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RESEARCH ARTICLE

FOOD SKILLS AS A PREDICTOR OF HEALTHY FOOD CHOICE AMONG THE FEMALE UNDERGRADUATES IN NIGERIA

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Abstract

There are indications that female undergraduates in tertiary institutions in Nigeria undergo a life transition that results in poor dietary behaviors and weight gain. Adequate food skills may improve dietary preference and prevent overweight among females. However, research is limited on students' food skills and food-related behaviors in the present context. The objective of this study was to assess whether food skills would predict healthy food choices of female undergraduates using a cross-sectional online survey. The participants comprised female students pooled from five public and private tertiary institutions in the Anambra and Enugu state of Nigeria. The respondents completed self-report measures. The result revealed a statistically significant interaction between food skills and food choice. Thus, it was recommended that food skills are an essential determinant of healthy food choices. The implication of the study is discussed.

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Introduction:-

There is a growing concern about adolescents' eating behavior (El-Shaheed et al., 2019) and diminished growth worldwide (Ishak et al., 2016). Healthy eating behavior in adolescence promotes excellent health, growth, and intellectual development (Centre for Disease Control, 2011; Ishaq et al., 2020; Stanner, 2004; Verma et al., 2016) and prevents health-related issues in adulthood. Perhaps, the nutritional status of adolescents is generally perceived as an essential component of health and well-being in the next generation (Wrottesley et al., 2020). Similarly, numerous literatures abound that seem to suggest that nutritional deficits and poor eating behavior during adolescence have long-term health, growth, and developmental implications (Christian, 2017; Jenkins & Horner, 2005; Konwar et al., 2019; Misra, 2010; Prangthip et al., 2021). Adolescent food habits are an essential concern in contemporary society due to enhanced nutrition transition. Food behavior adopted in the early years tend to be stable into adulthood. Besides, adolescents' eating behavior in recent years has increasingly shifted to an unstructured eating pattern, with fast foods and outside meals taking the lead (Ishak et al., 2020).

Developing healthy eating habits in adolescents is challenging (Barwood et al., 2020). The nutritional quality of the diets of many young people has been a matter of concern in recent years. Healthy food choice, including nutritious meals, remains a concern to nutritionists and dieticians. Food choice entails how individuals deliberate, obtain, cook, store, dispense, and eat foods (Sobal et al., 2006). Thus, food choices within the diet represent a determinant of individual health status (Souza et al., 2016). Accordingly, food choice is operationalized in this study as the preference between healthy homemade meals and ultra-processed convenience foods. Evidence suggests that the global food systems and food supply have greatly affected the food choice of many people, resulting in a shift toward the increased

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intake of unhealthy food (Jacka et al., 2014). Accordingly, Zobel et al. (2016) stated that the transformation in the global food supply chains impacts the food environments. For instance, the easy access, low-priced, and marketing strategies of much ultra-processed food have significantly influenced food choice (Crino et al., 2015; Thavarajah, 2018). Accordingly, Demmler et al. (2018) noted that the rapid spread of supermarkets in many developing countries could affect consumer food choices and thus nutritional outcomes. The trend established a cycled relationship between food choice and the outcome. Evidence indicates a link between consumption of heavily-processed foods and higher body mass index and the likelihood obese (Monteiro et al., 2013; Crino et al., 2015; Poti et al., 2017).

Research in Nigeria has emphasized the growing trend of preference for ultra-processed foods, including fast foods, snacks, and fizzy drinks (Adedini, 2015; Adegboye et al., 2016; Arisukwu et al., 2019; Arulogun & Owolabi, 2011; de Brauw & Herskowitz, 2021; Olusanya & Omotayo, 2011; Mapis, 2020; Mekonnen et al., 2021; Opara et al., 2010; Sosanya et al., 2021). This implies poor nutritional knowledge and the need for continued exploration of correlating variables. Perhaps, homemade foods are linked to improved diet quality and weight control (Wolfson et al., 2020). Nevertheless, numerous variables such as time, social norms, peer influence, modeling, perceived affordability of healthy foods versus convenience products influence food choice, especially among young people. However, a growing intimation seems to suggest that many young people lack the necessary skills associated with preparing healthy home meals (Soliah et al., 2012).

Although hunger is the primary motive for eating, what we choose to eat is not determined solely by physiological or nutritional needs. However, food characteristics and preparation procedures are essential components determining food preference. Food skills reflect the knowledge that enables an individual to select and prepare nutritionally balanced, age-appropriate, and satisfying meals with available resources (Kennedy et al., 2019; McGowan et al., 2017; Perry et al., 2017; Vidgen & Gallegos, 2014). Food skills comprise numerous mechanisms related to cooking, nutritional awareness, and health concerns, including planning, budgeting, and food safety concerns (Kennedy et al., 2019; Vidgen & Gallegos, 2014). Evidence indicates that increased food skills can contribute to better diets. At the same time, some suggest that decreased food skills could negatively impact healthy eating and contribute to overweight, particularly among young females.

There is a growing concern about the decline in consumption of homemade foods among undergraduates in the higher education landscape of Nigeria. Although the trend is prevalent across gender, the current study is concerned with female students. Females are widely considered kitchen-friendly than males and the primary provider of family meals (Nelson & DeVault, 1992), hence the belief that they must know how to cook. Regrettably, many female students no longer embrace the culture of preparing nutritionally balanced food, which seems to be economically cheaper. Perhaps, the food industry has responded by increasing the supply of numerous convenience food. However, the increasing use of these convenience products is reflected in reducing the frequency and time spent preparing and cooking homemade meals from fresh and essential ingredients. Thus, easy access to cheap convenience and pre-prepared foods may decrease motivation to develop food skills or diminish existing skills and confidence to make a meal and threaten healthy food choices. The primary purpose of the present study is to investigate food skills as a scarcely explored variable that could determine food choice among female undergraduates.

Hypothesis:

Food skills would significantly predict food choice among female undergraduates.

Method:-

The study was a cross-sectional survey among female undergraduates in tertiary institutions. The study took place in the southeastern part of Nigeria. However, five public and private institutions of higher learning were selected from Anambra and Enugu state because of variation in the location. A formal request was sent to the management of the institutions about the purpose of the study, and approval was granted. Participants were recruited through convenience sampling to include only female students based on the study's objective. The students were approached in hostels, departments, and school environments between August and October 2021 and were asked to participate in the survey to understand their food-related knowledge better. Thus, those who consented to participate completed a consent form, and thereafter, they were handed the study questionnaire to fill on the spot. In all, 308 questionnaires were appropriately filled and returned.

Questionnaire

Food skills were measured using a modified version of the Food Skills Questionnaire originally developed by the Ottawa Public Health, designed to assess food knowledge, planning, and food techniques. Perhaps, some questions were simplified to suit the current context. The questionnaire was subjected to a pilot study to ascertain its reliability and validity. Consequently, a Cronbach alpha 0.86 was obtained. A higher score indicates a high food skill. Also, the Food Choice Questionnaire was used to measure the respondent's food choices. The Linkert type scale contains items that seek to ascertain the importance of several factors that influence food choice: "health", "sensory appeal", "price", "convenience", "mood", "natural content", "weight control", "familiarity" and "ethical concern". The scale recorded a 0.78 reliability coefficient in the study.

Result:-

A simple regression model was employed to test whether the food skill predicted the undergraduate female's meal preference. The analysis showed that food skills statistically significantly predicted the respondent's food choice $F(1,306), 138.97, P<.000$. Thus, the expectation that food skills will significantly predict healthy food choices was affirmed.

Table 1:- Table showing the regression result for the relationship between food skills and healthy food choice

	B	SEB	β	R^2	t	Sig
Constant	2.59	.078			32.99	.000
Food choice	-.64	.054	-.69	.541	-11.84	.000

Note. B = Unstandardized regression coefficient; SEB = Standardized error of the coefficient; β = Standardized coefficient; R^2 = Coefficient of determination. * $P<.000$.

Discussion: -

This study aimed to investigate food skills among undergraduate females in tertiary institutions in Nigeria and their potential impact on food choice. The findings suggest that food skills contribute significantly to food choice. Higher food skills were associated with the likelihood of cooking healthy meals, while poor food skills are linked to the propensity to embrace convenience foods. This study is one of the few to explore the link between food skills and the variation in healthy food choices among female undergraduates in the present context. For this reason, it isn't easy to compare these findings with similar studies in Nigeria. However, there is no consensus on how to define "low" or "high" food skills (Lavelle et al., 2016, 2017). Nevertheless, research suggests that food-related skills have to be considered contextual and varying according to sociodemographic variables (Perry et al., 2017; Vidgen & Gallegos, 2014).

An essential finding of this study is that food skills contributed 5.41% of the variation in meal diversity among school-going females. Thus, the result corroborates previous studies that found increased cooking skills to motivate people to prepare food with available resources. Hence, it denotes an asset when budgets are inadequate (Daly & Kelly, 2015; Hammelman, 2018; Power et al., 2018). Food skills are considered a form of embodied cultural characteristics involving the deployment of psychomotor potentials. From the present finding, food skills appear to be an artistic feature that can alleviate the growing trend of ultra-processed food consumption.

However, it is crucial to be cautious in concluding that food skills alone can determine food choice. Previous studies indicate the role of situational factors in food choice. For instance, situations relating to inadequate cooking resources could decrease the relevance of food skills (Begley et al., 2019; Buck-McFadyen, 2015; McLaughlin et al., 2003). Also, lack of kitchen infrastructures can contribute to the diminished effect of food skills.

Conclusion:-

The study's primary purpose was to investigate food skills as a motivating factor that could predict healthy food choices. The result indicates a positive interaction between food skills and healthy food choices. However, the study is faced with certain limitations. For instance, the convenience sampling method used to employ the respondents restricts the generalization of the findings to all female undergraduates in Nigeria and introduces selection bias. Also, food skills were self-reported. Thus, they may reflect individual perceptions and may not be an objective measure.

However, the study provides valuable information on food skills and food choice among female undergraduates in higher institutions in Nigeria. The findings from this study can be relevant for promoting initiatives bettering the food preference among this group. Also, the study provides information that reflects the need to boost food skills among the girls with limited knowledge of meal preparation. These can be done by making home economics a compulsory subject in the educational curriculum of Nigeria.

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