing impairment is a hearing loss that prevents a person from totally receiving sounds through the ear (American with Disabilities,2015). Adedapo, Nwosu and Ibitoye (2009) explained that hearing impairment is a hearing loss that prevents a person from totally receiving sounds through the ear. If the loss is mild, the person has difficulty hearing faint or distant speech. A person with this degree of hearing impairment may use a hearing aid to amplify sounds. If the hearing loss is severe, the person may not be able to distinguish any sounds. Ogwu (2001) explained that hearing impairment is an umbrella term which covers both deaf and hard of hearing. It has the following characteristics: difficulty in hearing, difficulty in language expression, non-response when talked to, asks for repetition of questions, strains the face in order to hear, cupping the ears with the palm and frequent rubbing or scratching of ear.

Agricultural science teachers must be aware of special students with hearing impairments and be committed to provide quality education for every students irrespective of their abilities and disabilities in agricultural programme in secondary schools (John, Gary and David, 2008).

Secondary schooling in Nigeria is six years period. The first three years is for Junior Secondary Schools at the end of which Junior School Certificate is obtained. The last three years is for Senior Secondary School, at the end of which Senior Secondary School Certificate is obtained. In the context of this study, secondary school is an inclusive institution where agricultural Science is taught after primary school to both normal students and students with hearing impairments.

Hearing impaired is part of students with special needs that require special education because they behave differently from other students. MediLexicon International (2015) stated that hearing impairment, deafness, or hearing loss refers to the inability to hear things, either totally or partially. Symptoms may be mild, moderate, severe or profound. A patient with mild hearing impairment may have problems understanding speech, especially if there is a lot of noise around, while those with moderate deafness may need a hearing aid. Some people are severely deaf and depend on lip-reading when communicating with others. The situation accord to Adeniran (2000) is malfunctioning of auditory mechanism which may or not be perfected by constant use of hearing aids. Adediran (2009) explained that teachers who will teach students with special needs should be expose to the special management strategies, strategies for managing students with special needs, identification skills, psychology of children with handicapping condition, screening diagnosis and assessments strategies as well as counseling/behavior modification. Ozoji (2000) also stressed further that teachers that will teach special needs of which hearing impairment is one should have knowledge of coordinating curriculum, methods and material for achievement of educational objectives. Agricultural science Students with hearing impairment are those with one hearing disability or the other and are studying agricultural science in Secondary Schools in South-West Nigeria. In teaching students with hearing impairment teachers should be well exposed to the used of instructional materials.

Instructional materials as a concept applies to the materials teachers turn to in order to deliver quality instruction. Amadi (1995) defined instructional materials as any material, place, event or activity which teacher can resort to adapt or apply to facilitate teaching and learning. Ikerionwu in Okobia (2011) refers to instructional materials as objects or devices which help the teacher to make learning meaningful to the learners.

There are different media through which instructional messages can be transmitted to the learners such media may be visuals, audios and audio-visuals that help make concept, abstract, and ideas concrete in teaching and learning process. They are materials which teachers use in supplementing teaching. Instructional materials can be grouped into prints. Visual, audio and motion pictures, audio and static display (National Teachers Institute 2006). Various types of these instructional materials are also used in teaching students with hearing impairments. Imogie (2000) explained that local materials can be used to raise visual materials in diagrams. Light cartoons and cardboard papers could be used in improvisation for students with special needs for better teaching. In the context of this study instructional materials are materials that agricultural science teachers used in supplementing teaching to make abstract concepts real for students with hearing impairment.

Agricultural Science teachers who teach in these schools undergo little or no training on how to handle students with hearing impairment during their training as teachers. Obani (2006) stated that the state of education of students with exceptionality (hearing impaired included) is becoming problem in our regular schools because most regular teachers who encountered these students with exceptionality know nothing about them and their needs, nor do they have knowledge and skills to attend to their special education needs. Based on this, the researcher is of the opinion that the regular school teachers of agricultural science needed re-training for proper capacity building in order to handle students with hearing impairment

Capacity building is improving the ability of people in performing their duties. Capacity building in the view of Olaitan, Alaribe and Ellah (2009) is effort geared towards improving the level of knowledge, skills and attitudes possessed by individual for proficiency in a given task or job. Olaitan, Alaribe and Ellah (2009) define capacity building as an attempt aimed at increasing individuals ability to perform a job or task. It is geared towards making improvement on what individual is already doing. Capacity building in the context of this study involves re-training of agricultural science teachers in various methods and techniques of handling students with hearing impairment in order to reduce problems associated with teaching them to the barest minimum so as to achieve the set educational objectives of the agricultural science programmes.

Purpose of the Study

The major purpose of this study was to identify capacity building needs of secondary school agricultural sciences teachers in handling students with hearing impairment in the South-West Nigeria. Specifically the study determined capacity building of agricultural science teachers in:

1. management of students with hearing impairment.
2. handling students with hearing impairment on instructional strategies .

3. utilization of instructional materials in handling students with hearing impairment.

Research Questions

Three research questions question guided the study:

1. what are the capacity building needs of agricultural science teachers on management of students with hearing impairment?
2. what are the capacity building needs of agricultural Science teachers on instructional strategies in handling students with hearing impairment ?
3. what are the capacity building needs of agricultural science teachers in instructional materials utilization in handling students with hearing impairments?

Methodology

***Design of the Study*:** A survey research design was adopted for the study.

***Area for the Study*:** The study was carried out in South-West, Nigeria comprising Ekiti, Lagos, Ogun, Ondo and Oyo states. Osun state which is part of the South-West geo-political zone was not included because, the state has no secondary school where students with hearing impairments are being taught agricultural science along with their normal peers.

***Population of the Study* :** The population of the study was 51 agricultural science teachers from all the secondary schools that run inclusive Education in the Zone. The population was small and therefore the entire population was used; hence no sampling was made.

***Instrument for Data Collection*:** A 42 items questionnaire was developed based on the research questions and was used for data collection. The questionnaire had two response categories of Needed and Performance with four rating scales each. The needed category are Highly Needed (HN) =4; Averagely Needed (AN) =3; Slightly Needed (SN) =2 and Not Needed (NN) =1. While the performance category had High Performance (HP) = 4; Average Performance (AP) =3; Low Performance (LP)=2 and No Performance (NP) =1 respectively. Five experts validated the instrument, three from vocational Teacher Education Department and two form the Department of Educational Foundations (special Education Unit) all from the University of Nigeria Nsukka. Their views were used to fine tune the questionnaire which was tested for reliability using split half and Cronbach alpha which yielded the reliability coefficient of 0.83 considered high enough for the study.

***Method of Data Collection and Analysis*:** Fifty one (51) copies of the questionnaire were administered to the respondents with the help of two research assistants and the researcher who are conversant with the area of study. The instrument recorded 100% return rate and Capacity Building Needs index (CBI) was used to answer the research questions.

***Method of Data Analysis*:** To determine the capacity building gap, the following procedures were adopted.

1. The weighted mean of each item under the needed category (XN) was calculated.
2. The weighted means of each item under the performance category (XP) was also calculated
3. The difference between the two weighted means for each item (XN-XP) was determined

The decision rules were as follows:

a. A zero (0) value indicated that no capacity building is needed because the level at which the item was needed is equal to the level at which the respondents can perform it.
b. A positive (+) value indicated that capacity building is needed because the level at which the item was needed is higher than the level at which the respondents perform it.
c. A negative (-) value indicated that no capacity building is needed because the level at which the item was needed is lower than the level at which the respondents can perform it.

Results

The results of this study are presented in Table 1-3 based on the specific purposes.

Capacity Building Needs of Agricultural Teachers in Management of Students with Hearing Impairment

Table 1: Performance gap Analysis of Agricultural Science Teachers on Management Needs in Handling Students with Hearing Impairment.

N = 51

S/N	Capacity Building Needs	$\overline{X}_N$	$\overline{X}_p$	PG (X_n- X_p)	RMKS
1	Training in counseling psychology of students with hearing impairment.	3.65	2.94	0.71	CBN
2	Training in behaviour modification of students with hearing impairment.	3,61	2,84	0.77	"
3	Training on focusing on learners with hearing impairment strength and competencies rather than their weakness.	3.41	2.71	0.70	"
4	Planning of resources rooms for students with hearing impairment.	3.37	2.92	0.54	"
5	Organization of resource room for hearing impaired learners.	3.65	2.96	0.69	"
6	Training in rudiment of interpreting medical report for students with hearing impairment in relation to their educational needs.	3.41	2.69	0.72	"

7	Training in determining the eligibility and appropriate education placement for learners with hearing impairment.	3.41	2.69	0.72	"
8	How to rehabilitate learners with hearing impairment.	3.75	2.88	0.87	"
9	Re-training on effective monitoring of students with hearing impairment.	3.16	2.82	0.34	"
10	Training in collaboration with other personnel concern with hearing impaired for better handling of students with hearing impairment.	3.35	2.88	0.57	"
11	Training on diagnosis of various hearing impairments.	3.51	2.96	0.29	"
12	Re-training on how to assist hearing impaired in controlling their emotional problems.	3.37	3.08	0.29	"
13	Retraining in identification and knowledge of hearing impairment.	3.33	3.20	0.13	"
14	Be abreast in the policy statement about hearing impaired learners	3 .71	2.94	0.77	"
15	Management of modern equipment used by hearing impaired.	3.42	3.04	0.38	"
16	How to collaborate with parents of learners with hearing impairments.	3.66	3.08	0.58	"

$\overline{X}_N$ = Means of Needed $\overline{X}_p$ = Means of Performance CNB = Capacity Building Needed CBNN = Capacity Building not Needed

The data in Table 1 revealed that the performance gap (PG) of the respondents in all the 16 items were positive. The value ranges from 0.34 to 0.87. The performance gap indicates that Agricultural Science teachers in Secondary Schools needed capacity building in management to enable them handle students with hearing impairment effectively.

Capacity Building Needs on Instructional Strategies

Table 2: Performance gap of Agricultural Science Teachers on Instructional Strategies in Handling Students With Hearing Impairment.

S/N	Instructional Strategies	$\bar{X}_N$	$\bar{X}_b$	PG ($\bar{X}_n$-$\bar{X}_p$)	RMKS
1	Develop individual Education programme (IEP) for Students with hearing impairment.	3.76	2.88	0.88	CBN
2	Implementing individual Education Programme for Students with hearing impairment.	3.57	3.08	0.49	"
3	Training on adequate lesson preparation to benefit students with hearing impairment in an inclusive education set-up.	3.51	2.75	0.76	"
4	Training on handling of hearing aids and Audio-meter for assessing the degree of hearing acuity.	3.53	2.94	0.59	"
5	How to use sign language comfortably.	3.63	2.6	0.67	"
6	Ability to use finger spelling.	3.53	3.0	0.43	"
7	Ability to use finger numbering.	3.59	2.88	0.71	"
8	Use of task analysis in teaching students with hearing impairment.	3.69	2.98	0.71	"
9	Training in t he use of instructional materials for students with hearing impairment.	3.57	2.80	0.77	"
10	Re-training in improvisation of materials for students with hearing impairment.	3.73	2.94	0.79	"
11	Training in the use of assistive technology for students with hearing impairment.	3.53	2.78	0.75	"
12	Training in assisting students with hearing impairment on acquiring skills and competences as stipulated by the curriculum.	3.63	3.00	0.65	"
13	Training in various methods and techniques of teaching students with hearing impairment.	3.65	300	0.65	"
14	Training on how to implement practical experience for students with hearing impairment on the farm.	3.71	3.11	0.60	"
15	Training on how to use mnemonics in instructing students with hearing impairment.	3.68	2.84	0.63	"
16	Re-training on assessment and evaluation of learners with hearing impairment.	3.72	3.05	0.67	"

17	Training in learning psychology of learners with hearing impairment.	3.65	3.00	0.56	"
18	Re-training in Curriculum modification in favour of students with hearing impairment.	3.65	2.94	0.71	"
19	Training in expanded curriculum.	3.67	3.00	0.67	"

$\overline{X}_N$ = Means of Needed $\overline{X}_p$ = Means of Performance CNB = Capacity Building Needed CBNN = Capacity Building not Needed

Table 2 reveals that the performance gap (PG) of the respondents in all 18 items were positive. The performance gap values ranged from 0.49-0.88. This implies that Agricultural science Teachers needed capacity building in instructional strategies in handling students with hearing impairment in secondary schools in South West Nigeria.

Capacity Building Needs on Instructional Materials

Table 3: Performance gap analysis of Agricultural Science Teachers on Instructional Materials in Handling Students with Hearing Impairment

S/N	Instructional Materials	$\overline{X}_N$	$\overline{X}_B$	PG ($\overline{X}n$- $\overline{X}p$)	Remarks
1	Improvisation of instruction materials	3.59	2.85	0.65	CBN
2	How to use print media for learners with hearing impairment	3.71	2.85	0.86	"
3	Use of visual Media	3.68	2.88	0.80	"
4	Use of Audio media and motion pictures	3.87	3.20	0.85	"
5	Effective Display of Instructional Media	3.64	3.14	0.05	"
6	Modification of instructional materials for learners with hearing impairment	3.88	3.21	0.67	"
7	Designing of instructional materials for learners with hearing impairment	3.75	2,98	0.77	"
8	Selection of appropriate instructional materials	3.56	2.2.89	0.71	"
9.	Construction of instructional materials	3.61	3.95	0.67	"
10	How to improve durability of instructional materials	3.77	2.11	0.66	"

$\overline{X}_N$ = Means of Needed $\overline{X}_p$ = Means of Performance CNB = Capacity Building Needed CBNN = Capacity Building not Needed

Table 3 reveals that the performance gap (PG) of all the 10 items are positive. The values ranged from 0.50 to 0.86. This implies that Agricultural Science teachers agreed that they needed capacity building in instructional material utilization for handling students with hearing impairments in Secondary Schools.

Discussion of Findings

It was found out that Agricultural Science teachers needed capacity building in handling students with hearing impairment in the following areas: managing students with hearing impairment, instructional strategies for students with hearing impairment and instructional material for teaching students with hearing impairment

The result are in agreement with findings of Adediran (2009) that teachers who will teach students with special needs should be expose to the special management strategies, strategies for managing students with special needs, identification skills, psychology of children with handicapping condition, screening diagnosis and assessments strategies as well as counseling/behavior modification. The findings also revealed that agricultural science teachers needed capacity building in organization of resource room and rehabilitation of learners with hearing impairment. For agricultural science teachers to be effective in handling students with hearing impairments, they need improvement in managing them.

This study is also in consonance with findings of Ozoji (2000) that teachers that will teach special needs of which hearing impairment is one of them should have knowledge of coordinating curriculum, methods and material for achievement of educational objectives. For better handling of students with hearing impairment Agricultural science teachers needed improvement in instructional strategies.

The result of this study is also in agreement with the finding of Imogie (2000) that knowledge and handling of material like Audio, Audio Visuals, tactual aids and large prints is essential for teachers that will teacher students with special needs. The result of this study is also in agreement with the findings of Amadi (1995) that instructional messages can be transmitted to the learners through instructional media which may be visuals, audios and audio-visuals that help make concept, abstract, and ideas concrete in teaching and learning process. The study also revealed that agricultural science teachers also need capacity building in modification of instructional materials and designing of instructional materials for learners with hearing impairment. This in agreement with Imogie(2000) who explained that local materials can be used to raise visual materials in diagrams. Light cartoons and cardboard papers could be used in improvisation for students with special needs for better teaching. This implies that agricultural sciences teachers needed improvement in instructional material for better handling of students with hearing impairments.

Conclusion

From the findings of this study, it was discovered that Agricultural Science teachers in Secondary Schools in South-West, Nigeria needs capacity building in the area of management, instructional strategies and instructional material utilization for better handling of students with hearing impairment. If the findings of the study are developed into capacity building programme for retraining of Agricultural Science teachers in secondary schools, it will help to overcome deficiencies in handling students with hearing impairments in agricultural sciences classroom.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. The capacity building needs identified by the study should be packaged into a retraining programme to be utilized in retraining agricultural science teachers through seminars and workshops.
2. The programme should also be included in the pre-service course for agricultural science teachers in tertiary institutions particularly.

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Clothing Selection Practices of Adolescents and Implication for Family Values

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Abstract

This paper reviewed the clothing selection practices of adolescents. It also examined its implication for the family values. The current surge in fashion, accelerated by the media, exerts profound influence on the adolescent's clothing choices. These includes, ungendered clothing styles, indecent dressing, ostentatious clothing and obsession with fashion. This a times conflicts with the family values and accepted cultural norms. It was concluded that, the family has enormous role to play in this regard, to conserve these values. Based on these, recommendations were made.

Key Words: Adolescents, Family, Clothing Selection, Fashion, Peer Influence, Practices.

Introduction

Adolescence is viewed as a transitional period between child and adulthood. It is marked by many incidences which include the search for identity whereby they are involved in trying out different behaviours and self images in an attempt to discover their own selves. They also attempt to establish autonomy. In these endavours, clothing is used as a means of declaring independence, connectedness and to distinguish themselves from others.(Olugbenga and Odeleye 2008). Adolescence therefore adopt styles of clothes that express their particular identity.

Trends in fashion have moved with technological changes. Social change has brought about positive and negative changes in fashion trend (Nnubia, 2010). Globalization and information and communication technology has greatly helped to accelerate these changes at a bewildering pace across the globe. These exert much influence on today's adolescent. For them fashion is an accessible and flexible way of expressing modernity (Berk, 2004). Since fashion is always evolving, it corresponds with the evolution of change in the personality of teenagers (Steinberg 2008). They attempt to define their identity by consciously styling themselves in different manners to find what best suits them and are accepted by their peers (Rawin, 1992).

Hence clothing selection in most case is based on peer approvals. Their inexperience in life may not allow them to carefully scrutinize what to and what not to imbibe from the trend in vogue. These unchecked choices most times clashes with parental customary control. This generates conflict between the adolescent and their parents. Adults perceive their fashion as "weird" or out Landis and they perceive the adults as conservatives (Rynn, 2014). There is therefore, the need to strike a balance between the two for healthy family growth. This study therefore tries to examine adolescents characteristics, their motivations for clothing selection and wearing, their clothing selection practices, challenges related to these practices and implication for family values.

Adolescents Characteristics

Adolescence is a period of transition between childhood to adulthood approximately between the ages of 13 years to 20 years. The transition time varies among cultures but generally defined as the time when individuals begin to function independently of their parents (Vander Loff, Frank and Campbell, 1985, Jones and Meyer, 2008). In simpler societies the transition period is shorter while in industrialized world the transition period is greatly extended due to many years of education as they prepare for the productive world of work (Berk, 2004). Irrespective of the length of the transition time, the basic task of this phase are much the same around the world. Recognizing and understanding the unique developmental characteristics i.e traits associated with human growth is central to establishment of healthy relationship with the emerging adult (Berger, 2008).

During this remarkable stage of life cycle, adolescents experience rapid and significant developmental change which leads to rapidly changing behavioural identity and character changes (Berk, 2004). Every aspect of life is involved in these changes; physiologically, intellectually, psychologically, socially and morally. These characteristics are interrelated and overlap (Berk, 2004). Erik Erikson regarded these developments as psychosocial process going on through life (Jones and Meyer, 2008). Thus adolescence is a product of both biological and social forces. Biological changes are universally found in all primates and cultures. These internal stresses and the social expectations accompanying them make a young give up childish ways and develop new interpersonal relationship and take a greater responsibility. These forces give rise to the following adolescence characteristics.

Physiological Characteristics: Adolescence is a period of accelerated growth called 'growth sprout' (Jones and Meyer, 2008). The body changes of early adolescence rivals those of infancy in speed and dramatic change but differ in one crucial way – Adolescence are aware (Berger, 2008). The beginning of adolescence is marked by puberty a flood of biological events leading to adult sized body and sexual maturity (Berk, 2004). These changes are genetically influenced by hormones processes. They experience restlessness and fatigue due to hormonal change (Adolescent Learners Characteristics, 2007).

There is improvement in gross motor performance but the patterns of change differ for boys and girls. Girls gains are slow and gradual leveling off by ages 14. In contrast boys show a dramatic spurt in strength, speed and endurance continues through the teenage years (Berk, 2004). Accompanying the rapid increase in body size and changes in the physical features related to sexual functioning, some called primary sexual characteristics involving the reproductive organs (ovaries, uterus and vagina) in female (penis, scrotum and testes) in males others called secondary sexual characters which are visible on the outside of the body and serve as additional signs of sexual maturity for e.g. breast development in females and appearance of under arm and pubic hair in both sexes. Sexual maturity in girls is marked by onset of menstruation (menarche) and in boys by the production of semen spermerch) (Jones and Meyer, 2008).

Pubertal changes exerts some psychological impact on the adolescence. According to(Rice, 1996 and Berk, 2004) these changes affect the adolescents' self image, mood and interaction with parents. They are moody and less stable emotionally. There is also rise in parents child conflicts. Furthermore, there is also physical vulnerability resulting from poor health/dietary habits or engaging in risky behaviours. The common dietary disorder is known as resonate anoxeric and Bullima anoxeric (Berger, 2008).

Cognitive/Intellectual Characteristics: Adolescents develop intellectually just as their physical body attain maturation. Jean Piaget described it as the stage of formal operation (Jones and Meyer, 2008). This implies the development of the capacity for abstract scientific thinking. They no longer require concrete things and events as object of thought unlike children which reason in concrete terms. The development of formal operations leads to dramatic revision in the way adolescents see themselves, others and the world around them in general (Berk, 2004). They can now test hypothesis, analyze data, grapple with complex concepts and think reflectively (Caskey and Anfara, 2007). Inductive reasoning of a child gives way to deductive reasoning.

Personality trait associated with those developments includes egocentrism which is typically evident at the beginning of adolescence, intuition the middle and logic at the end (Berger, 2008). Egocentrism leads them to centre many of their thoughts on themselves and wonder how others perceive them. They try to make sense of conflicting feelings abut their own parents, school and classmates (Berk, 2004),Though they think deeply but not realistically about the future. Adolescents egocentrism differs from egocentrism of younger children in that adolescent egocentrism does not ignore others but rather distorts their understanding of what others might be thinking about them (Berger, 2008). Thus there is heightened self consciousness about their appearance. As teenagers imagine what others must be thinking about them; two distorted images of the relation between self and others appear; imaginary audience and personal/invincible fable (Rice 1997, Berk 2004 and Berger 2008).

Imaginary Audience: This manifests by heightened self awareness whereby they believe that they are the centre of focus of everyone. Everyone around them is intensely interested in them. Thus they are deeply concerned by the audience of their peers who presumably judge every visible oddity of their appearance and behaviour (Berger 2008). This explains the prolonged length of time adolescence spend inspecting every detail of their appearance.

Personal/Invincibility Fable: This is the idea that one is invincible, never defeated and protected from every harm (Berger 2008). Their inflated opinion of their own self importance about their imaginary audience may lead them to feel they can go unhurt by certain risks e.g. unprotected sex, additive drugs, self starvation, etc (Berk 2004).

Finally, they are argumentative. As adolescents acquire formal operation they are motivated to use them. The once pliable school age child becomes a fiercely argumentative teenager who can marshal facts and ideas to build a case (Berk 2004).

Psycho-Social Characteristics: The transition between childhood and adulthood heads to rapidly changing behaviours, identity disturbances and strong emotions (Green 2015). Stanley Hall described it as a period of emotional stress resulting from the rapid and extensive physiological changes occurring at pubescence (Caskey and Anfara, 2007). These development are normal part of adolescent growth.
Green (2015 identified five psychosocial characteristics of adolescence. They are as follows

Labile Emotions: This general emotional trend from late childhood through adolescent is towards less confidence (Berger, 2008). They can shift mood easily, vacillating between happiness and distress, self confidence and worry (Green 2015). Increased hormonal reactions in the body affects these emotions. Mood swings, peaks of intensity and unpredictability, sometimes results to over reaction to ridicule, embarrassment and rejection (Berk, 2004). Complex social interactions such as conflict with friends, school pressures and experimentation with romantic relationship can exacerbate the labile emotional state of adolescents Green (2015). Disappointment may lead to depression and in extreme cases thought of suicide (Berger 2008).

Personality Identity: Adolescent explores and tries to assert their personal identities. There is the struggle to reconcile their understanding of themselves as a unique person and where they fit in with peers and society at large. Four identity status are experienced as a result of this search. Berk (2004), Berger (2008) and Stenberg (2008) outlined them as; identity diffusion, foreclosure, moratorium and identity achievement. All children begin with identity diffusion, lacks knowledge of whatever their identity is. This is followed by identity foreclosure in which commitments are made without exploration of alternatives, then moratorium or the process of exploration and finally identity achievement in which moratorium has occurred and resulted in commitment (Stenberg 2008).

While these unstable identity issues are common part of early adolescence, they tend to stabilize between the ages of 19 and 21 (Green 2015). Trial and error in matching both their perceived image and the image others respond to see, allows for the adolescence to grasp an understanding of who they are, Rawin (1992).

Peer Relationship: During adolescence relationship with peers begins to take precedence over relationship with family. Strong emphasis are placed on friend's perception and values more than that of parents (Green 2015). Adolescent peers could be classified into cliques and crowds. Cliques are loyal to one another and excludes outsiders while crowds are large group who share common interest but may not necessarily be friends (Berk 2004). Cliques and crowds provide both social control and social support and promote group norms through criticism and exclusion of people who do not conform (Berger 2008). Peers could be constructive as well as destructive paired with adolescents limited life experiences and under developed decision waking skills, teenagers are often vulnerable to negative peer pressure (Green 2015).

Independence and Testing Boundaries: Adolescents need to develop autonomy, experience new activities and earn more independence. These often drive them to test parents and teachers rules and boundaries (Green 2015). Though teenagers can benefit from testing boundaries during this stage of development, they still require rules and boundaries, if they are to avoid negative influence and achieve their potentials.

Self Centered Attitudes: Adolescence hardly looks at circumstance from other peoples perspectives. This is due in part, to their still developing brain structures. This apparent apathy is normal and typically resolves itself once a teen reaches the end of adolescence, judging others quickly but acknowledging one's fault slowly (Stenberg 2008, Green 2015).

Adolescents Motivation for Clothing Selection and Wearing

Group Affiliation: As young adolescents affiliation base expands to include family and peers, feelings of conflict arise because of competing allegiances (Wiles, Bond & Wiles 2006). Group affiliation is the primary concern or motivation of adolescents with regards to clothing selection. According to Berger (2008) the crowds guides the adolescents on decision about clothes, music, drugs, classes and so on.

Clothing is used to signal connectedness and to distinguish themselves from other groups of young people by defining themselves based on their crowd membership (Newman 2010). Clothes help teens to explore new identities separate from parents and blend with peers. Therefore a way of establishing an identity is by being part of a peer group. And one way of fitting in within a peer group is looking like members of that group (Olugbenga and Odeleye 2008, Newman 2010).

Peer Influence: Adolescence forms a self conscious desire to feel important in their peer groups and enjoy social acceptance (Weston 2005). They derive affirmation and approvals from their friends identical outfit choices and from mimicking their friends appearances.

Newman (2010) identified two common behaviours associated with this peer influence. Mirroring and twinning – mirroring is exhibited when someone feels insecure but sees him or herself reflected back in another person's appearance, word or action. The person feels pumped up, and less insecure. Twinning bothers on quest for affirmation and approval of others to bolster self esteem. Adolescents exhibit these behaviours in other to bolster their fragile self esteem.

Clothing now becomes a source of overt admiration resulting in increased self esteem, self respect, self confidences, recognition and security (Nwankwo 2002, Steele 2009).

Media Influence: Another strong factor that motivates adolescents in clothing selection is the media influence. Media exposure over the past decades has increased likewise adolescents utilization of them, computers, cell phones, stereos and television to gain access to various medium of popular cultures (Okorie 2005). Just as fashion is evolving to influence adolescence so is the media. Media life takes place amidst a never enduring barrage of flash on screens, pages and billboards (Bradan Klein 2008). This barrage consciously or sub consciously register into the mind causing issues with self-image, a factor that contribute to an adolescence sense of identity, Marcia (1966).

Hence, they are socially vulnerable due to influences of media and negative interactions with adults (Kellough & Kellough, 2008). Also the celebrities of the day in most case media stars exert profound influence on adolescents motivation for clothing selection. Their clothing styles are tailored to mimic these icons.

Clothing Selection and Wearing Practices of Adolescents

Peer approval and group affiliation being given an uppermost consideration in motivation for clothing selection and wearing by adolescents, predisposes them to various forms of clothing norms and practices. Whereas clothing choices and selection according to Anyakoha and Eluwa (2008), and Nubia (2010), should be based on figure type, age, sex, complexion, dress colour, time, activities and status. Adolescents adopt blindly the perceived fashion in vogue. The following clothing practices are common clothing practices among the adolescents:

Ungendered Clothing: Steele (2009) described two notable trends which are likely to continue. Blurring of gender boundaries and towards ever more casual everyday dress. Blurring of gender boundaries has resulted in ungendered clothes. Trouser and tailored suits are two notable examples of men's style now regularly worn by men and women. In earlier years there is a sharp distinction between men and women clothing in colour, shape, fabric and decoration. Blurring of the gender boundaries on clothing distorts the cultural values and identity in distinction of feminine and masculine gender. Adolescents easily adopts these trends being always dominant in the fashion scene. Girls wear trousers, boys wear earrings, plait their hair, tattoo their bodies etc.

Shabby Clothing: The move towards more casual dressing has metamorphosed into all manner of dressing styles ranging from skimpy dressing, bump shorts, miniskirts, see through wears exposing private parts of the body etc. Most adolescents copy verbatim these clothing styles especially the girls. Boys sag their trousers exposing their under wears.They copy and wear such indecent, reckless and seductive, scandalous and sexually provocative clothing meant for commercial sex hawkers (Ozougwu and Anyakoha 2005). Thereby, they become sources of social stigma because of their vulnerable personality. Adolescents social maturity often lags behind physical and intellectual development (Scales, 2003).

Ostentatious Clothing: Finally, idolization of media stars as models for clothing selection and wearing practices have brought about ostentatious clothing styles. Hence the struggle to acquire these clothing articles and their accessories at all cost .Despite the fact, that the life span of these current fashion is usually very short ,and changes faster than price in stock market (Saduwa, 2006). Fashionable clothes of today becomes a fad at a very short time (Ukwe, 2010). The quest to blaze with the trend drive the young people into these with its attendant problems.

Challenges of Adolescent Clothing and Wearing Practices

Obsession with Fashion: The rapid changes in the contemporary fashion trend poses a lot of challenges for the family, especially for the young adolescent. Adolescents want to be popular in their environment by wearing expensive clothes made by famous designers in other to be respected by their peers. In some cases the family budget may not be able to carry this ostentatious lifestyle. Ayesha (2014) commented that in their area Pakistan, the poor class who cannot afford it, only feel depressed and stressed out due to unreasonable fashion trend. They sometimes commit suicide as they cannot afford such need that earn them respect. Therefore, quest to keep pace with fashion drives some of them into various vices such as stealing, begging, fraudulent behaviours, prostitution, etc.

Poor Academic Performance: Academically, obsession with fashion trend interferes with their studies. The zeal for academic pursuit to become a renowned professional in various fields are exchanged at the altar of becoming a fashion model. Ranjan (2014) observed that instead of reading their textbooks they prefer to read fashion magazines. Most of them prefer to go into the glamour world than any other job. The media world has been the vehicle carrying these changes. Much information regarding the recent trend in styles blocks the minds of children and distracts them from their studies. These generates conflict and tension between the adolescents and the parents.

Indecent Dressing: Furthermore, indecent dressing styles copied by adolescents in other to win the affirmation and acceptance of their peer is also a great challenge. Such indecent clothings in the name of fashion induces sexual harassment and disciplinary problems in school and social disorder, (Ozougwu and Anyakoha 2005, Olugbenga and Odeleye 2008). It also attracts abuses on the poor vulnerable youngsters whose intention may be in contrast to that of the beholder. The adolescent struggles to respect their parents and also fit in with their peers. A combination which a times is impossible.

Implication for the Family Values

Exemplary Lifestyle: Family is a group of people comprising a husband and wife and their dependent children (Igbo, 2011). It can also be described as a collective body of persons who live in one house and under one head or manager, a household including parents, children and servants as the case may be, lodgers or boarders (A. R. Dictionary 2010).It constitutes the fundamental unit of every society. The family remains the first agent of socialization. Though the adolescents are usually interested in greater personal independence, the home remains the headquarters for articulation and execution of family programme. Whether verbally or overtly learning takes place from parents to child in everyday family life, forming the habits and behaviour of the child (Gronhog 2014). Parental habits exert a significant influence on their children. There is intergenerational transfer of behaviours. It is more socially acceptable and convenient to learn and copy observed activity of the parents. Cleveland, Gibbon, Pomery and Brody (2005) noted that patterns set in place during childhood continues. If these patterns are positive they can buffer some of the turbulences of adolescence. Parents and their children behave alike. Parent should therefore work on their children early and help the adolescent towards accepting themselves the way they are, rather than bring carried away by peer pressures on current trends in fashion.

Strengthening of Parents-Adolescent Relationship: Parents are crucial for support and guidance at this time. Parents-adolescent relationship are pivotal but not always peaceful (Stenberg 2008). Dispute arise when a child's drive for independence clashes with parental customary control. These conflicts generate a healthy family close relationship though the issue of contention should remain focused based on principles and not deteriorate into meaningless battles (Cleveland et al 2008). Public criticism should also be avoided as a critical remark from parent or teacher can be mortifying as a result of their heightened self awareness (Berk 2004).

Upholding of Core Family Values: Families should explore their values and cultures and dreams and chose to live a life conscious of the global environment especially the current trend in fashion. The United Nation Development Programme (1996) emphasizes a human centered approach which is widely participatory process of social change in which families themselves share an opportunity to take part in making decision that affects their lives. Therefore, core family values have to be upheld and prevented from being eroded by external influences. Values are generally what individuals and families and societies hold to e right, true and desirable and therefore create norms which are rules for behaviour and lifestyle (Igbo 2011). Parents can influence their adolescents clothing selection and wearing practices via monitoring, modeling and conversation (Berger 2008). It is therefore, the role of the family to keep these adolescents within the ambient of the family values and cultural norms for fashion.

Intra-Family Communications: Through discussions of family rules and practices, adolescents become more aware of their parents' values and the reasons behind them and gradually they come to see the validity of parental belief and adopt them as their own. And as such, both generations benefit from warm protective family bond throughout the life span (Berger 2008). Family closeness should be fostered through communication, support connectedness and control. Parents should therefore influence their adolescent's clothing choices, linking the childhood years experiences with emerging adulthood.

Conclusion

Trends in fashion have moved with technological advancement. Information and communication technology has enabled exchange of ideas, innovation and fashion at a bewildering pace. This exerts profound influence on the adolescents and as such has implication for the family. The family which remains the custodian of the family values and standards has enormous role to play to ensure the sustainability of the cherished family values.

Recommendations

1. Parents should keep watch over their children's clothing choices and fashion.
2. School should also make some strict rules to avoid indecent dressing and using of fashionable accessories within the school premises as it lures others to imitate them.
3. The media should play a role in helping to control the excesses, since they are the biggest means of spreading fashion news among people.

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Challenges Militating Against Services of Guestroom Attendants in Hotels in Edo State.

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Abstract

This study focused on challenges militating against services of the guestroom attendants in hotels in Edo State. Two research questions were answered. The population was made up of 188 guestroom attendants in 180 registered hotels in Edo State. Questionnaire was used for data collection. Means were used for data analysis. The findings revealed 14 problems militating against the services of guestroom attendants in Hotels in Edo State. These include among others, poor knowledge and skills on how to use modern cleaning equipment, lack of regular water supply too much work load. It also identified 18 ways that could help to improve on guestroom cleanliness in hotels in Edo State. These include training and retaining of guestroom attendants, allocating specific maintenance tasks to the guestroom attendants. Based on the findings, three recommendations to improve the services of guestroom attendants in Edo State were made.

Keywords: Hotels, Challenges, Services, Guestroom Attendants'

Introduction

Hotel is a commercial establishment that provides accommodation, meals, drinks and other services like laundry, transportation among others in a comfortable and hospitable manner for people who are away from home. Hotel is very important because of movement and travelling from places of abode to other places for conferences, businesses, education, leisure and vacation. Before now, people travel and look for relatives to stay with but now people travel far and wide not considering whether there is a relative there or not provided there is a hotel to be accommodated in. (Raghubalan, 2008). The various department in a hotel include room division department, housekeeping department, front office department, maintenance department, food and beverage department, Human resources department, sales and marketing department, purchase department, financial control department and security department. Rooms and division department is the department responsible for maintaining and selling the room in a hotel. In most hotels, this is the departments that directly or indirectly generate more revenue than any other department because the sale of rooms constitutes a minimum of 50 percent of the total revenue (Armstrong 1999).

A hotel largest margin of profit comes from room sales because a room, once made, can be sold over and over again (Armstrong 1999). The housekeeping department is responsible for the cleanliness and upkeep of the front of the house areas as well as back of the house areas so that they appear as fresh and aesthetically appealing as on the first day the hotel property opened for business (Jiboku 2007) this department is headed by the executive housekeeper. The front office department is an operational department that is responsible for welcoming and registering guests, allotting those rooms and helping guests that are checking out (Akin Bankole 2009). The maintenance department is responsible for all kinds of maintenance, repairs and engineering work on equipment, machines, fixtures and fittings. The food and beverages department (F & B) includes the restaurants, bars, coffee shops, banquets, room service, kitchen and bakery. This department is responsible for the preparation and serving of meals and drinks to guests. The room division department is in charge of the guestroom. Guestroom is the main product of a hotel as it contributes to more than 50 percent of the total sales, making the profit percentage from room sales very high (Raghubalan 2008). The sale of a room means renting the room for occupation for 24 hours at a pre-determined cost. A room sold on a particular day earns revenue for that day and it can be sold again and again (Eja 2011). Guestrooms also have a role in the image building of the hotel. Guest stay in the hotel for pleasure, convenience among other reasons, they expect a certain standard of service and comfort, neat, hygienic, private and above all safe room (Apaokagi 2010). A neat room is the basic minimum expectation of any guest and attendants need to ensure this by laying out fresh linen and presenting a clean room on a daily basis. The guest room should not only be attractive but comfortable and functional. Hotel guests expect a high degree of cleanliness, leading to a hygienic environment to stay in (Ward 2008). There are different types of guestrooms in a standard hotel. Guest are offered a choice of more expensive rooms with upgraded facilities as well as the establishments' standard options (Dauda 2010). These include: single room, twin room, double room, triple room, queen room, king room, twin double room, sico room, mini suite, suite room, cabana, duplex suite executive room among others.

The contents of a guest room vary depending on the hotel and room categories. Generally, the contents of a standard guestroom of any hotel include furniture, fixture and fittings, soft furnishings, accessories and guest supplies. Furniture in the guestroom include: beds, upholstered chairs, sofas, tables, wardrobes, luggage rack, bedside tables, dresser and drawers. Fixtures in guestroom include: doors, windows, locks, telephone, guestroom safe, mini bar, television, radios, air conditioner, lighting fixtures, and sanitary fittings. Accessories in guestroom include pictures on the walls, decorative, ceramic vases and lamps, brass articles and artifacts, stone sculptures, crystal artifacts, candlesticks, wall hangings, ornamental mirrors among others. Guest supplies include all the items that are conducive to the guest's material comfort and convenience, they are divided into guest amenities, essentials expendables and loan items (Ward 2008). Guest amenities include coffee maker, bathroom amenities, nail clipper, scissors, bathrobes, among others. Guest expendables include laundry bags, stationeries, magazines, disposable slippers, toilet tissue, face tissues, bath soaps, face wash. Guest essentials include cloth hangers, drinking glasses, plastic trays, water jugs, ashtrays, waste baskets 'polish my shoes' card , 'make my room card' the Bible or gita or Quran. Guest loan items include pressing iron, hair-dryer, hot water bottles alarm clocks, electric shavers, cribs.

The guestroom attendants are the workers responsible for the cleaning and arrangement of the guestroom. Their duties include arranging the room attendants cart, bed-making, dusting (damp and dry), vacuuming, floor and carpet cleaning, cleaning of hard surfaces, window and mirror cleaning, bathroom cleaning, performing the turn-down service, using equipment, safety and security procedures.

Hotel business has grown in the aspect of being a very large employer, offering a wide range of job opportunities and employment thereby contributing to the economic growth of the nation (Edo 2010). Ofobruku (2012) found out that most hotels are being managed and operated by people without basic knowledge and skills in the hotel organization. Osaseri (2010) also observed that there are challenges militating against hotel services in Edo State. Among these challenges are inexperience and unskilled staff, lack of training and update of staff, poor kitchen hygiene, poor refuse disposal facilities, poor attitude of the front office staff, manhandling of the laundry, poor attitude of the waiter and waitresses, poor cleaning methods, poor maintenance of guest room among others (Anerua 2009).

Guestrooms have a role in the image-building of the hotel. Primarily, a neat room is the basic minimum expectation of any guest and the staff needs to ensure this by laying out fresh linen and presenting a clean room on a daily basis. Hotel guests expect a high degree of cleanliness, leading to hygiene environment to stay in (Raghubalan 2008). Cleaning is the removal of dust, dirt, foreign matter, tarnishes and stains from various surfaces with the aid of certain cleaning agents and equipment (Ofobruku, 2012). Dust, dirt and foreign matter deposited on a surface as stated by Raghubalan (2008) are referred to as soil. This may include substances such as sand, mud, pollutants, smoke and fumes brought into the building from outside. Guestroom cleaning is carried out for the following reasons

- ❖ Aesthetic appeal – the room is made visually attractive and appealing
- ❖ Hygiene – effective frequent cleaning controls and eliminates the growth and reproduction of pathogenic bacteria and other germs.
- ❖ Maintenance – surfaces and articles, however good in quality, will have a long, functional life span only when they are cleaned on a regular basis.
- ❖ Safety – cleaning is done for safety against health hazards, fine hazards and slip hazards.

There are different standards of cleaning for different surfaces and areas. These involve the following aspects:

Physically clean: when this standard is set, the area or surface is supposed to be free from apparent dust and dirt as when wiped by hand.

Chemically clean: this standard means that the area should be free from harmful chemicals on the surfaces and in the surrounding air,

Bacteriologically clean: to meet this standard, the surfaces should be cleaned so as to be free from any harmful bacteria that may cause disease or infection,

Entomologically clean: this means that the area must be free from harmful insects or pests,

Cosmologically clean: this means that the surfaces and areas should be free from any organic or inorganic matter that may emit an odour.

Efficient cleaning and maintenance are dependent upon high-quality cleaning equipment correctly used. However efficient cleaning may be, will not show result unless the optimal frequency for various cleaning tasks is maintained. Thus cleaning tasks may be scheduled as daily, weekly and periodic according to their frequency (Apaokagi 2010). It is observed that most of the hotels in Edo Estate not keeping to cleaning standard in the various guestroom of the hotels.

Purpose of the Study

The major purpose of the study was to find out the challenges militating against the services of guestroom attendants in Hotels in Edo-State. Specifically the study determined:

1. problems militating against guestroom attendants' in Hotels industry in Edo state.

2. ways of improving operations of attendants in the Hotels industry in Edo State.

Research Questions

The study sought answers to the following research questions.

1. What are the problems militating against services of the guestroom attendants' in hotel industry in Edo State.
2. What are the ways of improving operations of attendants in the Hotel industry in Edo State.

Methodology

***Area of the Study*:** The area of the study was Edo State. There are 18 Local Government Area in Edo State.

***Design of the Study*:** A survey design was adopted for the study. It sought information from hotel Supervisors, and hotel attendants from various registered hotels in Edo State.

***Population for the study*:** The population of the study consisted of all the 188 registered hotels in Edo state, both in the urban and rural areas. (Revenue office, Edo State 2012)

***Sample for the study*:** A random sampling technique was used to obtain a representative sample of 100 guestroom attendants from 60 selected registered hotels in Edo State. (Edo State Revenue Office, 2012).

***Instrument for Data Collection*:** Structured questionnaire was used for the study. The questionnaire was also used as an interview schedule for non-literate respondents. Four point scale response options were used for data collection.

The instrument was face-validated by three experts including two Home Economics lecturers and one hotel manager. The reliability of the instrument was determined using the Cronbach Alpha procedure as it dealt with multiple score items. A reliability coefficient of 0.85 was obtained.

***Data Collection and analysis*:** Distribution and collection of the instrument were by hand. Two research assistants were trained and used for data collection. All the 100 questionnaire distributed were duly completed and returned. This represents 100% return rates. Mean scores were used for answering the research questions.

Findings

The following findings were made

- Fourteen out of fifteen problems militating against guestroom cleanliness in hotel industry were revealed. These are summarized in Table 1
- Seventeen out of eighteen ways to improve guestroom cleanliness were agreed on which are summarized in Table 2.

Table 1: Mean responses on the problems militating against Services of the Guestroom Attendants' in Hotel Industry.

Guestroom Cleanliness Related Problem	Mean	St. Dev	Remark
Room attendant carts not been used during cleaning of the guest room.	3.54	0.62	Agreed
Lack of ventilation by drawing back the drapes and opening	4.35	0.39	Agreed
the windows before cleaning the room.	3.87	0.45	Agreed
Inadequate water supply	3.76	0.40	Agreed
Inadequate cleaning equipment			
Poor systematic method of cleaning surfaces by moving	3.31	0.88	Agreed
clockwise or anti-clockwise, from higher level to lower levels.	2.76	0.77	Disagree
Poor use of damp-dust method of cleaning.	3.31	0.82	Agreed
No innovative and modern method of bed making.	4.23	0.62	Agreed
Too much work load on the guest room attendants.	4.35	0.51	Agreed
Poor approach and manner on entering the guestroom.	2.43	0.66	Agreed
Delay in replenishing bedroom supply.	3.87	0.85	Agreed
Lack of protective gloves and apron especially when cleaning	4.30	0.31	Disagree
the toilet and bathroom.	1.71	0.98	Agreed
Poor knowledge on how to use modern cleaning equipment.	4.30	0.38	Agreed
Cleaning not done daily	4.48	0.40	Agreed
Not using the right equipment for the right task.			
Poor lighting system in the guestroom			

N = 100, SD = Standard deviation, A = Agreed, DA = Disagreed.

Table 1 showed that the respondents agreed with 14 out of 15 problems identified as problems militating against guest room cleanliness in hotel industry in Edo State. Their means are above the cutoff point of 2.5. The respondents only disagree on the item that showed cleaning not done daily. This showed that cleaning is done daily but not properly.

Table 2: Mean Response of Ways of Improving Operations of Guestroom Attendants' in Hotels Industry in Edo State

S/N	Ways of Improving Operations of Guestroom attendants	Mean	St. Dev.	Remark
1.	Regular water supply	3.54	0.62	Agreed
2.	Regular electricity supply	3.02	0.85	Agreed
3.	Training and retraining of guestroom attendant	4.11	0.39	Agreed
4.	Encouraging the guestroom attendance by giving incentives	2.43	0.71	Disagreed
5.	Proper training on how to use modern equipment	4.35	0.40	Agreed
6.	Engagement in regular enlightenment campaign on the importance of clean environment.	3.50	0.62	Agreed
7.	Set cleaning standard for daily and weekly guestroom maintenance.	3.76	0.45	Agreed
8.	Allocate specific maintenance task to the guestroom attendant.	3.40	0.72	Agreed
9.	Cleaning process should be efficient, using a minimum of equipment, cleaning agent, labour and time.	3.86	0.39	Agreed
10.	The simplest method of cleaning should be tried first, using the mildest cleaning agent.	4.10	0.32	Agreed
11.	When cleaning an area, start with the cleaner surfaces and articles and then go on to clean the more heavily soiled ones, so as to prevent the spread of soil from dirty to cleaner surfaces.	4.48	0.40	Agreed
12.	Suction cleaning should be preferred over sweeping wherever possible.	3.12	0.52	Agreed
13.	Sweeping should be done before dusting and dusting Before suction cleaning.	3.50	0.62	Agreed
14.	Noise levels while cleaning should be kept as low as possible.	2.25	0.77	Disagreed
15.	Stains should be removed as soon as they occur.	4.40	0.21	Agreed
16.	Guestroom attendant should take all safety precautions while cleaning.	4.21	0.30	Agreed
17.	Cleaning should start from the farthest end of an area, working towards the exit.	4.20	0.28	Agreed
18.	After the cleaning process is over, all equipment should be washed or wiped as applicable, dried and stored properly.	3.52	0.62	Agreed

Table 2 revealed that the respondents agreed with all the items identifying ways to improve guestroom cleanliness in hotel industry in Edo State. They all have the cutoff point of 2.5 and above, which shows that all these items can help to solve problems militating against guestroom cleanliness in hotel industry in Edo State.

Discussion of Findings

The findings revealed that the respondents agree with items identified as problems militating against guestroom attendants' in hotel and cleanliness in the hotel industry in Edo State. Guestroom attendants do not have knowledge of cleaning process has the highest rating as shown in table1. This is in line with the findings of Armstrong (1999) who noted that poor knowledge in housekeeping maintenance can mar hotel business. Poor knowledge of the guestroom attendants on the cleaning process can affect customer's patronage in the hotel industry without the knowledge of the management. No wonder Raghubalan (2008) stated that, guestroom is the main products of the hotel as it contribute to more than 50% of the total Income in the industry.

Guestroom attendants do not have knowledge of principles in cleaning process has the highest rating as shown in Table 1. This is in line with the findings of Onwunedo (2008) who noted that basic knowledge of principles of cleaning are needed by guestroom attendants in order to carry out their cleaning procedures such principle included- soil should be removed without harming the surface being cleaned or the surrounding surfaces, the surface should be restored to its original state after the cleaning process, the simplest method should be tried first, using the mildest cleaning agent, start cleaning with the cleaner surface and articles and then go onto clean the more heavily soiled ones so as to prevent the spread of soil from dirty to cleaner surfaces. Stains should be removed as soon as they occur, the cleaner should start cleaning from the farthest end of an area, working towards the exit, the cleaning process should be efficient, using a minimum of equipment, cleaning agents, labour and time. Kupoluyi (2013) observed that guestroom attendants in most hotels are schooled and trained in their job hence recommended that there should be a retooling training programme for the guestroom attendants so as to improve on their daily task and duties to enhance sustainable hotel business. Inadequate water supply was also rated highly by the respondents. Water is an important resource for which there is no substitute. The findings are also in agreement with the findings of Onwunedo (2007) who regretted that consumers in the topics are faced with problems associated with scarcity of water. Poor personal and environmental sanitation practices adopted by guestroom attendant may be attributed to the problem of water shortage because; cleanliness has a lot to do with water. Ogbene (2003) also observed that there is a direct link between poor sanitation, contaminated water supply and creating breeding grounds for pathogens and their vectors. Similarly, Raghubalan (2008) also observed that when sanitation and water supply are improving, the incidence of diseases such as cholera, dysentery, diarrhea and guinea worm decline.

The respondents also lamented poor knowledge on how to use modern cleaning equipment as shown in table 1. Efficient cleaning and maintenance are dependent upon high-quality cleaning equipment, correctly used. Selecting the ideal equipment plays a major role in the cleaning process.

This finding is in agreement with the findings of Kupoluyi (2013) who noted that, the guestroom attendant and the executive housekeeper should be trained and retained on the use of modern cleaning equipment because it is their responsibilities to select the most appropriate piece of cleaning equipment, according to the hotel's requirement. The correct choice of quality cleaning equipment could save costs due to breakdown reduce fatigue and also ensure overall efficiency in operations. Cleaning equipment are divided into two which are manual and mechanical equipment. The manual equipment include brushes, brooms, box sweeper, dry mops, wet mops, clothes, polish applicators, containers, and sundry equipment. Mechanical cleaning equipment include vacuum cleaners, scrubbing and polishing machines, wet-extractions systems, carpet shampoo machines, scrubbers-driers sweepers, high pressure washers, scarifying machines.

The respondents lamented of too much work load on the guestroom attendants. Most hotels in order to reduce cost and maximize profit, they over use guestroom attendants and other staff. Kupoluyi (2013) observed that most hotels prefer to have few guestroom attendants who will be occupied and engaged throughout the day. Some hotel management also prefer to contact the section of guestroom attendants to external management who will recruit staff and manage the room cleaning on behalf of the hotel (contract staff).

Table 2 revealed that the respondents agreed with 16 out of 18 items identified as possible ways to improve on guestroom cleanliness in hospitality outfit. The respondents supported the idea of setting cleaning standard for daily and weekly guestroom maintenance, proper training and allocation of specific maintenance task to the guestroom attendants among others. This finding is in agreement with Raghubalan (2008) who stated that training is the overall enhancement of human ability by developing knowledge, skills, attitude and behavior in order to achieve individual goals. Training relates not only to new employees but is an ongoing process for the entire team.

Cleaning tasks may be divided according to the frequency of their scheduling which depends upon the level of soiling, the type of surface, the amount of traffic, the type of hotel and the cleaning standards set. There are daily tasks which include the daily and regular servicing of guestrooms, cleaning of bathrooms and toilets, suction-cleaning of floors and floor coverings. Weekly tasks include the polishing of metal surfaces, dusting of hard-to-reach areas while periodic tasks are carried out on a monthly, quarterly, half-yearly or annual basis. These include shampooing of carpets, washing of walls, cleaning of chandeliers, stripping and polishing of floors among others.

Conclusion

The following conclusions were drawn base on the findings of the study. Among the challenges militating against services of the guestroom attendants in Edo State is poor guestroom cleanliness. It was observed that most guestrooms in the hotels are not hygienic enough for guest accommodation. It was also found out from the study that there are possible ways to improve guestroom cleanliness in hospitality outfits.

Recommendations

1. Public health authorities and other health related organization should not only inspect hotels environment and kitchen but should go further to inspect the guestrooms for proper sanitation.
2. There should be training and re-training of guestroom attendants and cleaners in the hotels.
3. There is also the need to enforce the use of correct cleaning equipment for the right task in the guestroom cleaning.

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Body Mass Index and Health Risks Status: Case Study of Health Education Students in University of Nigeria, Nsukka

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Abstract

The study examined the body mass index and health risks status of Health Education students in University of Nigeria, Nsukka. Quasi-experimental research design was used to evaluate the association between the baselines Body Mass Index (BMI). The population of the study consisted of all the health education students (n=59) of University of Nigeria, Nsukka. The instruments for data collection were the standard Anthropometric data and structured questionnaire to illicit some demographic information and the health status of the respondents. The information elicited on gender and level of study was used to ascertain the health status of the students. Data analyzed were presented using descriptive statistics. The findings of this study showed that many students had healthy status. There were however, indications that some students are at risk of underweight while some at risk of being obese later in life. The study recommended that concerted efforts need to be made by the management of University of Nigeria, Nsukka, especially Department of Health and Physical Education to educate undergraduates on what constitutes health hazards.

Keywords*:* BMI, Obesity, health risk, Students, Health, Education.

Introduction

Body mass index (BMI) is a simple index of weight –for – height that is commonly used to classify underweight, overweight, and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m^2) (Park, 2009). It is employed to determine fairly the accurate measurement of the health risks associated with body weight for average people. It is one of the most commonly used ways of estimating whether a person is overweight and hence more likely to experience health problems than someone with a healthy weight. It is also used to measure population prevalence of overweight and obesity. However, BMI is only a proxy for body fatness (Department of Health, 2009). On the contrary, despite its effectiveness in measuring obesity, BMI is not known to distinguish between fat weight and fat free weight.

These are evident in people of short stature, muscular athletes, and other adults with little muscle mass due to inactivity or an underlying disease.

Many complications and diseases are directly linked to BMI. Park (2009) noted that a simplistic relationship between BMI and the risk of co-morbidity can be affected by a range of factors including the nature of the diet, ethnic group, and activity level. According to Park, risks associated with increased BMI are continuous and are graded and begin at a BMI above 25.Wardlaw and Smith (2011) stated that a BMI 25 to 29.9 is a marker of overweight (compared to a standard population) and not necessarily a marker of over fat. They stressed that many men (especially athletes) have a BMI greater than 25 because of extra muscle tissue. According to them very short adults (under 5 feet tall) may have high BMI that may not reflect overweight or fatness. They concluded that BMI should be used as screening test for overweight or obesity. BMI is an easy way used by clinicians to screen who might be at greater risk of health problems such as hypertension and diabetes due to their weight.

BMI provides an indication of health status. A number of research studies have demonstrated a relationship between raised BMI and increased risk of health status or death (Lloyd-Jones, 2010; Flegal, Kit, Orpana, & Graubard, 2013; and Onyesom, Oweh, Etumah & Josiah, 2013). Roth and Insel (2006) stated that under the standards issued by the National Institutes of Health (NIH), a BMI between 18.5 and 24.9 is considered healthy, a person with a BMI of 25 or above is classified as overweight, and a with a BMI of 30 or above is classified as obese. A person with a BMI below 18.5 is classified as underweight although a low BMI values may be healthy in some cases if they are not the result of smoking, eating disorder or an underlying disease. There are several health problems associated with obesity that is when one has a BMI greater than or equal to 40 or weight at least 100 pounds over healthy body weight.

Obesity doubles mortality rates and can reduce life expectancy by 10-20 years. Obese individuals have a 50-100 per cent increased risk of death from all causes, compared with normal persons. It is associated with unhealthy cholesterol and triglyceride levels, impaired heart function, and death from cardiovascular disease. Other health risks associated with obesity include hypertension, many kinds of cancer, impaired immune function, gall bladder and kidney diseases, skin problems, impotence, sleep and breathing disorders, back pain, arthritis, breathing disorders, other bone and joint diseases. It is linked with complication of pregnancy, menstrual irregularities, urine leakage, psychological disorders and increased surgical risk. The concept of underweight has been described.

Lifestyle factors can work for or against BMI. Feeding patterns, extent of engagement in physical activities, and weight management practices influence BMI (Abdullah, Peters, & de Courten, 2010; Dibia, 2015). Underweight is categorized by a BMI less than 18.5 and can be caused by a variety of factors such as cancer, infectious disease (e.g., tuberculosis), body weight, digestive tract disorders (e.g. chronic inflammatory bowel disease), compulsive vomiting, and physical activity. Studies have linked certain health problems to obesity (Sothern, Gordon & von Almen, 2006; Wang, Hou, Zhang, Bao, Zou, Zhong, Xiang, & Jia, 2010). These health problems include loss of menstrual function, low bone mass, complications with pregnancy and surgery, slow recovery after illness and coronary heart disease. The relation between specific types of the fat and risk of coronary heart disease differed by age and BMI category (Oh, Hu, Manson, Stampfer & Willett, 2004). The results of prospective epidemiologic studies have in general suggested relations between specific types of fat and risk of coronary heart disease (CHD), but no relation with total fat (Oomen, Ocke, Feskens, et al, 2001). These findings are consistent with the effects of dietary fats on blood lipids in controlled feeding studies (Mensink, Zock, Kester, et al., 2003) and the limited randomized trials examining CHD endpoints (Sacks & Katan, 2002). Body mass index (BMI) is strongly associated with risk of CHD and is a major determinant of insulin resistance (Pyorala, Miettinen, & Halonen, et al., 2000). The metabolic responses to dietary fat are strongly modified by underlying insulin resistance (Dibia, 2015), but whether the relations between fat intake and risk of CHD are modified by BMI and other risk factors has not been examined in detail. Underweight can also lead to death (Wardlaw & Smith, 2009).

Smoking and overweight are principal determinants of poor health across the life course (Roberts, Galea, Austin, Corliss, Michelle, Williams & Koenen, 2012). Although these risk factors have long been recognized to contribute to poor health, they are stubbornly resistant to intervention. Policy measures such as indoor smoking bans and cigarette taxes have been successful at reducing smoking, but individual-level interventions for these risk factors are ineffective or only modestly effective over the longer term (Brown, 2009). This limited effectiveness may be because determinants of smoking and overweight extend beyond the individual and are difficult to change in the short term (Brown, & Summerbell, 2009).

Students of Health Education undertake courses in various aspects of health and lifestyle promotion. These courses have contents which if utilized are capable of normalizing BMI status and keeping health risks at a low level. However, it is not clear whether these students have BMI and health risk status expected of the individuals undergoing such course. This study therefore sought to find out the BMI and health risk status of

Health Education students in University of Nigeria, Nsukka

Purpose of the Study

The main purpose of the study was to examine the BMI and health risk status of Health Education students in University of Nigeria, Nsukka. Specifically, the study determined:

1. BMI and health risk status of Health Education students in University of Nigeria, Nsukka,
2. based on gender; and
3. based on year of study.

Research Questions

The following research questions guided the study;

1. What is the BMI and health risk status of Health Education students in University of Nigeria, Nsukka?
2. What is the BMI and health risk status of Health Education students in University of Nigeria, Nsukka based on gender?
3. What is the BMI and health risk status of Health Education students in University of Nigeria, Nsukka based on year of study?

Methodology

Design of Study**:** Quasi-experimental research design was adopted to assess BMI and health risk status of Health Education undergraduates in University of Nigeria Nsukka.

Area of Study**:** The study was conducted at University of Nigeria, Nsukka, Department of Health and Physical Education on students offering Health Education courses. These students were selected based on the fact that they offer courses and training on life skills that promote health as well as maintain a good BMI and health status.

Population for the study: The population of the study consisted of all the Health Education students in University of Nigeria Nsukka (59 students). The entire population was used for the study because the population was manageable. This is consistent with the submission of Israel (2013) which posited that where the number in the target population is small, it is preferable to utilize all the respondents in order to ensure representativeness and generalizability of findings.

Sample for the study: There was no sampling procedure.

Instrument for data collection**:** The instruments for data collection were the standard Anthropometric data and structured questionnaire to elicit some demographic information and the health status of the respondents. The questionnaire was the researchers developed questionnaires that elicited information on the health status of the students.

Data Collection: In data collection, height and weight were measured with standardized protocols and calibrated equipment in the departmental exercise physiology laboratory. BMI was calculated as weight in kilograms divided by height in metre squared and rounded to one decimal place. Ages of the respondents were gotten from the respondents through questioning. The ages were compared with the calculated BMI to ascertain the health status of the students.

Data Analysis: The analyses included one pregnant woman. Data analyzed were presented using descriptive statistics of frequency and percentages.

Results

The results for this study are presented in tables 1-3

Table 1: BMI and Health Risk Status of Health Education Students in UNN (n=59)

Category	Range of BMI (Kg/m^2)	f	%	Health Risk
Underweight	16.6	1	1.69	Moderate
Normal weight	18.5 – 24.71	42	71.19	Very Low
Overweight	25.10 – 29.41	13	22.03	Low
Obese	30.04 – 34.5	3	5.08	High

Overall range = 16.6 – 34.5kg/m

Table 1 shows that 42 (71.19%) of the Health Education students have normal weight with a very low health risk. The table also show that 13 (22.03%) of the Health Education students are overweight, 1(1.69%) is underweight while 3 (5.08%) were obese with a high level of health risk.

Table 2: BMI and Health Risk Status of Health Education Students in UNN Based on Gender (n=59)

Category	Range of BMI (Kg/m^2)	Male (n=24) f (%)	Female (n=35) f (%)	Health Risk
Underweight	16.6	0 (0)	1 (2.86)	Moderate
Normal weight	18.5 – 24.71	18 (75.0)	24 (68.57)	Very Low
Overweight	25.10 – 29.41	5 (20.83)	8 (22.86)	Low
Obese	30.04 – 34.5	1 (4.17)	2 (5.71)	High

Table 2 shows that more Health Education male students (75%) had normal weight than their female counterparts (68.57%) while females had higher proportions in other categories. The table also shows that 2.86 per cent of the female Health Education students were underweight with a moderate health risk, against nil of the male Health Education students. The table further show that 22. 86 per cent of the females were overweight while the other 5.71 per cent obese.

Table 3: BMI and Health Risk Status of Health Education Students in UNN based on Year of Study (n=59)

Category	Range of BMI (Kg/m^2)	100 level (n=13) f (%)	200 level (n=12) f (%)	300 level (n=22) f (%)	400 level (n=12) f (%)	Health Risk
Underweight	16.6	0(0)	0 (0)	1 (4.55)	0 (0)	Moderate
Normal weight	18.5 – 24.71	11(84.6)	9 (75)	14 (63.6)	8(66.7)	Very Low
Overweight	25.10 – 29.41	2 (15.4)	1 (8.3)	6 (27.3)	4 (33.3)	Low
Obese	30.04 – 34.5	0 (0)	2 (16.7)	1 (4.55)	0 (0)	High

Table 3 shows that more than 84.6 per cent of the 100 level and 75 per cent of the 200 level and slightly more than two third of the 300 and 400 level Health Education students had normal weight {100 level =84.6% > 200 level =75%; > 400 level = 66.7% > 300 level = 63.6%}. The table further show that 300 level Health Education students were overweight (27.3%) and obese (4.55%) with a low and high health risks respectively.

Discussion

This study focused on the body mass index and health risk status of health education students in University of Nigeria, Nsukka. The finding revealed that the overall range of BMI of the Health education students in UNN is 16.6 - 34.5kg/m. The overall range of BMI showed that the students' health status is within acceptable normal healthy range based on evidence report of Department of Health (2009).

The findings in Table 1 revealed that greater proportion (71.19%) of the health education students have normal weight with overall range of 18.5 – 24.71kg /m. This indicated that majority of the students have healthy status. The finding was expected because health education students have a good understanding of the importance of healthy living as well as the risks associated with unhealthy risk status. The finding is in line with the assertion of Wardlaw and Smith (2009) that a healthy weight –for-height is a BMI of 18.5 to 24.9. Data in Table 1 further revealed that 22.03 per cent of health education students are overweight with the overall range of 25.1 – 29.41kg/m. This finding is worrisome when the effects of overweight on health status are considered. Aniodo, Dibia and Anike (2015) opined that the prevalence of overweight is increasing in developing countries. The findings of the study is at variance with the findings of Aniodo *et al* who found out that only 3.7 per cent of their respondents were overweight. Nevertheless, the finding is consistent the findings of Peter-Kio, Briggs, Ogunleye & Leghemo, (2013) where 21 per cent of the respondents were overweight. Overweight is known to be linked to both current and future morbidity. This notwithstanding, overweight has a low health risk when compared with obesity. The finding in Table 1 showed that 5.08 per cent of health education students in UNN are obese. This finding is not surprising. Although the figure is quite small, but the conditions and complications associated with it is hearth-throbbing. Obesity is a frequent co-morbid condition associated with excessive increase in weight (Onyesom *et al*, 2013). It is one of the most important modifiable risk factor in the pathogenesis of health disorders such as hypertension and type 2 diabetes mellitus (Dibia, 2015). Table 1 further indicated that a negligible proportion (1.69%) of the health education students in UNN is underweight. This finding is at variance with the study of Kodoma (2010) and Sirang, Bashi, Jalil, Khan, Hussain, Baig, Taufeeq, Samad and Kadir (2013) on problems of underweight in young females and pregnant women in Japan, and weight patterns and perception among female university students of Karachi respectively where over a quarter were underweight.

The findings in Table 2 presented the BMI and health risk status of Health Education students in UNN based on Gender. The table showed that three quarter of male health education students had normal weight while slightly more than two-third (68.57%)of the females proportion on the same category. This finding is expected because male have more lean muscles than females. On the other hand, females were ahead of the males in underweight, overweight and obesity categories (Table 2). This lends support from report of Onyesom *et al.* (2013) where female undergraduates have considerable risk of increased BMI and associated abnormalities in blood glucose homeostasis. In contrast, Boffetta, McLerran, Chen, Inoue, Sinha, He, et al (2011) reported that the shape of the association between BMI and prevalence of diabetes was consistent between the sexes.

Table 3 shows the BMI and health risk status of Health Education students in UNN based on year of study. The findings show that 100 level health education students had the highest normal weight (84.6%) followed by the 200 levels. This finding is interesting and plausible because these levels are still fresh and may not have had much academic stress coupled with associated hunger that is ,more prevalent in penultimate and final years. This was expected because one expects that as the students' level of study increases there should be corresponding increase in knowledge with respect to nutrition information and thereby cultivating healthy eating behaviours. This finding negates the cohort study of Aniodo *et al* (2015) where 400 level PE students had 100 per cent normal weight. This notwithstanding, above three quarter of 100 level PE students in the study reported normal weight.

Conclusion

Sequel to the findings and discussion of the study, the following conclusions were reached. Higher proportion of Health Education students has normal weight with very low health risk status. Higher proportion of male Health Education students has normal weight compared to female Health education students, while females reported higher proportions in underweight, overweight and obese. The higher the level of study, the more normal weight the Health Education students assume very low healthy status; Students should partake in activities such as physical activity and nutrition education that helps to reduction of BMI among students, and as a strategy to prevent and control overweight and obesity, and their associated co-morbidities.

Recommendations

Based on the findings of this study, the following recommended that students should be counseled by experts in weight management to eat adequately in order to meet nutritional needs of the body and avoid health problems associated with unhealthy eating habits. They should also be counseled to undertake regular exercise to maintain healthy weight. Thirdly, concerted efforts need to be made by the management of University of Nigeria, Nsukka, especially Department of Health and Physical Education to educate undergraduates on the health hazards of extreme weights (increased weight and underweight) and the advantage of weight maintenance within the limits of what is formally acceptable using World Health Classification. Female undergraduate students should be counseled to pay more attention to their weight by taking adequate diet and taking part in regular exercises.

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Coping Strategies for Multitasking Challenges of Career Women in Colleges of Education in Anambra State.

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Abstract

The study determined the multitasking challenges and coping strategies of dual career women in tertiary institutions in Anambra State. A sample of 450 academic staff of colleges of education in Anambra State was used in the study. A 25-item questionnaire was constructed to survey the respondents on career-related, personal care related, and family responsibilities related challenges as well as coping strategies, of career women. Data obtained were analyzed using frequency, mean and standard deviation. The findings were that career women faced career-related and family related challenges to a high extent while personal-care challenges were to a low extent. The study recommended among others, proper time management, family support, networking, flexible work hours as strategies to assist the career women cope with multitasking.

Key words: Multitasking, Challenges, Career women, Coping strategies.

Introduction

Dual career women combine household responsibilities (marriages, child bearing, housekeeping etc.) with professional/ career responsibilities. The women are found in all sectors of the economy including education. In the education sector, they work as teachers/ lecturers and administrators, at various levels of tertiary education, including universities, monotechnics, polytechnics and colleges of Education.

In these institutions, the women teach, carry out research, publish articles, attend to students and do many other office works. They have work load and therefore need to adopt multitasking to meet up with their responsibilities.

Multitasking involves the performance of multiple tasks at the same time. It is a term that describes the work load of women and men who work to earn money, but also take up home responsibilities for unpaid domestic labour (Sweat, 2013). Martin (2014) noted that multitasking is not just doing two or multiple things at the same time, rather, it is a process that involves attempting to complete several things in tangent and this is accomplished by mentally going back and forth between two or more tasks rapidly that it appears one is doing them simultaneously. Etymologically, the term arises from the fact that many women are responsible for both domestic unpaid labour and their biological role. Shiplaya and Coatsb (2007) reported that there were evidence of stress among working mothers in the study they carried out on their coping strategies.

However, many women were found to obtain benefits from going to work, and there was considerable evidence of good coping, especially in terms of drawing on the informal support of other women. Both the quality of the job and quality of domestic support were found important for the working mothers' stress management. Low income 'single' women reported greatest levels of stress and strain, financial and child-care stress, and work stress. In another study by Nyako and Ribadu (2004) reported that female staff of Federal College of Education, Yola were faced with challenges in carrying out their daily routine of domestic chores and activities in their work place. They employed the services of house helps to alleviate the burden of multitasking.

Komolafe (2008) examined the effects of married women employment on time usage in home making activities in Katsina metropolis. The study was specifically conducted to examine the extent to which employed wives spend their time on household activities and leisure; the extent to which some household activities are preferred; and how often they performed these household activities. The study found that employment affects the time married women spent in household and leisure activities. It was also found that husbands and children do assist in most cases.

In a study to determine factors associated with job stress among teachers in secondary schools in Ibadan, Oyo State. Adesope (2009) found that though teachers have moderate stress in their job, female teachers were found to have more stress than their male counterparts. This variation was not unconnected to multitasking, as women extended their work at the home front.

The focus of Azubuike and Nwokolo (2012) study was on time management practices of working class mothers in Nigerian tertiary institutions. Sample was selected from six tertiary institutions across all the six geo-political zones of Nigeria. The study found, among others that working class mothers procrastinated duties and did not observe time management principles.

Multitasking is considered stressful. Based on this, Isiozor (2010) investigated administrative stress and level of coping among male and female primary school head-teachers in South-Eastern States of Nigeria. The results found no significant difference in the level of administrative stress of male and female stress. The degree of coping between male and female head-teachers was also found to be same.

Similarly, Wogu and Kaegon (2010) sought to find out work life balance preferences of academic staff of tertiary institutions in Rivers State Nigeria. Findings revealed that work life balance preferences of academic staff included attention to children's education, satisfying career, attention to spouse, flexible work schedule, health policies, etc. which nature trusts upon them (caring and nurturing of children).

Multitasking posses a lot of challenges to career women as it can induce stress if not properly managed. Stress is anything that undermines ones mental and physical wellbeing. It is a pressure situation of having feeling of frustration, tenseness and being in conflict situation (Isiozor, 2010). MedicineNet.com (2015) defined stress as a physical, mental or emotional factor that causes bodily or mental tension. Stress can be good (positive) or bad (negative). Good stress energizes one towards accomplishment of a task while bad stress has undesirable consequences on individual's health (Fawole, 2005; Nwachukwu and Nwachukwu, 2010).

Persistent stress can affect all parts of the body (brain, heart, lungs, blood vessels and muscles) leading to under-activation (Okoli, 2013). These may produce physical or psychological damage overtime.

Career women therefore, need to be selvedge from the burden and stress of multitasking by coming up with effective and efficient coping strategies so that none of their tasks suffers. How can these women be helped? Deepthi (2013), emphasized that for a career woman to properly manage the challenging tasks of the day, that time is of essence. A good time management is a requisite key to unlock a challenging day. Contending for proper time management, (Israel, 2004) stated that playing dual tasks of home and office management require extra-hard work and judicious management of time.

Time management for the career woman is critical and the key word is "prioritize". Some useful time management tips have been suggested by Deepthi (2013) as follows beginning the day early, doing domestic chores early in the morning before heading for work, doing shopping during the weekends, involving the spouse in carrying out house chores. This paper therefore, looked at the coping strategies for Multitasking challenges of career women in two communities in Anambra State Nigeria.

Career women combine their traditional roles with the demand of work that culminate in multi-tasking. These multiple tasks can constitute huge burden to these women and consequently, jeopardize their health, family responsibilities and work, if not properly managed. These career women, need good health to play these roles. Their family responsibilities cannot be sacrificed on the altar of career and the career cannot be foregone in the midst of socio-economic realities of now. How career women can cope at the cross roads of Multitasking is the problem of this study.

Objectives of the study

The major purpose was to find out coping strategies for multitasking challenges of dual career woman in colleges of Education in Anambra State. Specifically the study sort to determine;

1) career related challenges of career women
2) family related challenges of career women
3) personal care related challenges of career women
4) coping strategies of career women with multitasking

Research Questions

The following research question guided the study.

1) What are career related challenges of career women?
2) What family responsibilities constitute challenges to career women?
3) What personal care related challenges are encountered by career women?
4) How can career women cope with multitasks?

Methodology:

Area of study: The study was carried out in Umunze and Nsugbe in Anambra State. In these two towns, are located tertiary institutions – Federal College of Education(T) Umunze and Nwafor Orizu college of Education, Nsugbe. In these institutions, married women work as teaching and non-teaching staff.

Design of Study**:** The study employed descriptive survey design, where information was elicited from married female staff of the two colleges.

Population for the Study: The population for the study comprised 517 of married women in Colleges of Education in Anambra State. Ninety six female academic staff and 193 female non academic staff from Federal College of Education (Technical) Umunze while 76 female academic staff and 152 female non academic staff from Nwafor Orizu College of Education, Nsugbe made up the population. The data was collected from personnel unit of each of the colleges.

Sample for Study**:** The entire 517 married women from the two colleges were used for the study.

Instrument for Data Collection**:** Data for the study were collected using structured questionnaire of a 4 point scale. The questionnaire items were arranged in four clusters reflecting the four research objectives. The questionnaire titled Coping Strategies for multitasking Challenges of Career Women (CSMTCCW) was validated by three experts. The reliability index using Cronbach Alpha coefficient for each of the objectives were 0.72, 0.81, 0.83 and 0.69.

Data Collection and Analysis: Five hundred and seventeen copies of the questionnaire were distributed to respondents by hand and with the help of research assistance in the various colleges. In all 450 copies of the questioners were collected. Simple descriptive statistics, namely frequency, mean and standard deviation were used in analyzing the data.

Findings

The following findings were made by this study.

1) Eight career related multitasking challenges of career women were identified (Table 1)
2) Eight family – responsibility related multitasking challenges of career women were ascertained (Table 2)
3) Three out of five personal care-related multitasking challenges of career women were found out. (see Table 3)
4) Eleven coping strategies were determined. (Table 4)

Table 1: Career – related Multitasking challenges of career women. N=450

S/N	Career-related challenges	$\bar{x}$	SD	Remarks
1	Job Schedule interferes with other engagements	3.23	0.860	CLG
2	Employers do not permit the use of work hours for personal activities	3.69	0.70	"
3	Bosses do not always grant approval for time	2.77	1.216	"
4	off/leave	3.30	0.905	"
5	The work hours are not flexible	3.33	0.917	"
6	Bosses undermines women's capabilities for certain positions	3.14	0.793	"
7	Women of child bearing age are not given certain appointments	3.68	0.859	"
8	Teaching staff (women inclusive) are often denied annual leave	3.30	0.905	"
	Non-teaching staff (including the females) in most cases are called back to duty while on leave.			

CLG - Challenge, $\bar{x}$ – Mean response, SD – Standard deviation.

Table 1 shows that the mean ratings on career related challenges of career women range from 2.77 to 3.69 which is above the criterion mean of 2.50. These show acceptance of all the items. These are indications that there are career-related multitasking challenges encountered by career women which are very significant.

Table 2: Family – responsibility related multitasking challenges of career – women. (N=450)

S/N	Family Responsibility Related Multitasking challenges.	$\bar{x}$	SD	Remarks
1	Being pregnant and working affects career women	3.15	1.014	CLG
2	Taking proper care of family members is difficult	3.12	1.063	"
3	House hold chores affect career women	3.30	0.994	"
4	They deprive themselves of social engagements	3.26	1.20	"
5	Sex life of career women suffers	3.11	1.044	"
6	Children are not properly guided in their studies	2.91	1.445	"
7	They rarely have time to cook for their families	2.66	1.276	"
8	Career women give little or no time to interact with the children.	3.30	0.994	"

$\bar{x}$ – mean, SD – Standard deviation, CLG – Challenge.

Table 2 reveals mean ratings on family – responsibilities related multitasking challenges of career women. Items had means ($\bar{x}$) of 2.66 to 3.30 and a cluster mean of 3.10 are above the criterion mean of 2.50 an indication that career women have family responsibility related challenges.

Table 3: Personal care – related multitasking challenges of career women. N = (450)

S/N	Personal care-related multitasking challenges	$\bar{x}$	SD	Remarks
1	Career women have little or no time for rest	3.340	0.830	CLG
2	They have little or no time for medical check	2.36	1.195	NCLG
3	They have no time for leisure	3.16	0.994	CLG
4	Most career women seek medical help only when they are down in health	2.95	1.20	CLG
5	Most of them do not have time for physical fitness exercise .	2.42	1.170	NCLG

NCLG – Not a challenge, CLG – challenge, $\bar{x}$– Mean, SD – Standard deviation.

The results in table 3 shows that items 1, 3 and 4 with means ($\bar{x}$) of 3.34, 3.16 and 2.95 are above the criterion mean ($\bar{x}$) of 2.50 and constitute challenges to career women. On the contrary, items 2 and 5 which were rated below the criterion mean do not constitute a challenge to career women. However, the grand mean ($\bar{x}_g$) of 2.85 is an indication that career women are faced with personal care related multitasking challenges to some extent.

Table 4: Coping Strategies for multitasking of career women (N = 450)

S/N	Coping Strategies	$\bar{x}$	SD	Remarks

1	Career women need house -helps in the house	3.37	0.989	CS
2	Those with babies need day-care facilities or assistance of nannies	3.50	0.871	“
3	They should be given longer maternity leave to care for their babies.	3.79	0.489	“
4	Husbands should give helping hands in the house chores	3.86	0.458	“
5	Career women should manage their time properly	3.90	0.412	“
	Beginning the day early will be of help			
6	Having more flexible working hours for career	3.60	0.268	“
7	women	3.83	0.567	“
	Avoidance of distraction	3.34	0.830	“
8	Having “to do” list	3.30	0.994	“
9	Prioritizing her works	3.33	0.917	“
	Solving tasks in blocks	3.26	1.20	“

CS- Coping Strategy.

Table 4 shows that all the eleven coping strategies for multitasking of career women received high mean rating between 3.26 – 3.90. These mean ratings of the respondents were above the criterion mean of 2.50. The cluster/grand mean ($\bar{x}_g$) of 3.55 indicates that the strategies could be adopted so as to cope with multitasking to a very high extent.

Discussion of Findings

The study found that career-related challenges face career women to a high extent. It is expected that employers would not permit use of work hour for personal activities ($\bar{x}$ 3.69). Women capabilities are also undermined by bosses ($\bar{x}$ 3.33) and as such they may not be appointed into certain positions. The study also found that the work hours are not flexible ($\bar{x}$ 3.30) and job schedules interferes with other engagements ($\bar{x}$ 3.23), etc. The finding of the study is consistent with the earlier observation in Adesope (2009) that women are challenged by job-related stress, and that it is relatively higher in women than in men.

The study also found that career women are challenged by family responsibilities to a high extent. For instance, and most importantly, the fact that they engage in household chores ($\bar{x}$ 3.30) before and after work pose challenge and have little time to interact with their children ($\bar{x}$ 3.30). They also deprive themselves of social engagements ($\bar{x}$ 3.26). Pregnancy while working also constitutes a challenge ($\bar{x}$ 3.15). Others include taking proper care of family ($\bar{x}$ 3.12), sex life ($\bar{x}$ 3.11), assistance to children in homework ($\bar{x}$ 2.91) and cooking ($\bar{x}$ 2.66), although, the last two are to a low extent, but they pose challenges. The findings support the earlier work of Wogu and Kaegon (2010) on work life balance preference of academic staff of tertiary institutions in Rivers State. The earlier study identified children education, attention of spouse as areas staffs were in dire need of achieving balance.

In terms of personal care related challenges, the study found the following as challenging: time for rest that is barely unavailable ($\bar{x}$ 3.34); in time for leisure ($\bar{x}$ 3.16); and the career woman seeks medical help only when she is down ($\bar{x}$ 2.95). These conditions can be threatening. Although, career women rejected the fact that they do not exercise ($\bar{x}$ 2.42) and have no time for medical check ($\bar{x}$ 2.36) which conversely mean that they have time for medical check and do exercises, these are not enough. They need rest and leisure to ease off their burden, and overcome stress. Okoli (2013) reported that persistent stress can affect all parts of the body leading to under-activation.

For coping strategies, respondents accepted all items as a way forward. These strategies include; in the following hierarchical order: proper time management ($\bar{x}$ 3.90), spouse assistance ($\bar{x}$ 3.86), flexible working hours ($\bar{x}$ 3.83), elongated maternity leave ($\bar{x}$ 3.79), early beginning of day ($\bar{x}$ 3.60), day-care facilities ($\bar{x}$ 3.50), house help ($\bar{x}$ 3.37), avoidance of distraction ($\bar{x}$ 3.34), prioritizing of works ($\bar{x}$ 3.33), having "to do" list ($\bar{x}$ 3.30) and solving tasks in blocks ($\bar{x}$ 3.26).

These findings are consistent will earlier works of Nyako and Ribadu (2004) that found assistance of house help as coping strategy; Komolafe (2008) view the assistance of spouse and children as strategy and Azubuike and Nwokolo (2012) who made case for proper time management will enable the career woman make optimal use of her time and so achieve work-life balance.

Conclusion

Multitasking poses enormous challenges to the career woman who must strike a balance not only between work and family responsibility, but also her personal care and other engagements. The study found that career women are challenged to varying degrees of career-related problems, family responsibility and related issues as well as personal care related issues. The career woman therefore needs to adopt positive coping strategies as identified in this study in order to strike a balance.

Recommendations

In view of the findings of the study, the following are recommended:

1. The home should be supportive of the career woman in view of the socioeconomic value the career woman adds to the home. This means that the husband and children should assist in lessening her burden through assistance in domestic affairs.

2. Maternity leave should be made adequate for the career woman to rear her child.
3. The workplace should be made more gender-sensitive. This includes flexible work hours to enable the career woman give her best without compromising family responsibilities which is equally important for the sustenance of the society.
4. Women in career should adopt proper time management by making judicious use of their time. They should not be involved in idle talks and gossips that do not add value to their life.
5. Career women should form a network of support for one another so that they can exchange ideas and share challenges in order to overcome them.
6. Career women should take proper care of their health through regular health check, adequate sleep, good exercises, etc.

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Socio-Demographic Factors of Parents Influencing Childhood Immunization in Enugu State, Nigeria

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Abstract

The purpose of this study was to examine the socio-demographic factors of parents that influence childhood immunization in Enugu State, Nigeria. The study population consisted of married women of childbearing age (18-49) and their husbands. A sample of 1000 respondents was selected. Questionnaire was used for data collection. Focus Group Discussions (FGD) sessions were also conducted. Quantitative data were analyzed using percentages. Findings showed, among others, that female respondents (62.6%) perceived immunization as very important to their children as against their male counter-parts (37.4%). Younger respondents (72.5%) perceived immunization as more important than older respondents (27.5%). It is recommended that Enugu State Government needs to strengthen the expanded programme on immunization in the state with the aims of mobilizing, sensitizing, and convincing the older respondents of childbearing age to reduce drastically the number of deaths among children arising from preventable diseases.

Keywords: Socio, Demographic, Variables, Childhood, Immunization.

Introduction

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine (WHO, 2015). It is a way of creating immunity to certain diseases by using small amounts of a killed or weakened microorganism that causes the particular disease. The vaccine components which include: aluminum, antibiotics, Bovine serum, egg protein, formaldehyde, Gelatin, Human albumin, Lactose, sucrose etc, are present in very small quantities and there is no evidence that any of them cause any harm in these amounts (OVG, 2015). Appropriate deployment of relevant vaccines would significantly reduce mortality and speed up the achievement of Millennium Development Goal 4. The key ingredient in all vaccines is the active ingredients which are the parts of the vaccine made from viruses or bacteria (also called antigens).

Immunization is vital in the drive to decrease global childhood mortality. Immunization protects against diseases like measles, numps, rubella, hepatitis B, polio, diphtheria, tetanus and pertussis (whooping cough, chicken pox etc) (WHO, 2015). Infant immunization is currently central to national and international policy agenda to tackle ill – health and poverty in Africa and to achieve the Millennium Development Goals (MDG) in reducing childhood mortality and tackling infectious disease (leach & Fairhead, 2005). The prevention of childhood mortality through immunization is one of the most costs – effective public interventions in use in Nigeria. The prevention of diseases by immunization is today the best known practical way of protecting children against the major killer childhood diseases (Obionu, 2001). Immunization prevents more than 2.5 million child deaths each year and it has been shown that children who receive all appropriate immunization by nine months of age are less likely to die than those who do not (Rutherford, Dockerty & Jasseh, 2009). Routine immunization remains a particular concern for the government of Nigeria and its development partners.

However Nigerian's routine immunization schedule stipulates that infants should be vaccinated with the following vaccines: a dose of Bacillus Calmette – Guerin (BCG) vaccine at birth three doses of Diphtheria, pertussis and tetanus (DPT) vaccine at 6, 10 and 14 weeks of age, at least three doses of oral polio vaccine (OPV – at birth and at 6, 10 and 14 weeks of age, and one dose of measles vaccine at 9 months of age (Antai, 2009). It is generally agreed that antibody titres are generally higher with increasing age of immunization. As infants grow older, the immune system matures and transmitted maternal antibodies disappear (PAN, 2012).

Vaccine administration practices are based on clinical trials that determine the dose, route and schedule for each vaccine (Public Health Agency of Canada, 2013). All vaccine providers should receive education and competency – based training on vaccine administration before providing vaccines to the public.

The practice of incomplete immunization constitutes a huge threat to public health in the world today. Some studies have been conducted in Jamaica to investigate why some care-givers do not avail themselves of this cost effective means of disease prevention (Shuaib, Kimbrough, Roofe, McGwin and Jolly, 2010). One of the studies conducted by Bronte and Dejong (2005), found that low income and single parenthood, reduce the likelihood of children being fully immunized. Similar studies in Nigeria showed that poor immunization was attributable to low socio-economic status and low maternal education (Anastasia, Gage, Sommerfelt and Anrea, 1997).

There are some other reasons why some parents are so seemingly unconcerned about obtaining immunization for their children. One of them could be that they do not know how lives threatening some communicable illnesses still are. Others may believe these diseases have been eliminated and are therefore, no longer anything to worry about (Lynn, 2001). Fear of side effects does generally deter demand especially in rural communities of Enugu state, Nigeria. However some avoid immunization in the state because there have been rumours that immunization causes sterility, paralysis, and render children violent. However to date there has been no substantiated evidence that vaccines cause any of these problems, (Rapin, 1997). While minor discomforts, including mild fever, achiness and pain at the injection site may occur, vaccines are considered safe.

If mothers do not perceive vaccine preventable diseases as severe enough to warrant preventive action or if they do not perceive any particular benefit to their child's health from vaccination, then they will be less likely to complete immunization doses for their children and they are likely to oppose any law or policy that mandates such behavior. It is on the background of these mitigating factors that this study is set out to examine the socio-demographic factors of parents influencing childhood immunization in Enugu state, Nigeria.

Objectives of the study

The purpose of this study was to examine the socio-demographic factors of parents influencing childhood immunization in Enugu State, Nigeria. The study determined:

1. parent's awareness of childhood immunization based on their level of education.
2. perception on childhood immunization based on gender
3. urban/rural differences on the practice of childhood immunization.

Hypotheses

Furthermore, three null hypotheses were formulated to guide the study and they include the following:

HO_1: The parent's perception of the importance of immunization is dependent of their educational level

HO_2: The parent's perception of the importance of immunization is dependent of their sex

HO_3: The parent's perception of the importance of immunization is dependent of their age

Methodology

***Research Design*:** A survey research design was adopted for the study, as the opinions of parents were sought on the socio-demographic factors of parents influencing childhood immunization.

***Area of Study*:** The study was carried out in Enugu State of Nigeria. Enugu state is found in the South Eastern part of Nigeria with Igbo as the dominant ethnic group and the people are predominantly Christians. Enugu state has 17 Local Government Areas (LGA) with more number of rural areas than the urban areas. This disparity has not affected their willingness to immunize as necessary for their children.

***Population for the Study*:** The study population consisted of married women of reproductive ages (18 – 49 years) and their husbands aged 18 years and above. The population of Enugu State in 2006 census exercise was 3, 572, 298 (FGN) Official Gazette, 2007. The population distribution of the state is 39% urban and 61% rural inhabitants.

***Sample and Sampling Technique*:** Multi-stage sampling approach was adopted in order to draw a sample of 1000 respondents in which 39.9% and 60.1% were males and females respectively. The difference in the gender balance was to elicit credible information from women who are said to have more knowledge about child health care services than their male counterparts. The sample size was made up of four hundred respondents from the two urban LGAs and six hundred respondents from the three rural LGAs.

The five LGAs were clustered into communities and from these clusters: two communities were selected from each of the (5) LGAs through simple random sampling. Ten communities were divided into villages/streets where twenty (20) villages or streets were selected through random sampling technique. To get at the dwelling units or households from where the actual respondents were contacted, households within the villages or streets were counted and numbered, using the systematic sampling method. Fifty respondents were selected from each of the twenty (20) villages/streets, to give 1000 respondents.

***Instruments for Data Collection*:** The study utilized questionnaire and Focus Group Discussion Guide (FGD) for data collection. The questionnaire consisted of open and close – ended items relating to the objectives of study. Questionnaire served as interview schedule for illiterate respondents.

***Data Collection Technique*:** Data were collected by the researcher with the help of research assistants who were specifically trained for that purpose. One thousand copies of questionnaires were distributed to the respondents but only 976 were dully filled and returned. A total of ten (10) FGD sessions were conducted with seven (7) persons in each group. During the FGD sessions, instruments like tape recorders, cameras and notebooks were used, with permission granted by the FGD teams. Note taking and tape recording were the main instruments used to record the focus group discussion sessions.

***Data Analysis Technique*:** The responses obtained from the questionnaire were presented and analyzed using tables and relative measures such as percentages and cross tabulations. Chi-square (X^2) was used in testing hypotheses and it helped to determine the nature and the strength of the relationships between the dependent and the independent variables stated in the hypotheses.

Findings of the Study

Background Information of Respondents

The respondents fall within the age range of 29 – 39 years. Also 40.1% were males and 30.5% were females. Out of 976 respondents, 68.2% of them indicated that they were married where 72.2% (males) and 65.6% (females) were involved in the marriage. Majority of the respondents 352 (36.1%) were engaged in farming, and 31.3% were civil servants. More females (37.5%) than males (33.9%) were engaged in farming activities. The level of income of the respondents showed that majority of them fall within the range of ₦13, 800 – ₦25, 000. The study revealed that more males (11.1%) than females (3.6%) received ₦51, 200 and above as monthly income. Majority of them had completed their secondary education (38.5%), while 29.4% and 46.9% were residing in urban and rural areas respectively.

Awareness of Childhood Immunization

Majority of the respondents (71.5%) indicated that they immunized their last children as and when due. A small proportion of the respondents (20.1%) did not immunize their last children while only 5.8 percent were not sure whether they immunized their last children or not. Almost two-thirds (66.4%) of the respondents admitted that they demanded to have their children immunized before this study while 25.4 percent had never demanded for immunization. Majority of the respondents (75.5%) considered immunization very important to their children while only (16%) failed to consider immunization as a necessary practice based on the negative rumours concerning immunization services. The rural respondents (51.8%) seem to have considered immunization more important than the urban respondents (48.2%).

With regards to the negative ways in which some parents especially mothers see immunization during the FGD sessions, they believed that immunization is not a necessary practice for their children. They had the belief

- That immunization no longer prevents diseases but exposes their children to illnesses.
- That they were not immunized during birth and they have not died of any known diseases.

To this group of respondents, immunizing their children can bring the disease about though mildly, rather than prevent the disease itself. This belief as indicated in the study is associated with illiteracy or ignorance. Some mothers allege that immunization causes sterility, death of children, infertility, paralysis and absences. Some of them believe that government uses it to control birth, therefore they will not bring their children for immunization and some when they do they sometimes, refuse to complete the immunization doses.

Importance of Immunization Based on Sex, Age and Educational Level of Respondents

The findings revealed that female respondents (62.6%) perceived immunization as very important to their children as against their male counter parts (37.4%). In order words, more female respondents perceived immunization as a good practice more than their male folks. Certain factors which influence the use of maternal health care and childhood immunization includes: women's age, parity, media exposure, maternal education, wealth quintile, and residence (Tsaw, Moto, Netshivhera, Ralesego, Nyathi and Susuman, 2015).

Testing of Hypotheses

Table 1: Level of education and perceived importance of immunization

Level of Education	**Importance of Immunization**		**Total**
	Perceived Important	Perceived as not Important	
Low education	89 (12.1%)	36 (15.1%)	125 (1.8%)
Medium education	377 (51.2%)	149 (62.3%)	526 (53.9)
High education	271 (36.6%)	54 (22.6%)	325 (33.3%)
Total	737 (100.0)	239 (100.0)	976 (100.0)

(X^2 (2, N = 976) = 16.342, p≤.000).

Table 1 shows a significant relationship between the level of education and perceived importance of immunization. It reveals that more of the medium education groups (51.2%) perceived immunization more important than the high and low education groups (36.8%, and 12.1%) respectively. The hypothesis was tested with chi square (X^2) statistics. A calculated chi square value of 16.342 was obtained in the study at probability level of 0.5. Assumption significant level of .000 observed from the study is less than .05, indicating that the result is significant. We then accept the null-hypothesis which states that the parent's perception of the importance of immunization is dependent of their educational level.

Table 2: Age of respondents and the perceived importance of immunization

	Importance of Immunization		
Age of respondents	Perceived as important	Perceived as not important	**Total**
Younger respondents	534 (72.5%)	115 (48.1%)	649 (66.5%)
Older respondents	203 (27.5%)	124 (51.9%)	327 (33.5%)
Total	737 (100.0%)	239 (100.0%)	976 (100.0%)

X^2 (I, N = 976) = 47.987. P ≤ .000

Table 2 shows the relationship between age of the respondents and the perceived importance of immunization. The younger respondents' perception had a significant effect on many of these perception measures. 72.5% of them perceived immunization as important, while 27.5% of their older counterparts saw the program of immunization as not relevant. The hypothesis was tested with chi square (X^2) statistics. A calculated chi square value of 47.987 was obtained in the study at probability level of 0.5. Assumption significant level of .000 observed from the study is less than .05, indicating that the result is significant. We then accept the null-hypothesis which states that the parent's perception of the importance of immunization is dependent of their age. The possibility of obtaining this kind of result is based on the fact that most of these younger respondents fall within the child bearing age unlike the older respondents who may have already had the number of children they want. The older group of women may not be interested any longer in the issues of immunization. The central task of expanded programme on immunization is to make certain that eligible children within the reach of health services are identified and followed up until immunized.

Table 3: Logistic regression predicting perception of the importance of immunization

Variables	B	S.E	Wald	df	Sig	Exp (B)
Age of respondent	1.030	.157	43.027	1	.000**	2.802
Education	.342	.121	7.233	1	.007**	.723
Level of income	.273	.135	4.091	1	.043**	.761
Location	.081	.159	.258	1	.611	.922
Sex	.358	.163	4.831	1	.028**	.699
constant	.757	.578	1.713	1	.191	.469

Significant levels are denoted as ** $p < 0.05$ B: Unstandardized regression weight
SE: Standard deviation of a mean Wald: Individual Predictor variable
df: degree of freedom Sig: Significant level

Table 3 shows that four variables such as: age, education, sex and income level-were significant (p. 0.000, 0.007, 0.028 and 0.043) in predicting importance of immunization. The age of respondents had the most important influence on the perception of immunization, followed by the level of education which is associated with positive difference of 0.01 occurrences of importance of immunization. From the above analysis, it was observed that the place of residence is negatively associated with the perception of immunization. However, age, sex, education and income level of respondents were predictors of perceived importance of immunization. Place of residence was found to be a unique factor in that it has no relationship with other dependent variables. By comparing data from the regression table, age, sex and education are the variables which are consistent in predicting the indicators of importance of immunization. With this result, one can conclude that there is a relationship between sex and perceived importance of immunization (x^2 (1, N = 976) = 7.277, P ≤ = .005).

Discussion

This study also investigated the perception of males and females on the importance of immunization. The findings revealed that female respondents (62.6%) perceived immunization as very important to their children as against their male counterparts (37.4%). In other words, more female respondents perceived immunization as a good practice. Meanwhile, the high level of demand of immunization among parents is corroborated with the UNICEF (2001) which asserts that mothers are aware that childhood diseases could cause disability and death and they mostly perceive childhood immunization as a beneficiary and a necessary practice. This was partly because the experiences about the consequences of the vaccine preventable diseases are still fresh in the minds of these mothers. Most of the information regarding immunization risks and benefits is related to the level of parental education (Omer .QB, Mohd .BB, Muhannad .RM, Mustafa .GA, Ramadan .ME & Shazia .QJ. 2014). The level of parental education is the most important factor related to immunization knowledge and practices of parents. With this result, one can conclude that there is a relationship between sex and perceived importance of immunization (X^2 (1, N = 976) = 7.277, p ≤.005). During the Focus Group Discussion, both male and female groups accepted the idea of immunizing a child but the female groups showed that they were more knowledgeable about immunization than the male groups.

In this study, more of the married women (wives) (42.6%) perceived immunization as more important than their husbands (31.1%). The reason for this may be because the married women are more knowledgeable about immunization and bear the pains of infant deaths than their husbands. Immunization knowledge is significantly related to age, occupation, educational status, and socioeconomic status of mothers (Singh, Singh & Singh, 2015). Strategies to increase full vaccination should target young mothers especially during antenatal periods (Okugo, Anwanyi & Kutima, 2015).

The study showed that there was a significant relationship between the level of education and perceived importance of immunization (x^2 (2, N = 976) = 16.342, P ≤ = 000). The study revealed that more of the medium education groups (51.2%) perceived immunization as a necessary practice than the high and low education groups (36.8%) and 12.1% respectively.

The education of women has been reported as a key factor in reducing infant and child mortality. Data from NDHS (1999) revealed that lower educational levels among females were related to higher infants and under-five mortality.

In spite of health education and information some mothers were reluctant to accept immunization based on their place of residence. The study showed that the place of residence is negatively associated with the perception of immunization. Place of residence appears to have no effect on the perceived importance of immunization. In order words, there is no significant difference in the way urban and rural respondents think about immunization issues (x^2 (1, N – 976) = 215, P ≤ = 349). One would have thought that urban respondents would be more likely to perceive immunization positively than the rural respondents, because they seem to be more enlightened or educated. One female FGD participant in Ovoko in Igbo-Eze South LGA reported that women were unable to immunize their children because the health centre was located very far away from their homes and children usually become feverish after injection. Another woman in the same locality complained of time wasted during immunization and drugs ineffectiveness in our hospitals.

Some parents refuse to immunize their children due largely to ignorance and the fear of unknown. Some parents are unwilling to immunize their children due to fear of feverish conditions in which some children experience after immunization (Adiboye et al 2014). Lynn (2001) argued that some parents are unconcerned about obtaining immunization for their children, because they do not realize how life threatening some communicable illness still is. It should be noted that immunization protects our children against the common vaccine-preventable diseases. The central task of expanded programme on immunization is to make sure that eligible children within the reach of health services are identified and followed up until immunization. This situation represents a major public health gain in the space of the past 20 years.

Conclusion

The people of Enugu State still believe that immunization is very important to the survival and development of children in Nigeria. Demographic variables such as age, sex, education and income level of respondents were found to be positively associated with the importance of immunization services in Nigeria. Some other parents failed to consider immunization services as a necessary practice for their children based on the negative rumors concerning immunization services in Nigeria. For instance, some parents especially women believed that immunization causes sterility, death of children, paralysis and feverish conditions after injection. Other problems surrounding the poor patronage of immunization by parents included long distances and long waiting time at the health centers.

Recommendations

- Given all the benefits of immunization, parents should complete routine immunization schedules for their children by the age of 9 months.
- Health workers should address parents' concerns regarding the few appropriate side effects of immunization to help reduce unnecessary complaints resulting from their ignorance.
- Education should be employed to correct some of those cultural beliefs and practices attached to childhood immunization in Nigeria.
- Government should establish policies that will address poverty in the land and poor accessibility to medical care.
- It is pertinent to finally recommend that there should be an urgent need to invest in programmes that will enhance the awareness of childhood immunization in Nigeria.

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Using Folklores for Inculcating Viable Values in Youths in Ivo L.G.A of Ebonyi State

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Abstract

The study focused on the use of folklores for inculcating viable values in youths in Ivo Local Government Area of Ebonyi State. Specifically, the study identified specific values, contents of folklores, and procedures for inculcating viable values in youths. It also identified who should teach the folklores, obstacles to use of folklores and ways of removing the obstacles. Survey research design was employed. The population of the study is 121363 households were used for the study. A sample size of three hundred households was used. Questionnaire was used for data collection. Data were analyzed using mean. The findings revealed twelve specific folklores, thirteen contents, nine procedures, eleven agents, twelve obstacles and ten ways of removing obstacles in using folklores as summarized in Tables 1-6. Based on the findings, it was recommended that government through its agencies should help parents in the use of folklores in inculcating viable values in youths by making the accepted values available in schools, from pre-primary to tertiary institutions. This is relevant in the society where viable values that should hold the society together are ignored.

Key words: folklores, inculcating, values, youths, family.

Introduction

Folklores encompass verbal, material and social rituals that have been handed down solely or at least primarily by the words of mouth and by example rather than in written form (Balotito, 2011). The disregard for the core values of societies and inability or reluctance to apply the values in youths are responsible for the disorientation and deviance exhibited by many young people in the society (Joseph, 2012). Folklores include amongst others the following:

folktales, riddles, proverbs, myths, songs, legend, and superstitions (Ede, 2014). Danandjaja (2014) stated that folklores are those materials in culture that circulate traditionally among members of any group in different versions, whether in oral or by means of customary example. From the above various definitions, folklores contain universal values that are necessary for correcting moral anomalies in the society. For instance, they are lessons on hard work as against laziness, kindness and love as against wickedness, contentment as against greediness and covetousness among others. Content of folklores according to Josephine (2015) includes fable, fairy tales, ghost story, jokes, legends, parables, proverbs, myths, tell tale, folk songs, folk play, riddles among others.

Folklore is the original and persistent technology that gave human culture by allowing families to build on experiences over the generation. Oral tradition is the original forms of education, in which both social values and environmental knowledge are transmitted. In many African societies, a story teller must be encouraged with either traditional or spontaneous audience responses, creates community-strengthen process, expressing and reweaving their sense of group cohesion. The story teller shares knowledge of the content of folklore which strengthens community solidarity in stories, practices, sayings and jokes. Also folklores functions as a kind of education for listening and a lesson in concentration for those who hear it (Mcgreehen, 2011).

Folklores can be used in inculcating values. Values are internal consistency of a person's behaviour or attitude or the relevance of things and issues to the society (Osaat, 2011). Specific values that can be taught using folklore are respect for constituted authority, respect for self, for others, for life and property, tolerance for individuals and group differences, religious faith, ethnic and cultural beliefs, hard work, commitment, dependability, diligence, reliability, positive attitude among others (Emenyonu, 2013). For instance, children were entertained and instructed with folktales in most cultures of the world over, there was a rich tradition of storytelling for children and even adults and the ubiquitous tortoise tales who have found their way in some story books. In the olden days, most parents were too poor to buy books for their children, but use storytelling to inculcate the societal norms to their children. In the traditional African society there are people who teach folklores.

Those who teach folklores through values are the extended family system, peer groups, older siblings, parents, actors and actresses i.e. movie industry, religious groups, schools, historians. The teaching can be done during social gatherings, local festivals, among others. Stories are used to discipline youths, lullabies are sung to put them in good humour (Borrows, 2014). Folktales incorporate morals and inculcate general attitude and principles such as diligence, filial piety and to reduce ridicule, honesty, kindness, hard work, attitudinal re-orientation. Parents use folklores to teach youths not to take pride in their social status for misfortunes can befall them anytime. That no one should be partial towards others because of their poverty or their exterior appearances. They also play the role in marriage ceremonies (Nweke, 2015).

The teachers of folklore appear to face obstacles in inculcating viable values in youths. Nwite (2015) observed that high quest for money or material gains, non documentation of records, language barrier, culture, untimely death of parents affect the user of folklores in inculcating values in youths. These indeed are some obstacles in inculcating values in youths.

In line with above, Nwinya (2010) suggested that the obstacles in the use of folklores may be removed through documentation of oral traditions, discouraging the desire for high quest for money, teaching the peoples language to youths among others. The deteriorating rate of value system in the society is alarming. Family value system has been debased (Ita, 2011). Most parents no longer play their traditional roles; youths are disobedient and act flagrantly against social norms and duties. The attributes of the old values have been thrown into the garbage heap (Saboyajo, 2010).The inability of parents to play their roles may be attributed to the influence of westernization and globalization on the youths of today, hence, the high rate of rapping, kidnapping, examination malpractices, robbery with violence, political thuggery in the society. Parents have roles to play in the use of folklores in inculcating values in youths. Parents should wake up to this responsibility to the up-bringing of their children for better society. The problem of this study is how are folklores used in inculcating viable values in youths in Ivo L.G.A?

Purpose of the Study

The main purpose the study was to determine ways of using folklores in inculcating viable values in youths in Ivo LGA of Ebonyi State. Specifically the study determined:

1 specific values that could be taught to youths

2 content of folklores for inculcating viable values

3 procedures for inculcating folklores in youths

4 Persons ought to teach folklores to youths

5 obstacles to use of folklores in inculcating values in youths

6 ways of removing obstacles in the use of folklores in inculcating values in youths

Research Questions

The following research questions guided the study

1. What are the specific values that could be taught to youths through folklores?
2. What is the content of folklores in inculcating values in youths?

3. What are the procedures for inculcating folklores in youths?
4. Who are the persons that could inculcate folklores in youths?
5. What are obstacles to use of folklores in inculcating values in youths?
6. What are the ways of removing obstacles in inculcating viable values in youths?

Methodology

***Design and Area of the study*:** Descriptive survey design was adopted for this study. The area of the study is Ivo Local Government Area of Ebonyi State. Ivo Local Government Area comprised five autonomous communities of Umoihe, Ezeoke-Oyiri, Ihie, Okue and Ishiagu.

***Population of the Study*:** The population of the study comprised all the older siblings, family heads and members of the extended family system (EFS) in the households in the five autonomous communities in Ivo Local Government Area. The population is one hundred and twenty one thousand, three hundred and sixty three (121,363) households in Ivo Local Government Area of Ebonyi State (National population commission, (NPC), 2006).

***Sample and Sampling Techniques*:** A sample size of 300 respondents was selected for the study. Multi-stage sampling techniques were adopted. Stage 1 involved the purposive selection of the three autonomous communities out of the five existing autonomous communities. The reason for the selection of the three autonomous communities was informed by homogenous nature of the people's communities. This is supported by Nwanna in Igba (2006) when he said that if however, the phenomenon is known to exhibit little variability; a low sample percentage drawn from the population will give reasonable and reliable results. Stage 2 involved three villages that were purposively selected from each of the three autonomous communities giving a total of nine villages. This is because those villages are rural. EFS are mostly practiced in the rural areas and are easily accessible to the researcher.

Stage 3, 60 families were proportionately selected from the 9 villages using purposive sampling techniques. 6, 8 and 7 families were selected from 3 different villages respectively giving a total of 60 families. From these 60 families, 20 were single parent families giving a total of 20 respondents. 40 families had complete parents giving a total of 80 respondents. 100 families had older siblings who participated in the study. 100 EFS members using heads of families giving a total of 100 EFS respondents.

Finally, 100 parents, 100 older siblings and 100 EFS members giving a total of 300 respondents formed the sample size for the study. The parents, children and members of the EFS were met at their homes, streets and some at their farms.

***Instrument for Data Collection*:** The instrument for data collection was questionnaire and focus group discussion (FGD). Before the focus group discussion, the purpose ie objectives of the FGD were defined, a timeline of 6 weeks were established, the participants (literates and illiterates) were identified, questions based on the six research questions were generated, a script was developed, nine facilitators were selected and locations were chosen. After the FGD the notes were written, results were interpreted, reported, each meeting summarized, analyzed the summaries and the reports were written. The instrument consists of 67 items used to illicit information from the respondents. The instrument was validated by three experts, one lecturer from the Department of Home Economics, one lecturer from the Department of Arts and Social Science Education and one lecturer from Measurement and Evaluation all from Ebonyi State University, Abakaliki. The reliability coefficient of 0.79 was obtained using Cronbach Alpha Coefficient indicating high reliability.

Data collection and Data analysis: The 300 questionnaire were administered to the respondents through three research assistants. Two hundred and ninety two were completed and returned while eight were not retrieved. The data collected were analyzed using mean.

Finding: Focus group discussion results on the specific folklores in inculcating viable in research question 1 are summarized in Table 1.

Table 1: Specific folklores in inculcating viable values in youths

Item No	Specific folklores in inculcating viable values include:	$\overline{X}$	Remark
1	constituted authorities	3.70	sf
2	self	3.51	sf
3	others	4.01	sf
4	individual religious faith	3.15	sf
5	hard work	3.03	sf
6	Positive attitude to life	4.12	sf
7	Ethnic and cultural belief	3.14	sf
8	Value of human life	3.70	Sf
9	Dignity of labour	4.20	sf
10	Appreciation	3.61	sf
11	Love	4.05	sf
12	Kindness	4.12	sf

s.f = specific folklores

Table 1 shows the specific folklores that are used in inculcating viable values in youths in Ivo Local Government Area. The result in table1 implies that these are the specific folklores used in inculcating viable values in youths in Ivo L.G.A.

Findings: Findings to research question 2 are summarized in Table 2.

Table 2: Content of folklores for inculcating viable values

Item No	Content of folklores	$\overline{X}$	Remark
1	Fables	4.10	C
2	Fairy tale	4.00	C
3	Jokes	3.90	C
4	Legend	4.61	C
5	Folk song	4.10	C
6	Parable	3.82	C
7	Ghost story	3.90	C
8	Riddles	4.32	C
9	Playing	2.10	NC
10	Proverbs	3.81	C
11	Myths	4.01	C
12	Tell tale	3.50	C
13	Folk play	4.08	C

Source: field 2015 **C** (content) **NC** (not a content)

Table 2 shows the content of folklores in inculcating viable values in youths in Ivo L.G.A. the mean rating presented in table, shows that items 1-8 and 10-13 are the contents of folklores in inculcating viable values in youths because they scored above 2.50 while item 9 is not the content of folklores in inculcating viable values in youths because it falls below 2.50. The result of the analysis in table 1 implies that these are the content of folklore in inculcating viable values in youths.

Finding: Findings to research question 3 are summarized in Table 3.

Table 3: Procedures for teaching folklores in youths

Item No	Procedures for teaching folklores in youths include	$\overline{X}$	Remark
1	modeling	4.10	Pftf
2	exemplary living	3.15	Pftf
3	stories with moral lessons	4.01	Pftf
4	examining personal action of self and others	3.50	Pftf
5	problem solving	3.20	Pftf
6	Monitoring television viewing and internet use by older siblings	3.72	Pftf
7	Apologize to youths when parents make mistakes	3.40	pftf
8	Peer group interaction	3.82	Pftf
9	Youths to apologise when they make mistakes	4.11	pftf

pftf procedures for teaching folklores

Table 3 shows the procedures for teaching folklores in inculcating viable values in youth in Ivo L.G.A. The result in table 3 implies that all the items in Table 3 are the procedures for teaching folklores in youths.

Finding: Findings to research question 4 are summarized in Table 4.

Table 4: Those who teach folklores using viable values in youths

Item No	Those who teach folklores to youths include	$\overline{X}$	Remark
1	Parents individually	3.15	Agree
2	Parents collectively	4.02	Agree
3	Older siblings	4.05	Agree
4	Extended family system teach folklores	3.15	Agree
5	Actors and Actresses	4.03	Agree
6	Religious groups	3.05	Agree
7	Historians	4.13	Agree
8	Peer groups	3.07	Agree
9	Age grades	4.08	Agree
10	Traditional rulers	4.05	Agree
11	Tales by moonlight on TV	4.07	Agree

Table 4 shows those who teach folklores in inculcating viable values in youths in Ivo Local Government Area. The result in Table 4 implies that all the items in table 4 are those who inculcate viable values in youths in Ivo LGA.

Finding: Findings to research question 5 are summarized in Table 5.

Table 5: Obstacles to use of folklores in inculcating viable values in youths
Ouf= Obstacles to use of folklores

Item No	Obstacles to use of folklores in inculcating values include	$\overline{X}$	Remark
1	High quest for money and material gain	3.61	ouf
2	Non-documentation of oral tradition	4.20	ouf
3	Language barrier	3.70	ouf
4	Cultural differences	4.50	ouf
5	Untimely death of parents	4.62	ouf
6	Introduction of foreign religions	4.15	ouf
7	Neglect of tradition/indigenous culture	4.17	ouf
8	Poverty	3.14	ouf
9	Time factor on the part of the family members	4.00	ouf
10	Modernization	4.15	ouf
11	Acculturation	4.16	ouf
12	Home video impact	4.18	ouf

Table 5 shows the obstacles to the use of folklores in inculcating viable values in youths in Ivo L.G.A. The result of analysis in Table 5 implies that all the items in

Table 5 are the obstacles in the use of folklores in inculcating viable values in youths in Ivo L.G.A.

Finding: Findings to research question 6 are summarized in Table 6.

Table 6: Ways of removing obstacles in folklores in inculcating viable values in youths

Item No	Removing obstacles in folklores in inculcating viable values in youths	$\bar{X}$	Remark
1	Documentation of oral tradition	3.21	Rof
2	Discouraging high quest for money and material gain	4.50	Roff
3	Encouraging indigenous culture	4.10	Rof
4	Having quality time with youths	4.50	Rof
5	Parents should teach viable values from childhood	3.10	Rof
6	There should be forum where family members meet for inculcating viable values in youths	3.60	Rof
7	Parents should make youths realize that cultures are important	3.51	Rof
8	Encouraging indigenous culture	3.72	Rof
9	Monitoring home videos	4.11	Rof
10	Religious tolerance	3.70	Rof

Rof =Removing obstacles in folklores

Table 6 shows ways of removing obstacles in the use of folklores in inculcating viable values in youths in Ivo L.G.A. The result of the analysis in table 6 implies that all the items are the ways of removing obstacles in inculcating viable values in youths.

Discussion of Findings

Table 1 revealed twelve specific folklores in inculcating viable values in youths. These includes respect for constituted authorities, respect for self, respect for others, respect for individual religious faith, respect for hard work, positive attitude to life, ethics and cultural beliefs (Omenyonu, 2013). This indeed adds to specific folklores in inculcating viable values in youths.

Findings of the study from Table 2 show the content of folklores used in inculcating viable values in youths, the contents are fables, jokes, fairy tales, folk song, legends among others. Ede (2014) observed that proverbs, myths, tell tales and folk play are also the contents of folklores in inculcating values in youths. This is in line with Josephine (2015) who observed that the contents are the original and persistent technology that gives human culture first place by allowing us to build on experiences over the generations. She also asserted that these contents are original forms of education in which both social values and environmental knowledge are transmitted.

Findings in Table 3 also revealed procedures for teaching viable values in youths such as modeling, exemplary living, telling stories with moral lessons, examining personal actions, using folklores as a problem solving approach, monitoring television viewing and internet use (Hartati, 2011) Nnamdi (2014) observed the following as procedures for inculcating values in youths, through modeling, exemplary living, telling stories with moral lessons, examining personal action of self and others, problem solving, peer group interaction, monitoring television viewing and internet use among others. The above procedures may not, on its own proceed effectively without those to use folklore in inculcating values in youths.

Findings in Table 4 revealed those who should teach folklores in youths. These groups of people include the following: parents individually, parents collectively, older siblings, the extended family system, Actors and Actresses, religious groups, historians peer-groups, age grades, traditional rulers, tales by moonlight on TV among others (Burrows, 2014). Folktales incorporate morals, general attitude and principles such as diligence, honesty, kindness, hard work and attitudinal re-orientation. Parents use folklores to inculcate in youths not to take pride in their social status because misfortune can befall them anytime. No one should be partial towards others because of their poverty or their exterior appearances, (Ellis, 2013). Falana (2012) stated that older siblings, Ethical significance, peer groups should use folklores in inculcating viable value in youths for a better society. Findings of the study are in line with Saboyajo (2014) who stated that modernization, acculturation, home video impact and language are obstacles to the use of folklore in inculcating values in youths.

The findings in Table 5 of the study are in consonance with that of Nwite (2015) in his study that investigated the obstacles to the use of folklores in inculcating good values in youths. The findings revealed high quest for money and material gains, non documentation of oral tradition, untimely death of parents, introduction of foreign religions, and poverty among others as obstacles to the use of folklores in inculcating viable values in youths. (Nweke, 2007)

The result of this finding in Table 6 is in conformity with the finding of a study conducted by Nwinya (2010) on removing obstacles in using folklores in inculcating viable values in youths, where the author finds out that the documentation of oral tradition, discouraging the high quest for money and material gain, encouraging indigenous culture, encouraging parents to make youths realize that no one culture is better than the other, parents should have quality time with their children. The findings also revealed that youths should be encouraged in their indigenous culture, parents should monitor home videos and that youths should be made to understand the concept of culture as means of removing obstacles in the use of folklores in inculcating values in youths. In agreement with the above author, Obi (2011) stated that there should be forum where family members will meet for storytelling, parents should teach viable values in youths right from their childhood. If this is done, it will go a long way to compliment the golden saying that we should train up a child in the way he should go when he is old he will not depart from it.

Conclusion

The study has shown that there are content of folklores in inculcating viable values in youths in Ivo LGA. Some of such contents of folklores are fables, fairy tales, folk songs, legends, and riddles among others. These contents strengthen communities' solidarity and sense of group cohesion. Values such as respects for individuals constituted authorities, hard work, positive attitude to life, support viable values inculcation in youths.

Also, modeling, exemplary living, monitoring television viewing and internet use as procedures for inculcating viable values were revealed as the finding of this study. The study also revealed agents that inculcate viable values. Such agents include the following, parents individually and collectively, older siblings and extended family system because they act as checks on the behaviour of the youths in the society since the training of the child is a collective effort of the members of the public. The study revealed that Actors, Actresses, Peer-groups, Age- grades, traditional rulers, tales by moonlight on televisions are the agents that use folklores in inculcating values in youths.

The obstacles to the use of folklores in inculcating viable values in youths revealed that language barriers, poverty, time factor, non-documentation of oral tradition are obstacles to the use of folklores in calculating viable values in youths. The findings also revealed that the above obstacles can be removed through the following means; the documentation of oral traditions, discouraging high quest for money and material gain, improving on the traditional culture of parents, improving on the religious beliefs of parents.

Recommendations

The following recommendations were made based on the findings of the study.

1. Government through its agencies should help parents in the use of folklores in inculcating viable values in youths by making the accepted values available in schools, from pre-primary to tertiary institutions. This is relevant in a society where viable values that should hold the society together are ignored.
2. Government should improve the basic necessities of life to help families in inculcating viable values in use of folklores through poverty reduction programme for parents. That poverty level should

be reduced so that parent will have reasons to live what they teach.

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Perceived Benefits and Constraints of Establishing Tie-Dye Research Centre in Federal College of Education, Eha-Amufu

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Abstract

This study determined the perceived benefits of establishing local fabric dyeing centre in Eha-Amufu Community, possible Constraints to the establishment of the centre and possible ways of surmounting the identified constraints. The study was a survey. Questionnaire and focus group discussion (FGD) were used for data collection. The instrument was validated by four experts, three Home Economists and one Fine and Applied Arts Lecturer. The reliability coefficient of the instrument was 0.68 established using Cronbach Alpha coefficient. Mean and standard deviation were used in analyzing the three research questions that guided the study. Findings from the study revealed that benefits such as capacity building, economic empowerment among others can be achieved by establishing tie dye research centre, while inadequate funding, lack of experienced and qualified teachers to mention but a few are constraints to its establishment. Counterpart funding, invitation of resource persons, in-service training among others are ways of surmounting the constraints. Based on these findings, recommendations were made.

Key words: Tie-dye, Research, Center, Benefits, Constraints.

Introduction

Textile dyeing is a major component in Home Economics and Fine and Applied Arts curriculum in Nigerian Colleges of Education. Textile dyeing involves designing fabrics by methods of tie-dyeing, batiking, printing and painting, and immersing the fabric in a dye bath. Textile design is the process of creating designs on woven, knitted or printed fabrics or surface ornamented fabrics. This enhances the look of the fabrics and makes them attractive.

Tie – dyed fabrics have multipurpose functions for they can be used on natural and synthetic fibres. They have wide range of colours which make tie-dyed fabrics to be used for men's and women's attires and for the production of purses and children's caps, it avails children the opportunity to tie-dye their hats, shirts, pants among other items so as to express and represent their creativity (tie-dyepants.net, 2010). These items made from tie-dyed fabrics can be used as beautiful and unique gifts for friends. Also, caps made of tie dyed fabrics of bright colours help parents keep track of their little ones in a crowd. Pigment dyeing is advantageous because it is easy to apply, less expensive and produces wide range of colours in clothing items.

Clothing which is one of the basic needs of man is not only worn for protection and covering of nakedness, but man also needs beautiful and attractive clothing. The quest to get beautiful and attractive fabric, led man to seek ways of making designs on fabric using different techniques. Ezema (1996) noted that a good design on fabric creates beauty on the finished product. In dyeing fabric, conventional dyes such as vat dye are used, these conventional dyes in most cases are expensive and it is difficult to get good quality one that can be fast. Apart from getting quality and fast conventional dyes, students of Home Economics and Fine and Applied Arts in Federal College of Education, Eha-Amufu in order to learn the state of the arts in local dyeing using indigo leaves, travel all the way to the Western part of Nigeria – Oshogbo in Osun State. This movement is not only capital intensive but also predisposes students and staff to risk of accidents. In the light of this, it becomes necessary to research on the efficacy of some local plants, fruits, leaves and roots in dyeing fabrics. The efficacy of these local products can be done in an enabling environment which will enhance teaching, learning and research. Such an enabling environment is a research centre which will avail individuals the opportunity to extract dye from local plants, roots, leaves and fruits and use such dyes to dye fabrics. The use of these local natural dyes not only will reduce the cost of buying conventional dyes but will also reduce the effect of the toxic and hazards that go with use of conventional dyes. Kumaresan, Palanisany and Kumer (2012) reported that with the world becoming more conscious towards ecology and environment, there is greater need today to revive the tradition of natural dye and dyeing techniques as an alternative of hazardous synthetic dyes. In their own statement, (Purohit, Mallick, Nayak, Das, Nanda & Sahoo, 2007) pointed out that interest in the use of natural dyes has been growing rapidly due to the result of stringent environmental standards imposed by many countries in response to toxic and allergic reactions associated with synthetic dyes. To achieve this requires the establishment of a research centre that will make staff, students and indigenes of Eha-Amufu community to research on the use of local substrates from plants in dyeing fabrics. Such a research centre will increase the impact and prominence of scholarly research. Research centre is a faculty or building dedicated to research, commonly with the focus on a specific area. It should aim at attracting, retaining and supporting excellent academic investigation, enhance graduate education, train quality research manpower and finally, create new knowledge in the specific area of focus of each area.

Eha-Amufu Community is blessed with vegetation where plants parts can be harnessed for use in local dyeing. This community has a tertiary institution that offers Home Economics and Fine & Applied Arts that engage in fabric dyeing. Establishing a research centre in Eha-Amufu community will help the beneficiaries acquire relevant skills in fabric designing and research processes. Skills involve knowing the processes and techniques involved in carrying out an operation effectively. Okorie (2000) noted that skill is an organized sequence of action, proficiently executed and usually displaying a flexible but systematic temporal patterning. In line with the above definition, Ohawovriole (2004) defined skill as the ability of students to use knowledge effectively and readily in performance and the ability to transform knowledge into action. Transformation of knowledge into action demands that one be creative in nature as to meet up with the creative demand of the textile design. "Creativity is the mother of invention", common adage says. It is the ability of a person to originate a new idea or add new idea to an existing phenomenon. Ozioko (2006) explained creativity as a process by which something new, either an idea or an object is produced as a basic tool for progress in any undertaking. It is the frequency to generate or recognize ideas, alternatives or possibilities that may be useful in solving problems, communication with others and enhancing ourselves and others (Franken, 2014). In a nutshell, creativity is the ability to create ideas and solve problems using an original, new or unconventional means.

The use of substrates from fruits, roots, leaves and flowers of trees found in the locality will be a way of creating new idea in the area of fabric design. This will help the beneficiaries to have the opportunity to learn how to dye their new and faded fabrics. It will be a springboard to the development of young and new talents in the area of textile design/arts, hence leading to economic sustainability. It will also help in inculcating entrepreneurial and research skills in the staff, students and indigenes of Eha-Amufu, thus, enhance their career advancement.

The engagement of individuals in fabric dyeing business will not only improve the lives of the individuals but will help them to impact other people's lives positively. In other words, the individual will create job for him/herself and at the same time be an employer of labour. Lemchi (2010) pointed out that skill courses help in creating employers of labour and not job seekers as evidenced from numerous opportunities embedded in the various skill subject areas. Thus, the research centres will help in capacity building, developing capabilities in sustainable families which are both culturally appropriate and locally relevant.

Citizens of Eha-Amufu community will find the establishment of this research centre useful, as it will avail them the privilege of visiting the centre to acquire skills in dyeing fabrics and by extension being self-reliant. Some of them can be employed as workers in the centre or as resource persons in getting the needed local herbs or substances for dyeing from the locality. Despite the benefits derivable from the establishment of local fabric dyeing research centre, there are some constraints which hinder its establishments. Such constraints as lack of fund, lack of interest, lack of awareness, corruption and others. The surmounting of these hindrances to the establishment of tie-dye research centre will help workers in the centre experience a sustainable quantum leap in their economic well-being and also create a vibrant local economy that gives opportunities to meaningful and researching work for all the community.

Purpose of the Study

The major purpose of the study was to investigate the perceived benefits and constraints of establishing tie-dye research center in Eha-Amufu community. Specifically the study determined the perceived

1) benefits of the establishment of local fabric dyeing research centre in Eha-Amufu community.
2) constraints to the establishment of this local fabric dyeing research centre.
3) possible ways of surmounting the constraints against the establishment of the local fabric dyeing research centre.

Research Questions

The study sought answers to the following questions

1) What are the perceived benefits of establishing local fabric dyeing research center in Eha-Amufu community?
2) What are the perceived constraints to the establishment of this fabric dyeing research centre?
3) What is the possible ways of surmounting the perceived constraints to the establishment of this fabric dyeing research centre be solved?

Methodology

Area of study**:** The area of the study was Enugu State of Nigeria. Enugu State is made up of three senatorial zones namely: Enugu North, Enugu West and Enugu East. Eha-Amufu is in Enugu North. It has a tertiary institution named Federal College of Education, Eha-Amufu.

Design of the Study**:** The study adopted a survey research design. It sought information from staff, and students of Home Economics and Fine and Applied Art in Federal College of Education, Eha-Amufu and from indigenes of the community.

Population for the Study**:** The population for the study was 67 made up of first, second and third year students of Home Economics and Fine and Applied Arts departments, all the teaching and non-teaching staff in both departments and some indigenes of Eha-Amufu community. Due to the small size of the target population, the entire 67 number of subjects form respondents for the study.

***Instrument for Data Collection*:** Structured questionnaire and Focus Group Discussion (FGD) guide were used for the study. The structured questionnaire was developed based on literature and research objectives. The instrument was based on a four point scale of SA, A, D, SD. The instrument was face and content validated by three experts in Home Economics and one in Fine and Applied Arts Departments, all from Federal College of Education, Eha-Amufu. The reliability co-efficient of the instrument was established using cronbach Alpha reliability. The coefficient of internal consistency was 0.68.

***Data Collection and Analysis Techniques*:** Distribution and retrieval of the instrument were done by the researcher with the help of two research assistants. Data collected were analysed using mean and standard deviation. Two FGD sessions were also held to obtain a qualitative data. These sessions were made brief to avoid boredom on the discussants.

Findings

The following findings were made on the perceived benefits derived from the establishment of a tie-dye research centre in Eha-Amufu community, constraints impeding its establishment and solutions to the identified constraints. These findings are presented in tables 1, 2 and 3 in line with the research questions.

Results

Perceived benefits of establishing tie dye research centre in Eha-Amufu Community

Table 1: Mean Responses of Respondents on the Perceived Benefits for Establishing Tie Dye Research Centre.

	Benefits of Establishing Tie-dye Research Centre	͞f	SD	Decision
1.	Capacity building for staff and students of the institution.	3.50	0.71	Benefit
2.	Economic empowerment of staff, students and other individuals from the surrounding communities	3.00	0.82	Benefit
3.	Enhancement of the institution and departments internally generated revenue (IGR)	3.75	0.58	Benefit
4.	Increase in trade and commerce in textiles	2.65	0.44	Benefit
5.	Improvement of cordial relationship between Eha-Amufu community and the institution	2.75	0.50	Benefit
6.	Creates employment opportunity for indigenes of the community	3.00	0.94	Benefit
7.	Inculcates skill development in textile dyeing	3.50	0.53	Benefit

8.	Development of research capability in staff, students and other individuals	3.50	0.58	Benefit
9.	Supports academic investigation	3.50	0.48	Benefit
10.	Enhances students education	2.75	0.54	Benefit
11.	Creates new knowledge in the area of tie-dyeing	3.75	0.50	benefit

Table 1 shows the perceived benefits to be derived from establishing a local tie-dye research centre in Eha-Amufu community. The data collected in this table pointed to the fact that a lot of benefits can be derived from the establishment of this research centre. This can be seen from the responses in items 1 to 11. Among these items, enhancement of internally generated revenue (IGR) of the departments and the institution ranked highest with a mean (ƒ) of 3.75 while increase in trade and commerce in textiles ranked lowest with a mean score of 2.65. The standard derivation of the items range from 0.44 – 0.99 which indicate the responses of the respondents were close to each other.

The FGD with students, on the perceived benefits of establishing tie dye research centre, they revealed that having the centre will help them get firsthand information on the state of the art of dyeing fabric, help them experiment on the use of some local colorants in their various localities for fabric dyeing, and also avails them the opportunity to practice what they were taught theoretically in class.

On the part of staff, the FGD showed that it will enable them develop research skills, publish original work thereby adding to the body of knowledge in the area of textile dyeing. To them also, the establishment of such a centre will help them master the skills in dyeing and generate fund from the products.

The FGD with the indigenes indicated that having a tie dye research centre will enable them acquire knowledge skills and training in fabric dyeing. It will also help them dye their faded clothes, improve their income by sourcing for tie local colorants and supplying them to the centre for pay. They were also of the view that it will help them relate cordially with staff and students of the institution. Finally, it will increase their joy and happiness as they will feel fulfilled.

Possible Constraints in the establishment of a local fabric dyeing centre in Eha-Amufu community

Table 2: Mean Responses of Respondents on the possible Constraints in the Establishment of Local Dyeing Research Centre.

S/N	Possible Constraints to the establishment of	ƒ	SD	Decision
1.	Inadequate funding	2.56	0.63	Constraint
2.	Lack of Experienced and qualified teachers	3.00	0.98	Constraint
3.	Difficulty in sourcing raw materials/Local	2.75	0.54	Constraint

	stuffs			
4.	Lack of structural facilities	3.50	0.94	Constraint
5.	Lack of interest	3.00	0.82	Constraint
6.	Lack of awareness of the benefits	3.45	0.65	Constraint
7.	Corruption	3.75	0.50	constraint

Table 2 show that corruption ($\bar{x}$ =3.75), lack of structural facilities ($\bar{x}$ =3.50), lack of awareness ($\bar{x}$ =3.45), lack of experienced and qualified teachers ($\bar{x}$ =3.00) difficulty in sourcing raw materials ($\bar{x}$ =2.75) and inadequate funding ($\bar{x}$ =2.56) constitute setbacks in the establishment of a local fabric dyeing centre in Eha-Amufu community. The standard deviations range from 0.54 to 0.94 which implies that the opinions of the respondents are not too far from the means and from each other.

From the FGD, the indigenes of Eha-Amufu enumerated the following as the hindrances that will undermine the putting in place such a centre: problem of communication, the above problem may occur since most of those to teach the skills may not speak their dialect fluently and an interpreter may not communicate the idea effectively. Also, most of the interested ones may be slow to grasp what is being taught, lack of fund for buying some of the items (like fabric) needed for the training and training fee, inability to cope with the training and domestic chores.

Possible ways of surmounting the establishment of local fabric dyeing centre in Eha-Amufu community

Table 3: Mean Responses of Respondents on the possible ways of surmounting the constraints to the Establishment of Local Fabric Dyeing Centre

S/N	Possible ways of surmounting constraints	$\bar{x}$	SD	Decision
1.	Sourcing counterpart funding by the institution industrialists and other good spirited individuals	3.45	0.69	Solution
2.	Inviting resource persons from local areas where local textile dyeing is practiced	3.75	0.50	Solution
3.	Providing equipment and structural faculties by Tertiary Education Trust Fund (TETFund)	3.50	0.53	Solution
4.	Opportunity for in-service training to local dyeing area for teachers involved in the teaching of textile courses	3.50	0.48	Solution
5.	Improvisation of some of the equipment needed.	2.75	0.96	Solution

Table 3 reveal that engagement of resource person from the locality where local fabric dyeing is practiced and in-service training for textile teachers are very good solution to overcoming the problems of establishing local fabric research centre. Both had mean of 3.75.

Other solutions include provision of equipment and structural facilities by TETFUND ($\bar{x}$ =3.50), counterpart funding by institutions, industrialists and individuals ($\bar{x}$ =3.45) and finally, improvisation of some of the required equipment ($\bar{x}$ =2.75). The range of standard deviation of the items reveal that the responses of the respondents do not differ very much from each other (range of 0.48 – 0.96).

The FGD with the respondents revealed that for the problems identified can be solved by giving free training and providing the required items for practice, sensitizing them through village or church meetings on the need to acquire skills in fabric dyeing, show casing some of the items produced or that can be produced, teaching in their local dialect, teaching bearing in mind individuals' learning pace and having session of teaching to accommodate people with different work schedule.

Discussion

The result from this study indicated that a lot of perceived benefits could be derived from the establishment of local fabric dying Research centre in Eha-Amufu community. These benefits among others include generation and enhancement of internally generated revenue for the departments in particular and the institution in general, capacity building for staff and staff and students, skill development in fabric dyeing, development of research skills in staff, students and other interested individuals. Also, there will be benefits in terms of employment opportunities for indigenes of the community, economic empowerment of staff, students and other persons from the community. Establishment of this fabric dyeing practice centre will enhance the already existing relationship between Eha-Amufu community and the institution. In fact, establishment of local fabric dyeing practice centre will no doubt inculcate entrepreneurial skills in Home Economics, Fine and Applied Arts students and other persons who may show interest in the learning of fabric dyeing in the centre. When these entrepreneurial skills in the area of local fabric dyeing is imparted on individuals, it will help them to be self-reliant, thus averting the ills of unemployment. This agrees with Emelue (2010) who pointed out that entrepreneurial skills are skill an individual needs to succeed in business. In his own view, Mayoux (2005) reiterated that equipping youths for self-reliance through entrepreneurship is an effective way of addressing the challenges of unemployment and promote economic survival. Also, Olaitan, Ali, Onyemachi & Nwachukwu (2000) noted that skill acquisition will reduce poverty, rural urban drift and other social vices that emanate from joblessness. In his over view, Onyegegbu (2012) stressed that these needed skills will help in enhancing human capital and creating employment opportunities for self employment.

Enhancement of cordial relationship between Eha-Amufu community and the institution was one of the benefits identified if local fabric dyeing centre was established in Eha-Amufu. There is no gain saying that when indigenes of Eha-Amufu are given opportunity to be part of the training programmes on the skills in fabric dyeing as well as engaging some of them on collecting the raw materials for dyeing of fabrics. In effect, the bond between the two will be enhanced. This is because members of the community will have a stake and a feeling of recognition by the institution. In other words, the two will be partners in progress as there will be an agreement and understanding between them.

Summing up the benefits of practical exposure of individual, Steven (2008) stated that service learning experiences have multiple proven benefits for students, teachers, communities and learning institutions. It helps students to develop in numerous ways that can have lifelong benefits as gaining practical experience puts education theory into practice, thereby making it more relevant. Lee, Bush and Smith in Steven (2008), also noted that practical experience allows people learn in a variety of ways, enhances knowledge and skills and improves self-esteem. It improves academic achievement, problem-solving skills, character and social behavior.

Despite all the benefits expected to be derived from the establishment of a local dyeing centre, there are some challenges to the establishment of this centre. Such constraints included among others, funds, insufficient infrastructure, non-availability of raw materials etc. fund is a major hindrance in all life endeavor especially in business and this is applicable to the establishment of local fabric dyeing centre because fund is required for its set up.

In the case of fund being a constraint in the establishment of local fabric dyeing centre, Nwaokaomah (2010) stated that funding remains a strong militating factor in the provision of study material… in her own view Ogbene (2006) pointed out that central to the enhancement of entrepreneurial skill in Home Economics Programme is fund. Since fabric dyeing is an aspect of the course offered under Home Economics Programme, fund is needed for its execution. All vocational education courses are skill oriented and capital intensive. In line with this, Agomuo (2012) noted that vocational education training programmes are inherently expensive in terms of infrastructure, equipment, training, materials and personnel overhead. Continuing, Agomuo (2012) maintained that in most cases, modest scales are applied to the provision of these structural facilities which renders the Programme ineffective. The FDG with the indigenes showed that communication is a problem as the teachers/instructors may not be able to communicate in their language. Asma (2010) and Thutong (2011) wrote that communication is the key factor in the success of any business. It is essential for learning and development in both formal and informal contexts because individuals who are handicapped in this experience enormous barriers to learning and development.

The study also revealed how the constraints to the establishment of local fabric dyeing centre can be solved. These solutions included counterpart funding of such a project by the institution, industrialists and philanthropic individuals, engaging resource persons in the teaching of local fabric dyeing and improvisation of some of the needed equipment. Partnership among the institution, industrialists and some good spirited individuals in the community will help in alleviating the challenges posed by the establishment of local fabric dyeing centre in Eha-Amufu. This partnership is necessary as the parties involved will help to provide fund and/or equipment and facilities required in the establishment of such a centre. In agreement with the above statement, Bray (2004) stated that collaboration or partnership helps in increased resources because each partner brings resources which may be human, material of financial to the common forum. Nwakaire (2010) in his view recommended that communities should see themselves as partners and functionaries in their various capacities to ensure quality education.

Resource persons could be engaged in the teaching of the local fabric dyeing especially where the teachers are not well grounded in the art of fabric dyeing. This will help the participants of the programme on fabric dyeing gain firsthand information in the skill and art of fabric dyeing. In agreement with the above statement, (Centre for Civic Education, New York,) stated that classroom visits from informed professionals can be a valuable teaching tool. Resource experts serve as a role model and make community institutions more familiar. They provide additional content support to the classroom materials.

Conclusion

This research study has tried to establish the need for establishing a local fabric dyeing Research centre in Eha-Amufu community. The achievement of this goal will help the students, staff and individuals in the community in no small measure in empowering them financially, enhancing their research skills, cordial relationship between the community and the institution and above all, creating employment opportunities for individuals involved. The establishment of a local fabric dyeing Research centre is really a step in the right direction.

Recommendations

Based on the findings of the study, the researcher made the following recommendations:

1. Efforts should be made by management of the institution and leaders of the Eha-Amufu community to see that they gather all available resources at their disposal to see that a fabric dyeing Research centre is established.
2. Resource persons should be invited to teach the students and staff the art and skills involved in fabric dyeing.
3. Trees where the dye stuff will be extracted from (the leaves, roots and fruits) should be planted on the land of the Research centre.

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The Capacity of Public Libraries in driving Rural Development in South- East, Nigeria

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Abstract

This study examined the capacity of Public Libraries in South East Geo-political zone of Nigeria to drive local development in their areas of jurisdiction. It was a survey research. The five public libraries in South East Nigeria serve as the population of the study. Interviews and observation were used for data gathering. The collected data were analyzed using content analysis which involves sorting the collected data, coding, interpretation and transferring to percentages. The result of the study showed that there is shortage of professional staff in public libraries in South East Geo-political zone of Nigeria amongst others. The authors concluded that Public Libraries in South East Geo-political zone of Nigeria lack the capacity to drive rural development in their areas of jurisdiction. It was recommended that public libraries should employ more professional staff to enhance information delivery for local development and that local communities should support public libraries through donations by philanthropic individuals within the community amongst others.

Keywords: Public, Libraries, Rural, Development, Capacity.

Introduction

Rural areas are areas within a community that are far removed from cosmopolitan life of the city. Olojede, Adekunle and Samuel (2013); and Nworgu and Nworgu (2013) defined rural area in the Nigerian context as a place with small population size, consisting of homogenous people whose primary occupation is agriculture and who are mostly illiterates. Anele (2012) observed that Nigerian rural areas lack access to safe drinking water, good primary health care service, good road network, schools and other basic infrastructure which have prevented the people from contributing to the development of their society. In the same vein, Russell and Huang (2012) noted that in some communities, much of the gains of 21st century technologies are restricted to the urban areas, to the detriment of people in the local areas because the local areas lack basic social amenities. National Bureau of Statistics (2013) observed that school dropout rate is more among children in Nigerian rural areas.

The Nigerian government has responded to the situation in Nigerian rural areas through various development projects such as the National Accelerated Food Production Project (NAFPP), Operation Feed the Nation(OFN) and Agricultural Development Project (ADP) to mention but a few. Unfortunately, Obetta & Okide (2013) observed that these efforts have, as their primary aim, improvement of food, cash crops and agricultural production which is only a little aspect of rural development and which yielded very little result. The authors opined that rural development is synonymous to rural transformation. The authors defined rural transformation as a comprehensive all round structural and fundamental changes not just in the physical conditions of the rural inhabitants but more so in the mental, physiological as well as cultural aspect of development.

A more viable means of transforming rural communities in Nigeria is therefore needed. The Electronic Information for Libraries (EIL) (n.d) in its 2012-2013 impact assessment of libraries has shown that Public libraries can enhance rural transformation. The impact assessment reported rural development activities of public libraries in countries like Columbai, Armenia, Lativia, Chile, Zambia, and many other nations. It has been observed that no meaningful development can take place in any nation without a recourse to public libraries and information centres (Folorunso and Folorunso, 2010). Eze (2013) noted that public libraries in Nigeria have the capacity to transform rural communities as was the case in Norway, Kenya and Soviet Union. The author noted that in the mentioned countries, public libraries were used to raise the political understanding of the people on current political problems, government policies, programmes and citizens education.

As in the above mentioned countries, public libraries in Nigeria can drive rural development if well provided for. Osadebe (2012) and Ebiwolate (2010) observed that public libraries in Nigeria can transform the rural communities through the provision of information on agriculture, wealth creation, new business opportunities, new ways of social grouping and learning etc. Waizer & Gruidl (2007) observed that the ability of public libraries to engage in rural development depends heavily on the ability of the library to identify important local resources, chart a reasonable future for the community, and have people to follow assigned tasks through. In order words for public libraries to engage in development projects in their communities, the library must have capable hands, who will be able to identify viable local resources that can be used in organizing programmes for the community, plan policies to match the local communities demands and have enough manpower to monitor the projects. Edoka (2000) presented the following as the range of positions that can exist in a public library for it to function effectively: Director, Deputy Director, Assistant Director, Principal Librarian, Senior Librarian, Librarian 1, Librarian 11, Chief Library Officer, Principal Library Officer, Senior Library Officer and Library Officer. The author went on to say that the extent and number of the various positions will depend on several considerations such as size of the library collection, services offered, size and nature of users. A cursory look at the expected professional staff strength of Abia State public library show that public libraries are supposed to have the following number of staff to function effectively: Director=8, Deputy Director=16, Assistant Director=11, Principal Librarian=8, Senior Librarian=10, Librarian 1=29, Librarian 11=18, Chief Library Officer=14, Principal Library Officer=8, Senior Library Officer=11 and Library Officer 32. It was also observed that a new position has been added to the established staff strength. This is the position of State Director of Library Services which is supposed to be occupied by one person only. Glass & Krider (2000) observed that in public libraries in Kansas, USA, manpower is one of the greatest problems confronting the libraries. The authors further stated that nearly two-thirds of the state's public libraries have no staff with a Master of Library Science Degree.

Apart from man power needed by public libraries to enhance local development, there is need for current information bearing materials and Information and communication technology (ICT) equipment. Abolaji (2009) advised that Information bearing materials in public libraries should include reference materials, books relating to school curriculum, general books not relating to a specific subject area, periodicals, newspapers, audio-visual materials, government publications and electronically stored and retrievable materials. The author observed that these resources enable libraries to play crucial roles in the success of lifelong education of communities and societies in general. Ogbegbor (2011) included maps, photographs, art productions, computer work stations with software's, CD-Rom and connection to the internet as some of the materials needed by public libraries in performing their duties. With ICT equipment, public libraries can bridge the digital divide between urban and rural communities, enhance rural economic vitality of rural areas thereby improve the quality of life of rural populace (United States Development Agency 2010 & Iwhiwhu & Okorodudu, 2012). Electronic Information for Libraries (EIFL), an international not-for-profit organization dedicated to enabling access to knowledge through libraries opined that through innovative use of technology, librarians can work with different sectors of the community to increase access to information, improve standards of living and transform lives and livelihoods.

On currency of materials, Texas State Library & Archives Commission (2012) gave many criteria which library materials must attain to be considered relevant to remain on library shelves. Among the criteria is the datedness of the material. Datedness refers to when the material was published and when it was added to the library collection. Texas State Library & Archive Commission advised that library materials especially those dealing on education matters, societal issues and sciences should be weeded within five years of publication.

Despite the work of the public libraries in various countries to enhance local development, Nigeria public libraries seems not to be doing much in that area. This has prompted Abel & Issa (n.d) to declare that public libraries in Nigeria have failed, and have come to a near-total absence of relevance to local communities. In defense of the public libraries, Aguolu and Aguolu (2002) opined that public libraries cannot function effectively, if it is not adequately provided for. This controversy makes it pertinent that the capacity of public libraries in discharging their expected duties should be studied. This is what this research sets out to do.

Purpose of the study

The major purpose of this study was to investigate the capacity of Public Libraries in South East Nigeria in enhancing rural development through information provision. Specifically, the study determined:

1. The human capacity available to public libraries for discharging their responsibilities.
2. The Information carrying materials available in public libraries.
3. The currency of information bearing materials in public libraries.
4. ICT Tools available to public libraries for efficient information dissemination.

The following research questions will guide this study.

1. What is the human resources capacity of public libraries for discharging their responsibilities?
2. What are the information carrying materials available in public libraries?
3. How current are information bearing materials in public libraries?
4. What are the ICT tools available to public libraries for efficient information dissemination?

Research Methodology

Research Design: The research design used in this study was descriptive survey design.

Area of Study: The area of the study is South East geopolitical zone of Nigeria.

The zone is made up of five states namely Abia, Anambra, Ebonyi, Enugu and Imo States. There are five Public Libraries in the zone, one public library in each state.

Population of the study: The population of the study was made up of the (5) five public libraries within the south east geopolitical zone of Nigeria, These public libraries are; Abia State Library Board, Umuahia, Anambra State Library Board, Awka, Ebonyi State Library Board, Abakaliki, Enugu State Library Board, Enugu and Imo State Library Board, Owerri.

Instrument for data collection: The Instruments used for data collection were interview and observation checklist. The researchers developed interview and observation guide to enhance data gathering. The interview questions and observation guide were developed by the researchers through review of literature based on the objectives of the study.

Data collection techniques. Interviews were held with the heads of libraries in their different offices. The interviews were guided by the interview guide prepared by the researchers. With the help of an assistant appointed by each head of library on request by the researchers, the researchers were able to look round the library and noted the resources available to each library.

Analysis of data: Data collected for the study were analyzed using content analysis. The collected data were sorted, coded, interpreted and transferred to percentages. The analyzed data were presented in tables.

Findings

Table 1: Professional librarians available in five public libraries in South East Zone of Nigeria.

s/n	Professional librarians	Expected no.	No. Available	% Available
1	State Director	5	1	20
2	Director	40	6	15
3	Deputy Director	80	7	8.75
4	Assistant Director	55	9	16
5	Principal Librarian	40	9	23
6	Senior Librarian	50	8	16
7	Librarians 1	145	6	4
8	Librarian 11	90	11	12
9	Chief Library Officer	70	20	28.5
10	Principal Library Officer	40	21	52.5
11	Senior Library Officer	55	11	20
12	Library Officer	160	9	17.7

Table 1 show that professional librarians available in public libraries in South East Geo-political Zone of Nigeria are below the expected number of the establishment quota. Only one cadre (Principal Library Officer) has up to half (52.5%) of the establishment quota.

Table 2: Information bearing materials available in public Libraries in South East Geo-political Zone of Nigeria

s/n	Information Materials	Available	Not Available	% Available
1	Reference books	5	-	100
2	Books relating to school curriculum	5	-	100
3	Books not relating to school curriculum	5	-	100
4	General works	5	-	100
5	Journals	5	-	100
6	Newspapers	5	-	100
7	Magazines	5	-	100
8	E-books	2	3	40
9	E-journals	2	3	40
10	Audio Visual Materials	3	2	60
11	Government publication	5	-	100
12	Maps	4	1	80
13	Art Productions	2	3	40
14	Internet	2	3	40

Table 2 shows that information bearing materials like reference books, books relating to school curriculum, books not relating to school curriculum, general works, journals, newspapers and government publications are available in all (100%) public libraries in the South East. These are followed by Maps (80%) which are available in four of the public libraries and audiovisual materials (60%) which are available in three public libraries. The least available material in public libraries in the South East are e-books, e-journals, Art product and Internet (40%) which are available in two libraries only.

Table 3: The currency of information bearing materials in public libraries in South East, Nigeria.

S/n	Information Materials	2014-2009	%	2008-2004	%	2003-1999	%	1998 and below	%
1	Reference books	1	20	-	-	1	20	3	60
2	Books relating to school curriculum	2	40	1	20	2	40	-	-
3	Books not relating to school curriculum	1	20	1	20	-	-	3	60
4	General works	2	40	-	-	-	-	3	60

5	Journals	3	60	-	-	1	20	1	20
6	Newspapers	5	100	-	-	-	-	-	-
7	Magazines	2	40	1	20	2	40	-	-
8	E-books	2	40	-	-	-	-	-	-
9	E-journals	2	40	-	-	-	-	-	-
10	Audio Visual Materials	2	40	-	-	1	20	1	20
11	Government publication	5	100	-	-	-	-	-	-

Table 3 shows the currency of materials in the libraries in South East Geo-political Zone of Nigeria. The most current materials common to all the libraries are newspapers and government documents (100%). These are published between 2009 and 2014. Three (60%) of the libraries have current journals while two libraries (40%) have current books relating to school curriculum, general works, magazines, e-books, e-journals and audio-visual materials. One library (20%) has current reference books and books not relating to school curriculum. The other libraries have materials published in other years below 2009.

Table 4: ICT facilities available in Public Libraries in South East Geo-political Zone of Nigeria.

s/n	ICT facilities	Available	Not Available	% Avail.
1	Computers	5	-	100
2	VSAT Proxy Server	4	1	80
3	Satellite dish	2	3	40
4	Printers	5	-	100
5	Photocopiers	4	1	80
6	Projectors	2	3	40
7	Scanners	4	1	80
8	Mobile telephones	2	3	40
9	Internet connectivity	2	3	40
10	CD Players	2	3	40
11	CD-ROM	1	4	20
12	LAN (Local Area Network)	2	3	40
13	Wide Area Network (WAN)	2	3	40
14	Antenna Mast	-	5	-

Table 4 shows that ICT facilities available in all the public libraries in the South East are Computers and Printers. The table also shows that there are Vsat proxy server, photocopiers, scanners in four of the libraries while there are satellite dishes, projectors, mobile phones, Wide Area Network and Local Area Network in two of the libraries.

Discussion of findings

Findings from the study revealed that professional staff needed to man the libraries and drive rural development in the communities are lacking. In none of the five public libraries are there up to half of the expected number of professional staff. This entails that services that need expertise are left in the hands of non-skilled workers. Creativity and innovation in such circumstance may be minimal as such unskilled staff has no capacity to initiate innovative programs. This finding is consistent with the findings of Glass & Krider (2000) in which it was observed that manpower was one of the greatest problems confronting libraries in Kansas, USA. Without adequate manpower, there is very little that can be done by the libraries.

The result of the study shows that information bearing materials like reference books, books relating to school curriculum, books not relating to school curriculum, general works, journals, newspapers and Magazine etc are available in all the libraries. Abolaji (2009) opined that information bearing materials in libraries should include reference books, books relating to school curriculum, books not relating to school curriculum, general works, journals etc. The author further stated that these materials enable libraries to play crucial roles in the success of lifelong education of communities and societies where they exist. According to IFLA/UNESCO (2001), public libraries can combat rural illiteracy by providing materials in support of adult education programmes.

The result of the study further revealed that apart from Newspapers and Government document which are current in all the libraries, only two libraries have current materials (materials published in the last five years) in general works, Magazine, E-books, E-journals and Audio Visual Materials. Texas State Library and Archive Commission (2002) advised that library materials especially those dealing on education matters, societal issues and science should be weeded within five years of publication. It is unfortunate that only one library in the zone has current reference books and books not relating to the school curriculum. What this entails is that information given out from the other four libraries is stale information, which can do more harm than good. It is also unfortunate that books for pleasure reading (books not relating to the curriculum) which are very important in the development of people especially youths are lacking in the libraries. The availability of current government publication and newspapers in all the libraries may suggest that probably, the governments are using the libraries as a propaganda machinery to disseminate choice information.

The result of the study further revealed that internet connectivity in form of Wide Area Network and Local Area Network exist in only two libraries, this implies that the gains of internet communications which includes e-learning and virtual access to information are limited in the South East. ICT equipment is important for public libraries to perform their duties optimally. Iwhiwhu & Okorodudu (2012) observed that for any public library to perform and meet the needs of the users, it is necessary for the library to embrace the use of ICT. Electronic Information for Libraries (EIFL), an international not-for-profit organization dedicated to enabling access to knowledge through libraries opined that through innovative use of technology, librarians can work with different sectors of the community to increase access to information, improve standards of living and transform lives and livelihoods. The absence of these will to a great extent hinder the development efforts in the zone.

Conclusion

Public Libraries in the South East Geo-political zone of Nigeria are ill equipped to drive rural development in areas under their jurisdiction. The libraries lack professional staff, current materials on vital areas of information provision and relevant ICT equipment needed for effective transformation of the local communities. Without skilled personnel and relevant working materials, there is very little that the libraries can do to impact positively in their locales.

Recommendations

1. Government should provide current materials on vital areas of information provision to enable the libraries carry out their responsibilities effectively.
2. There is need for employment of skilled personnel in the libraries. The government should therefore employ more qualified librarians to man the libraries and plan development projects for local communities.
3. Government should provide Internet Connectivity (Wide Area Network) for all public libraries in the zone to enable the libraries offer e-learning services to their clients. This will also ensure ubiquitous access to information.
4. Local communities should be encouraged to form self help organizations to enable them contribute to the development of their libraries and communities.

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Role of Libraries in Enhancing Entrepreneurship Education in Nigerian Universities

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Abstract

This paper focused on the role of libraries in enhancing entrepreneurship education in Nigerian universities. It examined the concept and significance of entrepreneurship education in Nigerian universities; the stipulations of the National Universities Commission on the teaching of entrepreneurship education in Nigerian universities, and the present state of teaching entrepreneurship education in Nigerian universities. The paper further examined obstacles to effective teaching of entrepreneurship education in Nigerian universities, ways the university libraries can contribute to solution of the problem and enhancement of entrepreneurship education in Nigeria universities. Recommendations on ways of promoting the role of the library in enhancing entrepreneurship education in Nigerian universities were made. Recommendations include; developing special collections and services to address entrepreneurship education information needs and introduction and improvement of the provision of online library and information services on entrepreneurship education in libraries.

Key Words: Entrepreneurship, Education, Library, Role, Universities**.**

Introduction

The world is currently standing at the threshold of the information age and knowledge society characterized by challenges and promises posed by the momentous changes in our society at the global and local levels. Many of these changes had their roots in the 20th century, courtesy of advances in technology. At the heart of these advancements is information. Without doubt also, the central custodian of this information-banking is the library (Iloeje, 2000). The library is a collection of information resources and knowledge organised systematically for ease of access and effective use. Library is the engine room and the power house where information is collected, stored, processed and retrieved for use (Anafulu in Mole, 2007). It is the undisputed provider of information services and resources and in fact constitutes the gateway to the world's information resources.

The library serves as an important source of information in different areas of educational endeavour, including entrepreneurship education. The library is a dynamic instrument of education. It provides education that could be seen as growth in the life of an individual or society (Eke and Ihejirika, 2012). It provides tools and resources which support all educational instructions and development of individuals in skill acquisition which will help in growth and development. Aguolu and Aguolu (2002) indicated that the major role of libraries is facilitating greater access to information for every category of people in its user community.

Libraries can, no doubt, make a significant difference in the way and quality of life of the Nigerian public, in assisting special classes of people, acquire relevant and special education as well as provide information services to support entrepreneurship education; and in packaging information services to enable members of the public to acquire relevant and needed entrepreneurship education and training (Leeder, 2015). This is aimed at making them to explore opportunities and maximize their potentials and knowledge base necessary to fit into required occupations and vocations.

The library has been found to be a veritable tool for the development of the individual to contribute meaningfully to both self and societal development through a planned and systematic provision of education so desired. Education so desired does not only mean knowledge of concepts, ideas, principles etc but should amongst other things be an instrument for the development and production of a disciplined and skilled labour force. Public Library Research Group of the London and Home Countries Branch of the Library Association of the UK as cited in Boyd (1993) noted that one of the major objectives of libraries is education, in the area of fostering and providing means for the self development of the individual / group at whatever stages of education, closing the gap between the individual and recorded knowledge. All libraries disseminate information to their clients for proper growth and development as well as in entrepreneurship education.

Entrepreneurship is the willingness and ability of an individual to seek out investment opportunities in an environment and be able to establish and run an enterprise successfully based on the identified opportunities (Nwafor, 2007). It is about seeing opportunities and bringing about change (Brooks, 2012). Veronica, (2015) sees it as a willingness and ability to find out an investment opportunity, apply the energy towards the creation of an enterprise and convert a new idea into a successful innovation. According to Entrepreneurship Centre of Miami University of Ohio as cited by Mamman (2008), entrepreneurship is the process of identifying, developing and bringing a vision to life. The vision may be an opportunity or simply a better way to do something. The result of this process is the creation of a new venture, formed under conditions of risk and considerable uncertainty.

Entrepreneurship education, therefore, is the key, the skill that opens the way to economic growth and development. Mole and Dim (2010) asserted that entrepreneurship education is a planned instruction and training that equips an individual with relevant knowledge and skills in a particular occupation or vocation. It stimulates investment interest with business, brings about wealth creation and eradicates hunger and poverty in the society. Arua (2012) sees education as the direct means by which individuals seek to shape their destinies and transform themselves for better. Entrepreneurship education is education for empowerment.

In line with the above, entrepreneurship education is not only significant but strategic because of the continuously increasing strategic importance of entrepreneurs in economic development of the society. The Library should constitute a veritable vehicle for entrepreneurship education in Nigerian universities. How this can be achieved is the focus of this paper. The paper examined the stipulations of the National Universities Commission on the teaching of entrepreneurship education in Nigerian universities, and the present state of teaching entrepreneurship education in Nigerian universities. The paper also examined obstacles to effective teaching of entrepreneurship education in Nigerian universities; ways the university libraries can contribute to solution of the problem and enhancement of entrepreneurship education in Nigerian universities, and made recommendations on ways of promoting the role of the library in enhancing entrepreneurship education in Nigerian universities.

Benefits of Entrepreneurship Education in Universities

Entrepreneurship education provides the following benefits in universities.

***Reduction of Juvenile Delinquency*:** Entrepreneurship education helps in reducing the rate of juvenile delinquency such as drug abuse, sex abuse as well as the influx of HIV/AIDS and adverse effects on those infected. Drugs or substances, no doubt, may stimulate youth to engage in various delinquent acts such as armed robbery, cultism etc. Ede & Etonyeaku (2008) citing Michael indicated that entrepreneurship education keeps undergraduates develop pragmatic attitude towards theoretical component of education and consequently, keeps youths out of trouble, adds growth to the economy and establishes an opportunity for a better future of business to come. This is so because it equips them with useful skills with which they can engage themselves in useful and helpful ventures.

Increase in Self Esteem and Respect: Entrepreneurship education helps the student recipients to have high opinion of themselves. If you know what you want and how to get it through problem solving skills then your self esteem keeps increasing. Nwaokolo (1997) states that it is the right and ability to set ones own goals and realizing them as much as possible through ones efforts, using one's factors.

Promotion of Effective Local Resources Utilization: Entrepreneurship education can help in the promotion of effective utilization of available local resources through the enhancement of entrepreneurial expertise and the subsequent establishment of many enterprises. It affords individuals necessary and relevant skills to process and tap the abundant local natural resources in Nigeria. Many of these resources are used in the production of goods and services. The use of all these local resources will immensely reduce the countries dependences on foreign goods and improve on the countries balance of payment deficit.

Way to Economic Growth and Development: According to Mamman (2008), economic growth is an increase or an expansion of the national income and the volume of goods and services in the economy. All these are possible through technological advancement and establishment of many business ventures. Entrepreneurship education leads to wealth creation and facilitates income generation.

Stipulations of the National Universities Commission (NUC) on the Teaching of Entrepreneurship Education in Nigerian Universities

Unemployment, crime, and even global economic recession have caused salaried workers to be prematurely retired or even sacked out rightly without benefits. This calls for rethinking, re-orientation, guidance and counseling about our career goals and academic pursuit. The social problems led to the inclusion of entrepreneurial studies in Nigerian universities, when the Federal Ministry of Education revised the minimum academic standard in August 4, 2004. Ekwueme (2012) pointed out that the inclusion of entrepreneurial studies in Nigerian university system is to reposition the curriculum in order to produce knowledgeable skilled and entrepreneurial graduates that would meet the needs of the labour market. Entrepreneurial graduates will be self-employed and create jobs for others to enhance economic development of our country.

However, not a few universities did not take the revised minimum academic standard from the Federal Ministry of Education seriously, especially as it concerns the inclusion of entrepreneurial studies, as it remained non-existent in the curriculum of many Nigerian universities (Arua, 2012). This led to a directive from the National Universities Commission (NUC) for the mandatory introduction of entrepreneurship education in Nigerian universities in 2006. Consequently, many Nigerian universities commenced entrepreneurship courses. Entrepreneurship courses advocated by the NUC became part of university academic programme of the universities beginning from the 2007/2008 academic session. The courses are meant for undergraduates of every discipline and are administered to students mainly in their penultimate year of study.

The concept of entrepreneurship education in Nigerian universities evolves from the truism that entrepreneurism is innate in some individuals, and therefore, needs to be mobilized and developed deliberately (Eke, Igwesi, and Orji, 2011). It is designed to provide basic encouragement, relevant guidelines and positive mindset for entrepreneurship among undergraduates; to engender creativity, innovation and self-reliance during the formative stages of human development and cause entrepreneurial culture to prevail.

The course content of entrepreneurship education in Nigerian universities, according to the NUC bulletin include:

- Developing entrepreneurship/ intrepreneurship in organizations
- Entrepreneurial environment in Nigeria
- Intellectual property right in Nigeria
- Technological entrepreneurship
- Management of innovation
- Family business and succession plan
- Women entrepreneurship
- Social entrepreneurship
- Business opportunity evaluation

To facilitate the teaching of entrepreneurship education in Nigerian universities, the NUC also stipulated the establishment of Centre for entrepreneurship development in the universities. Such centre are required to among other duties, provide skill acquisition programmes, attract research consultancy projects, and organize workshops, seminars, and conferences for their university communities.

Present State/Scenario of Teaching Entrepreneurship Education in Nigerian Universities

Mueller (2004) and Scheela & Hoa (2004) also asserted that there is a link between entrepreneurship and economic growth of a nation. In the developed countries of the world, females and males are given equal opportunities for entrepreneurship education to help them acquire relevant entrepreneurship skills. They experience gender related discrimination, and experience more difficulty when starting up and running a business with their male counterparts (Scheela and Hoa, 2004).

In Nigerian educational system the practice is purely "literal education" or "academic education" which is geared towards certificates consciousness which prepares the citizenry for "white collar" jobs. As a result of this, most Nigerians are not well equipped with appropriate entrepreneurial skills that will enable them to be self employed. Nwafor (2007) indicated that the level of acquisition of entrepreneurial skills in Nigeria is very poor. As a result of this, most Nigerian graduates are unemployed because in Nigeria education is certificates orientated. Today, unemployment among graduates from Nigerian educational system is a cankerworm which has eaten deep into the fabrics of our society. No wonder today most of the state governments are now embracing the introduction of entrepreneurship education into their educational system to enable the citizenry to become self employed in the absence of "white collar jobs.

The Federal Government of Nigeria and other stakeholders in the educational sector have realized that entrepreneurial skills are indispensable in the socio-economic development of the nation thus the emphasis now in the Nigerian university system is on entrepreneurship education. Consequently, some centres were created out in some universities of the federation for the development of entrepreneurial skills. Such centres include Centre for Entrepreneurship Development and Research at University of Nigeria Nsukka, in Enugu State and the Chike Okoli Centre for entrepreneurship education at the Nnamdi Azikiwe University, Awka in Anambra State. Ebonyi State has also integrated entrepreneurship education into their. educational system.

Entrepreneurship education has also been made a compulsory course in some tertiary institutions in the country such as University of Nigeria Nsukka and so many other universities in Nigeria. These are welcome developments but a lot needs to be done to meet the millennium development goal.

Obstacles to Effective Teaching of Entrepreneurship Education in Nigerian Universities

Inadequacy of the curriculum: There is a current dissatisfaction about the inadequacy of the curriculum content of entrepreneurship education to meet the growing individual, organizational, and societal needs (Arua, 2012). This is attributable to a combination of various elements such as globalization, fast technological development, and changing nature of work and occupation.

Lack of Access to Quality and Up-to-date Information Resources: Educating the mind and enhancing the learning process are at the heart of almost every national agenda. Education has been seen as a most effective way of liberating the mind and hence society from the evils of ignorance, disease and poverty (Iloeje, 2001). Also, at the heart of the educational process is information. Thus, education is the delivery of information and its transformation into knowledge which eventually results in associated changes in people's skills and behavior (Adebowale as cited by Okeke 2010). This explains why education relies on information resources such as textbooks and journals, which both the teacher and learner rely on for research and scholarship. However, many people engaged in entrepreneurship education today lack access to quality and up-to-date information resources.

Transition Challenge: Opoku (2004) asserted that digital technologies have been integrated into virtually every facet of education, including commerce, health, governance and civil society, and have become critical factors in creating wealth worldwide. Nigerian universities have not yet taken advantage of this to strengthen entrepreneurial studies in the universities.

Other obstacles, according to Sassenberg (2001), include:

- ❖ Absence of technical support for the teaching of entrepreneurship education.
- ❖ Absence of regulatory mechanisms for effective oversight of entrepreneurial initiatives in Nigeria
- ❖ Poor access to capital which also breeds lack of interest and enthusiasm for entrepreneurship education in. Nigerian universities.

Ways the University Libraries Can Contribute to Solution of the Problem and Enhancement of Entrepreneurship Education in Nigerian Universities

Many entrepreneurial and skill acquisition opportunities abound in library information resources such as textbooks, manuals, newsletters, newspapers and even reference sources such as yellow pages and directories (Ekwueme, 2012). These contain, among others, information on skill acquisition centers, exchange rates, biographies of notable and successful entrepreneurs, including their rise to wealth; information on how to produce and manufacture various items such as soap, shoes and bags; information on how to acquire and utilize basic skills such as computer literacy skills, ICT skills, computer maintenance skills, marketing skills, electronics skills including phone repair skills, and information on available post-retirement employment opportunities.

The information contained in the library information resources enables entrepreneurs to discover abundant opportunities that would have been lost and turn them into unlimited asset and wealth. Thus, UNESCO public library manifesto, in Boyd (1993) noted that one of the main purposes of libraries is to be the principal means whereby the record of man's thoughts and ideas and the expression of his creative imagination are made freely available to all.

Library provides atmosphere and materials conducive and necessary for information dissemination for learning, teaching, research as well as in entrepreneurship education. The university libraries can further contribute to solution of the problem and enhancement of entrepreneurship education in Nigerian universities through the following roles:

The Use of Digital information resources: Today, computer and internet have formed the latest models of information production and retrieval in the world over. Through the use of internet connectivity, libraries link people from different parts of the world and educate their clients in the current information available in a particular area of educational endeavor. Igbokwe (2008) citing Kreitz, indicated that it is the duty of the librarians in an electronic research environment to use library knowledge and experience to create better opportunities of linking entrepreneurship trainees with a variety of information resources. Igbokwe (2008) citing Kreitz, asserted that it is the duty of librarians in an electronic research environment to use library information resources to create better opportunities linking researchers to a variety of information sources that will make them to be self reliance.

***Information Services for Skills Acquisition*:** The library, through its educational role provides the right information that will lead to acquisition of desired skill which will help entrepreneurship trainees in various agribusiness enterprises. Agribusiness enterprises are the various business involved in food production including farming, seed supply agrichemicals, farm machinery, wholesale and distribution, processing, marketing and retail sales.

***Vocational Education and Practice*:** Through information dissemination, the library, provides vocational education through which it encourages the public to continue to learn and to update their knowledge and skills. They are reminded of what they studied in schools in practical terms by constantly reading and practicing them (Nwafor, 2007). By so doing, libraries also create opportunities for entrepreneurial activities and ventures that will enable the students to be self reliant.

***Organising Seminars and Workshops*:** The library seminar and workshops constitute another means of promoting skills acquisition and entrepreneurship education in Nigerian universities. Such programmes which have as resource persons, experts and professionals in the area of entrepreneurship, usually have as participants, undergraduates and unemployed graduates, school dropouts, retirees and active entrepreneurs.

Conclusion

In conclusion, entrepreneurship education is expected to enable people to enjoy life by equipping them with knowledge and skills needed to achieve and sustain decent standards of living as well as skills and knowledge necessary to enable them live meaningful and productive life. It is important to note that the library through its role provides education for the empowerment of its citizenry and entrepreneurship education in Nigerian universities. However, this study became pertinent in view of the poor state of entrepreneurship education in Nigerian universities. The paper has been able to examine the concepts and significance of entrepreneurship education in Nigerian universities; the stipulations of the National Universities Commission on the teaching of entrepreneurship education in Nigerian universities, and the present state of teaching entrepreneurship education in Nigerian universities. The paper has also been able to examine obstacles to effective teaching of entrepreneurship education in Nigerian universities, ways the university libraries can contribute to solution of the problem and enhancement of entrepreneurship education in Nigerian universities. This paper also made recommendations on ways of promoting the role of the library in enhancing entrepreneurship education in Nigerian universities. Among recommendations made include developing special collections and services to address entrepreneurship education information needs in Nigerian universities and introduction and improvement of the provision of online library and information services on entrepreneurship education in libraries. It is, therefore, the hope of the researchers that this paper has been able to establish how libraries can help to change this trend and enhance entrepreneurship education in Nigerian universities.

General Recommendations for Promoting the Role of the Library in Enhancing Entrepreneurship Education in Nigerian Universities

Libraries of all types should develop/create special collections and services to address entrepreneurship education. These should include information resources of various types and in varying media and format which communicate relevant information on entrepreneurship.

Libraries should introduce and improve their provision of online services to provide for access to up-to-date and remotely located information especially for potential entrepreneurship trainees.

Entrepreneurship trainees in Nigerian universities should consider the acquisition of library and information literacy skill as one of the basic needs for enhancing their entrepreneurial education. This should be complemented by regular library use.

Industries, organizations, governmental agencies and even Non Governmental Organizations can help to complement the effort of libraries in supporting entrepreneurship education by organizing conferences, seminars, workshops and ether enlightenment fora. The focus of such fora should be to enlighten and educate potential entrepreneurs and managers of labour on the various ways of planning and managing entrepreneurial ventures. Proceedings of such fora should be deposited at no cost in libraries for public and wide consultation.

Entrepreneurship education should be made compulsory in the curricula of all the programmes of universities, colleges and polytechnics and made compulsory for all students. Libraries should complement the programme by developing rich collections to address the literature needs of such curricula.

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Competencies Needed by Clothing Laboratory Assistants of Tertiary Institutions in the South-East Zone

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Abstract

This study investigated the competencies needed by clothing laboratory assistants of tertiary institutions in South East Nigeria. Three research questions were answered. It was a survey. The population for the study was 45 clothing laboratory assistants in tertiary institutions in the area. Instrument used for data collection was questionnaire. Data were analysed using mean. Major findings include that clothing laboratory assistants required skills in all the 29 areas identified. It was recommended that government and administrators of tertiary institutions offering clothing and textile courses should organize seminars and workshop for clothing laboratory assistants in order to build their capacity for effective performance on the job.

Key words: Competencies, clothing, laboratory, assistants, tertiary institutions.

Introduction

Competency is a set of related behaviours that impact job performance which can be measured against established standard and can be improved through training and development (Wise, 2007). Experience has shown that knowledge, skill and attitudes are generally needed by clothing laboratory assistants to carry out their job in the laboratory effectively. A competent Clothing laboratory assistant is one who possesses the knowledge and skill to carry out clothing related task. Competency can be divided into two major categories which include work based competencies which involving job specific characteristic skills and abilities such as fluency at work with job package.

Competency is a standardized requirement for an individual to properly perform a specific job/task. Lab rules (2015) described competency as the ability to do something well, measured against a standard ability acquired through experience or training. Competency comprises of knowledge/ known how required for job occupation, skills in the application of knowledge successfully in one's sphere of work in order to accomplish occupational roles. (Okoro 2006) it is also the abilities of powers and authority of skills, knowledge, attitudes that are needed to accomplish tasks (Achilike and Okwuanaso 2004).

Competency is the ability of an individual to do a job properly. It is a set of defined behavior that provide a structured guide enabling the identification, evaluation and development of the behaviours in individual employee. (Mc Clelland 2010). It is also what people need to be successful in their job. It includes all the related knowledge, skills, abilities and attribute that forms a person's job. A need is something that is required or wanted. It is a circumstance in which something is necessary. Something that is essential and very important rather than just desirable.

A laboratory is a room or a building equipped for scientific experimentation, research, testing or manufacture of drugs and chemicals. Clothing laboratory is a room where equipment for sewing are kept, where drafting of pattern, clothing construction, mixing of chemicals for tye & dye production takes place. A laboratory is a facility that provides controlled conditions in which scientific or technological research, experiment and measurement may be performed (Pearce 2014).

Clothing laboratory is a place where equipment for sewing are kept, where drafting of patterns, clothing constructions, mixing of chemicals for tye and dye production take place (Adampty 2009). Clothing laboratory is a hand-on space where students engage in different methods of apparel construction fitting and visual analysis lab rules. The clothing laboratory is equipped to provide students with adequate space and equipment similar to that which would be in sample room for major apparel manufacturing companies lab rules.

Facilities available in the clothing laboratory according to Uzozie, Ezike, Bob - Eze (2014) covered every aspect of manufacture from cutting, to making up of garment. The facilities range from cutting, pressing, fusing equipment to advanced machines such as auto-feed buttons etc. laboratory facilities according to Pearce (2014) refers to equipment and tools used by scientist working in a laboratory. They are usually used to perform an experiment or to take measurement and gather data.

Facilities available in the clothing laboratory according to Okeakwa (2011) include the following work table, full length mirror, ironing and sleeve board, iron, pressing cloth, sewing machine, storage place, dress stand, scissors, tape measure, pins, needle etc. Many jobs are carried out in the clothing laboratory such as cutting of fabric, pattern drafting, sewing of garment, ironing of clothes, mixing of chemicals for tye and dye, storage of sewing tools and equipment etc.

A laboratory assistant is a person who performs the practical hand-on work in laboratory. The main duties include using the laboratory, cleaning and maintaining various types of equipment and tools, handling and storing chemicals, and other materials (Answers Cooperation 2013).

Clothing Laboratory assistants are those employees who work in a clothing laboratory in an institution of higher learning and other clothing outfit. Their major job is to maintain and carryout simple repairs on laboratory equipment. They also help both lecturers and students in practical works and other jobs that might be assigned to him/her.

Laboratory assistants are individuals who serve, assist or work in a laboratory room for scientific work. Their job is to monitor disruption of any kind and proper functioning of the laboratory equipment, keeping the laboratory clean, honour reasonable request about operations of the laboratory and conduct minor repairs. In the absence of laboratory personnel, the science teacher will be everything, thus the lesson is eroded, student's practical work is replaced by demonstration, expensive and available apparatus are under utilized or left idle to pick dust for want of use and maintenance.

Their jobs in the clothing laboratory according to Kadolph (1998) include, maintenance of laboratory, strictly monitor access to the laboratory, monitor the laboratory, keeping an eye out for theft and vandalism etc. The job of laboratory assistants is such that it bridges the gap between theory and practice as they compliment the efforts of the lecturers (Njoku 1994). A well trained and effective laboratory assistant according to Njoku (1994) is of immense help to the teacher, for he or she takes a great load of work off the teacher by helping to organize practical classes, service and supervise equipment and materials. This he said allows the teacher time to prepare lesson and be more available to the learner. The responsibility of laboratory personnel are so great and if properly discharged will lead to improved effectiveness of teaching. Arubayi (2014) asserted that clothing and textiles is characteristically skill and activity oriented which when properly taught with relevant tools and equipment will equip the learner with saleable skills needed for self reliance. Clothing laboratory assistants when properly equipped with these skills can be of immense help to both the students and teachers as they help in organizing materials and equipments for practicals. Nwazor (2012) stated that for Nigeria to achieve the millennium Development goals, capacity building of students, through adequate skill acquisition in various fields of study especially in clothing textile, there is need for skill acquisition. This can also apply to clothing laboratory assistants of tertiary institutions. The job of clothing laboratory assistants in tertiary institutions according to Emeka-Okafor (2013) include:

- ❖ Seeing that the laboratory is kept clean
- ❖ Taking inventory of all items under their care, checking tools and equipment
- ❖ Getting tools and equipment ready for practical lessons
- ❖ Promote safety standards of the laboratory
- ❖ Repair equipment if the need arises.
- ❖ Set up equipment and ensure that they will work before the lesson starts
- ❖ Supplying materials to students during practical lessons
- ❖ Helping students with private problems on equipment handling
- ❖ Labeling of items/substances and keeping them in order
- ❖ Keeping records of loaned items and reporting breakages or damages of items.
- ❖ Reporting breakages or damaged items.
- ❖ Arrive on time and open the laboratory to ensure its cleanliness
- ❖ Maintains a register for entry of students and has to be careful when practical are being conducted
- ❖ Make sure students do not carry any eatables inside the laboratory
- ❖ Has to keep record for the laboratory supply
- ❖ Has to shut down all running systems and switch off lights whenever not in use.
- ❖ Should educate students to keep the laboratory neat and clean maintain standards

However, the competencies they need to carry out their job effectively according to Njoku (1994) include competency in operation of modern sewing machine, repairs of machine, maintenance of machine, clothing maintenance, mixing and application of dye etc. Care and maintenance of clothing laboratory can be defined as the daily and periodic care of the laboratory and equipment in the laboratory and equipment in the laboratory that helps to extend their life span. Care and maintenance include daily cleaning, removing of cobwebs, cleaning the drawers, dusting the tables machines, cleaning to mirrors.

As the clothing laboratory assistants are equipped with identified skills or competences, they will help students during practical classes. One of the objective of teaching and learning skill oriented courses like clothing and textile in institutions is to inculcate skills into students which will eventually help them to earn a living on graduation. Laboratory assistants are charged with the responsibility of manning clothing laboratory equipment and they play an active part in the teaching and learning process by helping students in practical classes. Some of the clothing laboratory assistants are at lost on the requirements of their job in the clothing laboratory. This situation may have negative influence on their job performance. This situation is even made more complex as new technologies in many cases have replaced some of the obsolete clothing equipment and machines that these clothing laboratory assistants need to be equipped with adequate skills or competency to handle new machines and equipment. The job of laboratory assistance is such that it bridges the gap between theory and practice as they compliment the efforts of the lecturers. There is need for clothing laboratory assistants to know how o repair some minor faults in clothing machines especially with the new technologies. Presently, minor faults in these machines and equipment hinder performance especially when laboratory technicians are not readily available. The acquisition of technical skills will enhance maximum efficient performance of laboratory assistants.

Osinem and Nworji (2005) stated that some people in particular job or occupation lack the necessary required skill to carry out specific task. As education is dynamic, laboratory assistants may not have been exposed during their formal education to have the necessary skill and competences to handle modern laboratory equipment and carry other functions that may be assigned to them. There is need for clothing laboratory assistance to be competent in the identified competent in the identified competent in the identified competencies to cope with the institutional requirements especially in tertiary institution like Universities, Colleges of education, polytechnics and other industrial out fits where their services are needed.

Purpose of the Study

The major purpose of the study was to evolve the competencies needed by clothing laboratory assistants of tertiary institutions in the South-East zones. Specifically, this study determined the:

❖ Skills needed by clothing laboratory assistants of tertiary institutions in the South East for care and maintenance of laboratory facilities.
❖ Skills needed for assisting lecturers/ instructors
❖ Skills needed for assisting students during practicals.

Research Questions

1. What are the skills needed by clothing laboratory assistants in the South-East zones in care and maintenance of clothing laboratory facilities.
2. What are the skills needed for assisting lecturer's instruction
3. What are the skills needed for assisting students during practicals.

Methodology

Design of Study: The study adopted a survey research design.

Area of Study: Area of the study was South East of Nigeria. The study was carried out in institutions of higher learning in South East Nigeria. The study covered ten tertiary institutions which offer Home Economics, clothing and textile, Fashion design and Clothing technology. The institutions include University of Nigeria Nsukka, Federal College of Education, Ehamufu, State College of Education (Technical) Enugu, Federal Polytechnic Oko, Federal College of Education (Technical) Umunze, Nwafor Orizu College of Education Nsugbe, Ebonyi State University Abakaliki, Alvan Ikoku College of Education, Owerri, Federal University of Agriculture Umudike, Institute of Management and Technology (IMT) Enugu.

***Population for the Study*:** The population for the study was 45 clothing laboratory assistants in three colleges of Education, two polytechnics and five universities in the zone. The whole population was used for the study because of the manageable size, therefore, there was no sampling for the study. Most of these laboratory assistants are school certificate holders, National Diploma in Fashion design and Higher National Diploma in Fashion design and clothing technology.

***Instrument for Data Collection*:** Questionnaire was used for data collection. It was develop based on literature review and the purposes of the study. The questionnaire was divided into two parts. Part one contained three items designed to seek background information about the respondents. The second part was divided into two sections.

This section consisted of 27 items based on literature review. The questions sought information on competencies needed by clothing laboratory assistants in the institutions of higher learning in South East Nigeria. The response options were based on a 4-point rating scale. It was validated by three experts in related fields.

***Method of Data Collection*:** Forty five copies of questionnaire were distributed by hand to the respondents, with the help of two assistants. The 45 copies were all retrieved. This gave 100% return rate.

***Method of Data Analysis*:** The data were analysed using mean to answer the research questions. The mean scores were used to determine the perceived importance level expressed on a 4-point scale for each of the item. A mean rating of 2.50 was used for decision making.

Findings

The study identified the following:

15 skills needed by clothing laboratory assistants in the South East zones in care and maintenance.

Six skills needed by clothing assistants for helping lectures/ instructors and

Five skills needed by clothing laboratory assistants for helping students.

Table 1: Mean responses on skills needed by clothing laboratory assistants of tertiary institutions in the South East zones, for care and maintenance of laboratory facilities.

S/N	Laboratory facilities related skills	Mean	Remark
1.	Repairs of Sewing machines	2.65	Needed
2.	Operation of sewing machine	2.72	Needed
3.	Oiling of sewing machine	3.07	Needed
4.	Regulating of tension	2.75	Needed
5.	Activating sewing machine	2.68	Needed
6.	Replacement of needles	3.03	Needed
7.	Cleaning of Laboratory and sewing Equipment	3.05	Needed
8.	Storage of equipment and tools	2.79	"
9.	Arrangement of seats in the laboratory	2.67	"
10.	Security of equipment in the laboratory	2.79	"
11.	They put back all the equipment and tools used after practicals	2.57	"
12.	Proper monitoring of laboratory	2.75	"
13.	Proper inventory of equipment and tools in the laboratory	2.85	"
14.	They promote safety in the laboratory	2.67	Needed
15.	Arrangement of machines and tools in the laboratory	2.87	"

Table I shows that all the items (skills) have means ranging from 2.60 to 3.05. This shows that the mean value of each item was above the cut-off of 2.50. This means that clothing laboratory assistants required all the 15 skills in order to care and maintain laboratory facilities.

Table 2: Mean responses on skills needed by clothing assistants for helping lecturers/instructors.

S/N	Skills needed for helping lecturers/instructors	Mean	Remark
1.	Getting tools and equipment ready for practical lessons Needed	3.02	
2.	Labelling of items/substance and keeping them in order for teachers use.	2.72	"
3.	Helping lectures to prepare chemicals for practical	2.67	"
4.	Set up equipment and ensure that they work before lesson starts	3.01	"
5.	Improvise equipment and materials required by lectures	2.50	"
6.	Help lectures to supervise students during practical Lessons	2.80	"

Table 2 reveals that all the items (skills) are needed by clothing laboratory assistants in assisting lecturers/ instructors. However the item with the lowest mean of (2.50) deals with improvisation. The table also shows that clothing laboratory assistants are of the opinion that getting tools and equipment ready for practical lessons are skills needed with the highest mean score of 3.02.

Table 3: Mean Responses on Skills Needed for Helping Students**.**

S/N	Skills needed for helping students	Mean	Remark
1.	Supplying materials to students during practical lesson	2.72	Needed
2.	Helping students with private problems on equipment handling.	2.68	Needed
3.	Teaching students on how to pedal sewing machine	2.52	Needed
4.	They ensure that students adhere to safety rules in new the laboratory.	2.62	Needed
5.	Helping students on private problems on the practice clothing and fabric construction	2.55	Needed

Table 3 shows that all items were agreed upon as needed by clothing laboratory assistants in assisting students with item 1 having the highest mean.

Discussion of Findings

The study shows competencies needed by clothing laboratory assistants of tertiary institution in the South East zones. The findings of this study revel that clothing laboratory assistants of tertiary institutions in the south East zones needed skills in repairs of sewing machines, operation of sewing machines, oiling of sewing machines, regulating of tension, activating of sewing machine, replacement of needles, cleaning of laboratory and sewing equipment, storage of equipment and tools, arrangement of seats in the clothing laboratory, security of equipment in the laboratory, proper monitoring of laboratory proper inventory of equipment and tools in the clothing laboratory; and arrangement of tools and machine in the laboratory.

These findings were in agreement with the opinion of Wise (2007) who said that for effective performance of clothing laboratory assistants they should posses skills in the operation of sewing machines, maintenance of laboratory and laboratory equipment. Clothing laboratory assistants should be skilled in proper maintenance of sewing equipment. This is in line with the opinion of Anyakoha (2006) who said that sewing machines and other tools for sewing must be carefully handled and maintained to prolong their life span. The findings were also in agreement with the opinion of Okafor (2001) who opined that school laboratory and equipment needed skilled and careful maintenance which science teacher may not be able to offer. She said that the responsibilities of the clothing laboratory personnel are so great and if properly discharged will lead to effectiveness of science teaching.

Findings revealed that clothing laboratory assistants need competences in helping lectures and instructors such as getting tools and equipment ready for practical, labeling of items/substance and keeping them in order for the lecturer, helping lecturers/instructors to prepare chemicals for practicals, setting up equipment and ensure that they work before lesson starts, improvise equipment and materials required by lecturers and helping lecturers/instructors to supervise students during practical lessons. This is in line with the opinion of (Lab rules 2015) which says that laboratory assistants prepare laboratory in advance before the lesson starts. They perform this duty by reading the experimental procedure and any additional information given by the lecture or instructor.

Findings showed that clothing laboratory assistants needed competences in assisting students such as supplying materials to students during practical lessons, helping students with private problems, on equipment handling, teaching students on how to pedal sewing machines, ensuring that students adhere to safety rules helping students on proper threading of the sewing machine and finally helping students on private problems on clothing construction and fabric construction (Lab rules 2015) asserted that laboratory assistants show the students how to use some of the equipment and tools used in the laboratory. They ensure that students adhere to safety rules in the laboratory. Laboratory assistants works in a laboratory and as the name depicts, he is responsible for assisting in various tasks that are conducted in a laboratory, (Job description 2010). This person is appointed to work in the schools, colleges and other educational institutions. He is concerned with taking care of laboratory materials and to keep chemicals and other substance out of reach of students as well as help students in their practicals.

Conclusion

Fifteen (15) skills were needed by clothing laboratory assistants in the South East zone for care and maintenance of laboratory facilities. Six (6) skills were needed by clothing laboratory assistants for helping lecturers/instructors while six (6) skills were needed by clothing laboratory assistant for helping students.

Recommendations

Based on the findings of this study, the following recommendations were made

1. Newly employed clothing Laboratory assistants should be trained using identified skills in clothing and textile.
2. Qualified clothing Laboratory assistants should be employed to work in clothing and textile section/department of the tertiary institutions.
3. All the clothing Laboratory assistants in tertiary institutions offering clothing and textile should be re-trained or sent for further training based on the findings of the study.
4. Government and administrators of tertiary institutions offering clothing and textile should organize seminars and workshop for clothing Laboratory assistants in order to build their capacity for effective performance on the job.

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Promoting Informed Drug Use for Responsible Living among Individuals and Families: Challenges and Enhancement Options

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Abstract

Health is a key issue. Informed drug use is crucial to good health. it is also important for responsible living. It thus important to evolve ways of promoting informed drug use among individuals and families. This paper focuses on informed illicit drug use, informed prescription/over the counter (OTC) drug use. it further reviews the challenges to promoting informed drug use and ways of promoting informed drug use.

Keywords: Drug, Use, Prescription, Challenges, Information, Health

Introduction

The world is today characterized by information overflow and free access to knowledge. There are no more grey areas and graphic details of every conceivable matter of interest are available at just at a mouse click. it becomes important to ensure that individuals and families are given the benefit of education about topical issues to arrive at a balanced view/opinion about them and to make informed decisions on what they consume including drugs.

Drugs can be seen as substances used to diagnose, prevent, treat, mitigate or cure illness. In today's parlance, these substances are referred to as medicines. drugs are chemical substances, such as narcotics or hallucinogens, which affect the central nervous system, causing changes in behaviour and often addiction. The terms, drugs and medicines are used synonymously.

Making an informed decision implies that one has full knowledge of the facts about which he/she is to take decision and understands the risks inherent in taking that decision. In this way, individuals are expected to ensure that they get reliable information about every drug/medicine they are taking. This is a very important aspect of responsible living. The extent to which individuals do this remains questionable based on the various indiscriminate ways many people seek health care, purchase and take drugs. Drug misuse is also a common phenomenon. The practices of patronizing chemist shops and self medication are equally common. Health is very important and informed drug plays crucial part in good health. This paper focuses on:

- informed illicit drug use
- informed prescription/over the counter (OTC) drug use
- challenges to promoting informed drug use
- ways of promoting informed drug use

Informed illicit drug use

Cultural norms in Nigeria preclude the freedom to choose to use illicit or 'hard' drugs. Traditional societies frown at it and the laws of the land prescribe stiff penalties for cultivating, buying/selling and using illicit drugs. these laws at variance with other climes where the focus is no longer on prevention only but risk reduction for illicit drug users. Fishbein and Middlestadt (1989) in their theory of reasoned action posited that the consequences of deciding to engage in behaviour (like the use of illicit drugs) are always considered before deciding to use them. they reason that decisions to engage in behaviour (such as illicit drug use) are influenced by the perceived consequences of the behaviour; the approval or disapproval of others; and the context of the situation. Therefore, one would not expect an individual to get involved in drug use if he views the behaviour negatively and also knows that people he associates with have a negative view of drug use (Kubicek et al., 2001).

Education has a formative effect on the mind, character and abilities of people, teaches them how to think and act for themselves and encourages them to develop their informed opinions and to make their decisions. The content of the drug education needs to be tailored to the specific needs of particular people, taking into account their age, maturity, and risk of current or future drug use.

The aims of drug education include:

- To help increase the knowledge and general perception of drugs, drug use and related issues through the provision of information.
- to explore a range of attitudes towards drug use and drug policies and enable them to reach their informed views.
- To develop a range of skills to increase their confidence, abilities and skills to manage drug-related situations involving drug use.

Education about the illicit drugs should incorporate the following:

- Drug terminology including street language, appearance, possible effects and risks.
- Drug types: stimulants, depressants, hallucinogens.
- Different forms of drug use, including dependency and possible reasons for them.

- The impact of physical and mental health of people on drug use and effects.
- Signs and symptoms of drug abuse and drug addiction.

Few Examples of illegally abused substances Include:

Marijuana	Dope, ganja, grass, joint, bud, Mary Jane, pot, reefer, smoke, weed	smoked, swallowed
Fitrazepam	Date rape drug forget-me pill, Roche, roofies, roofinol, rope, rophies	swallowed, snorted
Inhalants	Solvents (paint thinners, gasoline, glues) etc	inhaled through nose or mouth
Cocaine	Cocaine hydrochloride: blow, bump, C, candy, Charlie, coke, crack, flake, rock, snow, toot	snorted, smoked, injected

Casa Colombia (2013)

Informed Prescription/OTC Drug Use

Over the counter (OTC) drugs are drugs that do not require the prescription and supervision of qualified medical personnel to obtain and/or use while prescription drugs written prescription to obtain. In Nigeria today, the line between to two is so blurred that it can be said to be non-existent. Since the general public has somewhat unlimited access to medicines, informed use of the said medicines is of utmost importance. Information is important because the dangers of misinformed medicines use are enormous and in many cases, life-threatening. the danger can be as a result of drug abuse/misuse (e.g. excess use of paracetamol found in our society today) or drug interactions.

Education that is necessary for the informed use of prescription drugs includes the following:

- The name of the medication
- What the medication is used for with specific references to the person in question (since there are various therapeutic indications for each medication). The doctor or pharmacist is available to educate one about every prescribed medicine and what the medicine is supposed to do in the body. if they fail to offer information, the person should endeavour to ask them for the information.
- *The right way to use the drug*: Every drug has a route of administration and dosage. The route of administration can be oral, intravenous, intramuscular, subcutaneous or any other route. Most take home drugs are taken orally. Advice from the pharmacist should include the right route of administration, dosage, the right

time to take the medicine and what to avoid when taking the drug to avoid interactions. An example is 'Take your oral drugs with water only and not fruit juices or soda'.

- *Drug interactions*: Engelbrecht and Shargel, (2010), noted that drug interaction is an adverse drug response produced by the administration of a drug or co-exposure of the drug with another substance, which modifies the patient's response to the drug. These interactions can be beneficial or harmful. Common examples include the following:
  - ❖ drug-drug interaction: levofloxacin and calcium tablets
  - ❖ drug-herbal interaction: *Warfarin* and *Ginkgo biloba*
  - ❖ Food-drug interaction: Grapefruit juice and nifedipine
  - ❖ Chemical-drug interaction: Alcohol and metronidazole
- *What the drug can do to the body (side effects):* Drugs have effects on the body but this should not make one stop taking the drug. The pharmacist on dispensing the drug should tell the individual about minor side effects she/he might experience as she/he takes the drug. The side effects might include nausea, vomiting, diarrhoea, constipation, sedation.
- *Other counseling points that may be person specific*: In addition to these, it would also be important to determine who prescribed the drug, and the source from which the individual obtained the drug. Pharmacists are always available to give the society all they need to know about the drugs they are taking. This involves counseling.

Challenges to Promoting Informed Drug Use

- Feeding of information from the social and electronic media. Enormous drug information is available via internet. This can sometimes pose challenges to the promotion of informed drug use.
- Peer pressure. Peer group pressure is a strong force, especially among the youths. This group can influence themselves in drug use.
- Socio-economic status. This can determine types of drugs an individual can afford to use.
- Legalisation of use of illicit drugs. This can regulate the drugs that could be accessed and those that are not readily accessible to individuals.

Ways of Enhancing Informed Drug Use

Manage the environment of your home: Social and electronic media: Censor the social and electronic media (i.e. films, TV/cable programmes, the internet, chat rooms) available in the home should be ensured. A lot of information on drugs is flying around on these media. one needs to be literate enough about these media to get the right information to share with the people in his/her home and other environments. This way, they will not be misled.

Dealing with peer group challenges: Know the friends of your children and other young people in your care. Talk to young people around you about drug abuse in a direct and sincere manner. Make these young people your friends so that they can lean on you when peer pressure to give into the wrong use of drugs becomes too high. When you have done all you can in educating them, ensure that they are kept busy in positive ways.

Dealing with self-indication: Resist the temptation of self-medicate or receive prescriptions from unqualified persons.

Knowledge of name of drug: Insist on knowing the name of every prescribed medicine. It is your right to know!

Conclusion

Drugs are easily accessible in the society, whether they are illicit, prescribed or over the counter drugs. Education on the dangers of drug abuse, misuse and addition is relevant to ensure responsible living. On receiving a prescription, responsible living involves getting informed about every drug that has been prescribed for the person's use.

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