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**THE IMPACT OF HEALTH AWARENESS AND CONSUMER ATTITUDES
ON THE CONSUMERS' PURCHASE INTENTION OF HEALTHY FOOD:
THE CASE OF UNIVERSITIES IN EGYPT**

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ABSTRACT

Purpose: This study aimed to examine the role of attitude as a mediator in the association between health awareness and the intention of young customers to buy healthy food products

Design/method/approach: A quantitative research technique was used in this dissertation. Questionnaires were used to gather data from a sample of university students, and a quota sample of two hundred eighty-five people was drawn from the whole population. The statistical technique of regression analysis was utilized to evaluate the proposed hypotheses.

Findings: The results indicated a positive relationship between health awareness and attitudes toward nutritious food ($p=.00$). Furthermore, there is a positive correlation between individuals' attitudes and their inclination to purchase healthier food options ($p=.00$). A VIF test was conducted to detect any multicollinearity between the variables. Results showed that HA and A are not highly correlated with each other, and the model does not suffer from multicollinearity issues. The results of the hierarchical regression analysis indicated that attitudes fully mediate the relationship between health awareness and purchase intentions of healthy food products.

Practical Implications: The study suggests that marketers should focus on logical aspects like the health benefits of nutritious foods to increase young consumers' buying frequency. Labeling and media should be clear and valuable, and buyers should understand the benefits of healthy foods. Educational initiatives can change environmental care and attitudes, and celebrity or industry expert talks can highlight healthy food production and consumption. Making healthy foods more accessible and affordable can boost consumption.

Key words: Health awareness, purchase intentions, attitudes, cognitive attitudes, behavioral attitude, affective attitudes.

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1. INTRODUCTION

1.1. Research Background

Chronic illnesses such as diabetes, heart disease, and cancer have increased the demand for nutrient-rich foods, resulting in an annual growth of 10–30% in the natural or healthy food market share. This surge is linked to heightened consumer awareness and demand. Foods that are natural and additive-free are perceived as more environmentally sustainable, influencing consumer preferences. Various factors impact consumer behavior, as demonstrated by studies on healthy eating. Health awareness initiatives support dietary changes. Some research underscores the importance of consumer engagement in selecting healthy meals. Shoppers carefully examine safety labels and consider the presence or absence of artificial colors, flavors, chemicals, and pesticides. Individuals embrace mindfulness and preventive measures to enhance their health. Eco-friendly diets focus on nutrient density while reducing harmful ingredients and pesticide residues. Health awareness is crucial for maintaining a nutritious diet. The saying "you are what you eat" has fueled the organic food movement. Regions such as Europe, North America, Australia, and New Zealand champion healthy eating. Consuming nutritious foods contributes to longevity, with both consumers and farmers favoring organic choices. Some companies prioritize healthy products, sharply contrasting with indulgent marketing strategies. They argue that promoting healthy eating through effective industrial practices can help healthy food businesses flourish. Understanding consumer purchasing intentions is essential for marketers to make informed decisions. Insights into consumers' buying plans aid marketers in forecasting inventory, reducing waste, and optimizing costs. Purchase intent is complex, revealing diverse buying behaviors at critical stages of the consumer journey. Marketing analytics heavily relies on understanding purchase intent.

1.2. Research Problem

This study explores the relationship between consumer health knowledge, attitudes, and buying behavior in Egypt's healthy food market. The research will focus on Generation Y customers enrolled in academic institutions with a high rate of healthy consumption. The study aims to determine whether significant differences exist in how consumers buy from one nation to another and how health knowledge influences their attitudes and intentions to make healthy food choices. It addresses a gap in previous research and emphasizes specific consumer behavior regarding health information about healthy products.

1.3. Research Objectives

This dissertation aims to:

- 1- Explore how health awareness influences attitudes toward consuming healthy food products.
- 2- Explore how attitudes towards consuming healthy food products influence the intention to purchase them.
- 3- Explore the mediating effect of attitudes towards healthy food product consumption on the relationship between health awareness and the intention to purchase healthy food products.

1.4. Research Questions

RQ1: Does individuals' health awareness level positively influence their attitudes towards the consumption of healthy food products?

RQ2: Do consumers' attitudes toward healthy food products' consumption influence their purchase intention?

RQ3: Do consumers' attitudes toward healthy food products mediate the relationship between health awareness and the intention to purchase healthy food products?

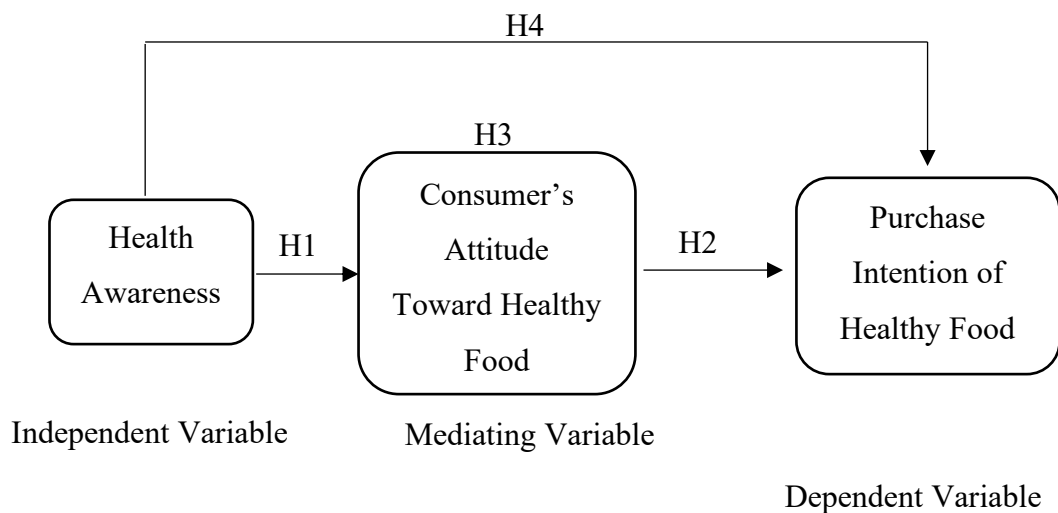
1.5. Research Framework

Based on the literature review presented in the following section and after gathering the different factors affecting customers' attitudes and purchase intentions, the following framework was proposed.

Figure 1

Conceptual Framework

Source (Author, 2023)



1.6. Hypotheses

H1_a: Individuals' health awareness positively influences their attitudes toward healthy food products consumption.

H1_o: Individuals' health awareness does not influence their attitudes toward healthy food products consumption.

H2_a: Consumers' attitudes toward healthy food products consumption influence their intention to purchase healthy food products.

H2_o: Consumers' attitudes toward healthy food products consumption do not influence their intention to purchase healthy food products.

H3_a: Consumers' attitudes toward healthy food products mediate the relationship between health awareness and the intention to purchase healthy food products.

H3_o: Consumers' attitudes toward healthy food products do not mediate the relationship between health awareness and the intention to purchase healthy food products

H4_a: Individuals' health awareness positively influences their intention to purchase healthy food products.

H4_o: Individuals' health awareness does not influence their intention to purchase healthy food products.

2. LITERATURE REVIEW

This chapter examines health awareness and the Theory of Planned Behavior, emphasizing personal traits and marketing tactics. Most prior studies relied on questionnaires, revealing that healthy meal consumption lags behind conventional foods. It discusses health awareness, purchase intentions, consumer attitudes, research variables, and the effects of the COVID-19 pandemic on health knowledge. The goal is to thoroughly understand these subjects and their implications for marketing strategies.

2.1. Health Awareness

Health encompasses the body, mind, microbes, and socioeconomic status. Rising stress levels and chronic illnesses have heightened consumer awareness, encouraging healthier lifestyles. Material possessions and social standing drive health-conscious individuals to adopt better behaviors. Factors such as taste, cost, and nutritional value influence food choices. Psychographic awareness of health predicts health-related behaviors and informs how individuals seek health information. Engaging groups with varied health knowledge can be beneficial. Monitoring health-conscious individuals can enhance health interventions. Those highly aware of their health represent "targets of greatest opportunity" for preventive health practices. Public health initiatives focused on health-aware individuals are more likely to be effective. The perspectives and actions of health-conscious people can positively affect the broader population. Nonetheless, limited research has utilized health awareness, highlighting the necessity for more studies to deepen our understanding and improve health interventions.

2.1.1. Definition of Health Awareness

Health awareness refers to an individual's approach to enhancing their health. Health-conscious shoppers prioritize their well-being by adopting healthy habits and being mindful of their health to improve and maintain their quality of life. Today, many emphasize health in their food choices and overall quality. Engaging in healthy activities and making informed decisions about well-being embody health awareness. Consumers aim to improve their health and quality of life to decrease their risk of illness. Health concerns are the primary motivation for people in both developed and developing countries to choose nutritious foods. As younger consumers learn about healthy habits from their families and educational institutions, they increasingly opt for better meals. Health 2020 is a new health policy framework in Europe that aims to support both government and society in significantly enhancing population health and well-

being, reducing health disparities, strengthening public health infrastructure, and ensuring accessible, sustainable, and high-quality health systems centered around individuals.

2.1.2. Dimensions of Health Awareness

Health awareness, which has several interpretations, has been recognized over the last twenty years as comprising five essential components: adopting healthy habits, being attentive to one's health, pursuing health knowledge, accepting personal responsibility, and having the motivation to improve.

2.1.2.1. Integration of Health Behaviors. Wellness encompasses health knowledge, exercise, personal responsibility, nutrition, and stress management as Slater and Flora (2019) outlined. Individuals who prioritize health recognize risks, engage in physical activity, and manage their nutrition and stress levels. The research focused on personal health responsibility, covering aspects like exercise, consuming nutritious foods, avoiding nitrites and preservatives, and maintaining balanced meals. According to Bloch (1984), a healthy lifestyle involves an individual's commitment to health, which helps minimize health issues and enhance well-being. The food industry's aim to attract customers may have driven innovations in consumer marketing studies. Most research on health awareness centers around dietary and exercise habits. Van Bakergem (2020) described health awareness as the extent to which health concerns influence a person's daily activities. Bollinger (2019) utilized a 6-point Likert scale to measure health awareness across four domains: nutrition, exercise, alcohol consumption, and gambling. Tabacchi (1987) identified four types of health-conscious consumers: those who conform to health norms, those who worry about their weight and health yet resist lifestyle changes, and those who consistently eat healthy foods. He et al. (2021) found that "weight awareness," "health consciousness," and "environmental consciousness" significantly shape the daily routines of Chinese women.

2.1.2.2. Psychological/Inner State. Janetius and Krithika (2021) claim that health awareness is a psychological trait defined by alertness towards health, self-consciousness, active engagement, and self-monitoring. Their research indicates that health awareness positively affects dietary choices, including increased vitamin intake and reduced calories, but does not impact physical activity. High levels of health consciousness correlate with greater discussions about health, reading health magazines, and a willingness to explore alternative medical treatments, along with decreased skepticism towards medical authorities. Kang highlights that health awareness, which centers on an individual's psychological state,

differs from health anxiety or fear of illness. His research, utilizing the Health Awareness Scale, reveals a positive link between health awareness and preventive health behaviors, such as consuming fruits and vegetables and regular exercise. Sakib et al. contrast health awareness with health orientation, emphasizing the latter's focus on health information, attitudes, and healthy practices.

2.1.2.3. Health Information Seeking and Usage. Experts have various definitions for health awareness, emphasizing how individuals obtain health information from the media or other sources. Acikgoz et al. (2022) suggest using media intake to categorize health and enhance predictions of health behavior by integrating media consumption traits with demographics and health evaluations. They also recommend diversifying media usage for improved audience segmentation. Acikgoz et al. (2022) identified audiences as uninformed, autonomous, health-conscious, and health-hazardous. Although lacking formal education, the health-aware group possesses knowledge about health information, engaging in minimal health-related and information-seeking activities. On the other hand, members of the autonomous health cluster actively pursue health information and more readily adopt healthy behaviors. Health awareness is a vital predictor of actions related to health information, including searching for information, learning, and communication. Meanwhile, health-conscious individuals prefer newspapers, journals, the internet, and personal networks for health information, process it more effectively, and integrate it into their behaviors.

2.1.2.4. Personal Responsibility. Research indicates that people with a solid grasp of their health are more inclined to take charge of their medical care and independently select their treatments. According to Kraft and Goodell (1993), health awareness is one of four key elements of health comprehension. Dutta-Bergman (2004) suggested that health-aware individuals tend to assume responsibility for their health, engage in behaviors that protect and maintain their well-being, and actively join both online and offline health communities.

2.1.2.5. Health Motivation. Prior research has examined how health motivation encourages preventive health behaviors. It represents a purposeful drive to participate in actions such as acquiring and maintaining health information. Gillison et al. (2019) stated that historically, health motivation was a stable psychological trait. Dutta-Bergman (2004) emphasized its significance in fostering health awareness, which reflects individuals' attitudes towards their health and wellness. Health awareness pertains to a

person's intrinsic motivation to uphold good health. Teixeira et al. (2020) distinguished health awareness from health motivation, asserting that health motivation is an internal characteristic while health awareness manifests externally in efforts to maintain good health. They also separated health value from health motivation, defining health value as the individual's assessment of the benefits compared to the costs associated with preventive healthcare actions. Their research assessed health value by evaluating the significance of specific benefits.

2.1.3. Segmentation of Health-Aware Consumers

For years, marketers have categorized customers based on their emotions, judgments, and beliefs. The health belief model was developed to explain the timing and reasoning behind individuals' engagement in remedial actions. Marketing researchers have customized health therapies to align with individual habits and attitudes. Lee (2021) investigated the extended health belief model, which incorporates demographics, perceptions, beliefs, and behaviors to encourage proactive preventive health measures. This approach aids in designing effective preventive health interventions. Further research indicates that health motivation, capability, and demographics influence consumer behaviors related to preventive health. Utilizing qualitative interviews, Lemmen et al. (2021) identified six market segments defined by individual perceptions of a product's risks and benefits and their likelihood of seeking preventive medical services. Olga et al. (2019) examined demographic information and attitudes toward medical treatment to delineate the "fitness" market into three submarkets. No conceptual framework has proven comprehensive and broadly applicable for defining and categorizing health-focused market segments. To address this, Pender et al. (1990) developed the Health Promotion Model (HPM), which synthesizes explanatory factors from previous health research into a cohesive framework that is accessible to both scholars and practitioners. The Health Promotion Model assists marketers in targeting customer-friendly market segments and refining marketing strategies. Health Preventive Management (HPM) prioritizes health promotion over disease treatment, categorizing potential customers into segments such as food industry workers and tailoring marketing efforts towards health-conscious consumers. The markets for healthy eating and drinking encompass various interpretations of a healthy lifestyle, shaped by culture, ethics, politics, and identity. Research from HMT and Lund University identifies healthy believers as falling into four categories: self-actualization, ethics, science,

and tradition. This framework enhances the comprehensiveness and proactive nature of health care.

2.2. Purchase Intentions

The reasonable behavior model is a theoretical framework that examines customer intent when making purchases. It highlights the consumer's inclination toward buying and their readiness to pay, which are essential indicators of purchasing behavior.

2.2.1. Customer Purchasing Journey

The customer journey encompasses all customer and company interactions throughout the purchasing process. This journey includes multiple stages, beginning with acknowledging the need for a product or service, followed by the transaction and post-sale aspects. For relationship customers, this experience is typically more cyclical than linear. Companies must grasp the four key stages to effectively map a customer journey and ensure that every team member aligns with the company's goals to deliver a cohesive customer experience.

2.2.1.1. Stage 1: Awareness or Need Recognition. The initial phase of the customer journey, termed "awareness," occurs when a customer identifies the need to buy a product, like a sofa, which lacks the desired aesthetic or functionality. This phase is vital for initial exploration and "needs recognition." Need recognition refers to the economic concept of realizing and confronting an issue before looking for a solution.

2.2.1.2. Stage 2: Interest or Search. Before purchasing, consumers explore and gather information about various products and services available in the market. They rely on multiple sources of information, including websites, catalogs, and discussions with friends and family. Marketing efforts, such as advertising and brand recognition, consider customer needs.

2.2.1.3. Stage 3: Desire. Once the buyer has gathered enough information to make a purchasing decision, they can explore the various alternatives to the available product. At this point, a customer's intent to purchase is more solidified, and a marketer would be eager to understand if customers are contemplating buying from them.

2.2.1.4. Stage 4: Action. The customer journey involves both immediate and delayed purchases of a product. Nevertheless, studies indicate that consumers often diverge from their initial intentions due to various circumstances. Therefore, marketers should gather

data on customers' purchasing decisions, including anticipated expenditures, to better align with their preferences and enable informed choices.

2.2.2. Factors Affecting Purchase Intentions of Healthy Food

Pricing, consumer perceptions of product quality, and internal motivations play significant roles in the purchasing process. Low-cost, low-quality products may be viewed as risky due to a lack of trust in the associated brands. Recently, there has been a shift towards healthier food choices, driven by health concerns, rising obesity rates, and various health conditions. A better understanding of nutrition, along with an increasing number of young individuals facing health challenges, promotes healthier eating habits. Consuming nutritious foods is essential for maintaining a balanced and healthy lifestyle. Young consumers are willing to utilize dietary supplements and pay higher prices for nutrient-rich products. A diverse selection of healthy foods can improve overall well-being.

2.2.2.1. Brand Name. The name and logo of a brand play vital roles in establishing a positive image and sustaining market share. A dedicated customer base is key to a company's profitability and expansion. Research indicates a significant link between brand equity and customer loyalty.

2.2.2.2. Ingredient Awareness. Consumers need to understand functional food components and ingredients to grasp nutrition. Recognizing the health benefits of antioxidants and their illness-preventing properties hinges on this knowledge. Awareness of functional meal elements influences customer attitudes and purchasing decisions, as functional meals can offer health-promoting substances. The success of chemical-based products depends largely on customer awareness. Having a basic familiarity with specific components and food sources of vital nutrients, such as dietary fiber, constitutes ingredient awareness, not full nutritional knowledge. Over the past decade, the industry has introduced new functional food components, including vitamins, minerals, antioxidants, probiotics, and phytosterols. Scientific research and consumer awareness have made these elements prominent. Newly discovered functional food additives like probiotics and phytosterols hold promise for enhancing nutrition and health.

2.2.2.3. Availability. The accessibility of food is vital to food security, emphasizing the presence of nutritious options in various contexts. The presence and reputation of food vendors play significant roles in food availability, with research often

highlighting the quality of the products offered. In the US, initiatives aimed at enhancing food security and promoting healthy eating tend to concentrate on the accessibility of grocery stores. A food desert is defined as a low-income area where the poverty rate is at least 20% and residents live over one mile away from a large grocery store or supermarket. The scarcity of full-service grocery stores and the prevalence of convenience stores and fast-food outlets limit access to healthy food choices. Food accessibility is essential for consumers, as the density of grocery stores in the vicinity directly impacts the variety of shopping options. Nevertheless, factors related to supply, such as the sheer number of food retailers, have been given undue importance.

2.2.2.4. Perceived Quality. The way customers view a product or service's premium value is termed perceived quality. Publicly held brand perceptions indicate that while high quality can affect competition, it doesn't always have a negative impact. Product quality influences purchasing decisions, with researchers discovering that customers are more inclined to purchase a product if they perceive its quality has risen. Brand quality significantly affects sales. This study aims to segment consumers and explore their motivations regarding food choices through both offline and online surveys. To facilitate this, we sampled 531 Italians. Using K-means cluster analysis, clients are categorized based on the six primary factors influencing meal choice. Research indicates that Italians prioritize health and environmental concerns when buying food. Consumers express a strong interest in both the health and emotional aspects of their food choices. There is a promising market for sustainable, low-packaging food products, and respondents demonstrate awareness of what constitutes a healthy diet.

2.2.2.5. Packaging. Packaging now embodies the maker, transmitting promotional messages, motivating consumer purchases, and communicating the business slogan. Effective packaging enables companies to distinguish themselves from rivals and enhances sales. An aesthetically appealing presentation is essential for food purchases, since it influences the customer's mindset and direct connection with the product. Research indicates that the visual and practical attributes of food packaging substantially influence consumers' purchasing decisions, brand loyalty, and, ultimately, the choice to buy. Consequently, effective packaging is crucial for contemporary companies to distinguish themselves and enhance sales.

2.2.2.6. Price. The price of a product or service must be justified. Prolonged brand allegiance enhances commercial success. Brand, price, and many product features influence client happiness. The price and perceived equity influence client purchases both directly and indirectly. The price affects brand loyalty and purchasing decisions. The prices of nutritious food reflect consumer expenditure. Nutritious foods incur higher expenses, increasing consumer expenditures. Consumers are willing to pay a premium when they perceive a product's price to be commensurate with its quality. Although the prices of healthy products impact household finances, frequent healthy consumers report increased prices less frequently than infrequent healthy consumers. As customers increase their purchases, acquire knowledge, and establish healthy eating as a lifelong practice, the expense of nutritious food diminishes. Discounts on health products entice both new and non-purchasers. Healthful items will be marketed to existing customers. Nam (2020) states that "price elasticity of demand" influences the purchasing behavior of healthy foods. The demand for healthy food is inelastic, hence minor price reductions have a limited impact on demand.

2.2.2.7. Advertising. Advertising is an essential marketing tactic that enhances potential customers' knowledge of a product prior to purchase. It constitutes a component of the "promotion mix," which includes product, pricing, distribution, and marketing. Advertising can build emotional ties between a firm and its target audience, resulting in a favorable response and an enhanced probability of positive product evaluation. Advertising has the capacity to inform and influence consumer behavior, as evidenced by study conducted in Malaysia.

2.2.3. Purchase Intention Theories

2.2.3.1. Theory of reasoned action (TRA) and theory of planned behavior (TPB). TPB was established in 1991, while TRA was founded in 1975. Evolution altered self-identity and behavior. Subsequent to the incorporation of TRA/TPB, social identity theory, human values, and associated ideas were revised. Both theories forecast commercial, health, medical, and internet consumer behavior. Theories of Reasoned Action (TRA) and Planned conduct (TPB) assert that will, beliefs, and subjective norms, such as peer pressure, significantly impact conduct. A revised TRA incorporating factors indicates that experience, intention status over time, and requisite abilities influence the indirect link between intention and conduct. According to the Theory of Planned Behavior (TPB), the intention to act influences behavior. This conduct is influenced by attitudes, subjective norms, and behavioral

regulation. Behavioral purpose refers to an individual's cognitive and actual actions aimed at resolving uncertainties, whereas subjective norm pertains to their preferences. Research indicates that an optimistic perspective on mobile marketing enhances success. Planning Behavior Theory (TPB) supplants Reasoned Activity Theory (TRA) by integrating behavioral control with achievement. Individuals with greater confidence take action. Presumes adequate resources and decision-making authority. The Theory of Planned Behavior associates actions with hypothetical scenarios, and opinions differ. Online buying is driven by social affiliation and enthusiasm for the internet. Comprehending overseas consumers and the limits of TRA/TPB necessitates further investigation.

2.2.3.2. Technology Acceptance Model (TAM). The Unique Technologies Acceptance Model (TAM) assesses the acceptance of novel technologies. Usability and utility assess the uptake of online consumer technology. Value, usefulness, and behavior can forecast technology adoption. PU refers to the perceived utility of a solution, PEOU denotes the user's assessment of technological ease, and intention influences technology utilization. The well recognized Technology Acceptance Model (TAM) elucidates the factors that increase the likelihood of potential customers adopting a technology. Individuals with TAM exhibit technological proficiency and creativity. Society gains advantages from the evaluation of mobile commerce penetration. The basic Technology Acceptance Model overlooks the influence of peer pressure, subjective norms, and behavioral control. Experience, motivation, and fun render TAM profound. E-commerce research employs the Technology Acceptance Model (TAM) to assess customer uptake. Research indicates that perceived usefulness (PU) and perceived ease of use (PEOU) of an online user interface enhance users' attitudes towards online purchasing and e-commerce. Perceived Ease of Use (PEOU) improves online buying experiences. Subjective norms directly influence e-commerce attitudes while indirectly impacting intents. Individuals that are proficient in online environments and possess the requisite skills, resources, and capabilities frequently engage in online purchasing. Others have examined subjective standards or group pressure in other contexts. Transactional Analysis of Motives, Relationships, and Conduct analyzes objectives and behaviors. They evaluate the context and components of each circumstance.

2.2.3.3. Big 5 Traits Theory. Personality factors significantly influence user behavior and the formation of online habits. The Big Five theory, emphasizing five personality qualities, posits that an individual's beliefs, attitudes, and behaviors influence

their online conduct. This theory is extensively utilized in personality research, as it precisely represents the structure of traits and is endorsed by the field of psychology. The Five Factor Model is extensively employed to evaluate personality by examining each of these traits. It facilitates online engagement between businesses and consumers while delivering quality products and services. Nonetheless, a direct correlation between mobile advertising and consumer behavior is absent, necessitating additional investigation in this domain.

2.3. Consumers' Attitudes Toward Healthy Food Products

An individual's thoughts, emotions, and behaviors regarding a topic, person, object, institution, or event are referred to as attitude. Its value may be positive or negative, contingent upon cultural context and upbringing. Television and various other elements affect an individual's mood. The collective cognitive training of humans, culture, can differentiate groups. Attitudes are psychological predispositions to favor or disfavor. Positive and negative emotions can coexist for the same subject. Attitude and object response dictate behavior. Historical and contemporary factors shape disposition. Can modify. Attitude encompasses cognition, conduct, and affect. Behavior refers to observable acts, affect pertains to emotional responses, and cognition encompasses thoughts, beliefs, knowledge, and perceptions. Positive and negative thoughts and attitudes can become detrimental. Comprehending attitudes is essential for grasping behavior. Psychologists have produced numerous models and hypotheses to comprehend consumer and purchase behavior. Notable models encompass tri-component attitude, hierarchy of effects, object attitude, behavior, reasoned action, and planned behavior. Consumer attitude is founded on cognition, affect, and conation. Consumer perceptions arise from direct interactions with the attitude object and several sources. The emotional influence of a product or brand on consumer behavior. Brand assessment reveals customer inclination, facilitating the examination of attitudes. Conatives highlight consumers' purchasing intentions and actions. Sun (2020) contends that customers' ideas and assessments on products need not alter in order to establish a purchase intention, particularly when the economic incentive is substantial. The behavioral intention of the target audience is the most reliable predictor of their purchasing behavior and should be taken into account when formulating a marketing strategy.

2.3.1. Factors Affecting Consumers Attitudes Toward Healthy Food

In response to media focus on health issues, consumers are increasingly prioritizing health and striving for enhanced quality of life. Factors enhance the demand and sales of nutritious foods. Nonetheless, the market for nutritious food remains nascent. Comprehending customer perceptions of nutritious food is essential for marketing and promotion. The adverse implications of inhibiting variables should be mitigated. The discourse will concentrate on the psychological transformation customers are undergoing and the elements influencing this change.

2.3.2.1. Health Awareness and Expectations of Well-being. A Malaysian poll identified health concerns, quality, and flavor as the primary factors influencing customers' purchases of organic food. Health consciousness is correlated with the acquisition of organic food. Research conducted in Italy and the United States has consistently demonstrated that consumers prioritize their well-being while acquiring organic food. Consumers favor diets abundant in minerals and micronutrients.

2.3.2.2. Quality and Safety. The increase in organic food consumption is chiefly attributed to apprehensions regarding food safety and the desire to evade detrimental substances such as pesticides and agricultural preservatives. The increase in foodborne illnesses such as avian influenza and bovine spongiform encephalopathy has underscored the significance of secure food products. Healthcare professionals, academic institutions, and governmental agencies collaborate to enhance food safety.

2.3.2.3. Environmental Friendliness and Ethical Consumerism. Consumers' perceptions of the environment have transformed in response to growing ethical apprehensions. Cultural norms and environmental issues shape human behavior, fostering a favorable disposition towards the environment. This transition has generated environmentally sustainable products, including organic food, in industrialized nations such as the United States and Germany. Apprehensions regarding the application of pesticides and chemicals in agriculture are widespread, especially in nations such as Canada, the United States, China, and India. Ethical consumerism, a branch of consumer activism, promotes ecologically sustainable purchasing to meet ethical obligations. Brands utilizing less detrimental materials and procedures may enhance consumers' perceptions of their product.

2.3.2.4. Willingness to Pay. Consumers in the United States, China, Japan, and India are prepared to pay a premium for products that offer social advantages. Concerns regarding quality of life and environmental conditions impact purchase choices. Fear, apprehension regarding risks, and unease may result in more prudent lifestyles. The rising popularity of healthier foods may stem from heightened knowledge of environmental contamination and concerns regarding allergies.

2.3.2.5. Price and Certification. Organic food encounters obstacles include insufficient awareness, inadequate financial viability, and elevated costs. Nonetheless, these may also offer prospects for advancement. Agricultural producers can broaden their clientele by enhancing supply distribution networks and obtaining governmental accreditation. Certification enables consumers to make informed decisions and fosters trust. Focusing on middle-income and upper-income consumers is essential for promoting healthy food consumption. Agricultural producers ought to concentrate on the local market and enhance consumption among individuals who value the beneficial attributes of nutritious food.

2.3.2.6. Fashion Trends and Unique Lifestyle. Certain meals are consumed as an indication of social status. The provision of costly and distinctive nutrient-dense dietary options has recently become the foremost trend among the elite in many nations. It indicates customers' purchasing capacity and affluent lifestyle, with a greater share of their income available for expenditure. These customers are predisposed to own elevated incomes.

2.3.2.7. Social Consciousness. Shopping behaviors, media engagement, and creativity can affect personality. Certain customers exhibit concern for societal welfare, resulting in apprehension around dietary selections and health-related choices. Eostre Organics discovered that 65.2% of participants desired to bolster local economies and communities, thereby fostering sustainable consumerism and ecological citizenship. The social environment can affect attitudes, emotions, and behaviors, promoting healthier dietary selections and societal transformation.

2.4. Relationship Between Health Awareness, Consumer's Attitude and Purchase Intention

Health awareness is a psychological inclination that encourages consumers to engage in health-promoting activities. The proliferation of healthcare enterprises, together rising life expectancy and economic levels, has led to an increase in the number of individuals prioritizing

their health. Health-conscious individuals focus their well-being by participating in advantageous activities, such as consuming nutritious foods. Increased health awareness can promote preventive healthcare, foster favorable attitudes towards nutritious meals, and enhance the inclination to obtain health-related products. In contrast, consumers with lower health awareness are less inclined to participate in advantageous activities and are more prone to select detrimental diets. The decision-making process for purchases is intricate, and customers' understanding of their health significantly influences their propensity to purchase healthy food items. Gould's health awareness scale comprises four subscales, and variations in attitudes are essential for assessing total engagement in health awareness. Empirical research indicates that health awareness markedly affects customers' intentions about the purchase and consumption of goods and services. Nonetheless, there is no evidence to substantiate the premise that consumers with heightened health knowledge are more inclined to acquire healthy products.

2.5. Health Awareness During COVID-19 Pandemic

Fictional narrative The COVID-19 pandemic poses a significant threat to global health. The WHO designated the outbreak a global public health emergency owing to its health hazards. In disaster preparedness and community resilience, fortitude is essential. Psychological and behavioral strategies enhance resilience and public health amid COVID-19. Inadequate nutrition might adversely affect long-term health and resilience. Nutrition and immune function are critical for combating viral infections; insufficient calories, protein, and micronutrients diminish immunity and elevate the risk of infection. Numerous national lockdowns have augmented food availability and consumption. Lockdowns impact food supply and consumption. Isolation may impact nutrition and physical activity. Indolence, lack of movement, and erratic eating habits can adversely affect both mental and physical well-being. The COVID-19 pandemic has complicated the pursuit of good eating. Resilience and illness prevention necessitate psychological and behavioral interventions, fundamental management principles, and the avoidance of important dietary deficiencies. The COVID-19 pandemic has induced stress, anguish, and emotional disorders, altering dietary habits. Research indicates that suboptimal diet quality and poor dietary patterns are associated with distress. A five-factor model of emotions and diet posits that stress and intensified emotions might alter food consumption as a "natural" reaction. Communities require fruits, vegetables, physical activity, a healthy weight, and adequate sleep. They also prevent hazardous nutritional and pandemic misconceptions. Nutrition guidelines during the pandemic advocated for a balanced diet to avert chronic diseases and infections. The WHO promulgated more stringent nutrition rules in

response to the epidemic, cautioning against inadequate diets and obesity. The pandemic has altered food consumer behavior, heightening the demand for diet and health information. Nutritional education aids consumers in comprehending weight management and caloric consumption.

3. RESEARCH METHODOLOGY

3.1. Research Philosophy

Research philosophy is essential to comprehending the research process, including assumptions, prior knowledge, and the extent of inquiry. It aids researchers in comprehending their assumptions and the categories of information accessible. The research philosophy underpins the research plan and is linked to multiple academic disciplines. This inquiry employed a positivist philosophical approach, emphasizing the collection and interpretation of quantifiable facts. This methodology corresponds with the empiricist notion that knowledge arises from human experience and is founded on an atomistic and ontological perspective of reality.

3.2. Research Approach

Sekaran and Bougie (2009) proposed that research may be executed through inductive and deductive methodologies. Inductive studies emphasize empirical evidence and the identification of novel patterns, whereas deductive studies ascertain the existence of a theory, generate hypotheses, and evaluate them in an appropriate context. This dissertation employs a systematic technique grounded in a literature review to formulate hypotheses derived from the findings.

3.3. Research Method

Qualitative research emphasizes comprehending the underlying and contributing components of specific situations, employing intricate scenarios and gathering data through unstructured or semi-structured methodologies such as personal interviews, focus groups, and observations. Quantitative research is characterized by its structured and controlled approach, emphasizing quantifying behaviors, attitudes, and views to derive quantitative and statistical outcomes. Qualitative research seeks to elucidate the underlying reasons behind phenomena and assess the transferability of its results to alternative contexts. The deductive technique is more appropriate for quantitative research, whereas the inductive method is typically associated with qualitative research. This dissertation employs a quantitative research methodology due to its alignment with a deductive research strategy.

3.4. Research Strategy

Survey research encompasses three principal methodologies: interviews, surveys, and direct observations conducted in person and on-site. Both in-person and online surveys are frequently employed, with interviews containing analogous questions and surveys administered in person, via telephone, or online. Surveys provide benefits, including reduced expenses and streamlined management. Interviews and observations were omitted owing to time limitations and the requirement for numerous responses. A survey was selected for this investigation because of its appropriateness and benefits, facilitating a more precise and representative conclusion.

3.5. Time Horizon

One-shot or cross-sectional studies collect data at a single point in time throughout days, weeks, or months. These studies may be longitudinal, examining a group's behavior before and after alteration, employing a cross-sectional temporal approach. These studies seek to address research questions by analyzing several timeframes.

3.6. Research Instrument

Sekaran and Bougie (2009) distinguished between primary and secondary sources of information. This research employed primary data for its empirical investigation. The research instrument comprised three sections: an introduction, demographic information, and multiple-choice questions utilizing a 7-point Likert scale. The scale was derived from multiple validated instruments assessing health awareness, attitudes, and consumer purchasing intentions.

3.7. Sampling Design

A population is a collective of individuals or occurrences that researchers examine. A sample is a representative segment of the population, and in this study, Egyptian students served as the sample. A study employs either probability or non-probability sampling, utilizing probability sampling where time or other constraints are critical. A probabilistic quota sample was obtained from Egyptian students, whilst a quota sample was derived from the overall population.

3.8. Data Analysis

The exploratory study utilized SPSS v27 software to analyze self-administered questionnaires. The survey was sent to respondents using Google Forms, allowing easy data collection and presentation.

3.9. Pilot Study

A self-administered questionnaire was disseminated to Egyptian university students, with 30 individuals participating in a pilot study. The questionnaire was refined through testing on a sample of respondents, comprising 70% males and 30% females. The pilot research data was examined for reliability and internal consistency.

4. RESEARCH FINDINGS AND DISCUSSION

4.1. Validity Testing

Two measurement instruments were chosen to validate the scale which are EFA using the Varimax rotation, and the Cronbach's Alpha.

4.3.1. Exploratory Factor Analysis

An EFA was conducted using principal component analysis and varimax rotation, with a minimum factor loading criteria of 0.50. The scale's commonality was assessed, and three factors were identified, accounting for 87% of data variation. Factor 1 represents attitude, Factor 2 refers to health awareness, and Factor 3 is purchasing intention. Respondents understood the questions, indicating an 87% relevance of the research. .

4.3.2. Reliability Analysis

The study's variables were assessed using Cronbach's Alpha, with Cronbach's Alpha values exceeding the required cut-off point of 0.7. The health awareness, attitude, and purchase intention scales showed high reliability and internal consistency, with values exceeding the required cut-off point. .

4.2. Descriptive Analysis

The survey surveyed 68.4% males and 31.6% females, with a majority aged 18-25. The data was analyzed using minimum, maximum, mean, and standard deviation to measure the distribution of health awareness and attitude toward healthy food products. The results showed that health awareness had a minimum score of 5.67, while attitude towards healthy products had a mean score of 6.91. Purchase intention of sustainable products had a minimum score of six and a mean score of 6.97. These results support the high range of responses in the Likert scale.

4.3. Hypothesis Testing

4.3.1. Correlation Analysis

The Pearson Correlation Coefficient was used to analyze the relationship between health awareness, attitudes towards healthy products, and purchase intention of sustainable

products. Results showed a strong moderate positive correlation between these variables, indicating that higher health awareness leads to more favorable attitudes towards healthy products. Additionally, a moderate significant positive correlation was found between health awareness and purchase intention of sustainable products, indicating that higher health awareness leads to higher purchase intentions. The Pearson Correlation Coefficient provides valuable insights into the relationship between health awareness, attitudes, and purchase intention.

4.3.2. Simple Regression Analysis

As correlation analysis is a prerequisite for regression analysis, the following regression analysis was conducted for the correlated variables.

4.3.2.1. Regression 1. Linear regression was performed to assess how much variance in purchase intention is explained by health awareness. The one-way ANOVA table showed that the model is significant ($p=.00$). The model summary table showed that 18% of the variance in purchase intention is explained by health awareness. Health awareness variables make a significant unique contribution to the purchase intention of healthy products ($\text{Beta}=.42, p=.00$). Hence, H_{4a} (Individuals' health awareness positively influences their intention to purchase healthy food products) is accepted.

4.3.2.2. Regression 2. Linear regression was performed to assess how much variance in purchase intention is explained by attitudes. The one-way ANOVA table showed that the model is significant ($p=.00$). The model summary table showed that attitudes explain 33% of the variance in purchase intention. The attitudes variable is making a significant unique contribution to the purchase intention of sustainable products ($\text{Beta}=.57, p=.00$). Hence, H_{2a} (Consumers' attitudes toward healthy food products consumption influence their intention to purchase healthy food products) is accepted.

4.3.2.3. Regression 3. Linear regression was performed to assess how much variance in attitudes is explained by health awareness. The one-way ANOVA table showed that the model is significant ($p=.00$). The model summary table showed that 13% of the variance in attitudes is explained by health awareness. Health awareness variables make a significant unique contribution to the attitudes toward healthy products ($\text{Beta}=.36, p=.00$). Hence, H_{1a} (Individuals' health awareness level positively influences their attitudes toward healthy food products consumption) is accepted.

4.3.3. VIF (Collinearity Statistics)

VIF test was conducted to detect any multicollinearity between the variables. Both have a Tolerance value of 0.866, which is quite high, indicating that multicollinearity is not a problem for these variables. The VIF for both variables is 1.155, which is very close to 1, further confirming that there is no significant multicollinearity in the model. Thus, the independent variables HA and A are not highly correlated with each other, and the model does not suffer from multicollinearity issues.

4.3.4. Mediation Analysis

4.3.4.1. Hierarchical Regression. The study investigates the relationship between health awareness and purchase intentions of healthy products. The results show that adding attitudes to the model improves the explanation of purchase intention variance. Health awareness has a significant positive relationship with purchase intention, while attitudes partially mediate the relationship. The mediation analysis suggests that health awareness influences purchase intention both directly and indirectly through its impact on attitudes. Therefore, the hypothesis (H3a) is accepted, indicating that consumers' attitudes toward healthy food products mediate the relationship between health awareness and purchase intention.

4.3.4.2. Homoscedasticity Test. The study examines the relationship between Health Awareness (HA), Attitude (A), and Purchase Intention (PI). The results show that both HA and attitude significantly predict attitude, explaining 13.42% of the variance in attitude. For each unit increase in HA, attitude is expected to increase by 0.2811 units. For purchase intention, both HA and attitude significantly predict purchase intention, explaining 38.57% of the variance. The direct effect of HA on purchase intention is significant, while the indirect effect via attitude is also significant. Attitude partially mediates the relationship between health awareness and purchase intention, confirming the hypothesis that consumers' attitudes toward healthy food products mediate the relationship between health awareness and purchase intention.

The second part of this chapter explains the dissertation's case study.

4.4. Case Study Selection

The study examined Generation Y students at Egyptian colleges, utilizing self-administered questionnaires from 350 students across public and private universities. To incorporate a greater percentage of private students, a case study was performed at a German university in Cairo. The study sought to equilibrate the sample and enhance comprehension of the subject, given that other universities experienced rejections or no replies.

4.5. Case Study Background

The German University in Cairo (GUC) is a private institution in Egypt that engages in innovative research, advances new therapies, prevention techniques, and health policies, and disseminates evidence-based information to enhance awareness of health issues. It engages local communities and organizations to execute health education initiatives, enabling individuals to take charge of their health and effectively make good changes.

4.6. Case Study Methodology

The study employed primary data, firsthand knowledge gathered by a researcher, to address a research issue. A systematic interview was performed on GUC's campus, concentrating on demographics and research characteristics. The research design was selected because of the significant interplay between theoretical data and practical procedures. The interview segment focused on consolidated inquiries posed. The sample comprised 98 respondents, with a gender distribution of 66.3% females and 33.7% males. The age distribution comprised 10.2% under 18 and 89.8% aged 18 to 25.

4.7. Case Study Results

The study employed descriptive analysis to assess the dispersion of a dataset in relation to its mean regarding health awareness and attitudes toward healthy food products. The findings demonstrated that each independent variable influenced attitudes towards healthy food products and purchase intentions. The average score for health awareness was 1, with a maximum score of 7 and an average score of 6.50. The average score for attitudes towards healthy items was 1, with a maximum score of 7 and a mean value of 6.54. The Pearson correlation coefficient was employed to analyze the association between health awareness and attitudes toward healthy products, revealing a robust positive correlation. This indicates that

increased health awareness results in more positive views towards healthy items and greater purchasing intentions. The study underscores the significance of health information and attitudes in influencing customer behavior regarding healthy food products.

4.8. Discussion

This study examines the role of attitude as a mediator in the relationship between health knowledge and the intentions of young customers to purchase healthy foods. Data from university students were gathered using surveys and statistical techniques. The results indicate that a positive perspective and understanding of one's health influence behavior and attitudes toward nutritious food products. A positive correlation exists between attitude and the intention to purchase healthier food choices. The study revealed a strong positive correlation between health awareness and attitudes toward healthy items, purchasing intentions, and perceptions of healthy products. Linear and hierarchical regression analyses demonstrated that attitudes fully moderate the link between health awareness and the intention to purchase healthy food products. The findings align with prior studies, suggesting that increased health awareness can promote preventive healthcare, positive attitudes toward nutritious diets, and the tendency to acquire health-related products. Individuals who prioritize their health are more likely to purchase nutrient-dense food products compared to those that are nutrient-poor. This indicates that consumers' health consciousness significantly impacts their intentions regarding the purchase and consumption of goods and services.

The sample utilized in the thesis was somewhat small due to time constraints. A limited sample size may affect the data. Although considerable efforts have been made to identify an appropriate sample for testing, an increased number of observations would significantly enhance the research. It is important to note that all polled respondents are university students, who are expected to possess greater health knowledge than other generations. The main limitation is that numerous students declined to participate in the survey, a situation that may be improved in the future by administering the poll through the institutions themselves to achieve higher response rates. The research indicates that marketers need to integrate the health benefits of nutritious foods into their marketing strategies to increase purchasing frequency among young consumers. This involves presenting evidence of their positive effects on health, ensuring the clarity of labeling and media, and informing consumers about the advantages of nutritious foods compared to conventional options. Educational activities can facilitate a shift in attitudes regarding the environment and promote healthier dietary choices. Presentations by

celebrities or industry experts could aid in disseminating knowledge about healthy food production and consumption. Addressing non-communicable diseases and improving access to and affordability of nutritious foods can encourage consumers to choose healthier alternatives.

Despite numerous significant contributions to this work, it has several shortcomings that additional scholars should strive to address. This study's conclusions only evaluate participants' intentions to purchase healthy foods, without measuring their actual shopping behavior. Previous research has shown a strong correlation between an individual's intentions and their subsequent actions. Consequently, consumer purchasing behavior and aspirations could be incorporated into future research efforts. Another limitation of this study is its focus on customers in Egypt; future research should include samples from diverse cultures to examine this phenomenon more thoroughly. The mediating role of attitude has been examined; however, future studies could incorporate additional mediators, including food involvement, perceived value, gender, and socioeconomic status.

5. CONCLUSION

This study examines the complex interplay between health knowledge, consumer attitudes, and purchasing intentions for healthy food among university students in Egypt, providing detailed insights into consumer behavior within a changing market framework. Utilizing the Theory of Planned Behavior and substantial quantitative evidence, the study confirms that health awareness significantly impacts consumer attitudes, influencing the intention to purchase healthy food products. The results demonstrate that attitude serves as a complete mediator in the connection between health knowledge and purchasing intention. This underscores the psychological mechanism by which health knowledge is assimilated and converted into behavioral intention. In essence, individuals aware of health concerns do not inherently choose healthy food; instead, it is the cultivation of favorable attitudes—anchored in understanding and conviction—that ultimately influences their purchasing behavior.

This discovery holds significant ramifications for marketers, policymakers, and educators. Marketers must focus on highlighting the functional advantages of healthy eating while also shaping attitudes through emotionally impactful and cognitively convincing communication. Educational initiatives aimed at improving health awareness should be structured to cultivate positive attitudes by linking health knowledge with daily decisions and personal identity. Similarly, public health treatments must align with the values and concerns of Generation Y consumers, who show a notable receptiveness to themes of wellness, sustainability, and personal accountability. The research theoretically enhances the existing literature supporting the mediating role of attitudes in health-related consumer behavior. It also substantiates the applicability of known psychological frameworks, such as the Theory of Planned Behavior, in non-Western settings.

This study emphasizes the necessity of a comprehensive approach to encouraging healthy eating habits, which includes awareness campaigns, affordability measures, and policy reforms to enhance accessibility and transparency in the health food market. Subsequent research may improve this study by broadening the demographic range, employing longitudinal methodologies, or including other mediating variables such as subjective norms or perceived behavioral control. In conclusion, health awareness is not solely an objective but a vital catalyst of consumer attitudes that ultimately influence market behavior. For stakeholders aiming to promote healthier societies, understanding and utilizing this psychological pathway is imperative.

REFERENCES

- Acikgoz, F., Filieri, R., & Yan, M. (2022). Psychological predictors of intention to use fitness apps: The role of subjective knowledge and innovativeness. *International Journal of Human-Computer Interaction*, 1-13.
- Bloch, P. H. (1984). The wellness movement: imperatives for health care marketers. *Journal of Health Care Marketing*, 4(1).
- Bollinger, B. J. (2019). *Stand, Speak, Act: Using the Theory of Planned Behavior to evaluate a sexual assault bystander intervention campaign on a tri-campus university* (Doctoral dissertation).
- Dutta-Bergman, M. J. (2004). Primary sources of health information: Comparisons in the domain of health attitudes, health cognitions, and health behaviors. *Health Communication*, 16(3), 273-288.
- Gillison, F. B., Rouse, P., Standage, M., Sebire, S. J., & Ryan, R. M. (2019). A meta-analysis of techniques to promote motivation for health behavior change from a self-determination theory perspective. *Health Psychology Review*, 13(1), 110-130.
- He, M., Xian, Y., Lv, X., He, J., & Ren, Y. (2021). Changes in body weight, physical activity, and lifestyle during the semi-lockdown period after the outbreak of COVID-19 in China: an online survey. *Disaster medicine and public health preparedness*, 15(2), e23-e28.
- Janetius, S. T., & Krithika, S. (2020). Health consciousness and health knowledge among yoga enthusiasts during COVID-19 pandemic 2020: a qualitative analysis. *International Journal of Health Sciences and Research*, 5(4).
- Kraft, F. B., & Goodell, P. W. (1993). Identifying the health-conscious consumer. *Marketing Health Services*, 13(3), 18.
- Lee, J. W. (2021). Covid-19 Preventive action Intention Determinants-Focused on the Expanded Health Belief Model. *Annals of the Romanian Society for Cell Biology*, 1425-1432.
- Lemmen, C., Simic, D., & Stock, S. (2021). A vision of future healthcare: potential opportunities and risks of systems medicine from a citizen and patient perspective: Results of a qualitative study. *International Journal of Environmental Research and Public Health*, 18(18), 9879.

- Nam, S. J. (2020). Moderating effects of consumer empowerment on the relationship between involvement in eco-friendly food and eco-friendly food behavior. *International Journal of Consumer Studies*, 44(4), 297-305.
- Olga, K. A., Oksana, Y. U., Julia, S. N., & Veronika, S. G. (2019). Consumer behavior on the Russian wellness market: Results of empirical study. *Academy of Strategic Management Journal*, 18(6), 1-15.
- Pender, N. J., Walker, S. N., Sechrist, K. R., & Frank-Stromborg, M. (1990). Predicting health-promoting lifestyles in the workplace. *Nursing Research*, 39(6), 326–332.
- Sánchez-Bravo, P., Chambers, E., Noguera-Artiaga, L., Sendra, E., Chambers IV, E., & Carbonell-Barrachina, Á. A. (2021). Consumer understanding of sustainability concept in agricultural products. *Food Quality and Preference*, 89, 104136.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Slater, M., & Flora, J. (2019). Is health behavior consumer behavior? Health behavior determinants, audience segmentation, and designing media health campaigns. In *Attention, attitude, and affect in response to advertising* (pp. 273-285). Psychology Press.
- Sun, W. (2020). Toward a theory of ethical consumer intention formation: Re-extending the theory of planned behavior. *AMS Review*, 10(3), 260-278.
- Svenningsson, J., Höst, G., Hultén, M., & Hallström, J. (2022). Students' attitudes toward technology: Exploring the relationship among affective, cognitive and behavioral components of the attitude construct. *International Journal of Technology and Design Education*, 32(3), 1531-1551.
- Tabacchi, M. H. (1987). Targeting the health-conscious consumer. *Cornell Hotel and Restaurant Administration Quarterly*, 28(3), 21-24.
- Teixeira, P. J., Marques, M. M., Silva, M. N., Brunet, J., Duda, J. L., Haerens, L., & Hagger, M. S. (2020). A classification of motivation and behavior change techniques used in self-determination theory-based interventions in health contexts. *Motivation Science*, 6(4), 438.

Van Bakergem, M. A. (2020). *Exploring Health and Well-being Considerations in Multifamily Real Estate Development*. North Carolina State University.