“Sustainable consumption in Indonesia: Health awareness, lifestyle, and trust among Gen Z and Millennials”

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This study explores the pathways to sustainable consumption among Gen Z and Millennials in Indonesia, focusing on the roles of health awareness, lifestyle behavior, and trust. Sustainable consumption in this context refers to conscientious choices made by individuals to minimize negative impacts on the environment and society while supporting personal health and well-being. A total of 210 respondents, representing consumers aged 18 to 42, who had purchased from healthy food restaurants in Jakarta, participated in the survey. This age range was chosen to encompass both Generation Z and Millennials, with a focus on individuals who are likely to be financially independent and capable of purchasing food for themselves. This sample was chosen to capture insights from key demographics known for their influence on consumption patterns and environmental awareness. Utilizing structural equation modeling, the analysis reveals that health awareness and lifestyle behavior significantly influence healthy food choices and sustainable consumption patterns. The direct path coefficient from lifestyle behavior to sustainable consumption (β = 0.394) surpassed that of health awareness (β = 0.134), underscoring the importance of lifestyle factors in driving sustainable consumption behaviors. Furthermore, trust emerged as a significant mediator between these factors and sustainable consumption. Health awareness and lifestyle behavior explained 65.3% of the variance in healthy food choices and influenced consumer trust by 39.7%. Additionally, lifestyle behavior and trust accounted for 61.2% of the variance in sustainable consumption. These findings highlight the critical role of lifestyle choices and trust-building efforts in fostering sustainable consumption behaviors among Gen Z and Millennials in Indonesia.

INTRODUCTION

Millennial and Generation Z cohorts, accounting for over half of the nation’s population, significantly shape Indonesia’s demographic landscape. This growing segment, ranging from 18 to 42 years old, has notably embraced fast food, drawn by its convenience and palatable flavor profiles. The inclusion of individuals as young as 18 reflects a focus on those who are likely to be financially independent and capable of making their own purchasing decisions. However, this dietary inclination has sparked concerns over its detrimental health effects, leading to colloquial references such as the “machine generation” due to the prevalence of fast food consumption. Despite its affordability and accessibility, fast food is increasingly recognized as an unhealthy dietary choice, with instant noodles often replacing traditional staples like fruits and vegetables.

Research has consistently demonstrated the pivotal role of health awareness in guiding dietary preferences and lifestyle behaviors. Heightened health consciousness correlates with more favorable at-
titudes toward healthy food choices and a propensity to adopt sustainable living practices. Such conscientious actions contribute to long-term health and aid in preventing and managing chronic diseases. Understanding the intricacies of dietary habits, encompassing attitudes, beliefs, and food choices, is paramount in promoting healthier lifestyles and fostering trust in food products.

Despite existing research highlighting the relationship between health awareness, dietary habits, and attitudes toward food, significant gaps persist, particularly within the Indonesian context. While past studies have explored facets of health consciousness and healthy living behaviors, there remains a lack of comprehensive understanding tailored to Indonesia’s Millennials and Generation Z. The complexity of this relationship warrants a nuanced exploration, considering psychological factors, cultural nuances, and socioeconomic influences.

1. LITERATURE REVIEW AND HYPOTHESES

According to the World Health Organization (WHO, 2019), health awareness embodies an ongoing process through which individuals enhance their comprehension of health and strategies for disease prevention. Consequently, Huang et al. (2022) posit health as a state of well-being encompassing mental, physical, and social dimensions distinct from conditions of illness, crucial for enhancing individual quality of life. Loebnitz and Grunert (2018) define health awareness as a state wherein consumers understand their health status and are motivated to foster their well-being and quality of life through preventive measures and healthy behaviors. Similarly, Castellini et al. (2023) conceptualize health awareness as an individual’s evaluation of their health status and active engagement in its maintenance, including adopting healthy lifestyles and seeking and utilizing health-related information. Synthesizing these perspectives, health awareness denotes a condition wherein individuals possess heightened understanding and consciousness regarding their health and surroundings, empowering them to undertake appropriate measures to sustain and enhance their well-being.

Facilitating behavioral change within the framework of health maintenance poses considerable challenges. Established lifestyles and daily behaviors are deeply ingrained, akin to consumption patterns, and fostering gradual shifts toward healthier routines demands significant time and effort (Blue et al., 2016). The prevailing assumption in most models of healthy behavior change is that individuals armed with awareness and information can opt for healthier lifestyle choices. Healthy living encompasses various facets, including dietary patterns, nutritional intake, and daily behaviors, collectively contributing to overall well-being. In sports, proactive health management can mitigate potential disease risks (Pedrelli et al., 2015). Furthermore, healthy living principles apply across diverse settings, including the workplace. Cultivating healthy behaviors within organizational contexts fosters a safe and conducive work environment. Such initiatives enhance employees’ self-assurance, job satisfaction, and skills, bolster morale, and alleviate stress (Ulutaşdemir et al., 2015).

Healthy dietary choices involve selecting foods rich in nutrients, such as vegetables, fruits, whole grains, and wholesome plant or animal proteins. Bolha et al. (2021) assert that two key factors influence the decision-making process regarding healthy food: extrinsic and intrinsic factors. Extrinsic considerations encompass the natural, social, cultural, economic, and religious milieu, while intrinsic factors pertain to motivations, perceptions, attitudes, and preferences, constituting psychological determinants. Psychological factors entail an individual’s internal cognitive processing of information concerning food choices. Ree et al. (2008) indicate that approximately 70% of adolescents make dietary decisions without considering health implications, potentially fostering unhealthy eating patterns. Motivations underlying food choices significantly impact an individual’s dietary habits. Opting for nutritious and safe foods is paramount to ensure the adequacy and quality of essential nutrients meeting the body’s requirements (Garcia et al., 2020).

Trust is pivotal in diverse spheres of life, particularly within interpersonal or organizational relationships. Robust trust serves to fortify connec-
tions and foster collaboration among individuals or entities. Anisimova et al. (2019) characterize trust as the consumer’s confidence in a company’s commitment to acting in the best interests of its clientele and fulfilling its pledges. Trust distinguishes between successful and unsuccessful sales relationships within exchange dynamics, aligning with consumer expectations (Éla & Rana, 2024; Wu et al., 2021). Based on this definition, trust is a profound belief or assurance in something or someone.

Industrialization, globalization, and economic development have significantly affected population health and nutritional status, leading to a transition in global dietary patterns (Formoso et al., 2020). Present-day production and consumption of healthy foods present widespread challenges. Demographic shifts, global population growth, and the emergence of modern dietary styles yielding numerous processed products have resulted in changes in consumer consumption patterns, favoring fast food consumption. The younger generation's health is a cause for concern as they represent the nation’s hope for progress. Issues arising from such consumption patterns may escalate, significantly increasing healthcare costs.

Health enables individuals to maintain optimal bodily functions and engage in diverse and sustained activities (Lazaroiu et al., 2019), ensuring happiness and productivity. Ultimately, health constitutes a dynamic balance between risk factors and the environment. Sustainable consumption of healthy foods should align with daily lifestyles and habits (Reisch et al., 2013). Embracing sustainable consumption of healthy foods can cultivate positive habits, particularly in food selection. It is intriguing to consider plant-based and organic foods in consumption practices. The emergence of healthy foods has played a crucial role in influencing the production and consumption of sustainable foods, estimating how organic food consumption impacts environmental implications related to dietary patterns (Lacour et al., 2018).

The retail trends in the food industry and the diverse preferences of consumers are increasingly on the rise. The appealing taste and presentation of food can broaden consumers’ palates. Nutritious and healthy food composition also factors food selection, challenging companies to create desired products (Sonnenberg et al., 2013). Most individuals desire healthy foods and know the importance of health for themselves and their families. Food selection and healthy lifestyles often weigh on an individual’s mind when consuming food, although many consumers still pay insufficient attention to it (Marty et al., 2021). Understanding the factors influencing health and the importance of obtaining accurate health information can affect the types of foods consumed. This is an effort to prevent disease and improve quality of life by engaging in health-conscious behaviors. Ree et al. (2008) found that approximately 70% of teenagers in Canada choose food without considering health issues. Nasiatin et al. (2021) explained that 40–60% of students in Indonesia experience worm infestations. They tend to choose less healthy foods and engage in poor eating habits.

Motivational aspects in food selection influence an individual’s eating habits. Limited knowledge or lack of health information remains a constraint that can ultimately harm health and community development (Igbinoba et al., 2020). Healthy foods are assessed based on their nutritional value, including calorie content, fiber, vitamins, and the right combination of macronutrients (Ditlevsen et al., 2019). Nowadays, consumers tend to select foods and beverages registered with the Food and Drug Administration (BPOM) and their contents. With health awareness, people realize that health is one of the primary aspects of their lives (Stanley et al., 2022). Research has extensively explored the key factors influencing healthy and sustainable food consumption.

Health awareness is interpreted as consumers being conscious of their health, motivated to consume healthy foods, and improve their quality of life to prevent diseases by adopting healthy behaviors (Huang et al., 2022). Mustafa et al. (2022) refer to this as an inherent drive to maintain health. Ornish et al. (1990) reported that individuals with high levels of self-awareness tend to be less affected by uncontrollable events than those with low levels of self-awareness. They define health consciousness as individuals choosing to manage healthy behaviors actively. Recent research explores how health awareness influences individuals’ choices in consuming healthy foods (Grunert et al., 2014; Pechey et al., 2015; Satia et al., 2005).
Greater health awareness positively influenced individuals’ decisions to consume healthy foods, indicating a significant relationship between health awareness and healthy food choices.

Consumers with healthy lifestyles tend to choose healthy foods and avoid unhealthy ones (Romeo-Arroyo et al., 2020). Health awareness and healthy behaviors can influence the selection of healthy foods (Chen & Antonelli, 2020; Garcia et al., 2020). Choosing healthy foods is conceptualized as selecting foods that provide optimal nutrition for the body and avoiding foods that trigger health disorders. The nutrition is minimal if food is of poor quality and unsafe for the body. It can lead to various diseases. Interventions that encourage individuals to consider health when making choices show promise in promoting healthy food choices. Health-conscious consumers care about their health and strive to improve and maintain it by engaging in healthy behaviors, such as consuming healthy foods. Shin and Mattila (2019) found a relationship between health consciousness and healthy food choices.

Operationally, individuals’ awareness of selecting healthy foods is reflected in their consideration of the nutritional value and quality of the food they choose (Loebnitz & Grunert, 2018). Consuming nutritious foods is also associated with increased confidence among individuals, leading to continued consumption of healthy foods (Tuorila & Hartmann, 2020; Huang et al., 2022). The findings from Micha et al. (2017), Lee and McCleary (2013), and Hwang and Cranage (2010) suggest associations between dietary factors and mortality, variations in consumer perceptions of health and healthy food, and the effectiveness of interventions in food environments for improving diet quality among youth and young adults. Healthy food choices can impact consumers’ confidence in their health. Those who opt for healthy foods often exhibit greater confidence in their health due to their mindful consumption habits. Poor dietary habits, including insufficient intake of fruits and vegetables, contribute significantly to the global disease burden (Brown et al., 2019).

Consumers who opt for healthy foods typically experience improved physical and mental well-being, enhancing their confidence and trust in their dietary choices. Loffredo et al. (2013) and Wu et al. (2021) indicate that choosing healthy foods can bolster self-assurance, mitigate the risk of chronic diseases, and enhance overall quality of life. Consumers with heightened self-confidence are more inclined to select healthy foods, believing in their substantial health benefits. Indonesia's millennial generation and Generation Z demonstrate a robust environmental concern and a solid understanding of healthy dietary practices (Kasidi & Adiwijaya, 2022). While Castellini et al. (2023) reported a modest correlation, Mustafa et al. (2022) and Bazzani et al. (2020) found a significant relationship between health consciousness and sustainable consumption. Ammann et al. (2023) highlighted the effectiveness and challenges associated with policy instruments promoting sustainable food consumption.

Thakur et al. (2023) explored how product quality, perceived value, and trust affect the adoption of green products, emphasizing their crucial role in promoting sustainable consumption behaviors. Similarly, Zhang et al. (2016) investigated strategies for enhancing institutional-based trust in sustainable consumption, highlighting the significance of transparent disclosure mechanisms. Their findings underscore the importance of trust-building mechanisms and transparent disclosure in facilitating sustainable consumer practices. Mastos and Gotzamani (2022) demonstrate that trust in the sustainable consumption of nutritious food consistently affects consumer choices, encouraging the selection of healthy and sustainable food options and fostering more responsible consumer behavior with sustainability in mind.

This study aims to investigate the economic implications of consumer confidence in healthy food choices and to advocate for policies that promote health awareness and healthy lifestyle behaviors, thus contributing to the discourse on economic issues in consumption and their impact on public health outcomes. A conceptual model (Figure 1) encompassing the constructs in this analysis is utilized to explore how these factors can enhance health awareness and lifestyle behaviors within Indonesia and beyond. Consequently, the following hypotheses are formulated:
**H$_1$: Health awareness positively influences healthy food choices.**

**H$_2$: Healthy living behavior positively influences healthy food choices.**

**H$_3$: Healthy food choices positively influence sustainable healthy food consumption.**

**H$_4$: Healthy food choices positively influence consumer trust.**

**H$_5$: Consumer trust positively influences sustainable healthy food consumption.**

**H$_6$: Healthy food choices and consumption are positively mediated by consumer trust in healthy food.**

### 2. METHODS

This study was conducted at Jakarta’s three most favored healthy food restaurants, “SNCTRY,” “SaladStop!” and “Burgreens,” between April and July 2023. The analysis targeted Millennial and Generation Z consumers (aged 18 to 42) who purchased at these highly esteemed restaurants, prioritizing financially independent individuals within this age range. A non-probability sampling method employing purposive sampling was utilized to determine the sample size, following Hair et al. (2018), and accounting for 30 indicators across five latent variables, leading to a recommended range of 150 to 300 respondents, prompting the selection of 210 respondents. Eight responses out of the 218 collected were deemed ineligible for analysis due to their low standard deviations, measuring below 0.25, as determined by Kurniadi and Rana (2023). This exclusion was justified by the significant similarity observed in these respondents’ questionnaire responses. Inclusion criteria required respondents to have made at least one purchase at one of these top-rated Jakarta-based healthy food restaurants and to be located within the Jakarta area. This population was chosen due to its relevance to the study’s objectives. The study aimed to explore specific qualities and characteristics within this group, considering them representative areas encompassing essential attributes for drawing meaningful conclusions.

The paper employed an instrument comprising six questions adapted from Chen’s (2009) validated scales to gauge health awareness. The instrument demonstrated strong internal consistency (Cronbach’s alpha = 0.821). To evaluate healthy living behavior, the study utilized six items from Ozvurmas and Mandiracioglu (2017), exhibiting a reliability of 0.790. Eight items were incorporated from Steptoe et al. (1995) and Ratih et al. (2022) to assess healthy food choices, with a reliability of 0.877. Trust
was measured using five items from Steptoe et al. (1995) with a reliability of 0.836, while sustainable consumption was assessed through five items from Kim et al. (2013) with a reliability of 0.883. All items were rated on a five-point Likert scale.

The study utilized Smart-PLS (version 3.3) as its primary statistical analysis tool. The analysis involved three key steps. Firstly, a descriptive analysis was conducted to collect demographic information. Secondly, the study assessed the measurement model’s reliability and validity, examining factors like factor loadings, convergent validity, discriminant validity, and measure reliability. Lastly, the structural model was analyzed, investigating direct and indirect effects on sustainable consumption and the mediating role of consumer trust in the relationship between healthy food choices and sustainable consumption. Smart-PLS was employed to scrutinize the structural model and determine the significance of model pathways (Hair et al., 2018).

The respondents’ demographic data (Table 1) reveal a balanced gender distribution, with 59.05% female and 40.95% male participants. Most respondents, 56.67%, fall within the Generation Z category (18-26 years old), while 43.33% are Millennials (27-42 years old), focusing on younger and financially independent adults. The study captured a diverse range of occupations, with 46.19% being private employees, 16.19% being students, 14.29% being government employees, 13.33% being entrepreneurs, and 10.00% being from other professions. Income levels varied, with 16.67% earning over Rp. 10,000,000, 39.52% between Rp. 5,000,000 and Rp. 10,000,000, 24.76% between Rp. 3,500,000 and Rp. 5,000,000, and 19.05% below Rp. 3,500,000. Regarding dine-in frequency at healthy food restaurants, 46.67% visited 1-2 times per month, 26.19% 3-4 times, 20% 5-6 times, and 7.14% more than six times. This comprehensive demographic profile offers valuable insights into the diverse characteristics of the study’s participants, laying the foundation for exploring correlations between these demographics and healthy food consumption patterns.

In a structural equations framework, evaluating the measurement model is vital to establish construct validity and reliability and assess collinearity. This study utilized both Cronbach’s alpha coefficients and composite reliability, surpassing the recommended 0.7 threshold, indicating excellent reliability. Additionally, values exceeding 0.50 affirmed convergent and divergent validity, following Hair et al.’s (2018) guidelines.

### 3. RESULTS

Collinearity analysis employed the variance inflation factor (VIF) to assess relationships among the latent variables, with VIF values detailed in Table 2 confirming the absence of collinearity. The findings demonstrate strong reliability coefficients for all constructs and convergent and divergent validity. Collinearity analysis using VIF revealed no collinearity among the measured latent variables, ensuring the robustness of the measurement model.

The analysis presented in Table 3, following the Fornell-Larcker criterion, confirms the discriminant validity of the study’s constructs. The diagno-
nal values, representing the square root of the average variance extracted (AVE) for each construct, consistently exceed the correlations between that construct and others in the same row. This observation indicates that each construct explains more variance within itself than it shares with other constructs, demonstrating distinctiveness. Furthermore, the off-diagonal values, representing correlations between different constructs, consistently fall below the square root of the AVE for the corresponding constructs, affirming that the constructs are distinct. These findings collectively support the measurement model’s robustness and affirm the constructs’ discriminant validity, underscoring their suitability for subsequent structural equation modeling analysis in the study.

The internal consistency of the indicators is presented in Appendix A. Six items (HA1, HA6, HLB3, HLB6, HFC7, and HFC8) were removed to achieve higher internal consistency and convergent validity. The measurement model was acceptable since it satisfied all the criteria once the elements were removed. The results for Cronbach’s alpha, composite reliability, and AVE are all above the necessary cut-off. The established thresholds for the different assessments have been successfully achieved, validating the constructs’ reliability, validity, and absence of collinearity. The data presented in Tables 2 and 3 and Appendix A collectively substantiate the robustness and soundness of the measurement model.

Comprehensive structural model evaluation must be assessed, encompassing predictive capabilities, construct relationships, and relevant criteria (Hair et al., 2018). Critical assessment criteria for PLS-SEM structural models include the significance of path coefficients (presented in Figure 2 with removed indicators from Table 4), $R^2$ values, effect sizes ($f^2$), and predictive relevance ($Q^2$). These criteria provide valuable insights into the model’s relationships and its ability to make predictions.

Table 4 presents the structural model results, showing the coefficients of determination ($R^2$), cross-validated predictive relevance ($Q^2$), and effect size ($f^2$) for the relationships between the latent constructs. The findings indicate that healthy food choices significantly influence sustainable consumption, with an $R^2$ value of 0.653, suggesting that healthy food choices explain 65.3% of the variance in sustainable consumption. Additionally, the $Q^2$ value of 0.379 indicates that this relationship has predictive relevance. Trust, in turn, also significantly affects sustainable consumption, with an $R^2$ of 0.612, explaining 61.2% of the variance, and a $Q^2$ of 0.401, signifying predictive relevance. Finally, trust is influenced by healthy food choices ($R^2 = 0.397$) with an $f^2$ effect size of 0.727, indicating a moderate effect. These findings provide insights into the interrelationships among these constructs in the structural model.

### Table 2. Measurement model – Reliability and validity

<table>
<thead>
<tr>
<th>Latent Constructs</th>
<th>Internal Consistency</th>
<th>Convergent Validity</th>
<th>Collinearity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cronbach’s Alpha</td>
<td>Composite reliability</td>
<td>AVE</td>
</tr>
<tr>
<td>Acceptable Values</td>
<td>&gt; 0.70</td>
<td>&gt; 0.70</td>
<td>&gt; 0.50</td>
</tr>
<tr>
<td>Health Awareness</td>
<td>0.821</td>
<td>0.881</td>
<td>0.651</td>
</tr>
<tr>
<td>Healthy Food Choices</td>
<td>0.877</td>
<td>0.907</td>
<td>0.618</td>
</tr>
<tr>
<td>Healthy Lifestyle Behavior</td>
<td>0.79</td>
<td>0.863</td>
<td>0.613</td>
</tr>
<tr>
<td>Sustainable Consumption</td>
<td>0.883</td>
<td>0.915</td>
<td>0.682</td>
</tr>
<tr>
<td>Trust</td>
<td>0.836</td>
<td>0.884</td>
<td>0.605</td>
</tr>
</tbody>
</table>

### Table 3. Fornell-Larcker criterion – Discriminant validity

<table>
<thead>
<tr>
<th>Fornell-Larcker criterion</th>
<th>Health Awareness</th>
<th>Healthy Food Choices</th>
<th>Healthy Lifestyle Behavior</th>
<th>Sustainable Consumption</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Awareness</td>
<td>0.807</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Healthy Food Choices</td>
<td>0.720</td>
<td>0.786</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Healthy Lifestyle Behavior</td>
<td>0.809</td>
<td>0.799</td>
<td>0.783</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Sustainable Consumption</td>
<td>0.472</td>
<td>0.575</td>
<td>0.510</td>
<td>0.826</td>
<td>–</td>
</tr>
<tr>
<td>Trust</td>
<td>0.573</td>
<td>0.630</td>
<td>0.597</td>
<td>0.774</td>
<td>0.778</td>
</tr>
</tbody>
</table>
The structural path model’s findings, summarized in Table 5 and depicted in Figure 2, provide compelling evidence of significant relationships among the constructs. Health awareness positively influences healthy food choices \( (\beta = 0.213, \text{t-value} = 2.633, p\text{-value} < 0.004) \), supporting \( H_1 \). Likewise, healthy lifestyle behavior significantly affects healthy food choices \( (\beta = 0.626, \text{t-value} = 8.083, p\text{-value} < 0.000) \), confirming \( H_2 \). Healthy food choices, in turn, positively influence sustainable consumption \( (\beta = 0.145, \text{t-value} = 2.372, p\text{-value} < 0.009) \), supporting \( H_3 \). Moreover, healthy food choices significantly influence trust \( (\beta = 0.630, \text{t-value} = 11.557, p\text{-value} < 0.000) \), validating \( H_4 \). Lastly, trust positively influences sustainable consumption \( (\beta = 0.683, \text{t-value} = 14.137, p\text{-value} < 0.000) \), confirming \( H_5 \). These findings collectively enhance the understanding of the intricate interplay between health awareness, healthy lifestyle behavior, healthy food choices, trust, and sustainable consumption, underscoring their pivotal roles in shaping consumer behavior within the study’s context.

### Table 4. Structural model results

<table>
<thead>
<tr>
<th>Latent Construct</th>
<th>( R^2 )</th>
<th>( Q^2 )</th>
<th>( f^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Consumption</td>
<td>0.653</td>
<td>0.379</td>
<td>0.033</td>
</tr>
<tr>
<td>Trust</td>
<td>0.612</td>
<td>0.401</td>
<td>–</td>
</tr>
<tr>
<td>Healthy Food Choices</td>
<td>0.397</td>
<td>0.235</td>
<td>0.727</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainable Consumption</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.658</td>
<td>–</td>
</tr>
</tbody>
</table>

### Table 5. Structural path model

<table>
<thead>
<tr>
<th>Hypotheses and Structural Paths</th>
<th>Path Coefficient</th>
<th>Bootstrapping</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H_1 ) Health Awareness ( \rightarrow ) Healthy Food Choices</td>
<td>0.213**</td>
<td>2.633 0.004</td>
<td>Supported</td>
</tr>
<tr>
<td>( H_2 ) Healthy Lifestyle Behavior ( \rightarrow ) Healthy Food Choices</td>
<td>0.626**</td>
<td>8.083 0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>( H_3 ) Healthy Food Choices ( \rightarrow ) Sustainable Consumption</td>
<td>0.145**</td>
<td>2.372 0.009</td>
<td>Supported</td>
</tr>
<tr>
<td>( H_4 ) Healthy Food Choices ( \rightarrow ) Trust</td>
<td>0.630**</td>
<td>11.557 0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>( H_5 ) Trust ( \rightarrow ) Sustainable Consumption</td>
<td>0.683**</td>
<td>14.137 0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: **t-value is significant at \( p < 0.05 \).
3.1. Mediation analysis

The mediation analysis results, as presented in Table 6, highlight the mediating role played by consumer trust in the relationship between healthy food choices and sustainable consumption. The findings indicate the significance of the total effect (without the mediating variable of consumer trust) of healthy food choices on sustainable consumption ($H_3$: $\beta = 0.145$, $t$-value = 2.372, $p$-value < 0.009). Furthermore, the indirect effect of healthy food choices on sustainable consumption through the mediator of consumer trust is also highly significant ($\beta = 0.432$, $t$-value = 8.316, $p < 0.000$).

Upon introducing the mediating variable of consumer trust into the analysis, the impact of healthy food choices on sustainable consumption remains robustly significant, signifying a comprehensive effect encompassing both direct and indirect pathways mediated by consumer trust ($H_6$: $\beta = 0.577$, $t$-value = 10.017, $p < 0.000$). This suggests that consumer trust is a partial mediator, indicating complementary partial mediation, in the intricate relationship between healthy food choices and sustainable consumption.

The model depicted in Figure 2 and scrutinized in Table 6 demonstrates significant explanatory power, particularly in the mediation model, where complementary partial mediation is evident. This underscores the crucial function of consumer trust as a mediator in elucidating the link between healthy food choices and sustainable consumption among patrons of healthy food establishments.

4. DISCUSSION

The primary objective of this study was to explore the interplay between economic factors and sustainable consumption behaviors among patrons of prominent healthy food restaurants in Jakarta, Indonesia. Specifically, it aimed to investigate how economic considerations, such as health awareness, lifestyle behavior, and consumer trust, influence the choices made by individuals regarding healthy food consumption and its sustainability. This analysis revealed that economic factors played a significant role in shaping consumer behavior, with health awareness and healthy lifestyle behavior accounting for a substantial portion (65.3%) of the variance in healthy food choices. Moreover, the findings indicated that consumer trust, a critical economic determinant, mediated the relationship between healthy food choices and sustainable consumption, underscoring its importance in driving consumption patterns. Overall, this study contributes valuable insights into the economic dynamics underlying sustainable consumption behaviors in the context of healthy food establishments.

The significant positive relationship between healthy food choices and health awareness is supported by evidence from this study ($H_1$: $\beta = 0.213$, $t = 2.633$, $p = 0.004$), consistent with Ornish et al. (1990), Grunert et al. (2014), Pechey et al. (2015), and Satia et al. (2005), highlighting the influence of health consciousness on dietary preferences. This relationship can be attributed to various economic factors. Firstly, individuals with heightened health awareness possess greater knowledge about foods’ nutritional content and health benefits, enabling them to make informed decisions that favor their overall well-being. Additionally, increased health consciousness fosters a greater appreciation for the long-term implications of dietary choices, motivating individuals to prioritize nutritious foods over less healthy alternatives. Furthermore,

<table>
<thead>
<tr>
<th>Direct Relationship</th>
<th>Direct Effect</th>
<th>Direct Effect (95% CI)</th>
<th>t-value</th>
<th>Significance ($p &lt; 0.05$)</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Food Choices → Sustainable Consumption</td>
<td>0.145</td>
<td>(0.052-0.246)</td>
<td>2.372</td>
<td>0.009</td>
<td>Significant</td>
</tr>
<tr>
<td>Trust → Sustainable Consumption</td>
<td>0.683</td>
<td>(0.596-0.757)</td>
<td>14.137</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Mediation</td>
<td>Indirect Effect</td>
<td>Indirect Effect (95% CI)</td>
<td>t-value</td>
<td>Significance ($p &lt; 0.05$)</td>
<td>Condition</td>
</tr>
<tr>
<td>Healthy Food Choices → Trust → Sustainable Consumption</td>
<td>0.432</td>
<td>(0.338-0.511)</td>
<td>8.316</td>
<td>0.000</td>
<td>Complementary (Partial Mediation)</td>
</tr>
<tr>
<td>Total Effect = Direct Effect + Indirect Effect</td>
<td>0.577</td>
<td>(0.475-0.665)</td>
<td>10.017</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>
societal trends emphasizing health and wellness shape consumer preferences in favor of nutritious options. Thus, the pivotal role of health awareness in guiding consumers toward healthier dietary behaviors is emphasized, underscoring the importance of promoting health education and awareness initiatives to support informed food choices. These insights contribute to understanding the economic factors influencing dietary preferences and highlight the significance of cultivating health-conscious attitudes to promote overall well-being.

The study’s second finding, indicating that healthy food choices are positively influenced by healthy living behavior \((H_2; \beta = 0.626, t = 8.083, p = 0.000)\), aligns with existing research that has consistently underscored the profound impact of such behaviors on dietary preferences. The significant effect of regular exercise and balanced nutrition on individuals’ food choices has been emphasized by Tuorila and Hartmann (2020), Huang et al. (2022), Micha et al. (2017), Lee and McCleary (2013), and Hwang and Cranage (2010). This trend suggests that individuals who maintain healthy lifestyle practices prioritize health-conscious dietary decisions, which is corroborated by the findings of this study. These results highlight the influential role of healthy living behaviors in shaping healthier dietary habits among consumers, emphasizing the economic implications of promoting such behaviors. Embracing habits prioritizing physical activity and nutritious food consumption leads to more informed dietary decisions. It contributes to individuals’ overall well-being, potentially reducing healthcare costs associated with diet-related health issues. Therefore, fostering healthy living behaviors holds economic significance in encouraging healthier dietary patterns among the population, ultimately promoting public health and reducing healthcare expenditures.

\(H_3 (\beta = 0.145, t = 2.372, p = 0.009)\) is supported, revealing a significant positive relationship between healthy food choices and sustainable consumption. These results are consistent with Mustafa et al. (2022), Bazzani et al. (2020), and Ammann et al. (2023), who highlighted the connection between nutritious food selections and sustainable consumption trends. This study shows that individuals prioritizing healthy foods embrace sustainable consumption practices. This underscores the importance of promoting healthier dietary choices to foster sustainability in consumption patterns. By advocating for the adoption of nutritious and environmentally friendly food options, stakeholders can contribute to cultivating sustainable consumption behaviors and promoting individual well-being and environmental health. Such findings underscore the interplay between dietary choices and sustainability, highlighting the potential of healthy food choices to drive positive environmental outcomes.

The findings robustly confirm the fourth hypothesis, revealing a notable positive correlation between selecting healthy foods and fostering consumer trust \((H_4; \beta = 0.630, t = 11.557, p = 0.001)\). These results align with Loffredo et al. (2013) and Wu et al. (2021), who also found that individuals who prioritize nutritious dietary choices tend to trust the sources and quality of their food selections. This finding underscores the pivotal role of healthy food choices in fostering consumer trust, which can have significant economic implications. Consumers who trust the sources and quality of their food are more likely to make repeated purchases of healthy foods, contributing to the sustainability and growth of the market for nutritious food options. By encouraging the adoption of nutritious dietary preferences, stakeholders can promote healthier lifestyles and stimulate economic activity in the food sector. Such insights shed light on the intricate relationship between dietary choices, consumer trust, and market dynamics, emphasizing the potential of healthy food choices to fortify consumer confidence and drive economic growth.

The subsequent findings also uphold \(H_5 (\beta = 0.683, t = 14.137, p = 0.001)\), elucidating a significant positive association between trust and sustainable consumption. These results align with Thakur et al. (2023) and Zhang et al. (2016), emphasizing the crucial role of trust in promoting sustainable consumption practices. Consumers who exhibit trust in the sources and quality of their food choices are more inclined to perpetuate consumption patterns aligned with sustainability goals and contribute to the sustainability of the food market. This underscores the importance of initiatives to cultivate trust among consumers, as they play a central role in promoting sustainable consumption behaviors that can drive economic growth and support environmental conservation efforts. By fostering trust
in food systems and sources, stakeholders can empower consumers to make informed and sustainable choices, promoting economic prosperity and environmental sustainability.

Finally, the significant role of consumer trust in mediating the relationship between healthy food choices and sustainable consumption ($H_2: \beta = 0.577$, $t = 10.017, p < 0.000$) is supported. This finding is consistent with Mastos and Gotzamani (2022), who have underscored the importance of trust in fostering sustainable consumption practices. Individuals who trust the sources and quality of their food choices are more inclined to perpetuate consumption patterns aligned with sustainability goals, thereby contributing to the economic viability of sustainable food markets. The present findings add depth to this body of literature by elucidating the mediating role of trust in the relationship between healthy food choices and sustainable consumption. Understanding the economic mechanisms underlying consumer behaviors and the pivotal role of trust is essential for devising effective strategies to promote sustainable consumption patterns aligned with broader economic objectives.

This study identified four potential paths influencing sustainable consumption, each with varying total effects:

1. **Path 1**: Health Awareness $\rightarrow$ Healthy Food Choices $\rightarrow$ Trust $\rightarrow$ Sustainable Consumption: Total Effect: $0.213 \cdot 0.63 \cdot 0.575 = 0.082$

2. **Path 2**: Healthy Lifestyle Behavior $\rightarrow$ Healthy Food Choices $\rightarrow$ Trust $\rightarrow$ Sustainable Consumption: Total Effect: $0.626 \cdot 0.63 \cdot 0.575 = 0.225$

3. **Path 3**: Health Awareness $\rightarrow$ Healthy Food Choices $\rightarrow$ Sustainable Consumption: Total Effect: $0.213 \cdot 0.63 = 0.134$

4. **Path 4**: Healthy Lifestyle Behavior $\rightarrow$ Healthy Food Choices $\rightarrow$ Sustainable Consumption: Total Effect: $0.626 \cdot 0.63 = 0.394$

Comparing the total effects of these paths, Path 4 (Healthy Lifestyle Behavior $\rightarrow$ Healthy Food Choices $\rightarrow$ Sustainable Consumption) demonstrates the highest impact (0.394). This highlights the significance of healthy lifestyle behaviors in driving sustainable consumption practices and underscores the health benefits and economic advantages of adopting healthier living habits.

The study offers valuable insights into the dynamics of health awareness, lifestyle behaviors, and sustainable consumption, yet it faces certain limitations. These include constraints related to sample size and the cross-sectional design, impacting generalizability and establishing causal relationships. Additionally, self-report bias may affect data accuracy, necessitating careful interpretation. Future research could explore the economic aspects of sustainable consumption to deepen one’s understanding, such as assessing the cost-effectiveness of adopting sustainable practices or investigating the economic incentives driving consumer choices. Incorporating economic perspectives into future studies can provide valuable insights for policymakers and businesses seeking to promote sustainable consumption while considering economic factors.

**CONCLUSION**

This study examined the relationship among health awareness, healthy lifestyle behavior, healthy food choices, trust, and sustainable consumption within the context of prominent healthy food restaurants in Jakarta, Indonesia. Notably, this analysis uncovered significant economic dimensions inherent in sustainable consumption behaviors. The primary objective was to assess whether consumer trust mediated the relationship between healthy food choices and sustainable consumption, with a particular focus on economic implications. The results revealed that health awareness and healthy lifestyle behavior collectively explained 65.3% of the variance in healthy food choices and influenced consumer trust by 39.7%. Moreover, healthy lifestyle behavior and consumer trust emerged as significant drivers of sustainable healthy food consumption, accounting for 61.2% of the variance.
The findings underscored the substantial economic impact of consumer trust as a mediator between healthy food choices and sustainable consumption, substantiating all hypotheses. These insights hold significant economic implications for policymakers, businesses, and public health advocates, suggesting that promoting healthier and more sustainable food choices can yield economic benefits for both consumers and businesses. By understanding the nuanced economic relationships uncovered in this study, stakeholders can develop targeted interventions and policies to encourage healthier dietary habits and foster sustainable consumption practices, ultimately contributing to both public health and economic prosperity.

AUTHOR CONTRIBUTIONS

Conceptualization: Thalia Agustina, Evi Susanti.
Data curation: Thalia Agustina, Junaid Ali Saeed Rana.
Formal analysis: Evi Susanti, Junaid Ali Saeed Rana.
Investigation: Evi Susanti, Junaid Ali Saeed Rana.
Methodology: Thalia Agustina, Evi Susanti, Junaid Ali Saeed Rana.
Project administration: Evi Susanti.
Supervision: Evi Susanti, Junaid Ali Saeed Rana.
Validation: Junaid Ali Saeed Rana.
Visualization: Thalia Agustina, Evi Susanti.
Writing – original draft: Thalia Agustina, Evi Susanti.
Writing – review & editing: Evi Susanti, Junaid Ali Saeed Rana.

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tional-based trust for sustain-
## APPENDIX A

### Table A1. Indicator analysis, discriminant validity, and collinearity

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Indicators</th>
<th>Before Removal</th>
<th>After Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Code</td>
<td>Description</td>
<td>Outer Loading</td>
</tr>
<tr>
<td>Health Awareness</td>
<td>HA1</td>
<td>I consider health a top priority in my life.</td>
<td>0.581</td>
</tr>
<tr>
<td></td>
<td>HA2</td>
<td>I have adequate knowledge of how to take care of my health.</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>HA3</td>
<td>I routinely check my health regularly.</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>HA4</td>
<td>I try to maintain a healthy and balanced diet.</td>
<td>0.824</td>
</tr>
<tr>
<td></td>
<td>HA5</td>
<td>I exercise regularly to keep my body healthy.</td>
<td>0.774</td>
</tr>
<tr>
<td></td>
<td>HA6</td>
<td>I avoid risky behaviors that can harm my health, such as smoking or consuming alcohol excessively.</td>
<td>0.61</td>
</tr>
<tr>
<td>Healthy Living Behavior</td>
<td>HLB1</td>
<td>I eat a healthy diet rich in fruits and vegetables.</td>
<td>0.779</td>
</tr>
<tr>
<td></td>
<td>HLB2</td>
<td>I avoid foods high in saturated fat, sugar, or salt.</td>
<td>0.747</td>
</tr>
<tr>
<td></td>
<td>HLB3</td>
<td>I consume enough water every day (at least 8 glasses).</td>
<td>0.626</td>
</tr>
<tr>
<td></td>
<td>HLB4</td>
<td>I am well-rested and sleep for 7-8 hours every night.</td>
<td>0.719</td>
</tr>
<tr>
<td></td>
<td>HLB5</td>
<td>I manage stress well through relaxation techniques or fun hobbies.</td>
<td>0.768</td>
</tr>
<tr>
<td></td>
<td>HLB6</td>
<td>I maintain personal and environmental hygiene to prevent disease.</td>
<td>0.698</td>
</tr>
<tr>
<td>Healthy Food Choice</td>
<td>HFC1</td>
<td>I try to buy organic or pesticide-free food if possible</td>
<td>0.769</td>
</tr>
<tr>
<td></td>
<td>HFC2</td>
<td>I reduce my meat consumption and prefer plant-based protein sources, such as beans or tofu/tempeh.</td>
<td>0.771</td>
</tr>
<tr>
<td></td>
<td>HFC3</td>
<td>I limit my consumption of processed foods, such as ready-to-eat foods or canned foods.</td>
<td>0.788</td>
</tr>
<tr>
<td></td>
<td>HFC4</td>
<td>I try to buy locally produced food to reduce the impact of transportation and support the local economy.</td>
<td>0.779</td>
</tr>
<tr>
<td></td>
<td>HFC5</td>
<td>I pay attention to the label and nutritional information on food packaging before buying it.</td>
<td>0.724</td>
</tr>
<tr>
<td></td>
<td>HFC6</td>
<td>I participate in programs or activities that support healthy and sustainable food selection, such as vegetable garden communities or healthy cooking study groups.</td>
<td>0.715</td>
</tr>
<tr>
<td></td>
<td>HFC7</td>
<td>I realized the importance of eating healthy foods to maintain a healthy body.</td>
<td>0.524</td>
</tr>
<tr>
<td></td>
<td>HFC8</td>
<td>Eating a healthy diet means avoiding or limiting less healthy foods.</td>
<td>0.589</td>
</tr>
<tr>
<td>Trust</td>
<td>CT1</td>
<td>I believe that the healthy food restaurant I choose provides a variety of healthy food choices that can meet my nutritional needs.</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>CT2</td>
<td>I believe the healthy food restaurant I choose uses fresh and quality ingredients in serving dishes.</td>
<td>0.783</td>
</tr>
<tr>
<td></td>
<td>CT3</td>
<td>I believe that the healthy food restaurant I choose can carry out criticism and suggestions from customers in paying attention to the source of food used, such as prioritizing local or organic products.</td>
<td>0.778</td>
</tr>
<tr>
<td></td>
<td>CT4</td>
<td>I believe healthy food restaurants use healthy cooking methods, such as avoiding excessive oil or processing.</td>
<td>0.713</td>
</tr>
<tr>
<td></td>
<td>CT5</td>
<td>I believe healthy food restaurants provide clear information about nutritional content and other important information on the menu, thus making customers loyal.</td>
<td>0.822</td>
</tr>
<tr>
<td>Sustainable Consumption</td>
<td>HC1</td>
<td>I eat fibrous foods to improve digestive health.</td>
<td>0.819</td>
</tr>
<tr>
<td></td>
<td>HC2</td>
<td>I eat plant-based foods for a sustainable source of nutrition</td>
<td>0.782</td>
</tr>
<tr>
<td></td>
<td>HC3</td>
<td>I am committed to supporting local agriculture or sustainable cultivation.</td>
<td>0.842</td>
</tr>
<tr>
<td></td>
<td>HC4</td>
<td>I eat organic food to support my health and environment.</td>
<td>0.855</td>
</tr>
<tr>
<td></td>
<td>HC5</td>
<td>I eat foods that reduce waste with sustainable processing and production.</td>
<td>0.832</td>
</tr>
</tbody>
</table>