

Underlying Motivations for Food Choices and Their Influence on Healthy Eating among Millennials

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Abstract

This study aimed to examine the underlying motivations behind food choices and their influence on healthy eating among millennials. We randomly surveyed 394 respondents between the ages of 19 and 37. This study utilizes a quantitative research design to quickly analyze the findings of numerical data from the study's target respondents. The statistical tools used in this study were Mean Percentage, Pearson r , and Frequency count. To add more, the research instruments in this study tested that the information authenticated was used as a data source. Findings indicated that motivations behind food choices among millennials are consistently evident. However, their index diet result suggests that healthy eating is only occasionally observed. This implies that although the two variables are in response to one another, the relationship is not very strong. The generated result of this study also suggests that the moderating factor, educational level, impacts all predictors for food choices. For instance, the high overall mean result of the factor of health concern and the higher level of education will lead to a higher mean effect on the healthy diet index. Millennials make healthier eating choices; healthy meals should be readily available where millennials mostly purchase their food. Nutritious foods should be emphasized and distinguish themselves from competing products using engaging food labels that include information on calories, nutrients, and recommended portions.

Keywords: Motivations, Food Choices, Healthy Eating, Millen

1. Introduction

Generation Y, or young millennials (aged 19-37), display unique consumer values, needs, and lifestyles, with a strong interest in food and beverages (Shipman, 2020). However, they are susceptible to overeating, resulting in overweight and obesity. Global obesity rates have been rising, surpassing deaths related to being underweight, as reported by the World Health Organization (2021). The National Nutrition Council (2023) stresses the importance of a healthy lifestyle to prevent non-communicable diseases and obesity. The food industry should offer more nutritious food options with lower sugar and salt and more fruits and vegetables. The Expanded National Survey shows poor diets and inadequate physical activity cause overweight and obesity among Filipinos, who consume energy-dense diets with high fat and sugar and fewer fruits and vegetables. In Davao City, restaurants like Soul Kitchen Co. offer over a hundred healthy food and beverage options for Filipinos of all ages and health goals. Unlike the abundance of instant and fast-food options, they provide pre-prepared, "grab and go" healthy food items that cater to weight loss, gain, muscle building, and even lactating moms. Customers pay for their desired food items and leave without the hassle of preparation (Sunstar-Davao, 2019). Limited research has been conducted on the dining habits of millennials despite their significance in the food service industry (Okumus, Ozturk, and Bilgihan, 2021).

Existing studies have explored topics such as food trucks (Yoon and Chung, 2018), food preferences and technology (Saulo, 2016), cooking preferences (Okumus and Ozturk, 2020), and factors influencing food decision-making (Namin, Ratchford, Saint Clair, Bui, and Hamilton, 2020).

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To gain deeper insights into the healthy eating choices of young adults, it is essential to examine their consumption patterns in specific regions such as the Philippines.

This study examines motivational factors impacting food choices and their influence on healthy eating among Filipino millennials. A healthy food intake index aligned with local dietary guidelines addresses the limited literature on these predictors and aims to promote healthier eating habits in this population. This study aims to measure the motivation levels (price, health concern, and mood) for food choices among young adults. To evaluate the dietary index using the Healthy Diet Index and explore the relationship between motivation and healthy food choices among millennials. This study section reviews existing literature on the motivations behind food choices and their impact on healthy food choices among millennials. It includes theoretical and conceptual frameworks and contemplations from various researchers, providing a broader understanding of the topic. The field of food choice research is rapidly growing, and this study aims to contribute to this area by focusing on the factors influencing young adults' food choices.

Studies have shown that multiple factors impact individuals' food preferences, including personal characteristics, life experiences, social circumstances, and food context. These factors are complex and dynamic, including demographics, health issues, and lifestyle. Identifying the grounds behind food choices is crucial for promoting dietary change and developing effective policy measures. Consumers' motivations for food choices can vary and encompass factors such as taste, health, animal welfare, and environmental considerations (Martinelli and De Canio, 2021; Hielkema and Lund, 2021). Halimic, Al-Jawarneh, Bawadi, Aljuraiban, and Al-Ghanim (2018) discovered that manipulating prices can influence behavior and encourage healthier food choices in Saudi Arabia. When the cost of unhealthy foods increased, 57.2% of choices were healthy, and when the cost of healthy options decreased, 58.5% of choices were healthy. However, individuals who typically consumed less healthy diets tended to choose fewer healthy options regardless of information about healthy eating. Li, Zhang, and Thappa (2018) observed that the high cost of fruits and vegetables may render them unaffordable for some consumers. As Stewart, Hyman, Dong, and Carlson (2021) demonstrated, prioritizing fruits and vegetables within one's budget can facilitate adherence to recommended dietary guidelines. Nevertheless, Pancrazi, Rens, and Vukoti (2022) highlighted the challenge of determining whether poor diets stem from individual choices or environmental factors. The food retail market significantly influences our food choices, with factors such as availability, advertising, labeling, and pricing impacting our health and well-being. However, despite these influences, there remains insufficient information on how prices specifically affect our eating habits and the risk of obesity. With this knowledge, developing effective public policies to promote healthy diets and prevent chronic illnesses becomes easier.

The health concerns of Generation Y have increased due to social media trends. However, many individuals still need to prepare to adopt a healthy diet, highlighting the importance of understanding the decision-making process for healthy food choices. Millennials' use of social media has shaped their preferences for specific cuisines and components and their desire to eat healthily. Sugar-free alternatives like Kombucha, vinegar, and traditional tonics have gained popularity due to social media's promotion of sugar as unhealthy. Additionally, Millennials are willing to spend more on healthier food options and engage in healthy eating events, as Batat (2019) noted.

Shipman (2020) suggests that their living arrangements influence Millennials' eating habits. When living apart from their families, they may adopt the convenience-focused approach of Generation Z, prioritizing tolerance over their diets and health. However, some independent Millennials resemble Generation X and Baby Boomers, prioritizing wellness and purchasing organic and natural foods with clean ingredients. Fitness and nutritional information on food labels strongly motivate this generation. Despite variations, Millennials share Generation Z and Generation X characteristics, such as a preference for cooking at home with fresh ingredients. They prioritize convenience and experience, often choosing small stores with organic options. Market research indicates their taste for healthier foods, but they spend less time dining at home than previous generations. Examining health concerns related to fast food consumption and unexplored areas is crucial, as supported by Rezai, Teng, Shamsudin, Mohamed, and Stanton (2017), who emphasize understanding key factors influencing consumers' purchase of functional foods and soy-based dietary supplements.

Leeds, Keith, and Woloshynowych (2020) discovered that internal and environmental factors, including mood, influence women's food preferences and eating habits. Participants reported a reciprocal relationship between mood and food choices, with negative attitudes associated with overeating and unhealthy food consumption. At the same time, healthier and social eating habits were linked to happier moods.

Ashurst, Woerden, Dunton, Todd, Ohri-Vachaspati, Swan, and Bruening (2018) found that negative, positive, or apathetic emotions influenced specific food choices in college students. For instance, negative emotions were connected to consuming meat and proteins, whereas positive emotions were linked to a preference for sweets. Additionally, positive emotions were found to reduce the likelihood of consuming pizza or fast food. Excess sugar and fat consumption have been linked to depression and low omega-3 fatty acid intake (Liao, Schembre, and O'Connor, 2018). In contrast, Mediterranean-style diets are associated with improved long-term mental health conditions due to changes in oxidative stress and inflammation (Conner, Brookie, Carr, Mainvil, Margreet, and Vissers, 2017). Women are more prone than males to overeat in reaction to stress, anxiety, and depression, with sleep deprivation and socioeconomic factors contributing (Saleh-Ghadimi, Dehghan, and Farhangi, 2019; Thompson, Smith, and Cummins, 2018).

Guine (2020) emphasizes that people's dietary preferences are shaped by a complex interplay of social and psychological factors, highlighting the need to understand these influences better. The importance of food in disease prevention and treatment should be continually emphasized and updated based on the latest research. Consequently, knowledge about the health benefits of nutritious foods is closely associated with motivations for healthy behavior (Scalvedi, Gennaro, Saba, and Rossi, 2021). A recent study suggests that making "healthy" food choices, such as increasing the intake of fruits and vegetables, can offer mental and physical health benefits and maybe a wise long-term investment in one's well-being, thus highlighting the relationship between food and well-being. Numerous health-related issues are linked to dietary sodium (Na) consumption, leading to many countries' concerns about reducing salt intake (He, Tan, Ma, and MacGrego, 2020). As salt in food is a significant source of sodium (1 g of NaCl = 400 mg of Na), several government initiatives have been implemented to decrease the salt (NaCl) content in meals (De Assis, Rebellato, Pallone and Behrens, 2022). Understanding the impact of reducing salt intake on food choices and information is critical to public health.

The relationship between alcohol consumption and being overweight or obese is complex and unpredictable, influenced by factors such as the type of alcohol consumed, drinking habits, and gender. According to Kwok, Dordevic, Paton, Page, and Truby (2019), moderate consumption of alcohol was linked to a higher weight in men, while mild to average alcohol intake was linked to lower weight in women. Research by Ricotti (2021) suggests that young adults often neglect their eating habits and skip meals, leading to poor dietary habits, such as consuming fewer fruits and vegetables and eating lots of energy-dense snacks. Skipping meals, especially breakfast, has been linked to several health risks, such as an increased risk of central adiposity, insulin resistance, and cardio-metabolic problems, and it can also result in a worse diet with lower intakes of essential nutrients (Wicherski, 2021).

The nutritional value of an individual's diet can be evaluated using a dietary questionnaire that asks about their food intake and portion sizes. The British Heart Foundation developed a questionnaire in 2012 that includes various nutrition groups, such as fruits and vegetables, fats, and sugars, to assist companies and healthcare professionals in guiding people toward better food choices. This questionnaire is comparable to the daily nutritional pyramid guide used in the Philippines and will be used in this study.

Over the years, many studies have tried to unravel what influences our food choices (Gibson, 2006; Gardner, Wansink, Kim, and Park, 2014; Ares and Gambaro, 2007). From these studies, researchers have discovered that various factors, such as our personal experiences, social settings, and the type of food available, affect our choices. A framework was developed by Steptoe and Pollard (1995) to measure the factors that influence personal food choices. The study utilizes a multidimensional scale, the food choice questionnaire, which includes relevant constructs such as health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concern. Irrelevant factors were excluded from the study, considering the Filipino context.

2. Methodology

This study used quantitative research to analyze how three predictors influence millennials' dietary choices and overall health. Quantitative research involves gathering numerical data to test hypotheses using structured data collection tools, large sample sizes, and statistical analysis. It enables researchers to identify patterns, make forecasts, test causality, and extrapolate results to larger groups. Islam (2019) explains that this method is well-suited for concluding data. Further details can be found in the chapter. Using a descriptive research design, the study investigated the factors influencing food choices among millennials in Davao City and how they affect their overall health. This design provided accurate and trustworthy results without manipulating variables (McCombes, 2019).

The researchers sought to gain insights into the motivating factors behind food choices among millennials by describing the population and phenomenon. The study randomly selected 384 participants from the millennial population of Davao City to obtain a representative sample of the general population. A random sample involves randomly selecting individuals representing the entire group (Cortés - Martín, Iglesias - Aguirre, Meoro, Selma, and Espín., 2021).

The research will utilize a survey questionnaire as the primary method for data collection. This questionnaire will incorporate two scales, which will be discussed in this section. The first scale assesses the underlying motives behind individuals' food choices. Developed initially by Steptoe and Pollard (1995) and later refined by Lindeman and Vaananen (2000), certain concepts from the original scale have been excluded in the current study. Thus, the scale used in the present study covers three predictors for food choice: (a) price, (b) health concern, and (c) mood. Another predictor, adapted from the British Heart Foundation (2012) questionnaire (d) Health Diet Index, was used to measure the influence of these predictors on healthy food choices among millennials. The respondents will be instructed to provide their answers using commensurate answers.

The researchers dedicated considerable time and effort to developing survey questionnaires by incorporating questions from previous relevant studies. The questionnaires utilized a scale to assess respondents' agreement and disagreement levels. Ample time was provided for participants to complete the survey, and the researchers collected and organized the data obtained. The research team will conclude and provide recommendations based on the findings. The researchers followed a series of steps to gather the data for the study. Firstly, they obtained consent from the school dean by submitting a letter outlining the study's purpose. Once permission was granted, the researchers administered the questionnaire, which underwent validation and distribution before being presented in person to the participants. The researchers explained the survey's significance to the respondents to ensure cooperation. Upon completion, the researchers collected the questionnaires and recorded the data. Lastly, statistical analysis was conducted to understand the results better. The researcher will use various statistical methods to analyze the data collected from the survey, including Frequency count, Percentage, Mean, and Pearson r . These methods will be used to interpret the demographic profile of the respondents, as well as their motivations for food choices and their healthy diet index. Frequency count and percentage will determine the number and rate of respondents per profile class. At the same time, the mean will measure the level of motivation for food choices and the diet index of millennials. Lastly, Pearson r will establish the correlation between the respondents' motivation and healthy diet index.

3. Result and Discussion

This section presents the research findings and analyzes and interprets those results. It summarizes the key findings, compares them with existing literature, and draws conclusions based on collected data. It also discusses the implications, limitations, and future research directions.

Table 1 presents the motivation level for food choices among millennials in Davao City. The mean score for motivation is 4.28, indicating a high priority placed on factors like price, health concerns, and mood. The standard deviation of 0.492 suggests relatively similar responses. Mood received the highest mean score (4.52, SD = 0.564), followed by health concerns (4.32, SD = 0.681). Price received a lower mean score (4.01, SD = 0.663).

Table 1. The level of motivation behind food choices among young adults, n=384.

Indicators	Mean	Std. Deviation
Price	4.01	0.663
Health Concerns	4.32	0.681
Mood	4.52	0.564
Overall	4.28	0.492

The study found that pricing, health concerns, and mood significantly influence the food choices of millennials. Health concern refers to the importance of vitamins, minerals, and protein in food for better health and well-being, including bone and muscle health and increased resistance. Millennials prioritize fresh and healthy food, highlighting the relevance of health concerns among them. However, as many millennials are students or just starting their careers, they may prefer cheaper food options, as healthy foods are often more expensive.

The highest-rated factor, mood, suggests that millennial food choices are often influenced by their current emotional state. Boredom, stress, and aversion can lead to unhealthy food choices among millennials.

Table 2 displays the diet index level among young adults in Davao City. It includes 15 items measuring respondents' dietary habits, with each element's mean score and standard deviation. The overall mean score, obtained by averaging all 15 item scores, is also provided. The table also displays the diet index results for young adults in Davao City. The general mean score of 3.24 with a 0.544 standard deviation indicates that millennials' healthy eating habits in the city are moderately practiced, suggesting occasional engagement rather than consistently healthy choices.

Table 2. The level of diet index among young adults in Davao City, n=384.

ITEMS	Mean	Std. Deviation
1. I eat more than four (4) different sorts of vegetables/fruit weekly	3.95	0.889
2. I prefer to consume low-fat foods and lean meat.	3.93	0.891
3. I prefer baked, steamed, or grilled foods over fried foods	3.84	0.979
4. I eat fatty fish at least once a week.	3.71	1.063
5. I season my meal with salt when I cook	4.05	0.985
6. I put salt on my food at the table.	2.88	1.227
7. I consume junk foods, potato chips, or pretzels more than three times each week.	3.13	1.172
8. I consume ready-made meals and processed meat more than twice every week.	3.35	1.031
9. I consume at least 6-8 glasses of water daily.	3.98	0.980
10. I limit myself to 5 glasses of alcohol each week. (For women)	3.75	1.447
11. I limit myself to 10 glasses of alcohol each week. (For men)	3.48	1.439
12. I skip breakfast more than once a week.	3.35	1.354
13. I skip lunch more than once a week.	3.12	1.336
14. I skip dinner more than once a week.	2.98	1.376
15. I frequently skip meals in favor of a snack.	2.89	1.344
Overall	3.24	0.544

The table indicates that respondents eat more than four different vegetables and fruits weekly, prefer low-fat foods and lean meat, and choose baked, steamed, or grilled foods over fried ones. On the other hand, respondents tend to consume fatty fish less frequently, put salt on their food at the table, and eat junk food, potato chips, or pretzels more than three times each week. Respondents also tend to consume ready-made meals and processed meat more than twice per week. However, they tend to drink enough water, limit their alcohol consumption, and skip meals less frequently. The study results bring attention to a critical area that can be used to assess individual satisfaction concerning the level of diet index among young adults in Davao City. Building on these studies, this study aims to empirically estimate the role of motivation in maintaining dietary health among millennials in Davao City. Although there is research on diet and basis, people have yet to examine whether healthy eating decisions are mediated by motivation officially. Conceptually, To consume a nutritious diet, a person must: (a) be cognizant of the function that particular nutrients perform in preserving health; (b) be driven to keep up a healthy diet (or to improve a poor diet); and (c) to gain an understanding of nutrition to influence dietary preferences, the person must also be inspired to adopt a wholesome diet (Lindbloom, Asirvatham, Moon, and Altman, 2021).

Motivation can play a crucial role in shaping healthy eating habits. People motivated to maintain a healthy diet are more aware of the nutritional composition of their meals and make more deliberate meal choices. They may be encouraged to meet specific health goals or maintain a healthy weight. On the other hand, people who lack the motivation to eat healthily may be more likely to eat unhealthy foods, skip meals, or make bad dietary choices. Therefore, motivation can be an essential aspect of maintaining a balanced diet. The study found no consensus on the relationship between motivation and healthy eating due to varying opinions and attitudes toward food choices. Initiatives to promote healthy eating should address concerns like convenience and enjoyment by enhancing nutritious meals' flavor and sensory aspects.

Factors other than motivation, such as the availability of healthy options, can also influence dietary choices. Efforts targeting this population should focus on identifying and eliminating barriers to healthy eating.

Table 3. Correlation between the motivations behind food choices and their influence on healthy food choices among millennials.

Variables Correlated	r-value	Verbal Description	df (n-2)	p-value	Decision
Motivation vs Healthy Diet Index	0.246**	Weak Positive Relationship	382	0.000	Ho is rejected

Legend: **Correlation is significant at 0.01 level (2-tailed)

Table 3 shows the correlation analysis between the "Motivation" and "Healthy Diet Index" variables reveals a statistically significant weak positive relationship with an r-value of 0.246**. This implies a positive association between motivation and adherence to a healthy diet among the participants.

In the study context, this result suggests that individuals with higher motivation levels are likelier to have a healthier diet. This aligns with the understanding that motivation is crucial in driving behavior change, including adopting and maintaining healthy eating habits. The rejection of the null hypothesis (H_0) suggests evidence supporting the alternative hypothesis (H_a) that a relationship exists between motivation and adherence to a healthy diet. In other words, the correlation analysis indicates that motivation significantly influences the participants' healthy eating behaviors. This result can have important implications for interventions and strategies promoting healthy eating among millennials in Davao City. By targeting and enhancing individuals' motivation, it may be possible to positively impact their dietary choices and encourage them to adopt healthier eating habits. Strategies such as providing education, setting realistic goals, offering incentives, and creating a supportive environment can help boost motivation and increase the likelihood of maintaining a healthy diet. However, it's important to note that while the correlation is statistically significant, the magnitude of the relationship is considered weak. This means that motivation alone may not be the sole determinant of healthy eating habits, and other factors should also be considered in interventions, such as addressing barriers to access, knowledge gaps, and environmental influences.

4. Conclusion

This study provides additional insights into the motivating elements that affect the food choices of millennials and how these factors impact their decisions to opt for healthier food options. The findings suggest that price, emotion, and health are crucial in encouraging individuals to choose more nutritious food items. Conversely, young adults who prioritize familiar foods and emotional states while selecting food are more likely to make unhealthy choices. To promote healthy eating habits among millennials, it is essential to ensure the availability of nutritious foods at locations where they frequently obtain meals, such as school cafeterias and restaurants. Additionally, attractive food labels should distinguish healthy food options from other items, providing information on calories, nutrition, and preparation methods. Further research is required to understand the relevance of these motivating factors (health concern, price, and mood) in the broader context of millennials' health and well-being.

5. Recommendation

Researchers recommend implementing a food content awareness program in restaurants. This involves listing nutritional information and creating appealing product labels to attract millennials and support their dietary preferences. By increasing awareness, beneficiaries can better understand millennials' eating habits and preferences. Additionally, the availability of product-specific nutrition data considering factors like pricing, health concerns, and moods can influence millennials' food choices.

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