

Healthy food consumption behavior of working people in the capital city: A case study in Bangkok, Thailand

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Abstract

As an essential component of life, food plays a crucial role in the physical, intellectual, and mental growth. Good nutrition will arise from appropriate eating, leading to a balanced health condition. As a result of the contemporary Thai culture's haste and need to compete with time, working individuals disregard and disregard the significance of healthy food consumption. This study intends to examine Bangkok's working population's healthy food consumption habits to uncover significant determinants and predict quantities. The risk categories can be identified, and development strategies can be devised. This quantitative study is an examination of comparable relationships. This study's samples consisted of 462 individuals of working age in the capital who were selected through a multi-stage random sampling process. There were twelve sets of variable evaluation measures employed. According to the confirmatory factor analysis criteria, each set of measurements passed. All eleven variables could predict the consumption of healthy foods by 40.40 % of the total sample. The risk categories consisted of older married men. The research revealed important development approaches concentrating on the development of persons of working age, including 1) self-localization in health care, 2) accessing the information on health care, and 3) social support from organizations. These characteristics will aid in encouraging working individuals to adopt eating practices that promote health.

Keywords: Food consumption behavior, health promotion, working-age people

Introduction

Food is an essential component of life that promotes physical development. Dopamine plays a crucial part in joyful individuals' physical, intellectual, emotional, and mental growth. To maintain health and longevity, goal-oriented consumers must consume nutritious foods. Hence, consumers must balance their diets to be disease-free

and have good mental health. Conversely, if the food is not appropriate for the age, it can lead to various dangerous disorders. Diet is a key cause of diseases such as obesity (Liu et al., 2017), heart disease (Pallazola et al., 2019), diabetes (Ley et al., 2014), hypertension (Ozemek et al., 2018), and cancer (Key et al., 2020), among others (Liu et al., 2017; Pallazola et al., 2019), Diabetes (Ley et al., 2014). Additional scientific findings demonstrate that people of different ages should consume diverse diets. For physical development, the emphasis should be on meat, eggs, and milk during childhood. Adults should avoid specific foods, such as fatty and sugary foods, to prevent the development of diseases.

Consequently, consuming nutrient-dense and complete foods from the five food groups will boost consumers' resistance to disease and lower their risk of problems. It was also discovered that middle-aged women are more likely to prioritize their physical health by consuming plant-based protein, organic food, clean food, sugar-free beverages, and regular exercise (Terry, 2021). As a result, the market for healthy foods is popular and tends to expand swiftly (Tongkum & Sasananan, 2014). In the context of Thailand, the government considers increasing the nutrition of the Thai people to be an important factor in enhancing the quality of life for all age groups. Rapidly changing economic and social situations necessitate adjustments in food consumption patterns from foreign nations containing various imported ingredients. Mixing Thai and foreign cultures, the capital's working population is increasingly accepting foreign food consumption patterns, particularly fast food, franchise food, frozen food, processed food, convenience store food, and fast food. These meals are extremely popular and a staple of the capital's working-class diet. This is because fast food is readily available, varied, affordable, and pre-cooked. However, the problem with these foods is that they include relatively large amounts of starch, sodium, fat, and sugar. If taken in excessive amounts, it will collect in the body until it becomes fat, produce more energy than it needs, and may cause harmful health effects (Fuhrman, 2018). This problem constitutes a crisis that must be resolved. Urgent measures must be taken to avoid and limit the danger of food-borne illnesses. So, the researcher is interested in examining capital city workers' healthy food consumption habits. To enter the 21st century as a nation with a healthy population and a sustainable way of life, the focus is on identifying the elements that lead to healthy eating

habits among working individuals. The Interactionism model (Endler & Magnusson, 1977), which defines the relationship between groupings of variables, was utilized. Both intrinsic and extrinsic elements are considered to evaluate the cause and identify the risk groups that must be developed immediately. It can create development strategies that lead to the formulation and implementation of concrete policies.

Literature Review

Healthy food consumption behavior is selecting and deciding to consume nutritious and healthy foods following the five nutritional groups necessary to meet the body's demands. Safe, sanitary, and hygienic food will promote good health. This is consistent with the Health Promotion Model (Pender et al., 1990) based on the Social Learning Theory (Bandura & Walters, 1977). It predicts activities that promote health. The researcher has utilized psycho-behavioral science by introducing personal aspects and conditions that influence eating nutritious foods. The study focuses on the mechanisms that stimulate or strengthen the motivation of individuals to engage in food consumption behaviors that promote appropriate health and self-care to live a healthy, sustainable life. The researcher utilized three components of the health promotion model, namely 1) the features and experiences of individuals, 2) environmental factors, and 3) social factors. Each individual's unique features and experiences have been manifested differently. It influences the practice of health-promoting activities that are influenced by individuals' distinctive traits and experiences, such as their past consuming habits. 2) Emotions and thoughts influence conduct uniquely. This component is essential for strengthening commitment to the activity. Health-promoting behavior is the essence of health-promoting activities that enable individuals to change their health behaviors, such as recognizing the benefits of the behavioral practice, perceived barriers to behavioral performance, self-efficacy, interpersonal influence, and situational influences. 3) A behavioral result is a person's intention to engage in an action. When the activity is practiced, the individual will exhibit behavioral outcomes such as dedication to behavior and other needs and preferences. Consequently, healthy food intake behavior is influenced by social learning, values, social forge, nutrition knowledge, and health and wellness information until it becomes a habit. This study split the components into 1) buying food as an option to

purchase food that is clean, safe, and nutrient-rich ([Dangerfield et al., 2021](#)), as the adage "safe, beneficial, and affordable" suggests. 2) Consuming food that is safe and sufficient for the body's needs is to watch how food is created, techniques of cooking, raw materials, seasonings, and hygiene, and evaluate the worth of food based on nutritional principles that are age-appropriate, as the adage "Eating well brings good things" suggests. Unhealthy diets lead to disease". 3) Avoiding food that is harmful to health is the ability to refuse to consume food that is harmful to the body; as the adage goes, "Don't take a chance on eating. Better to discard" ([Gizaw, 2019](#)).

Psychological trait group:

It is a mental characteristic that a person acquires via interactions with family and school. It has a static nature and is not affected by the present circumstances. Hence, the following are the studies of all four variables in the groups mentioned above:

- 1) Health status consciousness is a sentiment. A person's health knowledge through time and capacity to evaluate past, present, and future health concerns are important components of health literacy. They include views regarding food or medication potential, disease resistance or danger of illness, health concern or awareness, and illness comprehension ([Wang & Laffrey, 2001](#)).
- 2) Positive psychological capital is the notion of an individual in a positive light. It is a vital foundation for developing a person's ability to succeed at work and to have positive behaviors in the workplace and everyday life. 1) Knowledge of one's potential to have faith in one's talents when undertaking a task that challenges one's ability to accomplish. 2) Optimism involves considering the accomplishments occurring now and will occur in the future.
- 3) Expectation is the desire to attain the objective and if required, the ability to adapt one's strategy to achieve success. 4) Emotional resilience is the capacity to manage and swiftly return to normal feelings while confronting issues or barriers while trying to attain predetermined goals ([Luthans & Youssef, 2007](#)). Future-oriented and self-control are personality traits of a person who can forecast what will occur. People can believe that the same things that will occur

in the future will also occur to them. Things that occur in the future retain their value or significance. It is claimed that they are capable of self-control, self-improvement, or arranging part of their conduct to create new desirable behaviors, measure that behavior, and preserve good and helpful behavior. Also, it lowers or eliminates old, undesired behavior by one's management without reliance on the supervision of others (De Volder & Lens, 1982).

- 4) Appraisal of one's essence is one of the traits of a person based on which one evaluates or views oneself as competent, useful, and capable of controlling one's own life. They acknowledge and accept the results of their self-evaluation, including their pride in their general efficacy, emotional stability, and self-localization (Judge et al., 2003).

Situational factors group: A person's environment or the social environment influences their current thoughts and actions. Consequently, the following constitutes the examination of all four variables in the groups mentioned above:

- 1) Seeking healthcare information is a person's activity to gain healthcare-related knowledge and information. The need for health-related information prompts the process of acquiring new knowledge. If the information sought does not meet the requirements of the data is unavailable, new information will be sought using alternative methods (Zhang et al., 2022).
- 2) The good relationship in the family is a story about the relationship between parents and children, brothers, and other family members, as well as the pattern of family communication. It determines roles and decision-making authority, which can also be observed through the emotional ties between family members. It is the cooperation between family members and their adaptation to various situations (Thomas & Brausch, 2022).
- 3) Social support from the organization is that workers perceive themselves to be fair in allocating welfare, organizing the work environment appropriately, learning that supervisors value workers, accepting, supporting, giving advice, listening, transferring knowledge, and assisting workers in solving operational problems. This includes receiving a prize, monetary compensation, and a bonus and working under equitable conditions. If the outcome of the

organization's support is positive, the efficiency of the work will also be positive. In addition, corporate support has resulted in increased productivity through innovation (Rhoades & Eisenberger, 2002).

- 4) The workload is a job that is completed or responsible in terms of quantity and quality in a given period or work that must be completed following the Task, Duty, and Responsibility assigned to the tasks for each position. A workload that is too light or heavy can cause stress and time constraints. Therefore, the workload is one of the causes of stress that contributes to work exhaustion and health problems (Weinger et al., 2000).

Psychological state group: A person's mental qualities result from the interplay between the person's initial mental state and the situation they are currently facing. It is a mentality that is susceptible to change based on circumstances or is influenced by circumstances. Thus, the three factors in the group mentioned above were examined as follows:

- 1) Attitude toward health care behavior is a person's mental disposition, expressed as a sense of contentment or discontentment with something. This emotion results from a person's awareness of healthcare valuation. When a person is content or unsatisfied with something, he will act following his likes or dislikes for it (Ajzen, 1991).
- 2) The self-localization in health care is a belief that one can take care of one's health with four components: 1) believing that one can do it; 2) believing that efforts lead to the desired outcome, 3) believing that one can predict the results that will result from 4) believing that effort is very important in doing various actions, and 5) believing of the ability to control the results that occur as desire (Zielińska-Więczkowska, 2016).
- 3) Health transformational leadership describes the characteristics of a leader who can motivate others to take action to improve their health. It is a leadership approach that impacts changes in the attitudes and beliefs of people to create participation in the health transformation (Robbins & Davidhizar, 2020).

Background biosocial characteristics: Based on the research articles, it was shown that baseline biosocial features had a statistically significant link with desirable behaviors among working-age adults. It was a general query regarding gender, age, marital status, degree of education, type of organization, average monthly income, place of living, and congenital illness.

Hypothesis

H1: Psychological traits and situational factors of 8 variables, together with the psychological states of 3 variables in 11 variables, can predict healthy food consumption behavior for at least 5% more than predictors from either group alone.

H2: Older females with married status had more healthy food consumption behaviors than older males with married status.

The conceptual research framework of the current study is shown in Figure 1.

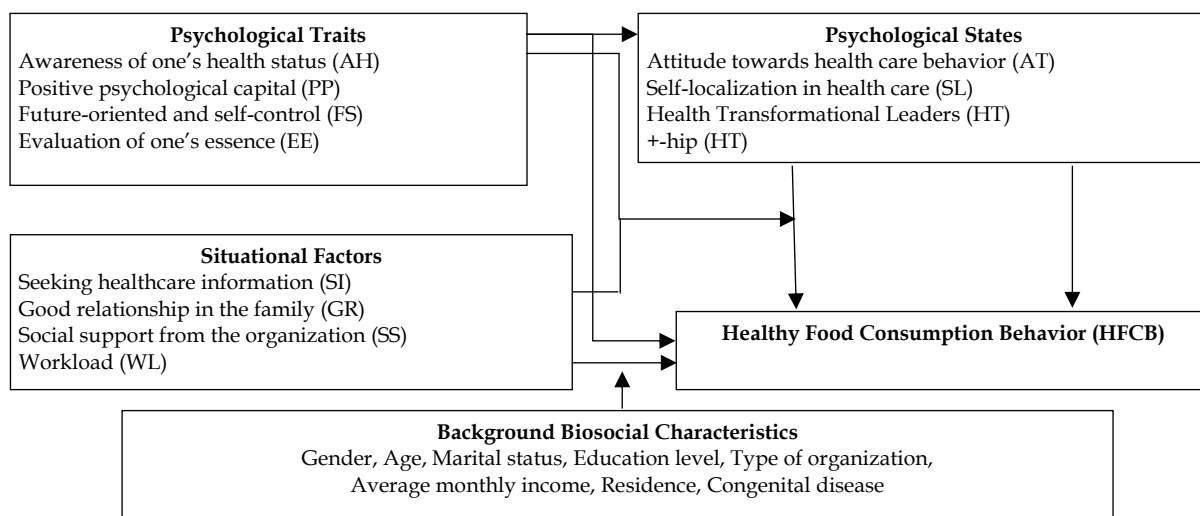


Figure 1 Conceptual framework

Methodology

Research Design

This was a correlational-comparative study to find significant predictors, prediction volume, and risk categories for healthy food intake behavior. Twelve questionnaires and one copy of biosocial background variables were utilized. The respondents undertook self-

reporting. To adjust the complexity of the response before or after each set, the researcher is separated into two sets (Set 1 and Set 2) with alternate measurement orders. The researcher highlighted data-collecting ethics. In compliance with national policy and ethical guidelines for human research, the researcher communicated the research aims, response methods, and consent forms to the participants before they completed the questionnaire. Then, following completion, the researcher verifies the accuracy of the response and offers a token of appreciation for the time.

Sample

Using the population formula of [Krejcie and Morgan \(1970\)](#), the sample group for this study consisted of working-age residents of the capital between the ages of 18 and 60 to represent the population's size adequately and to allow for a 5% data quality variance. According to the calculation, the researcher must collect at least 420 data using a multi-stage sampling method, divided into 1) working-age people in four capital cities, namely the Central Bangkok Group, the Southern Bangkok Group, the Eastern Bangkok Group, and the Western Bangkok Group; 2) gender as male and female; 3) type of organization as public and private sectors; and 4) the number of working people in each location equaling 25 individuals. The information was collected between December 2022 and March 2023.

Instruments and Ethical Considerations

University of the Thai Chamber of Commerce (Research Project Code UTCCEC/Expedited013/2022) has recognized 12 pieces of measuring equipment for ethical standards in human subjects (Research Project Code UTCCEC/Expedited013/2022). is a sort of measurement for a composite assessment scale. It comprises several sentences on a 6-point scale ranging from "most true" to "not true at all" to determine the instrument's quality. To evaluate the quality of each item, the test was administered to 160 students, similar to the sample group. Two forms of statistical analysis were employed: 1) item discrimination (t-ratio) analysis and 2) correlation coefficient analysis between individual item scores and total item-total correlation scores (r-ratio). Subsequently, a confirmatory factor analysis was conducted to assess construct validity (Table 1).

Data Analysis

To evaluate the hypothesis, statistical analysis was employed, including multiple regression analysis utilizing enter and stepwise approaches. Several predictors were utilized to predict each predictor based on a 5% anticipated percentage difference criterion (Cohen, 1988) and a three-way analysis of variance. If the results were deemed statistically significant at the .05 level, Scheffé's method would be used to compare the mean scores of each pair.

Table 1. Summary of item and measurement qualities

Measurements	Item used	Range of t-ratio (t≥2.00)	Range of item-total r (r≥0.20)	α	Confirmatory Factor Analysis: CFA						
					χ ²	df	p-value (p>0.05)	RMSEA (≤0.06)	CFI (≥0.95)	TLI (≥0.95)	SRMR (≤0.08)
1.HFCB*	11	3.42 – 8.95	0.29 – 0.65	0.79	63.344	51	0.3547	0.057	0.963	0.961	0.053
2.AT*	11	2.25 – 7.42	0.28 – 0.59	0.74	59.057	49	0.3468	0.052	0.971	0.973	0.047
3.SL*	12	2.34 – 8.45	0.24 – 0.57	0.71	62.786	52	0.3229	0.050	0.969	0.962	0.049
4.HT*	11	3.87 – 9.98	0.22 – 0.53	0.73	78.109	62	0.3782	0.049	0.968	0.963	0.045
5.SI*	11	2.31 – 7.85	0.27 – 0.59	0.70	77.257	63	0.3274	0.051	0.967	0.984	0.054
6.GR*	12	3.24 – 6.35	0.26 – 0.62	0.74	73.128	61	0.4389	0.043	0.964	0.969	0.054
7.SS*	10	3.28 – 8.27	0.28 – 0.51	0.72	59.725	57	0.3847	0.056	0.989	0.972	0.043
8.WL*	10	3.37 – 6.64	0.21 – 0.43	0.78	63.434	59	0.3758	0.047	0.967	0.964	0.056
9.AH*	11	2.15 – 7.92	0.23 – 0.65	0.72	62.147	55	0.3972	0.049	0.982	0.978	0.055
10.PP*	11	2.72 – 8.61	0.26 – 0.62	0.71	71.589	58	0.4328	0.051	0.983	0.983	0.069
11.FS	10	2.67 – 8.35	0.29 – 0.54	0.74	69.453	57	0.3526	0.055	0.986	0.984	0.051
12.EE	10	2.91 – 7.92	0.25 – 0.58	0.73	67.785	59	0.3945	0.042	0.979	0.981	0.062

Note: *It is a measurement created by the researcher. ** In this research, the emphasis was placed on the t-ratio rather than the r-ratio, with the selection criteria being t-ratio ≥ 2.00 and r-ratio ≥ 0.20. The CFA uses 3 out of 5 or more passing criteria, especially where the χ² value is not statistically significant.

Results and Discussion

576.0% of the collected data of 462 Bangkok residents of working age were male. The mean age was 39.31 years (age standard deviation = 0.80). 50.60 percent of the population was above the age of forty. The marriage rate was 51.70 percent. 67.10% had a bachelor's degree or above. The percentage of employees in private organizations was 50.60 percent. 42.22% of the population resided in condominiums or dorms. 64.70% of the income was less than 50,000 baht. 82% did not have an underlying illness. The correlation analysis of the variables in the combined group (N = 462) revealed that seeking healthcare information had the highest correlation coefficient with self-localization in healthcare and health-promoting eating behavior ($r= 0.492$, $p.01$), followed by self-localization in healthcare ($r= 0.484$). (Table 2). The findings of predicting eating behaviors to enhance health using original mental qualities, situations, and situational mental characteristics as predictors were analyzed using the usual multiple regression methods Enter and Stepwise. It was discovered that 1) the analysis findings for the combined group predictor 1, Psychological Traits and Situational Variables, can predict healthy eating behaviors for 34.60 percent of individuals. The order of the significant predictors was as follows: obtaining health care information, self-evaluation, company social support, and workload. The relative beta values were 0.28, 0.24, 0.16, and 0.13. 2) By 40.40 percent, the results of the combined group analysis, the third predictor encompassing all factors, may predict healthy eating behavior. Self-determination in health care, information access, corporate social support, workload, self-evaluation, and positive psychological capital were listed in descending order. The beta values were 0.32, 0.21, 0.20, 0.10, 0.18, and -0.14. (Table 3). The grouping with the highest percentage of prediction was individuals of working age with comorbidities, at 70.80%. These results support hypothesis 1, which states that there are at least 5% more predictors of good eating behavior when both groups are combined. The results of the overall group and nine subgroups were compatible with previous studies that examined the interactionism theory model (Kongtraipop & Sakdapat, 2022; Sakdapat, 2023). This prediction shows that healthy eating behavior derives from self-control and confidence in one's ability

to do so, which is furthermore consistent with the examination of the second most significant correlation coefficient (Table 2), which corresponds to the Health Promotion Model (Pender et al., 1990). Self-motivation difficulties include action commitment, health-promoting behavior, support for health-promoting activities, and the desire to modify one's health behavior. This predictor for accessing health care information pertains to a category of situations that includes a person's immediate environment, the social context in which the person lives, and historical occurrences. This is a significant component that influences an individual's beliefs and actions. It indicates that persons who seek a great deal of health care information likely to have good eating habits. This is consistent with the correlation coefficient analysis (Table 2). 3) For social support from the organization, this portion of the research findings is consistent with Rhoades and Eisenberger (2002). Suppose working-age people are allocated appropriate welfare from employers, such as sufficient wages, health insurance, and support to motivate people in the organization to pay attention to health problems, see the disadvantages and see the benefits of caring about health, such as nutritious food and exercise. In that case, the organization will have a good quality of life and well-being and will not cause stress to work people, which is considered one of life security and also one of the causes of illness.

Table 2. Intercorrelation matrix and descriptive statistics

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1.HFCB	48.95	7.56	1											
2.AT	35.18	6.99	.257**	1										
3.SL	44.16	8.07	.484**	.034	1									
4.HT	39.71	6.78	.409**	.394**	.509**	1								
5.SI	39.99	6.91	.492**	.389**	.527**	.669**	1							
6.GR	37.77	7.36	.327**	.437**	.247**	.512**	.483**	1						
7.SS	36.60	9.38	.355**	.487**	.082	.404**	.325**	.419**	1					
8.WL	35.94	10.44	.321**	.421**	.139**	.293**	.281**	.346**	.455**	1				
9.AH	39.77	6.50	.358**	.317**	.444**	.522**	.561**	.426**	.153**	.240**	1			
10.PP	44.78	8.02	.309**	.019	.600**	.375**	.487**	.227**	.132**	.031	.480**	1		
11.FS	38.01	7.13	.415**	.536**	.319**	.558**	.527**	.540**	.456**	.373**	.562**	.231**	1	
12.EE	42.94	6.62	.432**	.139**	.610**	.527**	.498**	.287**	.176**	.167**	.562**	.704**	.408**	1

Note. N=462. *p<.05, **p<.01; Numbers in the bracket represent reliability.

Table 3. Multiple regression analysis on healthy food consumption behavior

Group	N	1 st Predictive Set (1 - 8)			2 nd Predictive Set (9 - 11)			3 rd Predictive Set (1 - 11)			% Diff
		Psychological Traits and Situational Factors			Psychological States			Total variables			
		% Predictor	Significant predictors	Beta	% Predictor	Significant predictors	Beta	% Predictor	Significant predictors	Beta	
Total	462	34.6	5, 4, 7, 8	.28, .24, .16, .13	30.1	10, 9, 11	.42, .20, .12	40.4	10, 5, 7, 8, 4, 2	.32, .21, .20, .10, .18, -.14	5.8*
Male	266	55.4	5, 3, 7, 6, 4	.35, .28, .25, -.19, .18	39.6	10, 9, 11	.36, .25, .22	56.8	3, 5, 7, 10, 6	.32, .28, .24, .22, -.16	1.4
Female	196	24.5	6, 4, 8, 3	.28, .27, .23, -.15	20.2	10, 9	.45, .14	35.1	10, 8, 6, 3	.41, .27, .24, -.14	10.6*
Older (>40 years)	234	19.0	8, 5	.29, .24	21.8	10, 9	.46, .22	33.9	10, 11, 8, 7, 3	.46, -.23, .22, .21, .18	12.1*
Younger (≤40 years)	228	51.4	4, 5, 7	.37, .32, .27	36.1	10, 11, 9	.33, .27, .15	54.5	4, 5, 7	.37, .32, .27	3.1
Single	223	55.4	4, 5, 3	.49, .18, .17	42.7	10, 11	.43, .31	59.2	3, 4, 7, 10, 6, 1, 9	.32, .28, .24, .24, -.20, .18, -.17	3.8
Married	239	31.9	5, 8, 7	.29, .26, .17	26.6	10, 9	.36, .35	44.2	10, 11, 8, 5, 9, 7	.38, -.31, .30, .26, .19, .14	12.3*
Educational level lower than bachelor's degree	152	50.1	5, 7, 6	.64, .29, -.21	34.4	9, 10, 11	.57, .45, -.28	60.3	5, 7, 6	.64, .29, -.21	10.2*
Education level of bachelor's degree or higher	310	32.9	4, 6, 7, 8	.41, .20, .11, .11	37.9	10, 11	.45, .27	45.5	10, 6, 4, 7	.43, .21, .16, .14	7.6*
Public	228	34.8	8, 5, 6, 4, 3	.34, .21, -.21, .18, .18	33.3	10	.57	48.4	10, 8, 3, 6	.46, .32, .24, -.19	13.6*
Private	234	50.5	5, 7, 4, 6	.34, .24, .21, .16	35.3	9, 10, 11	.32, .31, .18	52.1	7, 5, 10, 6	.30, .29, .25, .16	1.6
High income (>50,000 baht)	163	56.2	8, 6, 7, 5, 2, 4	.32, -.30, .27, .24, .21, .16	34.5	10, 11	.39, .28	57.5	5, 4, 8, 7, 6, 9	.35, .31, .28, .27, -.25, -.19	1.3
Low income (≤50,000 baht)	299	31.9	5, 4, 6, 7, 2	.27, .26, .21, .19, -.18	28.7	10, 9	.44, .28	42.2	10, 7, 6, 3	.39, .23, .18, .12	10.3*
Live in own house	82	31.2	8, 5	.43, .24	8.2	10	.26	42.2	8, 5, 11	.48, .46, -.33	11.0*
Live in parent's house	185	45.4	1, 4, 8, 6	.37, .33, .25, -.16	45.7	10, 11, 9	.61, .15, .13	58.3	10, 1, 8	.46, .31, .17	12.6*
Live in a dormitory/condo	195	48.5	5, 7, 4	.42, .29, .21	33.4	9, 10, 11	.30, .23, .21	48.9	5, 7, 4	.42, .29, .21	0.4
Have congenital disease	83	67.0	2, 3, 7, 1, 6	.65, .55, .43, -.36, -.27	22.1	10, 9	.38, .32	70.8	2, 3, 7, 1, 6, 11	.61, .51, .47, -.35, -.33, .17	3.8
Not have congenital disease	379	33.4	5, 4, 8, 7	.28, .25, .17, .11	32.2	10, 9, 11	.43, .15, .15	40.8	10, 5, 8, 7	.38, .19, .17, .14	7.4*

Note: All beta values were statistically significant at .05 and had a 5.0% or higher percentage difference.

Predictor codes: 1 Awareness of one's health status, 2 Positive psychological capital, 3 Future-oriented and self-control, 4 Evaluation of one's essence, 5 Seeking healthcare information, 6 Good relationships in the family, 7 Social Support from Organizations, 8 Workload, 9 Attitude towards health care behavior, 10 Self-localization in health care, 11 Health Transformational Leaders

The results of a three-way ANOVA on eating behaviors to promote health based on the significant biosocial background factors (Tables 5 and 6) revealed only one independent variable, age (Table 4). When the group mean was divided by the level of this independent variable, it was determined that younger workers had healthier eating habits than older workers. It was also discovered to vary based on the relationship between gender and marital status. Using Scheffé's approach to compare the paired average scores, it was discovered that the pairs were significantly different. Females of working age who are unmarried have healthier eating habits than males of working age who are married. These results only partially support Hypothesis 2, which states that only females are affected. 1) Younger working-age individuals placed greater emphasis on healthy eating behaviors than older working-age individuals; 2) Single working-age individuals placed greater emphasis on healthy eating behaviors than married working-age individuals, in the same direction as earlier studies ([Intajak, 2020](#); [Pensresirikul, 2012](#)).

Table 4. Three-way analysis of variance results of healthy food consumption behavior according to gender, age, and marital status

Dependent Variable	F-Value						
	Gender	Age	Marital status	A x B	A x C	B x C	A x B x C
	(A)	(B)	(C)				
HFCB	1.074	13.219***	1.256	0.223	4.661*	0.212	2.383

Note: *p<.05, **p<.01, ***p<.001; N=462.

Table 5. Scores of the situational factors, psychological traits, psychological states, and healthy food consumption behavior

Dependent Variable	Group	Comparison of average scores of dependent variables				
		High-scored Group	Mean	SE	95%CI Lower	95%CI Upper
HFCB	Gender	Female	49.428	0.538	48.370	50.485
	Age	Younger	50.346	0.511	49.341	51.350
	Status	Single	49.457	0.516	48.444	50.471
	Group	Low-scored Group	Mean	SE	95%CI Lower	95%CI Upper
	Gender	Male	48.696	0.457	47.797	49.595
	Age	Older	47.778	0.488	46.820	48.736
Status	Married	48.666	0.483	47.717	49.614	

Table 6. The Three-way ANOVA compared the means of eating healthy behaviors, divided by gender and marital status

Gender	Marital status	N	Mean	Code	22	21	12
Male	Single	133	49.854	11	0.060	0.793	2.316*
Female	Married	106	49.794	22		0.733	2.256*
Female	Single	90	49.061	21			1.523
Male	Married	133	47.538	12			

Note. * $p < .05$.

This study indicated that males, older groups, and married groups tend to have less healthy eating patterns than other groups (Table 6). The various developmental approaches were as follows: 1) the development of male characteristics; 2) the development of the older age group's locus of control in health care and workload; and 3) the development of the pursuit of healthcare information and social support from the organization for the married group. Due to the diverse factors of working-age individuals in the capital city, the researcher recommends developing techniques, namely 1) acquiring health care information. It was a significant predictor indicating that for the gender and married groups, developing this variable's knowledge and access to health information for working people should be the top priority. This involves health information awareness. Once informed, there will be assessments,

concerns, and decisions regarding health care in daily life. As a result, the government and associated agencies should emphasize and establish values relating to age-appropriate food consumption and body-appropriate exercise from elementary school through college to build knowledge to reduce dangers. Moreover, knowledge should be disseminated conceivably through public relations in numerous regions. Individuals have access to credible health information sources. People should be educated about the need to consume nutritious food, and workers should be made aware of the dangers and risks they face and encouraged to conduct regular health checks. This is considered a healthcare standard. 2) Workplace development is required for both work burden and social support from the organization. It should prioritize effectively distributing the task and refrain from applying excessive pressure. Training and seminars on time allocation for work, rest, food consumption, and exercise should impart knowledge. For social assistance from the organization, an expert, such as a psychologist, may be offered for workplace counseling to alleviate stress and foster comprehension or motivation in health care. Moreover, the working environment should be favorable to the type of work to enhance the quality of work life. Together, the growth of the body and mind should be emphasized. The forum of monthly meetings can be utilized for information sharing. It will foster admiration and advice sharing among working individuals.

Conclusion

This research presents a new body of knowledge regarding the integration of causal variables of eating behavior to promote health in a multidisciplinary manner encompassing workplace social circumstances. Comparisons of a person's initial psychopathic group and mental qualities can be made in detail and depth based on the scenario. Because Interaction Theory is a comprehensive study of extrinsic and intrinsic causal factors and behavioral outcomes that can be precisely predicted and explained for a person's behavior, it is possible to identify significant causal variables by using it as the conceptual framework for the documentary. This research employs numerous types of statistical data analysis, including Regression analysis with multiple parameters. The final set of predictors, which included all factors, could

predict healthy food consumption by 40.40 percent. This is deemed acceptable and highlights the aspects that need to be created and the variables that need to be enhanced. This is crucial for the group since it includes these characteristics in the policy to address problems specific to the target group. The results of a three-way analysis of variance indicated that three independent factors interacted with the dependent variable, generating differences in the results' specifics. Occasionally, the results seem to support a connection between them. Yet, statistics can occasionally produce contradictory results. Numerous statistical analyses clarify the situation. It permits the confirmation of conclusions with adequate specificity. The research results and policy ideas derived from identifying key predictors have been used to extend the practical implications of this study to relevant agencies in both the public and commercial sectors in Bangkok and other provinces. This extends the outcomes beyond the sample group, resulting in widespread change. The researcher has prepared training for working-age individuals to reinforce and develop age-appropriate dietary habits that promote health. In addition, the researcher has compiled a knowledge manual on food intake that emphasizes proper nutrition, the disease-causing effects of eating unhealthy foods, and physical and mental strengthening exercises. This aims to encourage people of working age to study, review, and observe the dangers and advantages of food and the repercussions of improper consumption.

Limitations and Recommendations

This study employed a relatively large sample size. Systematic random sampling was utilized in the investigation. Consequently, the sample population meets the aims of the study. Yet, this huge sample size might easily render the statistical significance of the research results ambiguous and obscure the examination of some aspects. It should be used to examine interaction effects, improving the clarity and specificity of the data analysis outcomes. The researcher conducted subgroup analyses. This provides a comprehensive picture of the major predictors within each subgroup, leading to extremely thorough and particular development recommendations.

This research's measuring instruments are a measurement to which the researcher contributed concepts and principles by isolating aspects of each dimension following the theory, totaling 12 variables, and reconstructing and modifying the questions to fit the context of Thai society. Correlation coefficient analyses were conducted based on processing relevant documents and submitting them to a qualified individual for quality inspection, item discrimination, or t value. Each of which measures item-total correlation or r value, confirmatory factor analysis, and reliability. It displays the quality of dependable measurement tools and can be expanded upon with similar studies about the standardization of the quality of academic works. The results of this study can be utilized to establish model activities to develop elements to encourage healthy food consumption among working individuals or to use the results of this study for a long-term experimental-evaluative study.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Englewood cliffs Prentice Hall.
- Dangerfield, F., Ball, K., Dickson-Swift, V., & Thornton, L. E. (2021). Understanding regional food environments: A qualitative exploration of food purchasing behaviour. *Health & Place*, 71, 102652. <https://doi.org/10.1016/j.healthplace.2021.102652>
- De Volder, M. L., & Lens, W. (1982). Academic achievement and future time perspective as a cognitive-motivational concept. *Journal of Personality and Social Psychology*, 42(3), 566-571. <https://doi.org/10.1037/0022-3514.42.3.566>
- Endler, N. S., & Magnusson, D. (1977). The interaction model of anxiety: An empirical test in an examination situation. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 9(2), 101-107. <https://doi.org/10.1037/h0081612>
- Fuhrman, J. (2018). The hidden dangers of fast and processed food. *American journal of lifestyle medicine*, 12(5), 375-381. <https://doi.org/10.1177/1559827618766483>

- Gizaw, Z. (2019). Public health risks related to food safety issues in the food market: a systematic literature review. *Environmental health and preventive medicine*, 24, 1-21. <https://doi.org/10.1186/s12199-019-0825-5>
- Intajak, K. (2020). *Influences of clean food consuming determinants on consumer's behavioral intention*. Chulalongkorn University.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel psychology*, 56(2), 303-331. <https://doi.org/10.1111/j.1744-6570.2003.tb00152.x>
- Key, T. J., Bradbury, K. E., Perez-Cornago, A., Sinha, R., Tsilidis, K. K., & Tsugane, S. (2020). Diet, nutrition, and cancer risk: what do we know and what is the way forward? *Bmj*, 368. <https://doi.org/10.1136/bmj.m511>
- Kongtraipop, V., & Sakdapat, N. (2022). Causal factors of spending behavior by Thai undergraduate students: a path analytic approach. *Journal of Demography*, 38(2), 3. <https://doi.org/10.14456/jod.2022.7>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>
- Ley, S. H., Hamdy, O., Mohan, V., & Hu, F. B. (2014). Prevention and management of type 2 diabetes: dietary components and nutritional strategies. *The Lancet*, 383(9933), 1999-2007. [https://doi.org/10.1016/S0140-6736\(14\)60613-9](https://doi.org/10.1016/S0140-6736(14)60613-9)
- Liu, A. G., Ford, N. A., Hu, F. B., Zelman, K. M., Mozaffarian, D., & Kris-Etherton, P. M. (2017). A healthy approach to dietary fats: understanding the science and taking action to reduce consumer confusion. *Nutrition journal*, 16(1), 1-15. <https://doi.org/10.1186/s12937-017-0271-4>
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of management*, 33(3), 321-349. <https://doi.org/10.1177/0149206307300814>
- Ozemek, C., Laddu, D. R., Arena, R., & Lavie, C. J. (2018). The role of diet for prevention and management of hypertension. *Current opinion in cardiology*, 33(4), 388-393. <https://doi.org/10.1097/HCO.0000000000000532>
- Pallazola, V. A., Davis, D. M., Whelton, S. P., Cardoso, R., Latina, J. M., Michos, E. D., Sarkar, S., Blumenthal, R. S., Arnett, D. K., & Stone, N. J. (2019). A clinician's guide to healthy eating for cardiovascular disease prevention. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, 3(3), 251-267. <https://doi.org/10.1016/j.mayocpiqo.2019.05.001>

- Pender, N. J., Walker, S. N., Sechrist, K. R., & Frank-Stromborg, M. (1990). Predicting health-promoting lifestyles in the workplace. *Nurs Res*, 39(6), 326-332. <https://pubmed.ncbi.nlm.nih.gov/2092305>
- Pensresirikul, W. (2012). *Factors related to food consumption behaviors of working people in Bangkok Metropolis*. (Doctoral dissertation). Chulalongkorn University. <http://cuir.car.chula.ac.th/handle/123456789/44757>
- Rhoades, L., & Eisenberger, R. (2002). Perceived Organizational Support: A Review of the Literature. *The Journal of applied psychology*, 87, 698-714. <https://doi.org/10.1037//0021-9010.87.4.698>
- Robbins, B., & Davidhizar, R. (2020). Transformational leadership in health care today. *The Health Care Manager*, 39(3), 117-121. <https://doi.org/10.1097/HCM.0000000000000296>
- Sakdapat, N. (2023). Psychosocial factors and situational factors correlated to financial planning behavior of private sector employees. *Procedia of Multidisciplinary Research*, 1(1), 11-11. <https://so09.tci-thaijo.org/index.php/PMR/article/view/885>
- Terry, P. E. (2021). Health promotion planning and an interview with Dr. Lawrence Green. *American Journal of Health Promotion*, 35(6), 760-765. <https://doi.org/10.1177/08901171211022560>
- Thomas, A. L., & Brausch, A. M. (2022). Family and peer support moderates the relationship between distress tolerance and suicide risk in black college students. *Journal of American college health*, 70(4), 1138-1145. <https://doi.org/10.1080/07448481.2020.1786096>
- Tongkum, S., & Sasananan, M. (2014). Supply Chain of Organic Vegetables: A Case Study of Food Safety Program in Hospital. *Journal of Interdisciplinary Research: Graduate Studies*, 3(2), 23-34. <https://www.scribd.com/document/254719818>
- Wang, H. H., & Laffrey, S. C. (2001). A predictive model of well-being and self-care for rural elderly women in Taiwan. *Research in Nursing & Health*, 24(2), 122-132. <https://doi.org/10.1002/nur.1015>
- Weinger, M. B., Vredenburgh, A. G., Schumann, C. M., Macario, A., Williams, K. J., Kalsher, M. J., Smith, B., Truong, P. C., & Kim, A. (2000). Quantitative description of the workload associated with airway management procedures. *Journal of clinical anesthesia*, 12(4), 273-282. [https://doi.org/10.1016/S0952-8180\(00\)00152-5](https://doi.org/10.1016/S0952-8180(00)00152-5)

- Zhang, X., Chen, B., Li, G., & Dong, Y. (2022). Exploring the health information seeking behavior of social media users under the background of COVID-19 pandemic: An empirical study based on social cognitive theory. *Frontiers in Psychology, 13*. <https://doi.org/10.3389/fpsyg.2022.1045914>
- Zielińska-Więczkowska, H. (2016). Relationships between health behaviors, self-efficacy, and health locus of control of students at the universities of the third age. *Medical Science Monitor: international medical journal of experimental and clinical research, 22*, 508-515. <https://doi.org/10.12659/MSM.894997>