

SOCIAL REPRESENTATIONS OF FOOD AND HEALTHY EATING
DURING COVID-19 PANDEMIC

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

EKİN KÖSEGİL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
IN
THE DEPARTMENT OF PSYCHOLOGY

AUGUST 2022

Approval of the thesis:

**SOCIAL REPRESENTATIONS OF FOOD AND HEALTHY EATING
DURING COVID-19 PANDEMIC**

submitted by **EKİN KÖSEGİL** in partial fulfillment of the requirements for the degree of **Doctor of Philosophy in Psychology, the Graduate School of Social Sciences of Middle East Technical University** by,

Prof. Dr. Yaşar KONDAKÇI
Dean
Graduate School of Social Sciences

Prof. Dr. Mine MISIRLISOY
Head of Department
Department of Psychology

Prof. Dr. Bengi ÖNER ÖZKAN
Supervisor
Department of Psychology

Examining Committee Members:

Prof. Dr. Özlem BOZO ÖZEN(Head of the Examining Committee)
Middle East Technical University
Department of Psychology

Prof. Dr. Bengi ÖNER ÖZKAN (Supervisor)
Middle East Technical University
Department of Psychology

Prof. Dr. Yeşim YASAK
Çankırı Karatekin University
Department of Psychology

Assoc. Prof. Dr. Müjde KOCA ATABEY
Ankara Medipol University
Department of Psychology

Assist. Prof. Dr. Kerim SELVİ
Eskişehir Osmangazi University
Department of Psychology



I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name: Ekin Kösegil

Signature:

ABSTRACT

SOCIAL REPRESENTATIONS OF FOOD AND HEALTHY EATING DURING COVID-19 PANDEMIC

KÖSEGİL, Ekin

Ph.D., The Department of Psychology

Supervisor: Prof. Dr. Bengi ÖNER ÖZKAN

August 2022, 141 pages

The COVID-19 pandemic has changed daily eating habits. This dissertation aims to investigate attitudes, meanings, and beliefs related to food and healthy eating and their relationship with healthy eating behavior in the pandemic context. This dissertation uses a mixed methodology approach consisting of a qualitative and quantitative study. Study 1 aims to identify the contents and thematic structure of social representations of food and healthy eating during the Covid-19 pandemic. Semi-structured interviews were conducted with 26 participants. The qualitative analysis identified eleven themes: “Eating is a pleasure for me”, “Food is primarily a necessity”, “Food in the social order”, “Traditional food culture”, “Development of food preferences”, “Healthy eating”, “Unhealthy eating”, “Food is central to human biology”, “Natural food is healthy”, “Changes in diet due to pandemic Conditions”, “Changes in diet to protect against Covid-19”. Study 2 applies the theory of planned behavior to identify predictors of healthy eating behavior during the pandemic. Data were analyzed using Structural Equation Modeling. Fit indices showed close fit, namely theory of planned behavior model well explained healthy eating behavior in the pandemic context. All hypothesized relationships between latent variables except the path from the subjective

norm to intention were significant. Perceived behavioral control and control beliefs were significantly associated with healthy eating behavior during the pandemic. As much as individuals believe in their capability to eat healthily and have internal or external resources that facilitate healthy eating, they will be more likely to eat healthy in the pandemic context.

Keywords: social representations, food, healthy eating, Covid-19, theory of planned behavior



ÖZ

COVID-19 PANDEMİSİ DÖNEMİNDE YEMEK VE SAĞLIKLI BESLENMENİN SOSYAL TEMSİLLERİ

KÖSEGİL, Ekin

Doktora, Psikoloji Bölümü

Tez Yöneticisi: Prof. Dr. Bengi ÖNER ÖZKAN

Ağustos 2022, 141 sayfa

COVID-19 pandemisi günlük yeme alışkanlıklarını değiştirdi. Bu tez pandemi bağlamında yemek ve sağlıklı beslenmeyle ilgili tutum, anlam ve inançları ve bunların sağlıklı beslenme davranışı ile ilişkisini araştırmayı amaçlamaktadır. Bu tez, bir nitel ve bir nicel çalışmadan oluşan karma metodoloji yaklaşımı kullanır. Çalışma 1, Covid-19 pandemisi döneminde yemek ve sağlıklı beslenmenin sosyal temsillerinin içeriklerini ve tematik yapısını belirlemeyi amaçlamaktadır. 26 katılımcı ile yarı yapılandırılmış görüşmeler yapılmıştır. Nitel analiz on bir tema belirledi: “Yemek benim için zevktir”, “Yemek öncelikle ihtiyaçtır”, “Sosyal düzende yemek”, “Geleneksel yemek kültürü”, “Yemek tercihlerinin gelişimi”, “Sağlıklı beslenme”, “Sağlıksız beslenme”, “Yemek insan biyolojisinin merkezinde yer alır”, “Doğal yemek sağlıklıdır”, “Pandemi koşullarına bağlı beslenme değişiklikleri”, “Covid-19'dan korunmak için beslenme değişiklikleri”. Çalışma 2, pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirlemek için planlı davranış teorisini uygular. Veriler, Yapısal Eşitlik Modellemesi kullanılarak analiz edildi. Uyum indeksleri yakın uyum gösterdi, yani planlı davranış teorisi modeli, pandemi bağlamında sağlıklı beslenme davranışını iyi açıkladı. Öznel normdan niyete giden yol dışında, gizil değişkenler arasındaki tüm varsayımsal ilişkiler anlamlıydı. Algılanan

davranışsal kontrol ve kontrol inançları, pandemi döneminde sağlıklı beslenme davranışı ile anlamlı bir biçimde ilişkiliydi. Bireyler sağlıklı beslenme kabiliyetlerine inandıkları ve sağlıklı beslenmeyi kolaylaştıran iç veya dış kaynaklara sahip oldukları ölçüde, pandemi bağlamında sağlıklı beslenme olasılıkları o kadar çok olacaktır.

Anahtar Kelimeler: sosyal temsil, yemek, sağlıklı beslenme, Covid-19, planlı davranış teorisi



to the good days to come



ACKNOWLEDGMENTS

Firstly, I would like to express my deepest gratitude to my advisor Prof. Dr. Bengi Öner Özkan, for her valuable guidance and everlasting support. She has been an encouraging, supportive, and compassionate role model for me. I feel very lucky to have such an amazing advisor.

I would like to thank thesis monitoring committee members, Prof. Dr. Özlem Bozo Özen, and Assoc. Prof. Dr. Müjde Koca Atabey for their valuable contributions and positive feedback to my research. They were always kind and supportive at every stage of the process. Also, I would like to thank the jury members of my thesis defense, Prof. Dr. Yeşim Yasak, and Assist. Prof. Dr. Kerim Selvi for their encouragement, contribution, comments, and suggestions.

I feel so grateful to all my friends and faculty members in the Psychology department. Completing this whole process in an environment surrounded by people like you and sharing similar paths with you were unforgettable experiences for me. Thank you all for your remarkable efforts!

I would like to thank The Scientific and Technological Research Council of Turkey, TÜBİTAK, for providing financial support during my Ph.D. with BİDEB 2211/A National PhD Scholarship Program.

I am very grateful to the participants of the studies and the people who helped me during the data collection process.

I would like to present the biggest thanks to my dear family. Mom, you inspired me to find a thesis topic with the delicious food you cook. Dad, thank you for prioritizing my education and your contribution to my critical thinking. Sister, knowing your presence gives me strength. I love you so much!

TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT	iv
ÖZ.....	vi
DEDICATION	viii
ACKNOWLEDGMENTS.....	ix
TABLE OF CONTENTS	x
LIST OF TABLES	xiv
LIST OF FIGURES.....	xvi
CHAPTERS	
1. INTRODUCTION.....	1
2. STUDY 1 QUALITATIVE.....	7
2.1. Introduction	7
2.1.1. Foundational Food Studies.....	7
2.1.2. Social Representations Theory.....	10
2.1.2.1. Social Representations of Food.....	15
2.1.2.2. Concept of Themata	16
2.1.2.3. Themata of Food Representations.....	17
2.1.3. Food Studies That Applied Social Representations Framework.....	17
2.1.3.1. Dimensions of Food Representations.....	17
2.1.3.2. Social Representations of Food Questionnaire	19
2.1.3.3. Cross-cultural Development of Social Representations of Food Scale	21
2.1.3.4. Social Representations and Consumer Behaviors.....	22
2.1.3.5. Culture and Food Representations	23
2.1.4. Turkish Culture and Food Activities.....	24

2.1.4.1. Gender	25
2.1.4.2. Ethnicity	26
2.1.4.3. Rural Urban Dichotomy	27
2.1.4.4. Class	27
2.1.4.5. Diet-Health Link and Turkish Culture	28
2.1.5. Research Questions	28
2.2. Method	28
2.2.1. Participants	28
2.2.2. Procedure.....	30
2.3. Results	31
2.3.1. Food Representations	32
2.3.1.1. Eating is a Pleasure for Me	32
2.3.1.2. Food is Primarily a Necessity	33
2.3.1.3. Food in the Social Order	34
2.3.1.4. Traditional Food Culture.....	37
2.3.1.5. Development of Food Preferences	40
2.3.2. Healthy Eating Representations	42
2.3.2.1. Healthy Eating.....	42
2.3.2.2. Unhealthy Eating.....	43
2.3.2.3. Food is Central to Human Biology	45
2.3.2.4. Natural Food is Healthy	46
2.3.3. Eating Representations Affected by Covid-19 Pandemic.....	47
2.3.3.1. Changes in Diet due to Pandemic Conditions.....	48
2.3.3.2. Changes in Diet to Protect Against Covid-19.....	49
2.4. Discussion	51
3. STUDY 2 QUANTITATIVE.....	57
3.1. Introduction	57

3.1.1. Theory of Planned Behavior	57
3.1.2. Healthy Eating Studies That Applied Theory of Planned Behavior	59
3.1.3. The Effect of Covid-19 Pandemic on Eating Behavior.....	60
3.1.4. Research Questions	64
3.2. Method	65
3.2.1. Measures.....	65
3.2.1.1. Healthy Eating Behavior	65
3.2.1.2. Past Healthy Eating Behavior	65
3.2.1.3. Attitudes towards Healthy Eating	66
3.2.1.4. Behavioral Beliefs Regarding Healthy Eating	66
3.2.1.5. Subjective Norm Regarding Healthy Eating	67
3.2.1.6. Normative Beliefs Regarding Healthy Eating.....	67
3.2.1.7. Perceived Behavioral Control Regarding Healthy Eating.....	67
3.2.1.8. Control Beliefs Regarding Healthy Eating.....	68
3.2.1.9. Intention towards Healthy Eating.....	68
3.2.2. Reliability Analysis of Variables	69
3.3. Results	70
3.3.1. Data Screening	70
3.3.1.1. Missing Data	70
3.3.1.2. Outliers	70
3.3.1.3. Normality	70
3.3.1.4. Multicollinearity	71
3.3.2. Demographic Characteristic of Participants.....	72
3.3.3. Descriptive Statistics	73
3.3.3.1. Healthy Eating Behavior	73
3.3.3.2. Past Healthy Eating Behavior	73
3.3.3.3. Attitudes Towards Healthy Eating	74

3.3.3.4. Behavioral Beliefs.....	75
3.3.3.5. Subjective Norm Regarding Healthy Eating.....	76
3.3.3.6. Normative Beliefs	76
3.3.3.7. Perceived Behavioral Control Regarding Healthy Eating	77
3.3.3.8. Control Beliefs	78
3.3.3.9. Intention Towards Healthy Eating	80
3.3.4. Correlation Among Variables	80
3.3.5. Structural Equation Modelling.....	83
3.3.5.1. Fit Indices.....	85
3.3.5.2. Measurement Model.....	85
3.3.5.3. Structural Model.....	87
3.4. Discussion	89
4. GENERAL DISCUSSION AND CONCLUSIONS.....	94
REFERENCES.....	99
APPENDICES	
A. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE.	118
B. TURKISH SUMMARY/TÜRKÇE ÖZET.....	119
C. CURRICULUM VITAE	140
D. THESIS PERMISSION FORM / TEZ İZİN FORMU.....	141

LIST OF TABLES

Table 1. Demographic Variables of Participants	29
Table 2. Thematic Block of “Eating is a pleasure for me”	32
Table 3. Thematic Block of “Food is primarily a necessity”	33
Table 4. Thematic Block of “Food in the social order”	34
Table 5. Thematic Block of “Traditional food culture”	37
Table 6. Thematic Block of “Development of food preferences”	40
Table 7. Thematic Block of “Healthy eating”	42
Table 8. Thematic Block of “Unhealthy eating”	43
Table 9. Thematic Block of “Food is central to human biology”	45
Table 10. Thematic Block of “Natural food is healthy”	46
Table 11. Thematic Block of “Changes in diet due to pandemic conditions”	48
Table 12. Thematic Block of “Changes in diet to protect against Covid”	49
Table 13. Reliability analysis of the theory of planned behavior constructs	69
Table 14. Skewness and Kurtosis Values of Variables	71
Table 15. Demographic Characteristics of Participants	72
Table 16. Mean, Standard Deviation, and Frequency Distribution of Behavior	73
Table 17. Mean, Standard Deviation, and Frequency Distribution of Past Behavior	73
Table 18. Mean, Standard Deviation, and Frequency Distribution of Attitude	74
Table 19. Mean, Standard Deviation, and Frequency Distribution of Behavioral Belief Strength	75
Table 20. Mean, Standard Deviation, and Frequency Distribution of Outcome Evaluations	75
Table 21. Mean, Standard Deviation, and Frequency Distribution of Subjective Norm	76
Table 22. Mean, Standard Deviation, and Frequency Distribution of Normative Belief Strength	76
Table 23. Mean, Standard Deviation, and Frequency Distribution of Motivation to Comply	77

Table 24. Mean, Standard Deviation, and Frequency Distribution of Perceived Behavioral Control.....	77
Table 25. Mean, Standard Deviation, and Frequency Distribution of Power of Control Factors.....	78
Table 26. Mean, Standard Deviation, and Frequency Distribution of Control Belief Strength	79
Table 27. Mean, Standard Deviation, and Frequency Distribution of Intention.....	80
Table 28. Correlations among variables.....	81
Table 29. Model Fit Information of Structural Equation Modelling Analysis	85
Table 30. Results of Confirmatory Factor Analysis of the Measurement Model (Mplus standardization)	85
Table 31. Path coefficients in structural equation modeling.....	88

LIST OF FIGURES

Figure 1. Thematic Map of Representations	31
Figure 2. Hypothesized Structural Equation Model Predicting Healthy Eating Behavior During the Pandemic	82
Figure 3. Structural Model of Structural Equation Modelling (Mplus standardized estimates).....	87



CHAPTER 1

INTRODUCTION

Pandemics are disease outbreaks becoming widespread due to the spread of human-to-human infection (Qui et al., 2016/2017). Throughout history, pandemics such as Spanish flu, Asian flu, Hong Kong flu, Swine flu have occurred globally (Saunders-Hastings and Krewski, 2016). Pandemics caused crises and negatively impacted national and global communities' health, economy, society, and security. Additionally, they have caused significant social and political disruption (Qui et al., 2016/2017). Coronavirus disease 2019 (COVID-19) first appeared in China and spread to 114 countries with 118.000 cases by March 11, 2020, and World Health Organization (WHO) described the COVID-19 outbreak as a pandemic (WHO, 2020). As of July 3, 2021, the Turkish Ministry of Health reported that the total number of cases in Turkey was 5,440,368, and the total number of deaths was 49,874 (Health Ministry of Turkey, 2021). On 1 December 2020, the Turkish Interior Ministry declared a curfew and accompanying restrictions, including the closure of workplaces and schools and transportation restrictions (Interior Ministry of Turkey, 2020).

The pandemic has changed daily eating habits. Habits form a great deal of individuals' everyday activities. Eating habits are a few of the most striking (Wood et al., 2014). Eating routines are different ways individuals regularly construct eating practices. They may modify routines with changing circumstances. Eating routines are rooted in work, recreation, and family schedules (Jastran et al., 2009). The social setting is an important dimension of everyday eating episodes. Terms such as situation, context, and setting are elements involved in the act of eating, and they are external to the individual and apart from the particular food of interest. Eating is linked to roles, responsibilities at home and work, and daily schedules (Bisogni et al., 2007). The pandemic has deeply affected individuals' lives as an external effect. During confinement, individuals had to modify their eating routines to adopt changing

conditions such as daily schedules, remote working, new responsibilities, finding new recreational activities and home-schooling.

The pandemic has raised health consciousness, which has increased the demand for balanced diets (Zwanka and Buff, 2021). A well-functioning immune system is strongly related to diet (Childs et al., 2019) and obesity increases the risk of dying from COVID-19 infection (Kassir, 2020). These have increased the importance of the relationship between health and diet. Over the past decade, diets and lifestyles have been rapidly changed due to industrialization, economic development, market globalization, and urbanization. These changes significantly affect populations' health and nutritional status, especially in developing countries (WHO, 2003). Prevalent chronic diseases have grown in developed and developing countries due to dietary and lifestyle changes. Scientific evidence demonstrates that diet both positively and negatively affects health throughout life. Diet plays a vital role in preventing chronic diseases, including diabetes, obesity, cardiovascular disease, hypertension, and some types of cancer (WHO, 2003). According to World Health Organization (WHO) effective public health policies for preventing chronic diseases should consider the human organism's complex relationship to its environment and societal, ecological, and behavioral aspects of diet and health (WHO, 2003).

Research shows that although the pandemic reduced restaurant dining and fast-food consumption among lower-income individuals, total amounts remained comparably high, and higher fast-food consumption was related to poor diet (Cohen et al., 2022). Americans spend 42 percent of their food budget on food eaten away from home, which is less nutritious than food prepared at home (McGuire, 2011). Research conducted with American participants shows that although Americans value cooking from scratch, they generally use convenience foods (Wolfson et al., 2016). Research demonstrates that Americans spend less time on home cooking, and they mostly eat out (Smith et al., 2013). Previous studies on cooking at home were mostly conducted with American participants. The current study will be conducted within Turkish culture, where cooking at home is valued more.

The pandemic imposed constraints on leisure. Governments introduced restrictive measures on leisure activities such as going to malls, bars, restaurants, beaches, parks, public gatherings, and family visits that people used to do before the pandemic as leisure. People respond to this by learning creative ways of filling long-

vacant hours at home (Stodolska, 2021). The experience of adverse life events causes stress, and leisure works as a significant resource transcending adverse life events (Kleiber, 2002). Leisure served to cope with stress brought by the pandemic and escape from the boredom of home confinement (Stodolska, 2021). People who stayed at home during the pandemic appeal to recreational activities to spend their leisure time. Aşan and Kınay (2021) analyzed social media trend of bread-making at home in Turkey during quarantine. Making bread at home and sharing it on social media as a recreational activity has positive outcomes on individuals: feeling positive emotions, relaxation, healing, having an activity with family members, and sharing it on social media thought as a recreational socialization experience.

Cooking at home has increased due to closed restaurants and the need for leisure activities to spend long-vacant hours at home during confinement. A study conducted in the Turkish context showed that home-cooking as a leisure activity has positive psychological effects such as happiness, relaxation, gaining knowledge and skills, self-enrichment and self-actualization (Güler and Haseki, 2021). Cooking at home is perceived as an essential activity (Short, 2006). A systematic review (Mills et al., 2017) showed that home cooking has positive consequences on health and diet and leads to better social outcomes. Specifically, home cooking positively affects gender, BMI, personal relationships, and cultural identity. Cooking at home is a way to connect family members through meals and leads to family cohesion. Connecting to other family members is one psychosocial advantage of family meals (Simmons and Chapman, 2012).

Research shows that the pandemic-caused stress has negative and positive consequences on food parenting. The negative outcome is non-nutritive feeding practices, whereas positive outcomes are making efforts to create meal routines and pleasurable interactions while eating occasions (Jansen et al., 2021). Family as a social context influences children's eating behavior. Children learn and adopt eating behaviors from their parents in either healthy or unhealthy directions (Yee, 2017). In Turkish culture, family meals enable establishing solidarity and commitment in the family and emotionally supporting family members. Family meals contribute to socialization. The socialization process, in turn, has shaped eating styles and eating habits (Beşirli, 2010). Commensality means eating with other individuals. Commensal eating structures show the social relationships of individuals. Most frequent

commensal partners are family members, and they constitute a commensal circle. Family is the basic commensal unit (Sobal, and Nelson, 2003).

The pandemic also disrupted family life. The pandemic caused parents to feel stress, primarily due to balancing work-life with the joined responsibility of homeschooling and childcare (Carroll et al., 2020). The confinement exacerbated gender inequality in sharing parenting duties such as cooking, childcare, and household chores. Parenting responsibilities while remote working led to a psychological burden, especially for working mothers (Manzo and Minello, 2020). Research conducted with Turkish mothers showed that women had difficulties adapting to changing daily routines and were at greater risk of experiencing psychological problems due to the unproportioned parenting responsibilities during confinement (Özdemir et al., 2021). During confinement, caregivers faced the brunt of disrupted daily routines and increasing childcare responsibilities, leading to dysfunctional eating behavior (Jordan et al., 2021).

A systematic meta-analysis showed that the pandemic had affected the mental health of individuals from different communities; additionally, anxiety, depression, and stress were prevalent among the general population (Salari et al., 2020). Negative emotions induced by the confinement, such as anxiety, stress, and depression, also have impacted eating behaviors. Research conducted during the pandemic showed that higher depression, anxiety, and unsupportive social interactions led to emotional eating, while higher stress led to binge eating (Cecchetto et al., 2021). Emotional eating is overeating when responding to negative emotions, and it is a maladaptive coping strategy to stressors. Emotional eating is related to posttraumatic stress disorder (Talbot et al., 2013) and anxiety and depression (Goossens et al., 2009). Increased emotional eating might be induced by an attempt to escape from self-awareness (Wallis and Hetherington, 2004). Anxiety and stress and higher levels of perceived stress, poor coping skills, and low social support were associated with binge eating (Rosenbaum and White, 2015; Freeman and Gil, 2004).

Both individual and social factors affect food choice in other words the interaction between the larger food system and individual food-related acts creates food choice. Life-course experiences significantly influence food choice, including personal factors, resources, ideals, social contexts, and the food context. These influences led to the development of personal systems for making food choices (Furst

et al., 1996). Individuals use thoughts and considerations in selecting and eating food. The considerations as a basis for food choice are labeled as values. Individuals managed food-related values of health, taste, cost, social relationships, convenience, symbolism, variety, ethics, safety, quality, and waste in personal food systems (Connors et al., 2001). Values guide and motivate behavior and are defined as enduring beliefs (Kahle and Timmer, 1983). Attitudes towards food may form according to the impact of the particular historical era, the cultural and social settings, and the timing and trajectories of experiences of past and current events (Furst et al., 1996). Meanings of foods and food attitudes can change with new information, new relationships, new situations, and new environments. When change or new information is introduced into lives, individuals re-define what is acceptable behavior and what values become most important. In the re-defining process, individuals use skills they acquired over their lives. They obtain information from the media, professionals, friends, and family. These resources enhance their ability to restructure a personal food system (Connors et al., 2001).

This dissertation will explore values, attitudes, beliefs, thoughts, meanings, and behaviors related to food and healthy eating and how they changed with the pandemic. Secondly, this dissertation will investigate the relationship between beliefs, attitudes, and behaviors related to healthy eating during the pandemic. Furthermore, this dissertation will identify predictors of healthy eating during the pandemic. This dissertation applies two social psychology theories to achieve these aims. Social representations theory will be applied to explore values, attitudes, beliefs, meanings, and behaviors related to food and eating during the pandemic. Theory of planned behavior will be applied to investigate the relationship between beliefs, attitudes, and behavior and identify predictors of healthy eating during the pandemic. This dissertation utilizes a mixed methodology and consists of a qualitative study based on semi-structured interviews and a quantitative study based on a survey.

Investigating food and healthy eating by focusing on social, cultural, and psychological aspects is worthwhile. Changing external circumstances brought by the pandemic like a quasi-experiment provides an opportunity to study the effect of the social environment on eating from a social psychology perspective. There is a controversy about whether the pandemic caused healthy or unhealthy eating in the

literature. As it becomes more difficult to tend to healthy behavior in times of crisis, it is valuable to identify predictors of healthy eating behavior in such a period.



CHAPTER 2

STUDY 1 QUALITATIVE

2.1. Introduction

2.1.1. Foundational Food Studies

Food is a fruitful subject studied from different perspectives by sociologists, anthropologists and psychologists. In light of these studies, food has started to be seen as a social phenomenon that brings people together, besides being nutrition. According to the psychologist Rozin (1996) food starts with being a source of nutrition and sensory pleasure and continues with being a social marker, a source of meaning and metaphor, a moral entity, and an aesthetic experience. Culture-specific traditions direct these transformations. Food is a source of pleasure for people from diverse cultures. The joy of food has appeared as an aesthetic pleasure in the elaborated forms of cuisine by food as an art form.

In the 19th century, anthropology dealt with food in relation to taboo, totem, sacrifice, and communion, and addressed food in the context of the religious aspects of the consumption process (e.g., Frazer 1890; Crawley, 1902). After that, anthropologists focus on the role of commensalism in establishing and maintaining social relations. For instance, traditions that seem meaningless and absurd at first sight fulfill the most important tasks in the social economy (Radcliffe-Brown, 1922). The act of searching for food requires cooperation; in addition, it also strengthens the established cooperation (Malinowski, 1929).

Unlike animals, human beings cook their food. Levi-Strauss (1966/2012), one of the pioneering researchers in the field, studied cooking as a universal human activity and proposed that the way of cooking of a society is a language. Categories of raw, cooked, and rotted constitute a culinary triangle based on binary oppositions that are elaborated/unelaborated and nature/culture. Cooking is not placed solely on the side of culture. Roasted is at the side of nature, whereas boiled is at the side of culture

because boiling requires a cultural object. Boiled and rotted are two modes of the elaborated, whereas roasted and raw are two modes of the unelaborated.

Another pioneering researcher Douglas (1972) focuses on meals as studying units. Meals are structured social events and they become meaningful depending on other meals. Meals necessitate a table, a seating order, and a restriction of movement. Meals take on the frame of gathering people. The line between intimacy and distance is the great operative of the system. In this way, eating expresses social relations.

Mintz (1979/2012) studied long-term changes in food consumption patterns and food preferences by combining historical and anthropological perspectives. Mintz proposed that economic and political forces make products such as sugar available. These products continuously permeate downwards through the class structure. For instance, colonialism transformed high-status sugar that is produced in the Caribbean into a working-class staple.

Goody (1982/2012) studied industrialization as a gate to the development of world cuisine. Industrialization of food processing in terms of preservation, mechanization, transportation, and marketing of food items makes different cuisines similar to each other. Industrialization in food processing even affects Ghana, a West African country relatively closed to external influences, both as a supplier and as a consumer. Industrial foods of the “West” have now become standardized and they are included in the Third World meals.

Sociologically, food is a class marker. Eating habits form a lifestyle according to one’s positioning toward others in terms of food consumption. Tastes in food should be evaluated depending on the ways of forming relationships with the world, according to others, one’s own body, and social classes. Ways of presenting, offering, serving, and treating food reveal the characteristics of particular social groups such as the working-class or bourgeois. Stylization is inclined to transform the emphasis from substance and function into form and manner (Bourdieu, 1979/2012).

Barthes (1961/2012) studied the psychosociology of contemporary food consumption. In terms of contemporary eating habits, foods are attitudes that imply a set of choices, tastes, values, dreams, and images. There is a production of false values and perceptions between the real product and the bought product in advertising. Such false perceptions are elements of a collective imagination displaying a mental framework rather than an expression of individual prejudices. In this sense, food is a

body of images, a communication system, a protocol of situations, usages, and behavior. Buying food transmits a situation and constitutes information. Among members of a given society, all food serves as a sign. People communicate with food as soon as substances, habits, and preparation techniques become parts of a system of differences in signification. To eat is a sign because it replaces, sums up, and signals other behaviors.

From hunter-gatherers to this time, food has had a socially constitutive role that regulates everyday affairs and relationships. From the beginning of history, food obtainment has been a major force determining both events of great importance and daily events (Rozin, 1996). Cooperation in food obtainment is fundamental for the social organization through reciprocity and redistribution (Fischler, 2011).

Food is of great importance in terms of being at the intersection of social and biological aspects of human beings. Eating is usually considered as a primary biological function. Similarly, eating might be thought of as a primary social function (Fischler, 2011). Concerning social development, nursing and weaning have a significant place in child development; besides, food has a determinant role in the interaction between a mother and her child (Rozin, 1996). Tastes in food have a relationship with the body in the ways of treating, caring, feeding, and maintaining. In addition, food has effects on the body in terms of strength, health, and beauty (Bourdieu, 1979/2012).

Why do people eat together? Eating together is a practice taken for granted in our daily life. This long-lasting practice shows the sociality of food. Commensality, which literally means eating at the same table, is one indicator of human sociality. People tend to eat together or eat in groups. People who do not share any special interest may gather together at a common meal. Commensality turns the biological selfishness of eating into a collective social experience. Sharing food is a way to create intimacy and strengthen bonding between people (Fischler, 2011). Similarly, food sharing is an expression of solidarity (Rozin, 1996).

Rozin et al. (1999) first studied the psychology of food, specifically how food functions in the minds and lives of people from four countries: the United States, Japan, Flemish Belgium, and France. Rozin et al. developed a questionnaire to explore the role of food in life. This questionnaire consisted of questions dealing with beliefs. This questionnaire generally assessed knowledge about food and nutrition, knowledge

about cuisine, the linkage between food and moral issues, the extent of worrying about adverse effects of food on appearance and health, socializing around food, and enjoying food.

American participants showed a slight tendency for culinary associations, whereas Japanese participants showed the most tendency for culinary associations, followed by the French participants (Rozin et al., 1999). This finding shows the effect of culture on shaping beliefs regarding eating.

Rozin et al. (1999) found a significant gender effect that was larger than country effects. Female participants were negative health-oriented, and male participants were more pleasure or culinary oriented. Female participants were concerned about body shape, weight, and appearance more. Female participants were concerned more about nutritional aspects of food because they were disproportionately responsible for preparing food for their families. Although women do more cooking than men in general, female participants were less likely to make culinary associations compared to nutritional associations.

To conclude, these studies analyzed the social aspects of food by studying it from different aspects and contributed to the literature. Even though the social aspects of food are studied, food is a new field for social psychologists. The present study applies social representations theory in order to understand the social aspects of food.

2.1.2. Social Representations Theory

Moscovici studied how psychoanalysis penetrated French society through content analysis of French press and survey questions. This study is the landmark study for the formulation of social representations theory (Moscovici, 2008). Social representations have a clearly defined role that is providing to the genesis of communication and social behaviors (Moscovici, 2008). Social representations theory is highly suitable for media studies because of the focus on representations of societal phenomena and communication. As a communication theory, social representations theory links public to media and individual to society (Höijer, 2011).

The basic premise of the social representations theory is that the social and the psychological are inextricably linked. Social representations theory allows understanding social and psychological mechanisms that involve creating,

maintaining, and propagating socially fundamental belief systems (Cirhinlioğlu et al., 2006). Social representations theory proposes that knowledge is social in origin and not the output of individual cognition. The person's relevant others define and mediate his or her epistemic relationship with an object. The group is the source of the individual's understanding of the world through the group's representation systems serving communication (Wagner and Hayes, 2005). Social representations theory conceives the individual and society as mutually dependent and inseparable, pointing to the interdependence between the individual and the social. Social representations theory assumes the symbolic and communicative interdependence between Ego and Alter. To be is to communicate symbolically. Ego and Alter mutually constitute one another together and cannot be treated as independent units (Markova, 2004).

Bauer and Gaskell (1999) present the primary analysis unit to provide a paradigm for social representations research. The minimal system involves two subjects and an object. The mediation of two subjects and an object is the basic unit for the meaning elaboration because meaning implies the 'other' rather than being an individual or private affair. A time dimension considering both past and future is added to the system to indicate the project linking the two subjects and object. The project links two subjects through mutual interests, goals, and activities.

Social representations theory investigates the exchange between science, primitive thought, and everyday understanding. Both science and primitive thought build one's relationship between the inner and the outer world. The scientific mind is alarmed by the forces of nature. The scientific mind has achieved so much in a few centuries. On the other hand, the primitive mind is alarmed by the forces of thought. The primitive mind has enabled people to survive for millions of years (Moscovici, 1984/2001).

Reconsidering common sense knowledge is necessary to understand the concept of social representations. People are born into symbolic and cultural phenomena and do not invent everything themselves in their individual lives. The cultural phenomenon, social modes of thought, common ceremonies, social practices and language, daily life passed down from generation to generation; is transferred without individual effort through communication, collective memory, and institutions. This phenomenon shapes the broad panorama of social realities and becomes imprinted in common sense knowledge (Markova, 2004). Common sense is the

opposite of conscious and ordered knowledge complex. Common sense requires using perceptions intelligently and meaningfully by forming opinions and promoting reflection to deal with everyday problems. For analysis, common sense should be defined as a cultural system and comprehensive knowledge complex (Wagner and Hayes, 2005).

Social representations have two characteristics: conventional and prescriptive. Representations conventionalize objects, persons, and events that people encounter. Conventionalizing is to give objects definite forms, to locate objects in given categories, and to establish objects as a distinct model which is shared by a group of people. Every new element adheres to this model and merges into it. On the other hand, the prescriptive characteristic of representations implies that representations are present before people think, and representations command what people should think. Representations communicate between themselves, oppose each other, change in harmony, vanish, and then reemerge (Moscovici, 1984/2001).

Moscovici (1984/2001) proposes two terms: consensual universe and reified universe. The boundary between these two universes splits collective and physical reality into two. Social representations deal with the consensual universe, whereas science deals with the reified universe. Representations restore collective awareness, give it a shape, and explain objects and events so that they become accessible to people. In the consensual universe, people are equal and free to express their opinions, air their views, and lay down laws regardless of their occupations or competence. In a way, people are amateur doctors, politicians, and psychologists who create opinions related to these domains without expertise. People form handy opinions out of bits of scientific, artistic, economic traditions and by using personal experience and hearsay. These handy opinions differ from opinions derived from science, art, and economy involved in the reified universe. In the consensual universe, communication gradually creates nodes of stability and communality of significance between communicators. Hence, people share an implicit stock of images and ideas mutually accepted and taken for granted. This characteristic makes the universe consensual. Different from the consensual universe, the reified universe aims to encourage intellectual precision and empirical evidence. By doing this, the reified universe conceals values and advantages. In the reified universe, society consists of individuals with different roles and from different classes who are unequal. People confront each other within a system of pre-

established rules, regulations, and organizations. There is a hierarchy of roles and classes.

In the consensual universe, people want to feel at home secure from any risk of friction or strife. People want that all they say and do confirm acquired beliefs and interpretations; verify traditions instead of contradicting them. People expect the recurrence of the same situations, gestures, ideas over and over again. Change is only admitted as long as it provides aliveness and avoids stifling of dialogue. People want to perceive and understand objects, individuals, and events compatible with previous encounters or paradigms. Thus, the purpose of each representation is to transform the unfamiliar into familiar. The unfamiliar attracts people while, at the same time, it alarms them. The act of representation is shifting what disturbs people or what threatens the universe. The tension between the unfamiliar and familiar is always settled in favor of the familiar in the consensual universe. Contrarily science aims to transform the familiar into unfamiliar. Science is engaged in demolishing current perceptions and opinions and disproving customary ideas and experiences (Moscovici, 1984/2001).

Concepts, technical terms derived from theories studied within the scientific discipline framework, start to be part of ordinary conversations, become familiar terms, and form social reality (Öner, 2002). Science becomes an object of study as social representations if it makes an impact upon the public. Media has a fundamental role in the public understanding of science. Scientific representations held by laypeople are more probably to originate in the media. Those who are influential in media act as intermediaries between scientists and laypeople. Besides interviewing laypeople, it is vital to analyze scientific representations in media (Farr, 1993).

Some authors and scientists write such things in the media that what they write allows everyone to see themselves as sociologists, economists, or psychologists. Therefore, common sense is constantly re-emerging based on a scientific foundation in societies where scientific and technical information is popular (Öner, 2002). Using the language of those who are amateurishly interested in science is necessary to study social representations (Cırhinlioğlu et al., 2006). Social representations play a crucial role in science education. One needs to know the social representations theory to understand the public's understanding of science. Scientists need to be aware of the

distinction between science and social representations of science if they want to communicate persuasively with the public (Farr, 1993).

Science and social representations are different from each other, likewise complementary. Theories, information, and events of the reified universe can be transferred to the consensual universe, circumscribed, and represented. In this way, scientific information reproduces and becomes accessible to people. There are two mechanisms: anchoring and objectification. Anchoring is to reduce strange ideas into ordinary images and categories so that people can compare and interpret them. To anchor is to classify and name something (Moscovici, 1984/2001). Anchoring characterizes society's inclusion of science into a hierarchy of values and its operations. Society uses anchoring to change a social object into a tool it can use and insert that object into enduring social relations (Moscovici, 2008). Group's symbolic coping with unfamiliarity involves a set of responses called anchoring. The group gets a basic understanding of unfamiliar phenomena through attributing characteristics and naming so that unfamiliar phenomena become communicable. Akin to the categorization process, enduring representations considered applicable come forward and used for understanding and naming (Wagner et al., 1999). For example, with the transfer of the psychoanalytic method from the analytical context to the religious context and, as a result of the association of confessionality with the method of free association, psychoanalysis became familiar and spread throughout French society (Öner, 2002).

Objectification is to turn something abstract into something nearly concrete so that people can see, touch, and consequently control it. The scientific concept becomes part of everyday communication through social identification (Moscovici, 1984/2001). Two fundamental mechanisms of objectification are naturalization and classification. Naturalization transforms symbols into reality by broadening the scope of beings that can be attributed to a person. On the other hand, classification gives a symbolic appearance to reality by detaching some of those beings from their attributes to keep with society's system of reference (Moscovici, 2008). The group develops their own interpretations of unfamiliarity to cope symbolically with unfamiliar or threatening phenomena. Objectification captures the unfamiliar phenomenon's essence; thus, the unfamiliar phenomenon becomes intelligible for the group and becomes part of the group's common sense (Wagner et al., 1999). For example, in Christian societies, the

concept of 'god' is embodied with the phenomenon of 'father' or atoms are likened to billiard balls (Öner, 2002).

2.1.2.1. Social Representations of Food

Moscovici and Vignaux (1994/2001) state that it would be interesting to study food representations to answer the following research question. How nutritional representations, which indicate the new categorization of the social, are constantly recomposed?

Food selection is not only made according to physiological needs but also according to cultural and social representations. In a way, people feed not only on proteins, fats, carbohydrates, but also on symbols, myths, and fantasies (Fischler, 1980).

Culture develops taxonomies that separate edible from non-edible. During socialization, the child naturally learns to distinguish between what can be eaten and what should not. What is edible and what is inedible varies from one culture to another. While some cultures do not eat living creatures such as oysters, for others, it is acceptable. Avoiding eating meat or avoiding eating certain types of animals or avoiding eating certain parts of the animal; all testify to the contrasting edible/inedible taxonomy that exists in everyday life quite fundamentally. When a crisis occurs, the edible/inedible taxonomy will change its boundaries and be rebuilt (Markova, 2004). Nevertheless, such taxonomies or categorizations are different from scientific classifications (Fischler, 1980). The lay pattern of thinking categorizes foods according to oppositions such as the raw/the processed, the bloody/the bloodless, the nourishing/the light, the fresh/the preserved. These oppositions seldom converge (Masson et al., 2016).

Experts and lay public differ in the way they evaluate risks associated with food and eating because they have different kinds of reasoning or mental mechanism. The most critical risks related to food do not cause most anxieties or the hugest media reaction. Rather, for instance, being contaminated induces disgust and fear. Social scientists try to reveal how lay public evaluates risks on the food domain. Lay mental functioning related to diet is shaped by a mechanism called “magical thinking”. Magical thinking is deeply rooted in the minds of people (Fischler, 2002). Frazer and

Mauss termed magical thinking in terms of two laws: contagion and similarity (Frazer, 1922; Mauss, 1950, as cited in Fischler, 2002). Contagion means that even a small amount of contact with an impure object may spoil one's purity. Similarity means image equals object. In the field of diet, contagion and similarity converge into the belief which is "you are what you eat". People generally believe that through eating and then incorporation, they take food's real or imagined characteristics (Fischler, 2002). "You are what you eat" reflects the thinking manner of laypeople.

In the food domain, the unfamiliar is new scientific nutritional terms. How is scientific information about nutrition of the reified universe transferred to the consensual universe? How is scientific information about nutrition integrated into pre-existing categories? The systematic way nutrition categorizes food is new and different from the thinking manner of laypeople. Nutritional categorization may interfere with pre-existing categorizations. Lay nutritional thinking constitutes by combining scientific knowledge with pre-existing knowledge. This complex process evolves slowly through the diffusion of scientific knowledge. However, it would never be entirely revised because it progresses with a different logic (Masson et al., 2016).

2.1.2.2. Concept of Themata

Moscovici and Vignaux (1994/2001) propose a term: *themata*. Themata are at the heart of social representations that endure as concept images. According to Moscovici and Vignaux, the analysis of social representations should aim to identify themata that operate as first principles, compelling ideas, images, and to show empirical and methodological consistency of these concepts. Themata can be considered as source ideas that can take the form of notions that are potential places for meaning generators. In line with this statement, this dissertation aims to identify the themata of food representations.

Themata are fundamental elements of thoughts, and they are in the form of dyadic oppositions. If dyadic oppositions are sources of tension or conflict, they become themata. Dyadic oppositions begin generating social representations by being a source of tension and conflict. Themata is a starting point to generate social representations. A thematic concept refers to the content and transformation of a dyadic opposition (Markova, 2015). An example of oppositional taxonomy is

edible/inedible. Boundaries between edible and inedible will be dialogically reconstructed when a crisis occurs. Social representations of phenomena such as health, food, animal, dirt, life, death are generated by edible/inedible taxonomy becoming themata and giving rise to public discussions (Markova, 2000).

2.1.2.3. Themata of Food Representations

Moscovici and Vignaux (1994/2001) discuss food representations in order to elaborate on the concept of themata. Food representations include representations, food carries, and representations related to food. The themata of food representations are structured based on the systems of oppositions and the convergence of these oppositions. Specifically, the uppermost dichotomy of the food representations is social/biological. Social/biological consists of preoccupations regarding health and survival, memories, and culinary cultures. Dyadic oppositions sometimes occur as triplet elements. Food/body, health/cuisine, taste is a triplet that reappears in different forms that are traditional, natural, and sophisticated. Contemporarily in this triplet, the image notions such as land, health or beauty, and distinction are anchored, which in turn generates semantic domains. Different types of rules that produce the multiplicity of images and meanings will be applied according to the themata (Moscovici & Vignaux, 1994/2001). In the literature there is a body of research applying social representations framework to food studies. Some of these studies aim to identify the themata of food representations.

2.1.3. Food Studies That Applied Social Representations Framework

2.1.3.1. Dimensions of Food Representations

Bäckström et al. (2003) studied representations of new foods. This study was one of the prior studies that applied social representations theory to a food study. The target of the study was new foods. Bäckström et al.'s dimensions are of great importance because many researchers in the field used his dimensions to assess social representations of new foods.

Tuorila (2001) categorizes new foods into five groups: functional foods, genetically modified products, nutritionally modified foods, organic foods, and ethnic

foods. Functional foods have clinically proved healthful effects. Genetically modified products or their additives are produced with gene technology. Nutritionally modified foods contain more fiber or less fat, sodium, or sucrose compared to conventional products. Organic foods are produced in traditional farming conditions with no fertilizers or herbicides. Ethnic foods are unfamiliar to one's own culture but familiar in other cultures.

Bäckström et al. (2003) studied social representations of new foods with thematic and content analyses through focus group interviews. In the first half of the focus group participants freely talked about food in general. Bäckström et al. introduced new foods after the first half of the focus group interviews. Bäckström et al. proposed that participants became familiar with new foods with the aid of dichotomous thinking. Results of the thematic and content analyses showed that there were five dichotomies: natural/artificial, trust/distrust, safe/unsafe, and past/present, pleasure/necessity. Bäckström et al. (2003) emphasized dichotomous thinking on transforming the unfamiliar into familiar. These dichotomies that were found point to the aim of identifying themata. Bäckström et al. (2003) found that trust/distrust had great significance. Contradictory information, unknown after-effects, and suspicion led to distrust. The safe/unsafe was composed of beliefs about fear, risk of overdose, toxication, and health concerns. In terms of results, the most prominent dichotomies were trust/distrust and safe/unsafe. The target of the study was new foods. Thus the most featured dichotomies appeared as valence without semantic content. In other words, participants focused on whether they were opposed to new foods or not.

Past/present was a temporal aspect that intertwined the relationship between trust/distrust and safe/unsafe. Participants thought that eating was safe in the past, whereas participants thought it was risky at that time. Participants thought organic food as safe food of the past. Natural/artificial was related to supposedly unnatural and abnormal nature of technologically produced new foods such as functional foods. Food additives were the by-product of food technology. Usage of food additives increased public opposition to food technology. In everyday thinking, participants thought technology as a thing that ought not to be related to food. Participants thought that technological food tasted nauseating, disgusting, and weird. Participants thought that technology, in particular, gene technology as a means of food production, was

unnatural even abnormal. Whereas, they thought homemade and organic food was natural and of high value (Bäckström et al., 2003).

Pleasure/necessity identified the personal importance of food and eating. Some people eat to live; some people live to eat. Pleasure/necessity built up one's relationship between meaning given to food in general and the meaning attached to new foods. In this sense, this dimension did not target new foods as remaining dimensions. Pleasure/necessity made a distinction between everyday food and festive food. Everyday food was associated with the necessity to get energy, and festive food was associated with pleasure. The participants stated that a good meal is social; for instance, it is a pleasure to eat with friends or invite guests to dinner. Participants talked much about the pleasure of eating during interviews. For middle-aged female participants, a significant theme emerged that was the necessity of cooking food for the household (Bäckström et al., 2003).

Bäckström et al. (2003) found demographic variations in results. Young female participants were the most susceptible to contradictory information. They sought to find out more information in order to disentangle the contradictions. The older female participants were worried most of the genetic modification showing they were suspicious of issues because they had a life-long experience regarding technological developments. More educated participants considered different views, whereas less educated participants were either pro or con, did not modulate their view.

2.1.3.2. Social Representations of Food Questionnaire

Bäckström et al. (2004) developed a questionnaire that assessed social representations of new foods based on dimensions that were formed by Bäckström et al. (2003). Salient themes that were identified previously constituted dimensions of the questionnaire. Bäckström et al. (2004) generated items by transforming notable quotes and idioms from Bäckström et al.'s (2003) focus group interviews. The final version of the social representations questionnaire consisted of 27 statements that were centered on different aspects related to new foods. Statements were rated using a Likert scale (1 = *strongly disagree* to 7 = *strongly agree*).

Bäckström et al. (2004) found that statements were loaded on five factors: adherence to natural food, adherence to technology, suspicion, food as a necessity,

food as enjoyment. Suspicion was an indicator of being cautious about new foods, especially functional foods. Suspicion showed resistance to novelties because participants thought novel foods were vain, useless, and artificial. On the other hand, adherence to technology indicated trust in technological food in terms of food and gene technology-oriented position to novel foods. Adherence to natural food emphasized nature and naturalness. Food as enjoyment indicated hedonism concerning food and eating. Conversely, food as a necessity indicated indifference and unimportance of food. In terms of themata, natural and technological seemed to be central parts of the representation. The arch-theme of nature was positively associated with organic and natural food in everyday thinking.

Bäckström et al. (2004) stated that the dimensions of the questionnaire were more coherent and condensed compared to Bäckström et al.'s (2003) dichotomies. Previously formed dichotomies were natural/artificial, trust/distrust, safe/unsafe, past/present, pleasure/necessity. Trust/distrust and safe/unsafe were combined into suspicion. Statements that give reference to past and present loaded under suspicion. Pleasure/necessity separated into food as enjoyment and food as a necessity. Natural/artificial separated into adherence to natural food and adherence to technology.

In both studies, natural and technological seemed to be central parts of the representations. Bäckström et al. (2004) argued that participants thought natural, organic, and ethnic foods were good, whereas participants were prejudiced regarding technological foods. Participants, in general, were suspicious about novel food. Nevertheless, participants trusted in technological foods. Adherence to technology strongly predicted willingness to try genetically modified foods, whereas adherence to natural food strongly predicted willingness to try organic foods. Hence adherence to natural food or technology predicted willingness to try adverse categories of new foods (Bäckström et al., 2004).

In both of these studies, the target of representations was new foods, and dimensions showed participants' positioning towards new foods. It was expected to find the predictive power of these particular dimensions for willingness to try new foods; in other words, finding a statistically significant relationship between these dimensions and willingness to try new foods was susceptible.

Bäckström et al. (2004) found demographic variations in the results. More educated participants were less resistant and suspicious. Lower educated participants, participants who live in the countryside, and male participants were more suspicious of novel foods. Male participants who live in urban areas were more adherent to technology compared to women. Participants who live in the countryside were more adherent to natural food compared to participants who live in urban areas. Male participants were more hedonistic related to new foods compared to female participants.

Huotilainen and Tuorila (2005) tested the consistency of the social representations questionnaire over three years in Finnish society. Cronbach's alpha showed that the internal consistency of the dimensions of the social representation was good. Huotilainen and Tuorila found that the core of the social representations of new foods was trust, and its counterpart was suspicion. Technological and natural were core themata organized around the central core. Trust and suspicion showed participants' positioning toward new foods. Trust and suspicion might be indicators of willingness to try new foods. Instead of suspicion, natural ought to be core themata because themata needs to carry semantic content prior to showing valence.

2.1.3.3. Cross-cultural Development of Social Representations of Food Scale

Onwezen and Bartels (2013) tested the scale developed by Bäckström et al. (2004) cross-culturally and developed a shortened version of the scale that assessed social representations of new foods. In order to test the external validity and psychometric properties of the scale, Onwezen and Bartels collected data from 1000 participants from every three countries: the United Kingdom, the United States, and Germany. Results showed that the generalizability of the original social representations scale outside Finland was limited. The original scale had moderate reliability, and poor model fit across the United Kingdom, the United States, and Germany. Onwezen and Bartels argued that this poor fit might be rooted in the fact that social representations are socially and culturally constructed.

Onwezen and Bartels (2013) collected data in order to assess the reliability and validity of the shorter scale from 500 participants from every three countries: Netherlands, Poland, and Spain. Results showed that the shortened scale had good internal reliability and validity in the Netherlands, Poland, and Spain. In terms of

results, Bäckström et al. (2004) reported that all five dimensions have predictive power for willingness to try new foods. However, Onwezen and Bartels (2013) found that enjoyment and necessity had no predictive power for the willingness to try new foods. Necessity and enjoyment did not target new foods as remainder dimensions. The target of necessity and enjoyment dimension was eating and food in general (Bäckström et al., 2003; Bäckström et al., 2004). This difference in target might be an explanation of why these two dimensions had no predictive power for the willingness to try new foods.

Bäckström et al. (2004) found a correlation between two dimensions that are adherence to technology and adherence to natural foods. Bäckström et al. concluded that adherence to natural food and adherence to technology relied on the same underlying core of trust. On the other hand, Onwezen and Bartels (2013) found no correlation between technology and natural foods. Onwezen and Bartels proposed that these dimensions might not be sharing a single underlying core. Trust may be an indicator of willingness to try new foods rather than being core themata. Natural and technological are more likely to be themata. Findings of Onwezen and Bartels (2013) is more consistent compared to Bäckström et al.'s (2004) findings. Some researchers in the field used Bäckström et al.'s dimensions to assess social representations of new foods in relation to consumer behavior.

2.1.3.4. Social Representations and Consumer Behaviors

In the literature, social representations are studied in relation to consumer behavior, and some of these studies used Bäckström et al.'s (2004) dimensions. To illustrate, Bartels and Reinders (2010) examined the effects of domain-specific innovativeness, social representations, social identification, and demographic variables on organic food consumption across three countries: the United Kingdom, the United States, and Germany. Social representation of new foods is assessed with Bäckström et al.'s (2004) five different dimensions. Domain-specific innovativeness and social identification are stronger predictors of organic buying behavior compared to social representations. Nevertheless, social representations of new foods was a predictor of organic buying behavior. Adherence to natural food had a significant positive effect on organic buying behavior across three countries. This finding supports

Bäckström et al.'s (2004) finding that adherence to natural food is a significant predictor for willingness to buy organic food.

Huotilainen et al. (2006) used Bäckström et al.'s (2004) dimensions and demonstrated that food innovators who were low on suspicion of novelties and high on food as an enjoyment were willing to try and use new food products.

Bartels and Onwezen (2014) used Bäckström et al.'s (2004) dimensions and demonstrated that consumers who were adherent to technology or natural food and did not see food as a necessity were more willing to buy products with ethical and environmental claims.

Mäkinen et al. (2011) qualitatively studied everyday thinking concerning ethical and unethical food with students from Finland, Italy, and Denmark. Mäkinen et al. employed social representations theory to investigate country-specific and shared contents of socially constructed everyday ideas regarding ethical and unethical food. Fourteen categories of the content were generated: natural/unnatural, required/prohibited food, local/global, equality/inequality, good animal welfare/poor animal welfare, healthy/unhealthy, rules and descriptions. In terms of social representations, the natural category and the required category were core elements across three countries. These identified categories show various aspects of everyday ethical thinking about food and point to aim of identifying themata.

Lo Monaco and Guimelli (2011) studied the influence of wine consumption practices on its social representations and the variations in representations resulting from the manipulation of context. Results showed that consumption practices are explanatory factors for the different ways of representing wine. However, consumption practices did not have an effect on the collective aspects of the social representation of wine, which eliminate variations in representational construct.

2.1.3.5. Culture and Food Representations

Lo Monaco and Eric Bonetto (2018) reviewed food studies that applied social representations framework and highlighted the relevance of examining the interaction between culture and food representations. Lo Monaco and Eric Bonetto grouped these studies into three subgroups: social representations as meaning structures, the role of

social representations in cultural identity and, social representations as predictors of consumer behavior.

Food studies that centered on social representations as meaning structures showed the shaping role of culture. The attribution of meanings to food is rooted in culture; in other words, culture shapes social representations. Cuisines are consisting of views, classifications, and culturally defined rules about practices, production, preparation, and consumption of food. Hence, there is a strong relationship between food consumption and religion, class, ethnicity, gender, culture, nation. The influence of culture is rooted in historical traditions, legitimatizing eating, and drinking social practices. The transformation of the way to represent an object is connected to previous meanings. For instance, the link between wine and health might be silent for a period, yet a few events may make awaken the debate that is always strained in France. Social representations have a role in cultural identification. In a sense, foods are social objects. Sharing socially constructed beliefs and knowledge about food enables the affiliation to a cultural group (Lo Monaco & Eric Bonetto, 2018).

Lo Monaco and Eric Bonetto (2018) mention that in the field of acceptance innovations, novelties, new foods, and their adoption, there is an essential role of culture. The influence of culture has implications for consumer behavior. Social representations have predictive power regarding consumer behavior. Culturally shared beliefs and values have a significant effect on consumers' beliefs and behaviors about new food products. Extensively, considering the distinction between individualistic and collectivist cultures would be fruitful to examine culture as an essential factor for accepting innovations.

Examination of culture and cultural variables in food studies by applying the theoretical framework of social representations is motivated by two standings. The first one is the intrinsic theoretical link between social representations and culture. The second one is empirical research evidence that points to a relationship between culture and food representations (Lo Monaco & Eric Bonetto, 2018).

2.1.4. Turkish Culture and Food Activities

Food preparation, production, and consumption ways are related to gender, ethnicity, urbanization and class. In this section, these relationships are examined

separately under the arch theme of culture. This dissertation investigates food representations focusing specifically on Turkish culture. Therefore, sample research studies have been selected from Turkish literature.

2.1.4.1. Gender

In most cultures, women hold power through their control of meal planning and cooking. Women have the responsibility of food provisioning at home and hold power over food distribution, whereas control resides with men as they purchase food. Women's power over food provisioning has two sides. By giving food, which is a valued substance, women tend to hold power over their husbands and children. On the other hand, women's responsibility over food provisioning shows female subordination due to women's necessity to serve and satisfy their husbands and children (Counihan, 2005).

Food symbolically connotes maleness and femaleness by establishing the social value of men and women. Food is a way of connection and means of differentiation among men and women. Men and women define their masculinity and femininity through asserting different roles and identification with specific foods. In most cultures, maleness and femaleness are related to specific foods and rules about regulating their consumption (Counihan, 2005).

Food exchange between men and women is a way to mediate contested meanings concerning food. Men's and women's relationship to food and derived meanings contribute to their valued sense of selves. For instance, men's and women's attitude towards their bodies, and the control of their appetites define their images of self. In more gender-equal cultures, men and women are more likely to be satisfied with their bodies. The relationship between food and gender may both create gender complementarity and mutual respect or gender hierarchy (Counihan, 2005).

Historically, there is an established relationship between meat-eating and masculine identity in many cultures. Çarpar (2020) studied the relationship between meat-eating and masculine identity as a cultural phenomenon with Turkish participants from male-dominated areas such as bodybuilding, football, rugby. This study shows that the act of eating meat has turned into a tool for men to perform their gender, and it has become a step in building their masculinity going beyond being a simple taste

preference. Therefore, male participants see eating meat as a necessary practice to achieve their imaginary masculine ideals and construct their gender identity through women who do not or should not eat meat.

Different from manhood, which is defined in terms of eating practices, womanhood is defined in terms of feeding practices. Womanhood is generally associated with motherhood practices and rituals in most cultures. For instance, in Turkish society, breastfeeding is an essential process in infant nutrition, and it has gone beyond being a biological and psychological situation. Breastfeeding has become a phenomenon built by socio-cultural dynamics. Just as there are different forms of femininity and motherhood in different cultures and periods, there are also different moral and social definitions of infant nutrition. Motherhood identity, which constitutes an essential aspect of gender identity, has turned into an issue directed by cultural practices. Thinking breastfeeding as natural, safe, healthy, and essential for being an “ideal” and “good” mother may have social and moral pressures on women who cannot or do not breastfeed (Timurturkan, 2020).

2.1.4.2. Ethnicity

Food is one of the most striking markers of cultural differences among people of different ethnic origins. To illustrate, Knudsen (2006) compared seafood consumption ways of Trabzon and İstanbul and proposed a dialectic relationship between two cultures of seafood consumption. Distinct ways of seafood consumption articulate powerful identities, and Turkish people have vivid images regarding what eating fish means. Alcohol has a significant effect on these images. According to the İstanbul seafood culture, consuming seafood with alcohol by the elite is thought of as a symbol of a wealthy, secular lifestyle, and a sophisticated way of creating good moments. Trabzon fish culture diverges from the İstanbul seafood culture mainly because fish stands are not decorated. Trabzon fish culture is identified with hamsi, which signifies people of that region. Characteristics of these people, such as energetic activity and vigor, are thought to embodied in hamsi. Turkish people believe that hamsi has healing and health-giving properties. These people perceive the İstanbul seafood culture as showing a non-Muslim, Rum identity, and infidel lifestyle (Knudsen, 2006).

2.1.4.3. Rural Urban Dichotomy

In Turkish culture, one of the traditional behaviors is to eat food quickly. In rural areas, eating food quickly and getting up early from the table is the appropriate behavior. It was believed that the child who ate the food quickly would be skilled at work. During farm work, not spending too much time eating and continuing to work in the field as soon as possible played a role in eating food quickly. Eating is considered as a duty. Whereas in urban areas, eating is taken more slowly by taking care of pleasure and aesthetic elements besides feeding (Tezcan, 2000).

Although the table manners enter the rural areas as cultural complexes, it takes a long time to adopt it as a cultural tool of urban areas in the form of eating with separate plates, glasses, and cutlery. Nevertheless, rural areas have their own customs regarding eating. When guests come home in the countryside, food is always served. Hospitality is a sacred duty. Because of the privacy of the household, what is eaten at home is not told to others. Those who boast about what they eat are condemned. Undoubtedly, this behavior is unique to rural people (Tezcan, 2000).

Being overweight was an essential value in the agricultural economic structure because it was necessary to be strong in agricultural activities. Today, industrialized urban life has brought thinness into fashion. Thinness has become a universal value, and it has been considered necessary for health (Tezcan, 2000).

2.1.4.4. Class

Assuming social classes' formation process as a cultural process that consists of traditions, value systems, and institutional structures, instead of only depending on material conditions, enables seeing "class wars over nutrition" as an essential part of different social classes' biographies (Thompson, 1963, as cited in Yenal, 1996).

Ural (2020) analyzes the way Orhan Pamuk writes the food scenes where he stages the Istanbul bourgeoisie in his narratives. This study investigates meanings constructed around food scenes regarding class, gender, tradition, and modernity. The eating habits of the bourgeoisie have a close relationship with socially and historically constructed meanings. The link between food scenes and being bourgeoisie is "everydayness". Food scenes as repeated activities build everydayness in the representation of bourgeois life. In Orhan Pamuk's narratives, food scenes represent

the tension between the material and cultural capital of the bourgeoisie and bourgeoisie weaknesses; in other words, the bourgeoisie as the founder of modern life and also as “nouveau riche”.

2.1.4.5. Diet-Health Link and Turkish Culture

In Turkey, eating habits, attitudes, and values were not related to health until recently. People traditionally were eating and drinking the way they wanted, without ever paying attention to health. Nevertheless, there is a paradoxical situation with food. Eating can cause disease, even death of the organism, as much as it gives pleasure, strength, and health. These negative aspects of food became visible at the end of the 1990s. This change occurred in the form of establishing a relationship between meals and health. However, cultural habits intervened in this relationship. For instance, eating bread and pastries was a cultural habit. This habit emerged as a requirement of a socio-cultural structure such as agriculture and animal husbandry in Central Asia and Anatolia. Bread consumption is still alive and will continue to live as a result of a long historical past. Thus, avoiding this type of food creates stress in those who are on a diet for health reasons (Tezcan, 2000).

2.1.5. Research Questions

Research questions:

1. What are the contents and themata structure of social representations of food and healthy eating during the COVID-19 pandemic?
2. How does COVID-19 alter social representations of food and healthy eating?

2.2. Method

2.2.1. Participants

Semi-structured interviews were conducted with 18 women and 8 men whose ages ranged between 20 – 68. The demographic information of participants is shown in Table 1.

Table 1. Demographic Variables of Participants

Variable	Frequency	Percentage
Age		
18-24	6	%23
24-34	6	%23
35-44	4	%15
45-54	5	%19
55+	5	%19
Gender		
Female	18	%69
Male	8	%31
Civil Status		
Married	7	%27
Single	15	%58
In a relationship	4	%15
Having a child		
Yes	8	%31
No	18	%69
Level of income		
Low	1	%4
Middle	23	%88
High	2	%8
Education		
High School	1	%4
Undergraduate	17	%65
Graduate	8	%31
Profession		
Student	8	%31
Teacher	4	%15
Pharmacist	2	%8
Other	11	%42
Unemployed, Housewife, Research Assistant, Biologist, Retired Teacher, Human Resources, Mechanical Engineer, Engineer, Agricultural Engineer, Retired Civil Servant		
Place of residence		
Town	1	%4
City	25	%96
Religious belief		
Believer	14	%54
Unbeliever	7	%27
Other (Agnostic, Bektashi)	5	%19

2.2.2. Procedure

Fifteen interviews were conducted face to face, and the interviews were audio-recorded. The remaining eleven interviews were made online through the Zoom program and recorded via the Zoom program. Participants were chosen via snowball sampling. Before the interviews, the participants were informed about the purpose of the research, the average duration of the interview, the audio recording will be taken, their information will be kept confidential, they could withdraw from the study if they felt uncomfortable, and participation was voluntary. After participants gave consent and signed the informed consent form, interviews were started. Interview questions were as follows:

1. What comes to your mind when you think of food?
2. What does food mean to you?
3. Do you think that you are eating healthy?
4. What does healthy eating mean to you?
5. What do you do to eat healthily?
6. Has the Covid changed your eating habits?
7. How have your habits changed before and after Covid?
8. What are the advantages of healthy eating during the pandemic?
9. What are factors that facilitate healthy eating during the pandemic?

Interviews were held in the summer of 2021 when quarantine rules were bent. The duration of interviews ranged between 8 and 30 minutes, and each of them was recorded. Although the duration of the interviews seemed short, the data was rich. Participants sufficiently expressed in detail what food and healthy eating meant to them. Firstly, each interview was transcribed, then they were read and reread based on social representations to form thematic units from participants' narratives. Secondly, related units were categorized and named provisionally. Based on this preliminary work, transcribes were reread to classify contents into thematic blocks. Thematic analysis was conducted using MAXQDA software program.

2.3. Results

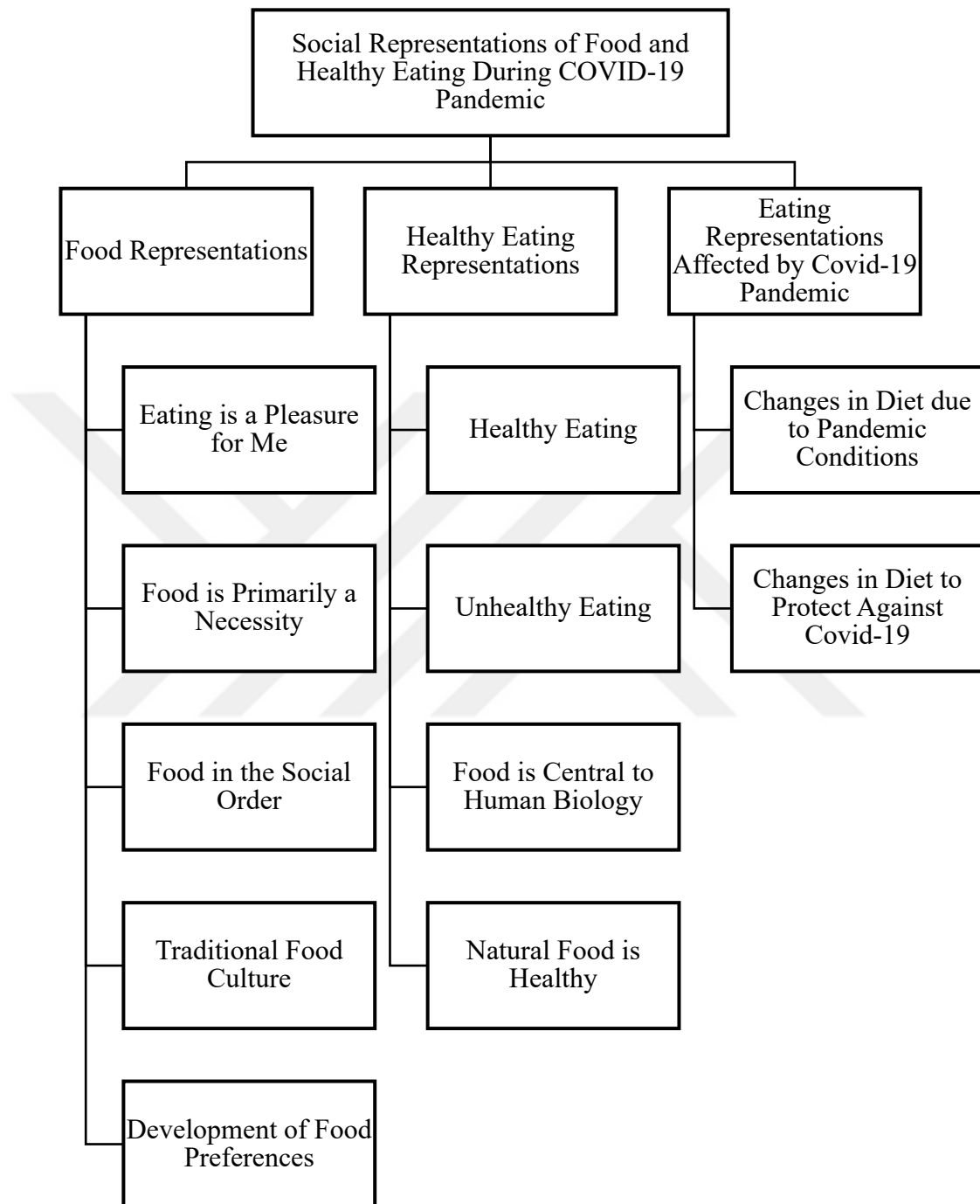


Figure 1. Thematic Map of Representations

2.3.1. Food Representations

Results showed that food representations could be divided into five thematic blocks as follows: “Eating is a pleasure for me.”, “Food is primarily a necessity”, “Food in the social order”, “Traditional food culture” and “Development of food preferences”.

2.3.1.1. Eating is a Pleasure for Me

Table 2. Thematic Block of “Eating is a pleasure for me”

Name of the Thematic Block	#	Frequency	Percentage
Eating is a pleasure for me.			
Eating is a pleasant activity.	21	12	46,15%
Good food makes people happy.	16	12	46,15%
Food gives pleasure.	10	7	26,92%
Taste is important for me.	12	6	23,08%
Food is a way to reward myself.	5	5	19,23%
I like cooking.	5	4	15,38%
The pleasure of food is temporary.	5	3	11,54%
I don't want to be deprived of the pleasure of eating.	4	3	11,54%
We should enjoy the pleasures of the world, because we are mortal.	3	1	3,85%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

Many participants have associated food with pleasure and see eating as an activity. Food has an importance in their life. Besides eating, they enjoy preparing and serving food. They enjoy spending time in the kitchen. When they have time, they prepare grueling and delicious meals. They like to eat delicious food. The food they eat can affect them emotionally and change their mood. A participant thinks that a person should be able to taste everything they want. Some participants do not want to deprive themselves of the pleasures of eating, even when it is harmful to their health. People who see food as a pleasure also emphasize that pleasure is temporary.

In the Quote 1 below, the participant says that eating gives him great pleasure.

Quote 1

Ama önce gözlerim açılıyor. O kadar sevinçle yiyorum ki seve seve yiyorum. Mesela pilav, kuru fasulye, iyi bir barbunya pilaki. En çok sevdiğim yemekler. Eti çok seviyorum ama güzel pişmiş olacak. Yani pişirme sanatına uygun olacak. Örneğin bir incecik pirzola, kuzu pirzola. Bonfile ipince olacak. En az üç ila beş dakika arasında pişecek. Yarısı kırmızı olacak. Yarısı kızarmış olacak. Ve onu şarapla birlikte yiyecek mesela. Büyük zevk veriyor.

Quote 1

But first, my eyes open. I eat it with such joy that I eat it happily. For example, rice, dry beans, a good kidney bean stew. My favorite dishes. I love meat, but it should be well cooked. So, it should be suitable for the art of cooking. For example, a thin cutlet of lamb chops. The tenderloin should be very thin. It should be cooked for at least three to five minutes. Half should be red. It should be half roasted. And you will eat it with wine, for example. Gives great pleasure.

2.3.1.2. Food is Primarily a Necessity

Table 3. Thematic Block of “Food is primarily a necessity”

Name of the Thematic Block	#	Frequency	Percentage
Food is primarily a necessity.			
I eat to live.	10	7	26.92%
Food is a basic need.	7	6	23.08%
I eat for nourishment.	10	6	23.08%
I eat to satisfy hunger.	8	6	23.08%
Food is not just a necessity.	11	6	23.08%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

The first thing that comes to mind when talking about food is the essential need for food. Many participants stated that they have to eat to survive. They see food as meeting their needs in daily life. They eat to satisfy hunger. It doesn't matter what they eat. Some participants eat to live and see food as nutrition. Their priority is healthy eating. They eat to be strong and energetic. They eat foods that are beneficial to their body and avoid harmful foods. Although food is primarily a need, many participants emphasize that food is more than a need. According to these participants, food can be

a means of socialization as well as something to be enjoyed. One participant said that she meets a need by preparing meals that will whet her appetite.

The participant in Quote 2, sees food as nutrition and gives importance to being healthy.

Quote 2

Yemek deyince aklıma ilk önce doymak geliyor. Vücudumu beslemek geliyor. Sağlıklı olmak geliyor...Yemek benim için bir kere zevk filan değil. Gerçekten, hani şey derler ya, yaşamak için mi yiyorsun, yemek için mi yaşıyorsun filan. Ben yaşamak için yiyen biriyim. Öyle ya canım şunu çekti, benim onu yemem lazım filan diye bir kafam yok. Sağlıklıysa vücudumun ihtiyacı varsa yerim. Zararlı olduğunu düşünüyorsam mümkün olduğunca kaçınırım...Yediğim şeylere ya ben bugün yeterince protein aldım mı ya da işte ben bugün yeterince kalsiyum aldım mı filan gibi gün içerisinde kendimi sorguluyorum. Yani kendime bir düzen belirledim. Bir rutinim var. Aşağı yukarı gün içerisinde ihtiyacım olan günlük almam gereken o besin değerine ulaşmaya çalışıyorum.

Quote 2

When I think of food, the first thing that comes to my mind is to be full. It means to nourish my body. It means to be healthy...Food is not a pleasure for me. Really, they say, do you eat to live, do you live to eat, etc. I am a person who eats to live. I don't think I should eat what I really feel like eating. If it's healthy and my body needs it, I will eat it. If I think it's harmful, I avoid it as much as possible. During the day, I question myself about the things I eat, like did I get enough protein today or did I get enough calcium today. So, I've set a schedule for myself. I have a routine. I am trying to reach that nutritional value that I need to take daily, more or less during the day.

2.3.1.3. Food in the Social Order

Table 4. Thematic Block of "Food in the social order"

Name of the Thematic Block	#	Frequency	Percentage
Food in the social order			
Comparing self to others in terms of eating habits.	15	11	42.31%
Family forms eating habits at home.	14	10	38.46%
Eating with friends is a social event.	10	6	23.08%
Food brings the family together.	7	5	19.23%
I like preparing food for others.	7	5	19.23%
Having a conversation during eating is custom.	7	5	19.23%
Feeding my family healthy is part of my motherhood identity.	9	4	15.38%
Food sharing is a prosocial behavior.	5	3	11.54%
Healthy eating is a political issue.	5	3	11.54%
I eat healthy, thanks to my family members.	6	3	11.54%

Table 4 (continued)

A meal has to be social to be meaningful.	2	2	7.69%
Eating together is a way to make friendships.	4	2	7.69%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

Food is a socialization agent and becomes meaningful with its social aspects. Some participants associate food with sharing. They said one could share the pain, friendship, and love through food. Chatting during the meal was emphasized. They serve food to others and wait to be liked in return. For example, they serve food to guests to entertain them. Food creates social surroundings. The family gathers for dinner. Eating habits at home show continuity and create a routine. Participants talked about their mutual eating habits at home. Family members motivate each other regarding healthy eating. Participants use others as benchmarks for healthy eating and compare themselves to others in terms of eating habits. Social has many dimensions, for example, politics and gender. Healthy eating as a political issue includes various contents. Participants think that accurate information about healthy eating does not reach the public. While many people can eat a rich variety of healthy foods, most people are forced to eat a poor diet. Animals are mistreated for food production. Representations of food differ based on gender. Cooking is a women's duty. Both men and women like to cook; however, for men, cooking is arbitrary. Women see cooking as a workload. Feeding their children is an extension of motherhood identity. In addition, feeding their children healthy is their responsibility.

In Quote 3, the participant emphasized the power of food to bind people together and the importance of family gatherings at meals.

Quote 3

Benim için yemeğin anlamı, oturup yemekte sohbet edip birbirleriyle tanış şey yapmaktır, diyalog kurmaktır. Yoksa yemeğin başka bir şeyi yok. Ben öyle düşünüyorum. Yani sadece yemek yiyip karnımızı doyurmak değil. Yani bir aile eğer toplu olarak oturup bir yemek yiyebiliyorsa o zaman aile olur ve orda sorunlar tartışılır. Mesela ben çocukluğumda şunu çok biliyorum. Mesela bizim aileler genellikle çocukluğumuzda aileler geniş aileydi. Yani ancak yemekte bir araya gelinebiliyordu. Yemekte de o günkü işler, neler yapıldı, yarın neler yapılacak iş bölümü orda başlardı. Herkes yarınki işini yemekte çözerdi.

Quote 3

For me, the meaning of food is to sit and chat at dinner, get to know each other, and establish a dialogue. Otherwise, there is nothing else to eat. I think so. So, it's not just about eating one's fill. In other words, if a family can have a meal together, then it becomes a family, and problems are discussed there. For example, I know this very well from my childhood. For example, our families were usually extended families in our childhood. So, we could only come together for dinner. At dinner, what was done that day, what will be done tomorrow, the division of labor started there. Everyone solved tomorrow's job at dinner.

It can be inferred from Quote 4 that food is a valued substance served to please another.

Quote 4

Yemek deyince aklıma mutluluk, birliktelik, mutfakta güzel zaman geçirmek bana büyük haz veriyor. Çok seviyorum yemek yapmayı zaten. Saatlerce mutfakta kalıp yemek yapabilirim. Özellikle misafirlerime yemek yapmak çok hoşuma gider çok zaman...Sofrayı hazırlayıp ortaya güzel bir şeyler çıkarmak, sunum yapmak çok hoşuma gider. Bunun sonucunda güzel şeyler duymak isterim. Çok güzel olmuş. Bunun içine ne koydun. Eline sağlık. Daha önceki yediklerimizden daha farklı. Gibi cümleler duyunca çok hoşuma gider. Bazen de kendim de güzel olmadığını hissedersen, kendimin de hoşuna gitmezse eğer o şeyi sunuma çıkarmam. Hoşuma gitmediği şeyi ortaya da koymak istemem yani.

Quote 4

When I think of food, I think of happiness, togetherness, spending good time in the kitchen gives me great pleasure. I love cooking already. I can stay in the kitchen for hours cooking. I especially enjoy cooking for my guests...I like to prepare the table, create something beautiful, make presentations. As a result, I would like to hear good things. It's very beautiful. What did you put in it? God bless your hands. It's different from what we ate before. I like it very much when I hear sentences like. Sometimes, if I feel that it is not beautiful myself and I do not like it myself, I will not put it on a presentation. So, I don't want to serve the thing I don't like.

It is reflected in Quote 5 that women's duty for cooking is traced to motherhood identity.

Quote 5

Çocuklarımı yetiştirirken de sağlıklı beslenmeye çok özen gösterdim...Yemek benim için şu anda görev. Çünkü evde evin annesi benim. Bu yemeği yapmak zorundayım. Önce görev olarak geliyor. Sonra sevdiklerimi, ailemi, kendimi beslemek olarak geliyor. İki anlamda geliyor.

Quote 5

While raising my children, I took great care to eat healthily...Food is my task right now. Cause I'm the mother of the house at home. I have to make this dish. It comes

first as a task. Then it comes to nurturing my loved ones, my family, myself. It comes in two senses.

2.3.1.4. Traditional Food Culture

Table 5. Thematic Block of “Traditional food culture”

Name of the Thematic Block	#	Frequency	Percentage
Traditional food culture			
Every culture has its own cuisine.	16	12	46.15%
I seek diversity in meals.	11	7	26.92%
Local dishes vary from region to region.	12	7	26.92%
Eating customs are part of the culture.	11	6	23.08%
I like to taste new things.	9	6	23.08%
Traditionally mothers prepare meals.	6	5	19.23%
Mediterranean diet is healthy.	5	5	19.23%
Beliefs about eating habits are centered on norms.	9	4	15.38%
Cooking is an art.	4	4	15.38%
Religion affects food culture.	3	3	11.54%
I eat unhealthy because of my cuisine culture.	4	2	7.69%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

There is a huge culture of cooking and eating. Culture determines what, when, and how to eat. Cooking and eating are a kind of art, and there are many different rich and diverse cuisines. Food habits vary from region to region, from city to city, from country to country. Many participants prefer variety in their meals in terms of cultural variety or food variety. Food introduces one to other cultures to illustrate participants think that eating habits reflect one's personality. Some participants enjoy tasting the famous food of that region while traveling and enjoy tasting flavors from different cuisines. Especially young participants are more open to trying new tastes. On the other hand, some of them prefer traditional food as mothers do. The relationship between traditional and health can vary. For example, while Mediterranean cuisine is traditional and healthy, Eastern Anatolian cuisine is unhealthy. Although some participants give importance to healthy eating, they cannot be successful because of their cultural habits. Anatolia is rich in food rituals, such as meals are served during

grave visits and weddings. Cultural beliefs about food and healthy eating are common. Get up from the table without filling your stomach. The Prophet said to eat less. Wasting food is a shame. There should be no dislike for any food; all kinds of food should be eaten. If you ate someone's food, you could not harm them. Food customs come from past to present by changing. Although families are large in villages, they eat together, and the next day's division of labor is planned during the meal. Food should be chewed slowly during a conversation. The quarrelsome people eat together to end the quarrel.

It can be inferred from Quote 6 that what to eat, when, and in what order creates cultural rules; in addition, these rules differ according to culture.

Quote 6

Onun yanında, yemeğin sonunda tatlı gelmesine karşıyım. Esasında şöyledir Avrupa'da kültür. Tatlı yemekten önce yenmesi gerekir. Mesela, çorba yemekten sonra içilmesi gerekir. Yemeği yiyeceksin, yarım saat sonra içilmesi gerekir. Mesela Avrupa'da bakın. Tüm insanlar önce coffee break diyorlar. Coffee break oradan gelmiş; saat vakti. Oturuyorlar saat üç buçuk dörtte bir pasta yiyorlar. Neden? Kan şekerini dengeliyorlar. Veyahut da İngilizler breakfast diyor. Sabah kahvaltısı diyor. Sabah kahvaltısına bakın; faydalı besinler de var. Bize göre zararlı, mesela onlar domuz etini seviyor. Jambon seviyor. Efendim sosis seviyor. Onun yanına haşlanmış baklagil koyuyorlar. Bu genelde şey oluyor; fasulye oluyor veyahut da bizim dediğimiz şekilde barbunya oluyor. Bizim ülkemizde tarım da çok önemli tabi ki.

Quote 6

Besides, I am against having dessert at the end of the meal. In fact, the culture in Europe is as follows. Dessert should be eaten before the meal. For example, the soup should be drunk after a meal. You eat the food; it should be drunk after half an hour. Take Europe, for example. All people first say coffee break. The coffee break came from there; it's time. They eat a cake at three and a half to four o'clock. Why? They balance blood sugar. Or, the British call it breakfast. They say morning breakfast. Look at the morning breakfast; there is also healthy food. For us, it is harmful; for example, they like pork. They like ham. You see, they like sausage. They put boiled legumes next to it. This is usually it; it's beans or, as we say, kidney beans. Of course, agriculture is also very important in our country.

In Quote 7, as an example of Anatolian food rituals, the participant introduced local dishes specific to grave visits.

Quote 7

Şimdi yemekle, bizde şimdi bir de her yerde olduğu gibi mesela bizim gelenekte örneklerimizde bir şey vardır. Özellikle bizim bölgede, Dicle bölgesinde, biz her yıl şey her yıl mayıs ayının ortalarında, mezar ziyareti dediğimiz bir olay var.

Bütün insanlar o çevredeki insanlar her mezarlığın belli bir günü var ve o günde bütün köylü yemeklerini yapar bir de bizim yöresel olarak adını Pendrüt dediğimiz Zazacada biz Pendrüt diyoruz. Türkçede ne anlamına gelir nasıl yapılır bilmiyorum. Yani ayran bir de bulgur ve nohut bir şeyler katılır ayran çorbasının katısı yapılır. Katı yapıldıktan sonra, üzerine tereyağı dökülerek yenir ve bu yemek de o ziyaret dediğimiz olaya özel özgü bir yemektir. Ve bütün köylüler öğleden sonra namazdan sonra mezarlığı ziyaret eder. Mezarlığı ziyaret ettikten sonra her ailenin belli bir yeri vardır. Ve orada yemek yenilir. Ve herkes orada gelir yemeğini yer.

Quote 7

Now with food, there is something in our tradition, just like everywhere else. Especially in our region, in the Dicle region, there is an event that we call a grave visit every year in the middle of May. All the people in that neighborhood, each cemetery has a certain day, and all the villagers cook on that day, and which we locally call Pendrüt; we call it Pendrüt in Zazaki. I don't know what it means in Turkish. In other words, ayran and bulgur, and chickpeas are added to make a solid ayran soup. After the solid dish is made, it is eaten by pouring butter on it, and this dish is a special dish for the event we call that visit. And all the villagers visit the cemetery after the afternoon prayers. After visiting the cemetery, each family has a certain place. And food is eaten there. And everyone comes and eats there.

The opposition of the dichotomy that is cuisine/and health can be seen in Quote 8.

Quote 8

Çok sağlıklı beslendiğimi düşünmüyorum. Çünkü benim kültürüm biraz ne derler protein ağırlıklı, yağlı, salçalı, acılı. Haliyle, yağ, acı baharatlar ondan sonra yüksek miktarda proteinler, evet, bunlar vücuda fazlası zararlı. Ama alışkanlığımız, belki benim değil, annemin belki o da değil anneannemin alışkanlığı. Yani bu kültür böyle hani oradan buraya gelen bir kültür. O yüzden çok sağlıklı mı? Bence değil. Kuyruk yağı, iç yağlar falan filan çok tüketiriz. Ama yani bence evet çok bir Egeli kadar sağlıklı beslendiğimi söyleyemem.

Quote 8

I don't think I'm eating very healthy. Because my culture is a little bit, what they say is protein-based, oily, with tomato paste, spicy. Naturally, oil, hot spices, and high amounts of protein, yes, too much of these are harmful to the body. But it is our habit, maybe not mine, my mother's, maybe not hers, my grandmother's habit. I mean, this is the culture that came from there. So, is it very healthy? I do not think so. We consume a lot of tail fat, lard, etc. But I think yes, I cannot say that I eat as healthy as an Aegean.

2.3.1.5. Development of Food Preferences

Table 6. Thematic Block of “Development of food preferences”

Name of the Thematic Block	#	Frequency	Percentage
Development of food preferences			
Taste develops from childhood.	4	4	15.38%
Food culture comes from the family you grew up in.	6	3	11.54%
I continue my family's eating habits.	4	3	11.54%
I try to break my preconceptions about food from the past.	4	3	11.54%
My eating habits changed as I grew up.	3	3	11.54%
I remember food related memories from childhood.	3	2	7.69%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

The food one ate in childhood develops a taste. When one grows up, they look for flavors suitable for the palate that developed as a child. Healthy eating habits are formed based on parents' habits. Some participants stated that even if they live alone or with their friends, they continue their family's eating habits. One participant stated that food culture had become a philosophy of life in the house she grew up in. Although it is difficult, the taste can change. Some young participants stated that they tried other recipes to break their prejudices from the past.

In Quote 9, the participant states that she finds food delicious that is suitable for the palate, which is developed from childhood.

Quote 9

Yani bir damak tadınız var. Hani bu çocukluktan gelen, annenizin yaptığı yemekler, akraba yani küçükken babaannenizin ya da anneannenizin işte teyzenizin teyzeniz ya da işte akrabalarınızda yediğiniz bir yemek tadı oluyor. Bir damak tadı oluşuyor küçüklükten. Ve daha sonra da işte onunla büyüyörsünüz. Ve hep o tadı arıyorsunuz, açıkçası yani gittiğiniz yerlerde çalıştığınız yerlerde okulda. Hep o tadı arıyorsunuz. Bazen bulamıyorsunuz. Bulamayınca da yemeği hani çok size şey çekici gelmiyor yani. Yemek istemiyörsünüz. Genelde öyle oluyor benim. Yani mesela evde o mesela bizde salçalı yemek yapılır. İş yerinde yapılıyor mesela atıyorum işte taze fasulye. Bizde hani salçalı yapılır. Zeytinyağlı yapılır. Ama iş yerinde yapılan hani aynı tat olmayınca onu çok yemiyorum açıkçası. Hani bunun gibi.

Quote 9

“So, you have a taste. You know, from childhood, the food that your mother made, relatives, that is, it tastes like the food you ate from your grandmother or grandmother, your aunt, your aunt or relatives when you were little. A taste is formed in childhood. And then you grow up with it. And you're always looking for that taste, frankly, wherever you go, where you work, at school. You are always looking for that taste. Sometimes you can't find it. When you can't find the food, you know, it doesn't appeal to you much. You don't want to eat. That's usually what happens to me. For example, at home, we cook with tomato paste. It is made at work, for example, green beans. You know, we made it with tomato paste. It is made with olive oil. But frankly, I don't eat the food made at work much when it is not the same taste. Like this.”

The participant in Quote 10, argued that eating habits are culturally transferred from the family in which one grew up.

Quote 10

Yani aslında baya şey beslenme bir kültür. Hani nasıl büyüdüğün, yetiştiğin aileden de gelen bir tarafı var. Alışkanlıkların çünkü çocukken oturuyor. O yüzden insanlar genelde ailelerinin beslenme şekillerini ediniyorlar bana kalırsa. Benim hayatımda da birazcık böyle. Evdeki gibi pişiririm. Yalnız da yaşıyorsam yıllardır onu sürdürdüğümü fark ediyorum... Yani anne babanın hani daha böyle sağlıklı gıdalara yönelmişlerse, daha dikkatli ve seçicilerse işte, aman sebzeni aksatma, aman meyve mutlaka her gün tüket filan. Bunlar bir şekilde sende de yer ediyor. Senin beslenme kültürüne de yerleşiyor. Ben kaç yıldır yalnız yaşıyorum? Herhalde on altı yıldır filan yalnız yaşıyorum ama şimdi bakıyorum çok da farklılaşmamışım. Hala anne babamın evindeki şeylere gıdalara benzer şeyler yiyorum, onların yemediği şeyleri ben de hala yemiyorum. Onlar çocukken çünkü otorite olarak dayatıyorlar ya birazcık zorluyorlar, yasaklar koyuyorlar işte seni yönlendiriyorlar filan ama çocukken geliştirdiğin damak tadı hem işte sağlık adına yaptığın seçimler bir şekilde bence oturuyor. O yüzden kültür gibi bir şey dedim.

Quote 10

In other words, nutrition is a culture. You know, it has an aspect that comes from the family you grew up in. Because your habits formed as a kid. Thus, people generally adopt the diet of their families, I think. It's a bit like that in my life too. I cook like at home. Even I have lived alone for years, I realize that I've been continuing it...In other words, if your parents have tended towards such healthy foods, if they are more careful and selective, do not skip your vegetables, necessarily consume fruit every day, and so on. Somehow, they make an impression on you, too. It settles in your food culture as well. How many years have I been living alone? I guess I've been living alone for like sixteen years, but now I see I'm not that different. I still eat things similar to foodstuffs in my parents' house, and I still do not eat things that they do not eat. As a kid, because they impose as an authority, they push a little, impose bans, direct you, and so on. But

I think the taste you developed as a child and the choices you made in the name of health somehow settled. That's why I said it is something like culture.

2.3.2. Healthy Eating Representations

Results showed that healthy eating representations could be divided into four thematic blocks as follows: “Healthy eating”, “Unhealthy eating”, “Food is central to human biology” and “Natural food is healthy”.

2.3.2.1. Healthy Eating

Table 7. Thematic Block of “Healthy eating”

Name of the Thematic Block	#	Frequency	Percentage
Healthy eating			
A balanced diet is healthy.	30	17	65.38%
Three meals a day is healthy.	19	12	46.15%
A plant-based diet is healthy.	14	11	42.31%
Avoid junk food.	15	11	42.31%
Enough is as good as a feast.	9	8	30.77%
Healthy eating varies from person to person.	18	7	26.92%
I try to form good eating habits.	10	6	23.08%
Self-control is necessary to be healthy.	7	5	19.23%
Healthy eating feels energetic.	4	4	15.38%
Homemade food is healthy.	4	3	11.54%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

For many participants, healthy eating means a balanced diet. Taking basic food groups, such as protein and carbohydrates in certain proportions, is a healthy diet. Not eating things that are harmful to the human body is necessary to be healthy. One should stay away from harmful foods to avoid or remove them from the diet if possible. Eating a diet rich in vegetables is healthy. Even a completely vegetarian diet is necessary. Paying attention to mealtimes is essential for healthy eating. Regularly scheduling meal times is one of the principles of healthy eating. It is important not to skip meals. Eating enough and not eating much is healthy. One participant stated that he gets up from the table before he feels full. Many participants think that one needs to know

their own body and eat accordingly. One should regulate their diet according to their health problem and their health condition. Eating according to the age, gender, and needs of the person is healthy because the anatomy of everybody is different. Some participants try to gain healthy eating habits. They find it difficult to break the vicious cycle of eating habits.

2.3.2.2. Unhealthy Eating

Table 8. Thematic Block of “Unhealthy eating”

Name of the Thematic Block	#	Frequency	Percentage
Unhealthy eating			
Overeating is unhealthy.	6	4	15.38%
Eating junk food is unhealthy.	5	4	15.38%
I'm afraid of gaining weight.	8	4	15.38%
Bad food makes me regret.	8	4	15.38%
Eating out is unhealthy.	4	3	11.54%
Unhealthy food tastes delicious.	5	3	11.54%
Eating one type of food is unhealthy.	6	1	3.85%
Fast food is more convenient.	1	1	3.85%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

Some participants stated that they overeat their favorite food and excess their limits. They can not mix in the correct proportions and eat their favorite food in three to four servings. Many participants think eating out is unhealthy. No matter what one eats out, no option is healthy. To be healthy, they try not to eat out. Many participants limit themselves because they do not want to gain weight. One participant sees eating as something she should always avoid. Some participants said they would eat if they weren't going to gain weight. Gaining weight is a serious problem. Overweight participants fear for their poor health. One participant feels so bad after eating; it could even be a shame. Another participant said first he eats with joy; then it turns into sadness because of overeating. Especially processed foods make one feel bad after eating. This kind of food has a nasty feel. They don't feel like eating this type of food.

One participant had nausea after eating junk food. Junk food is fast, easy, and cheap. Healthy food should be easily accessible for healthy eating.

In Quote 11 below, the participant mentions that unhealthy foods cause him to feel disgusted after eating.

Quote 11

Onun dışında dün bir pişi yedim. Yarım pişi. Bugün de geri kalan yarısını yedim bu sabah. Mesela sağlıklı sayılabilecek şeyleri de arada yiyorum tabi. O mesela beni pişman etmedi ama mesela cips yesem, aaa yeni bir cips çıkmış! Fesleğen aromalı cips, çok merak ediyorum filan diye gidip aldım geçen. Şey yaptı yani bir de bitirmek zorunda gibi hissediyor insan. Onu yedim. Böyle ilki fena değil gibi geldi. İlk yediğim. İkinci yediğim cips filan. Sonra böyle yük gibi geldi. O cipsi de böyle sanki bitirmek zorundaymışım. Aldım çünkü ziyan olur yoksa hani. Öyle bir besin yani yemeği bırakmak ahlaksızlık gibi bir şey olarak öğretildi çocukluktan beri. Yemek arttırmak kötü bir şey yani yokluktan gelen. Büyükanнем filan olduğu için dedem büyükanнем onlar hep yemeğini bitirmiş. Neyse o yüzden cipsi bitir sonuna kadar bitirmek zorunda hissediyorum kendimi. Çok yemiş oluyorum sonra da. Sonra da çok kötü hissediyorum. O kadar yediğim için...İşte kaçınıyorum kötü gıdalardan pis gıdalardan. Paketli, ambalajlı, işlenmiş gıdalar. Abur cuburdan. Evde bulundurmuyorum çok işte öyle şeyleri de. Çok canım da çekmiyor zaten. Artık pis böyle pis bir hissiyatı var. Sanki onların böyle pişmanlık hissiyle eşleşmiş gibiler. Çok da canım çekmiyor yani tüketmek istemiyorum.

Quote 11

Other than that, I ate a roll yesterday. Half a roll. Today I ate the remaining half this morning. For example, I also eat things that can be considered unhealthy, of course. For example, it did not make me regret it. But, for example, if I eat chips, oh, a new chips is out! Basil flavored chips, I'm very curious, so I went and bought it. I mean, you feel like you have to finish it. I ate it. The first one didn't taste bad. The first thing I ate. The chips I ate the second time and so on. Then it felt like such a burden. It's like I had to finish that chip. I bought it because otherwise it would be wasted. Since childhood, wasting food was taught as something immoral. Wasting food is a bad thing due to poverty. My grandfather, my grandmother, they always finished their meal. Anyway, that's why I feel like I have to finish the chips to the end. I have eaten a lot then. Then I feel so bad. Cause I ate so much...I avoid bad foods, dirty foods. Packaged, wrapped, processed foods. From junk food. I don't keep many such things at home. I don't feel like eating anyway no longer. It seems like they have such a dirty feeling. They seem to be associated with such a sense of regret. I don't feel like eating them; in a word, I don't want to consume them.

2.3.2.3. Food is Central to Human Biology

Table 9. Thematic Block of “Food is central to human biology”

Name of the Thematic Block	#	Frequency	Percentage
Food is central to human biology			
Eating affects body organ systems.	14	11	42.31%
The body is an intelligent machine.	13	8	30.77%
Appetite is vital.	6	5	19.23%
An unhealthy diet causes diseases.	5	4	15.38%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

There is a strong relationship between diet and physical health. Eating in a healthy way is good for the organs and does not harm the organs. Organs such as the liver, kidneys, heart, brain, intestine, and stomach are affected by diet. Body systems are also related to diet. The proper functioning of the body's systems, such as the digestive system, urinary system, and musculoskeletal system, relies on a healthy diet. A healthy diet protects people from diseases. Some diseases, such as diabetes and Alzheimer's disease, are directly related to nutrition. For example, the cause of cardiovascular diseases is consuming animal products. Eating leads to the secretion of hormones, for instance, dopamine secretion. Many participants attribute mechanical properties to the body. Use the body well and take good care of the body. One participant stated that her body gives error when she overeats. Another participant said that he eats vegetables according to signals of his digestive system. According to some participants, the body wants what it needs. Eating according to the desires of the body will be healthy for the person. One participant said that if her soul wants it, obviously her body needs it, and it will be good for her. Some participants stated that they had problems because they had less appetite. One participant indicated that appetite is very much related to life, and if one has a good appetite, it means one wants to live.

In Quote 12, the participant explains the relationship between eating habits and health by referring to the biological structure of human beings.

Quote 12

Bana göre sağlıklı beslenmek kişinin biyokimyasına göre hareket etmesi demek. Kendi bünyesine göre hareket etmesi demek. Şeker, üresi, bu üre, gut hastalığı. GPD enzimler karaciğer için önemlidir. Gama glutamil kalp kasları için önemlidir. Kalsiyum kemiklerin gelişimi için önemlidir. ... Yine idrar yolları için böbrek yolları için önemlidir. Kreatin böbrek taşı için önemlidir. Eğer kişi kendini altı ayda bir çekup yaparsa, biyokimya analizlerine bakarsa, kan analizlerine bakarsa. Ona göre, kendini bir besin teknolojisi metabolizmasını uygularsa bu sağlıklı beslenmedir.”

Quote 12

For me, eating healthy means acting according to one's biochemistry. It means to act according to one's own constitution. Sugar, urea, urea, gout disease. GPD enzymes are essential for the liver. Gamma-glutamyl is essential for the heart muscle. Calcium is essential for the development of bones...Again, it is essential for the urinary tract and kidney tract. Creatine is essential for kidney stones. If a person makes a physical examination every six months, looks at biochemistry analyzes, looks at blood analysis. If she applies a food technology metabolism accordingly, this is healthy nutrition.

2.3.2.4. Natural Food is Healthy

Table 10. Thematic Block of “Natural food is healthy”

Name of the Thematic Block	#	Frequency	Percentage
Natural food is healthy			
I prefer natural food.	20	11	42.31%
I avoid food additives.	10	7	26.92%
Fruits and vegetables of the season are healthy.	13	7	26.92%
Natural environment protects the health.	9	5	19.23%
Conventional agriculture is safer.	4	2	7.69%

Note. In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

One of the most recurring themes was natural. Participants associated healthy eating with natural. Participants make a lot of effort to reach natural products. Some participants bring natural products from their hometowns or villages through their acquaintances. Organic products are much more expensive. Consumers cannot trust the seller regarding the quality of the product. Participants state that they produce some products such as sausage and yogurt themselves. Participants avoid packaged, ready-cooked, processed, hormonal, additive, and preservative-containing foods.

Participants pay attention to eating fruits and vegetables in season. For example, they do not eat summer vegetables in winter. Participants complain about the lack of a natural feeding environment. Some participants want to live in the natural environment and be fed with plants grown in the natural environment. Two participants are trying to find products that are cultivated with genuine seeds.

In Quote 13, the participant emphasized naturalness and argued that healthy eating is eating compatible with nature.

Quote 13

Sağlıklı beslenmek ne demek? Bir defa, doğanın istemediği ya da çok basit şöyle söyleyeyim bir sineğin ya da bir arının ya da bir ne bileyim bir böceğin tercih etmediği bir besin bence insanların da tercih etmemesi gereken besinler grubundadır. Çünkü hayvanların iç güdüleridir ve hayvanlar bu iç güdülerine göre beslenirler. Ama insanlar öğrendikleriyle, öğrendiği şekilde besleniyorlar...Dolayısıyla hani hayvanlar bile doğanın kabul ettiği doğanın içinden gelen doğal besinleri tercih ederken, insanlar böyle daha yapay daha suni şeyleri yemeği seçiyorlar. E bu da yol su elektrik olarak bize geri dönecek. Yani vücudumuz bunu bir süre sonra tolere etmemeye başlayacak. Bir yerden sonra birtakım hastalıklar çıkmaya başlayacak belki de vücudumuzda. O yüzden, olabildiğince doğal, olabildiğince ilaçsız, olabildiğince nasıl diyim ev yapımı olan ya da herhangi bir kanserojen madde içermeyen ne ürün varsa mesela onları tercih ederek yemenin sağlıklı olduğunu düşünüyorum.

Quote 13

What does it mean to eat healthy? Once, a food that nature does not want or, let me put it very simply, food that a fly or a bee or an insect does not prefer, I think, is in the group of foods that people should not prefer. Because animals have instincts, and animals are fed according to these instincts. But people feed on what they learn, the way they learn...Therefore, while even animals prefer natural foods that come from nature, which nature accepts, people choose to eat such more artificial things. This will return to us as negative consequences. In other words, our body will not tolerate this after a while. After a while, some diseases will start to appear, maybe in our body. I think it is healthy to prefer whatever products that are as natural as possible, drug-free as much as possible, homemade as much as possible, or do not contain any carcinogenic substances.

2.3.3. Eating Representations Affected by Covid-19 Pandemic

Results showed that eating representations affected by the Covid pandemic could be divided into two thematic blocks as follows: "Changes in Diet due to Pandemic Conditions" and "Changes in Diet to Protect Against Covid".

2.3.3.1. Changes in Diet due to Pandemic Conditions

Table 11. Thematic Block of “Changes in diet due to pandemic conditions”

Name of the Thematic Block	#	Frequency	Percentage
Changes due to pandemic conditions			
Healthy			
I less often eat out.	11	7	26.92%
More homemade food	9	6	23.08%
Mealtimes changed and became more regular.	7	5	19.23%
I had a chance to eat healthy because of pandemic.	7	3	11.54%
Neutral			
No change in my diet	7	6	23.08%
I spent more time in the kitchen.	4	3	11.54%
I returned to my previous eating habits with the normalization process.	3	2	7.69%
Unhealthy			
Covid caused me to eat unhealthily.	8	4	15.38%
I gained weight.	4	3	11.54%

* In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

Daily life has changed due to the conditions brought by the pandemic. Some participants' eating habits changed, while others' eating habits were not affected by the pandemic. Students' eating habits seem to have changed the most among the participants. Eating habits; changed towards healthy, neutral, and unhealthy directions. The most critical conditions that cause changes in eating habits are being at home and having more time. The frequency of eating out has decreased inevitably. The decrease in eating out affected the eating habits in a healthy way. Eating at home increased as eating out decreased. Some participants started eating at certain times every day because they were at home. For some participants, breakfast became a meal, or they devoted more time to breakfast. The pandemic has created a healthy eating trend for some participants. Some participants saw the pandemic as an opportunity to eat healthily. For some participants, the pandemic made no difference in their diet. Many participants stated that they are doing the same now as they were doing before. Some participants started to try dishes they did not know how to cook because they spent

more time at home. They had more time to make time-consuming food. The eating habits of some participants were negatively affected. Some participants stated that they started to eat more out of boredom. There is a difference in eating habits between the first periods of the pandemic and the following periods. After getting used to the conditions brought by the pandemic, some participants returned to pre-pandemic eating habits.

2.3.3.2. Changes in Diet to Protect Against Covid-19

Table 12. Thematic Block of “Changes in diet to protect against Covid”

Name of the Thematic Block	#	Frequency	Percentage
Changes to protect against Covid			
I paid attention to the cleanliness of the dishes.	9	6	23.08%
I can get the virus from eating outside.	4	4	15.38%
I started to use supplementary food.	4	3	11.54%
I became more careful to eat healthily.	4	2	7.69%
I ate more to strengthen my immune system.	4	2	7.69%

* In this table, column # means how many times each theme was mentioned during the interviews. The column Frequency means how many interviewees mentioned each theme. The column Percentage means what percentage of interviewees mention the theme.

Many participants intentionally changed their eating habits to avoid Coronavirus. Eating out has decreased due to the fear that Coronavirus may be transmitted from eating outside. While many participants used to eat out easily before the pandemic, now they see eating out as risky. They feel uncomfortable when they go to the restaurant. Some participants started to care about food hygiene more after the pandemic. Most participants spend a lot of time washing the food. Food hygiene is almost obsessive in the early stages of the pandemic and decreased by learning that the virus was not transmitted from the surface. While some participants emphasized natural foods, they started to use supplementary food artificially to protect them from the virus. One participant stated that she does not normally find it appropriate to take vitamins as pills. Some participants gave importance to their nutrition in order not to get sick. They ate more fruits and vegetables containing vitamins. Two participants stated that If they eat well, they will be stronger.

Quote 14 reflects the difference between changes in diet made intentionally to protect against Coronavirus and changes in diets due to the conditions brought by the pandemic.

Quote 14

Spesifik olarak Koronavirüs'ten korunmak için sağlıklı beslenmiyorum. Yani böyle hani şey gibi bir düşüncem yok. Hani sağlıklı besleneyim bünyem kuvvetli olsun, ve o zaman hani Koronavirüs bana bulaşmaz demeyim de bulaşınca daha hafif geçiririm. Yani böyle bir düşünceyle sağlıklı beslenmiyorum. Sağlıklı beslenmeyi kendim artık biraz böyle hani yeme düzenimi değiştirmek istediğim için yapıyorum. Tabi ki Koronavirüs dolayısıyla gelen etkenler, işte evde kalıyor olmamız, çok fazla gece dışarıya eğlenceye çıkmıyor olmamız, bir şeyler tabi ki hani yeme düzenini etkiliyor. Yani Koronavirüs dolaylı olarak yeme düzenimi etkiliyor ama Koronavirüs'ten korunmak için sağlıklı besleniyorum gibi bir düşüncem yok.

Quote 14

I don't eat healthy specifically to protect myself from the Coronavirus. I mean, I don't have a thought like that. I will eat healthily, my body will be strong, then you know that the Coronavirus does not infect me, or I will overcome mildly when it does. So, I do not eat healthy with such a thought. I eat healthy because I want to change my eating pattern. Of course, the factors that occur due to the Coronavirus, the fact that we stay at home, that we do not go out to have fun at night too much, of course, affect the eating pattern. In other words, the Coronavirus indirectly affects my eating habits, but I do not think that I am eating healthy to protect myself from the Coronavirus.

In Quote 15, the participant gives an example of increasing artificial vitamin intake during an extraordinary situation, namely the pandemic, despite the great importance of natural nutrition.

Quote 15

Yani Koronavirüs'ten korunmak için sağlıklı ve yeterli beslenme dengesini oluşturmak gerek evet. Bu tıp otoritelerinin de söylediği bir şey. Ancak Covid'ten korunma döneminde biz daha steril yaşamayı, yani evimizde olmayı, çok sosyal ve kalabalık ortamlara girmemeyi. Evet şöyle biraz daha özen gösterdik. Mesela önceki dönemlerde kışın biz vitamin takviyesi hiç almazdık. Ama bu kış D vitamini takviyesi aldık. İşte Omega 3 takviyesi aldık. Normal hayatımızda ben hap olarak vitamin takviyelerini çok doğru bulmuyorum...İnsan metabolizması açısından ama bu kış bunu yaptık evet. Bir tek onu değiştirdi Covid. D vitaminimiz bol olsun ki bağışıklığımız güçlü olsun gibi tabi tıp otoritelerini takip ederek. Böyle bir ufak bir değişiklik yaptı. Ama beslenme şeklimizde hiçbir değişiklik yapmadı.

Quote 15

In other words, it is necessary to create a healthy and adequate nutritional balance in order to be protected from the Coronavirus. This is a thing medical authorities say too. However, during the period of protection from Covid, we live more sterile, stay in our home, don't to enter very social and crowded settings. Yes, we took a little more care. For example, we have never taken vitamin supplements in the winter in the previous periods. But we took vitamin D supplement this winter. We took omega 3 supplements. I do not approve of vitamin supplements as pills in our everyday life...In terms of human metabolism, but we did that this winter, yes. Covid only changed it. We will have plenty of vitamin D so that our immunity will be strong, by following the medical authorities of course. It made such a small change. But it hasn't made any changes to our diet.

2.4. Discussion

Participants talked about what food and healthy eating mean to them, what they do to eat healthily, and how the pandemic has changed their eating habits during interviews. As mentioned before, Moscovici and Vignaux (1994/2001) state that the analysis of social representations should aim to identify themata that operate as first principles, compelling ideas, and images. Themata are at the heart of social representations that endure as concept images. Themata takes the form of dyadic oppositions, which are fundamental elements of thought (Markova, 2015). In line with this statement, the current study found that some themes emerged as dyadic oppositions: pleasure/necessity, natural/artificial, and health/cuisine. In the literature, pleasure/necessity and natural/artificial were two of the five themes of Bäckström et al. (2003), who studied the thematic structure of social representations of new foods.

The pleasure/necessity dichotomy is pervasive among interview data. Food as a necessity and food as pleasure appeared together in the phrasings of participants' expressions. Most participants stated that they enjoy eating rather than seeing food as necessary. They satisfy their needs by preparing delicious meals. Many participants referred to the proverb "eat to live or live to eat" and mentioned their standing in this opposition. Eating is not a pleasure for those who see food as nutrition.

Health/cuisine is another dichotomy that emerged in the current study, just as stated by (Moscovici & Vignaux, 1994/2001). The current study found a contrast in eating behavior between the participants who have Eastern Anatolian cuisine and those who have Mediterranean cuisine. Participants who have Mediterranean cuisine reported that their culture caused them to eat healthily, whereas participants who have

Eastern Anatolian cuisine reported that their culture caused them to eat unhealthily. Participants who have Eastern Anatolian cuisine reported that although they want to eat healthily, they can not succeed because of their cultural habits. Future research should examine cultural barriers to healthy eating. Researchers might identify related factors in healthy eating by comparing healthy cuisines with unhealthy cuisines.

The majority of participants emphasized the naturalness of food. This result can be generalized because a systematic review of 72 studies from 32 countries shows that food naturalness is crucial for consumers (Roman et al., 2017). Why do people value naturalness in the food context? Purely out of health concerns? Siipi (2013) examined consumers' desire for natural food and the relationship between natural food and healthiness. Different meanings of natural in the food context (lack of human influence, natural as familiarity, and natural as authenticity) were not conceptually linked to health. Nevertheless, participants in the current study seemed to believe that natural food is healthy. They mentioned natural and artificial characteristics of food together, resulting in a natural/artificial dichotomy. For example, participants stated that they avoid packaged, ready-cooked, processed, hormonal, additive, and preservative-containing foods and prefer natural, organic, and homemade foods.

Another important finding was that women participants see feeding their family healthily as a part of their motherhood identity. This finding is consistent with Ristovski-Slijepcevic et al. (2010), who stated that mothers have a moral responsibility for their children's healthy nutrition and well-being. Mother participants stated that they pay attention to healthy nutrition while raising their children. In addition, they stated that they try to make their children's favorite dishes to make them happy. These results reflect those of Anving and Thorsted (2010), who also found that serving children healthy food and compromising children's wishes are necessary to live up to the role of "mother" and meet feeding ideals. Just as mother participants take the cooking role, student participants also attribute it to their mothers. The concept of 'mother food' emerged. Students participants differentiate between 'mother food' and eating out. Moisio et al. (2004) proposed that mothers construct family identity through homemade food instead of offering "market-made" food. Participants said that eating habits form at home as family interaction. Besides motherhood identity, gender roles were influential on how participants perceived cooking. Most participants (including

female and male participants) said they enjoy cooking. Nevertheless, for men, cooking is arbitrary, whereas, for women, cooking is a duty.

The current study found that food preferences and tastes develop from childhood. Participants stated that they continued to maintain their parents' eating habits even after becoming adults. This finding has important implications for early intervention programs that promote healthy eating. Prior studies noted the importance of the parenting environment as the first and most crucial setting where children's eating behaviors are socialized. Young children need guidance to adopt healthy food preferences, self-regulation, and basic eating skills. Parents should change their feeding practices to be more developmentally appropriate as children age (Hughes and Power, 2018). So, how should parents behave to ensure that their children eat healthily? Parents use positive and negative feeding strategies while influencing their children's food preferences. Providing healthy food at home, modeling healthy eating, explaining reasons for consuming healthy food, and children's participation in meal preparation increased positive outcomes. In contrast, restriction of unhealthy food, using food to regulate emotions, and using food as a reward was associated with adverse outcomes (Vollmer and Baietto, 2017).

Variety is repeated throughout interviews, and participants attribute different meanings to variety. Participants said they seek variety in their diet and think that rich diet is healthy. Participants use "variety" to describe richness in the food context regarding world cuisines, various fruit and vegetables, different spices, and diverse diets. Participants also stated that cooking and eating is an art. A participant says that women can use their intelligence and creativity in a kitchen by using all sorts of ingredients. All these findings are consistent with Weaver (2019), who proposed that people seek variety in their diets because it is aesthetically pleasing, facilitates social integration, serves as a status marker, and is nutritious.

The current study indicates that beliefs about eating habits are centered on norms, and food has moral aspects. This finding is in accord with Minton et al. (2019) that moral foundations influence food preference. For instance, participants stated that vegetarians choose not to eat meat because of moral reasons. Healthy eating norms influence participants eating experience. Many participants stated that bad food makes them feel regret. They think unhealthy food has a dirty feeling and makes them feel nausea. These findings are consistent with those of Chapman and Anderson (2012),

who proposed that the role of disgust over evolutionary time has changed and gained moral status. The original function of disgust is to defend the body against toxins, but it evolved to the rejection of violating social and moral norms.

It is interesting to note that food has a place in traditional ritual practices. Participants talk about food served in social gatherings such as weddings and grave visits. For instance, a study demonstrated that the cultural rituals performed by Muslims in Turkey during the mourning period involve offering halva and dessert to neighbors and cooking in the deceased's house for seven days (Ümmühan et al., 2022). Food is not only a substance but has spiritual characteristics. For instance, wheat, the main food source in Anatolian culture, was not only seen as food but attributed meanings such as abundance and fertility. Various religions attributed holiness to wheat offered to the gods as gifts. Wheat continues to preserve its place as a ritual in the beliefs and traditions of the people (Altier, 2022).

The current study showed that Turkish culture is rich in meanings, beliefs, and values related to food and healthy eating. The pandemic seems to have affected the Turkish sample less than other samples because the eating habits of Turkish people are based on cultural rules, and cultural codes related to eating are strong. For instance, cooking at home is prevalent in Turkish culture. Thus, closed restaurants did not change eating habits much. Participants stated that the pandemic had not affected their diet generally. They just made minor differences in their diet. Cultural eating habits seem to be less affected by changing environmental factors brought by the pandemic. Students seemed to be the group in which the pandemic changed their eating habits the most. Students' dietary habits may be more dependent on environmental cues.

It was not possible to control the effect of the pandemic on food representations. Variables such as overcoming Covid-19, overcoming it as severe or mild, losing a loved one, living alone, and being sensitive to feeling negative emotions caused by staying at home may be related to how the person is affected by the pandemic. Interviews were held in the summer of 2021 when quarantine rules were bent. The participants answered the questions retrospectively by considering the whole process in the current study. Some participants stated that the pandemic and lockdown measures affected their eating habits phase by phase. At first, they saw the pandemic as an opportunity to eat healthily, but later they started to eat unhealthily. Nevertheless, many participants stated that their eating habits remained the same even though other

things in their lives had changed. Some participants talked about the changes in eating habits brought by the pandemic before asking how the pandemic affected their eating habits. The Covid-19 pandemic is a great social incident that changes lives entirely, including eating habits, even though eating behavior is highly habituated.

A strength of the current study is that participants are from different regions of Turkey, including the Aegean region, Eastern Anatolia, the Mediterranean region, İstanbul, and Ankara. Food culture differs from region to region in Turkey, leading to a variety of cuisines. Findings of the current study show diversity in cultural eating traditions. Compared to big cities such as Istanbul and Ankara, participants from different regions might attribute more meaning to food. Those who have immigrated to Istanbul and Ankara also seem to try maintaining their hometowns' cultural eating habits. If the current study was restricted to Ankara and Istanbul, findings would not show such diversity in the socio-cultural aspects of the food.

A limitation of this study is that the sample includes only one housewife. Actually, interviews were conducted with more housewives, but these interviews were excluded from the data set because their answers to the questions were found insufficient. As the role of cooking was attributed to housewives, they were expected to have richer food representations. However, they had difficulty expressing what food meant to them. They gave recipes or started to list the types of dishes. They perceived the interview as a test even though the interviewer tried to make them feel comfortable.

The current study contributes to our understanding of the socio-psychological aspects of food as it is a new field for social psychologists. Although healthy eating is studied in the literature, food's social, psychological, and cultural aspects have been neglected. The current study reveals meanings attributed to food and beliefs about food by constructing themes within the framework of the social representations theory. The current study is an explorative qualitative study that throws in many concepts. By selecting a few presented concepts, future research might quantitatively examine the relationship between these concepts. Food has an important place in Turkish society, and Turkish people like to eat. Therefore, studying food in the Turkish context is valuable.

An important point to consider is individual differences in eating habits affected by the pandemic. One of the two participants living in the same house says that the pandemic caused him to eat unhealthily, while the other says that it caused her

to eat healthily. Future research is needed to identify predictors of healthy eating and investigate the relationship between healthy eating beliefs and healthy eating behavior. The second quantitative study will apply the theory of planned behavior to fulfill these aims.



CHAPTER 3

STUDY 2 QUANTITATIVE

3.1. Introduction

3.1.1. Theory of Planned Behavior

The theory of planned behavior assumes that people behave sensibly, meaning they implicitly and explicitly consider available information and the implications of their actions. The theory proposes that intention to perform a behavior is the most critical determinant of action. According to the theory, there are three determinants of intention to perform a behavior: attitudes that are personal in nature, subjective norms that reflect the social influence, and perceived behavioral control that deals with control issues (Ajzen, 2005).

Attitude is a positive or negative evaluation of performing a particular behavior. Secondly, the subjective norm is a term that corresponds to the perception of social pressure to perform a particular behavior. Thirdly, the term perceived behavioral control corresponds to self-efficacy or the ability to perform a particular behavior. If people evaluate a behavior positively, if they feel social pressure to perform a behavior, if they think they are able to perform a behavior, people have intention towards performing this behavior (Ajzen, 2005).

The theory proposes that perceived behavioral control has an effect on intention. People who think they have resources and opportunities to perform a particular behavior are likely to have strong intentions even if they have unfavorable attitudes and think that significant others would disapprove of performing this behavior. The association between intention and perceived behavioral control is not mediated by subjective norms and attitude. Perceived behavioral control can indirectly influence behavior via intentions. Perceived behavioral control also predicts behavior directly because the performance of a behavior depends on sufficient control over the behavior (Ajzen, 2005).

People's intentions and actions can be explained by their attitudes, their subjective norms, and their perceived control. However, it is required to investigate why people hold particular attitudes, subjective norms, and perceived control for a more comprehensive understanding. Antecedents of attitudes toward the behavior are behavioral beliefs. Evaluation of an object follows from the beliefs people hold about the object. Accessible beliefs about consequences of the behavior determine attitude toward behavior. Every behavioral belief associates the behavior with a particular outcome. People's evaluation of the outcomes linked with the behavior and the strength of these linkages determine the attitude toward the behavior (Ajzen, 2005).

Antecedents of subjective norms are normative beliefs. Normative beliefs are beliefs that hold subjective norms. Normative beliefs correspond to people's beliefs that particular individuals or groups support the given behavior. Normative beliefs are also about whether social referents themselves engage or not engage in the behavior. Depending on the behavior involved, social referents might be parents, close friends, spouse, coworkers. As long as people think social referents think they have to perform the given behavior, they perceive social pressure to perform that behavior (Ajzen, 2005).

Antecedents of perceived behavioral control are control beliefs. Control beliefs are about factors that facilitate or impede a given behavior. People perceive control over behavior to the extent that they believe they have the necessary resources and opportunities. Control beliefs lead to the perception that one has the capacity to perform the behavior (Ajzen, 2005).

At the initial level, intention and behavioral control determine behavior. At the next level, attitude toward behavior, subjective norms, and perceived behavioral control determine intention. The third level explains attitudes, subjective norms, and perceived behavioral control by behavioral beliefs, normative beliefs, and control beliefs. In the final analysis, people's behavior is explained by their beliefs. The theory of planned behavior has significant implications for behavioral interventions that aimed to change intentions and behavior (Ajzen, 2005).

3.1.2. Healthy Eating Studies That Applied Theory of Planned Behavior

The theory of planned behavior is popular in health psychology. Some researchers applied the theory to investigate healthy eating. Armitage and Conner (1999) studied eating a low-fat diet by applying the theory of planned behavior. This study examined differences between perceived behavioral control and self-efficacy. This study also investigated self-identity as an addition to the model. Furthermore, this study aimed to identify beliefs that might provide valuable targets for interventions. They found support for using the theory of planned behavior to predict intentions and behavior concerning eating a low-fat diet. By contrast with expectations, they could not find an interaction between intention and perceived behavioral control. They found substantial evidence for the difference between self-efficacy and perceived behavioral control. In terms of findings, self-identity might prove to be a valuable addition to the model.

Povey et al. (2000) applied the theory of planned behavior to two healthy eating behaviors: eating a low-fat diet and eating five portions of fruit and vegetables per day. This study examined the distinction between self-efficacy and perceived behavioral control in food choice that is a novel behavioral domain. This study aimed to demonstrate which underlying control beliefs predict the separate components of self-efficacy and perceived behavioral control. Results showed that the theory of planned behavior could be applied to two different dietary behaviors. Additionally, empirical evidence showed that there was a distinction between self-efficacy and perceived behavioral control. Further evidence showed that self-efficacy and perceived behavioral control have different bases in terms of underlying control beliefs.

Astrom and Rise (2001) examined the effect of role identity and group norms from the framework of the theory of planned behavior in terms of eating healthily. Subjective norms, attitudes, and perceived behavioral control would predict the eat healthily intentions. This study proposed that role identity would predict healthy eating intentions; specifically, the relation between intention and role identity would stronger for participants who are more experienced with healthy eating. This study further proposed that group norms would predict intention when participants identified strongly with reference groups. Results showed that the theory of planned components significantly explained healthy eating intentions. Additionally, role identity explained

significant variance in intention over and above theory of planned behavior components. Contrary to expectations, past behavior did not change the effect of role identity on intention. Further evidence showed that when participants identified strongly with reference groups, group norms about healthy eating explained significant variance in intention.

Conner et al. (2002) applied the theory of planned behavior to predict healthy eating intentions and healthy eating behavior over six years following participation at health promotion clinics. This study examined the effect of perceived past behavior and the moderating effect of intention stability on the relationship between intention and behavior and the relationship between behavior and past behavior. These relationships were further examined in terms of three eating behaviors that are eating a diet rich in fiber, eating a diet rich in fruits and vegetables, eating a diet low in fat. Results showed that intentions were strong predictors of healthy eating over six years. When intentions were stable, intentions were strong predictors of behavior. Evidence showed that there was no relationship between past behavior and healthy eating behavior.

3.1.3. The Effect of Covid-19 Pandemic on Eating Behavior

Covid-19 pandemic and quarantine regulations changed daily lives. The time spent at home has increased. Social isolation and confinement have caused negative feelings such as stress and anxiety for some people. How did the pandemic affect eating habits, one of the essential parts of daily life? The importance of nutrition may have increased as healthy nutrition is critical for a competent immune system (Gombart et al., 2020). Time spent on cooking may increase because of closed restaurants and more spare time. Is the pandemic a threat or an opportunity for healthy eating? Research to date has shown controversial results.

This section will include research that suggests that the pandemic leads to healthy eating and the factors associated with healthy eating. Afterward, studies suggesting that the pandemic causes unhealthy eating and the factors associated with unhealthy eating will be included. Then, studies that found mixed results will be presented. Finally, the studies carried out in Turkey will be presented.

Some of the research in the field shows that the Covid-19 pandemic is an opportunity for healthy eating. Research with 36.185 adult participants from 16 European countries showed that participants generally adopted healthier eating habits during confinement; precisely 57.8% of participants reported that their fast food intake is decreased, and 52.1% of them cooked more during confinement (Molina-Montes et al., 2021). Jaeger et al. (2021) suggests that Covid-19 disruption provided the impetus for healthier eating, with 44% of participants reporting positive dietary change. Results of the research with 7514 Spanish participants showed healthier eating behaviors than previous eating habits in terms of adherence to the Mediterranean diet. They decreased the intake of fast foods, red meat, or sweet beverages but increased Mediterranean diet-related foods such as olive oil, vegetables, or fruits during the lockdown (Rodríguez-Pérez et al., 2020).

What are factors associated with healthy eating during the pandemic? Cooking skills, available time for cooking tasks, positive feelings, and family support were associated with positive changes in diet. The quality of diet improved when cooking chores were shared between household members. Feeling overworked is negatively associated with a healthier diet (Tribst et al., 2021). Familiar interaction and increased time at home due to the pandemic seemed to induce positive outcomes on the diet. The time available to arrange eating activities including improving cooking skills, time spent cooking, and sharing meals with family members were main drivers of healthy eating habits (Bhutani et al., 2021; Rodríguez-Pérez et al., 2020; Scarmozzino and Visioli 2020). Household income and instrumental or emotional support increased the positive changes in eating habits (Vidal et al., 2021). Food access, unemployment insurance, and larger social networks were associated with healthy dietary changes (Miller et al., 2021). Health was a critical motive among participants who made positive changes in their diet (Jaeger et al., 2021).

Some of the research in the field shows that the Covid-19 pandemic leads to unhealthy eating behavior mostly due to negative emotions induced by disruption. A study conducted across Europe, North Africa, Western Asia, and America with 1047 participants showed that food consumption patterns were unhealthier during the stay-at-home orders in terms of eating out of control, snacking between meals, and the type of food (Ammar et al., 2020). Negative emotions cause eating for emotion regulation (Macht, 2008). Research done in the Covid-19 pandemic context shows that stress

caused by the pandemic was associated with eating to cope. Participants who showed maladaptive coping tendencies reported increased sugar intake, drinking to cope, and food addiction symptoms (Cummings et al., 2021). One study shows that 31% of participants reported that the pandemic affects their diet negatively, including overeating (39%), skipping meals (25%), restricting eating (20%), and fasting (16%). Participants who engage in unhealthy eating practices significantly scored higher on stress levels (Khubchandani et al., 2020). Research demonstrates that nearly half of the participants felt anxious due to their eating habits, consumed comfort food, and increased food intake to feel better (Di Renzo et al., 2020). A more neutral emotion relative to stress and anxiety, boredom, is also associated with a poor diet. Boredom leads to eating more to escape threatening, self-focused awareness that boredom brings (Moynihan et al., 2015). Research done in the pandemic context shows that 72.4% of participants who make unhealthy changes in their diet attributed these changes mainly to feelings of boredom during confinement (Alah et al., 2021).

What are factors associated with unhealthy eating during the pandemic? Adverse changes in diet were associated with decreased household income due to the pandemic and maladaptive coping strategies such as self-blaming and self-distraction (Vidal et al., 2021). Maladaptive coping and higher body mass index were associated with unhealthy eating behavior during the pandemic. In addition, participants who showed emotional and uncontrolled eating in pre-pandemic were at greater risk for unhealthy eating behavior during the pandemic (Coulthard et al., 2021). Research demonstrates that self-control had enormous significance in regulating stressful emotions and maladaptive eating behavior during the Covid-19 pandemic. Low self-control predicted maladaptive eating behavior through negative affect (Li et al., 2021). Low craving control was the significant predictor of increased sweet and savory food intake (Buckland and Kemps, 2021). In another study, low craving control was a risk factor for increased food intake and snacking during stay-at-home orders (Buckland et al., 2021). Being overweight and obese increased the risk of unhealthy dietary behaviors during confinement (Poelman et al., 2021). Participants who had children in the household, had obesity, and had transportation barriers were significantly more likely to eat unhealthily (Miller et al., 2021). Adverse eating habits were associated with limited physical activity, weight gain, and mental health issues (Bennett et al.,

2021). Unemployment and higher anxiety increased the risk of unhealthy eating behavior during the pandemic (Zhang et al., 2021).

Some studies in the literature reveal mixed results reporting healthy and unhealthy eating behavior together. Meta-analysis of 23 papers about the effect of the COVID-19 pandemic on dietary practices both shows positive and negative impacts. The meta-analysis presents favorable findings in terms of increase in fresh produce, increase in home cooking, reduction in alcohol consumption, and reduction in comfort foods. On the other hand, it also shows adverse findings regarding reduction in fresh produce, increase in comfort foods and increase in alcohol consumption (Bennett et al., 2021). In a study conducted with 1080 American adults, more than half of participants reported making changes to their diet: 28.3% reported a healthier diet, while 24.8% reported an unhealthier diet during the pandemic (Miller et al., 2021). Research conducted with 4780 Brazilian adults on changes in eating behavior during the pandemic shows that 21.1% of participants improved their diet quality while 12.5% of them worsened their diet (Tribst et al., 2021). Participants who make healthy changes to their diet and participants who make unhealthy changes were observed together in the research population. Positive changes included eating more home-made food, fruits, vegetables, and adaptive coping strategies, whereas negative changes included emotional and uncontrolled eating (Coulthard et al., 2021).

Studies with Turkish participants examining the impact of the Covid-19 pandemic on eating behavior will be presented. Many studies suggest that the pandemic led to healthy eating, whereas others suggest that pandemic led to unhealthy eating in the global literature. The same controversy is prevailing for studies conducted in Turkey. Başaran and Pekmezci (2021) conducted a study with 3017 participants from Turkey to compare food consumption patterns during the Covid-19 pandemic with the pre-pandemic period. They found that conditions caused by the pandemic, such as social isolation, stay-at-home orders, economic problems, and the desire to have a competent immune system changed food consumption patterns. Overall, participants showed healthy eating tendencies during the pandemic. A study with 982 participants from Istanbul under self-isolation suggested that quarantine positively affected healthy eating behavior (Ceylan et al., 2020). Şen and Şimşek (2021) studied changes in eating habits during the pandemic with 1258 Turkish participants and found a significant change in fast food consumption, ordering out, making homemade bread,

having a balanced diet, not skipping meals, eating foods to strengthen the immune system. Demir (2020) proposed that pandemic caused unhealthy eating behavior in terms of overeating, losing control of eating, and eating attacks. Dinçer and Kolcu (2021) suggested that the Covid-19 pandemic affected the eating habits of Turkish participants negatively. 46.9% of participants reported body weight increases, and 51% reported a negative impact on their eating habits. Packaged food consumption and low physical activity level significantly increased body weight ($p < 0.001$). They also found that 80.2% of the participants experienced stress and anxiety, and the eating habits of 74.2% of those experiencing stress and anxiety worsened. They further found a statistically significant relationship between the change in dietary habits and the bodyweight increase, consuming packaged food, ordering out, consuming tea and coffee, physical activity level, and stress and anxiety levels. Madalı et al. (2021) studied emotional eating tendencies of 1626 Turkish participants and found that they used emotional eating to cope with negative emotions such as stress, anxiety, and depression due to the pandemic. 75.7% of participants were emotional eaters at different degrees. Emotional eating was higher among obese participants than normal weight and underweight participants. 32.7% of the participants reported an increase in appetite, and 34.4% reported weight gain.

3.1.4. Research Questions

1. How well theory of planned behavior model explains healthy eating behavior in the pandemic context?
2. What are behavior, attitude, behavioral beliefs, subjective norm, normative beliefs, perceived control, control beliefs, intention, and past behavior; towards healthy eating during the pandemic?
3. What are the relationships between behavior, attitude, behavioral beliefs, subjective norm, normative beliefs, perceived control, control beliefs, intention, and past behavior; towards healthy eating during the pandemic?

3.2. Method

3.2.1. Measures

3.2.1.1. Healthy Eating Behavior

Defining the behavior of interest is the first step to conceptualizing and measuring behavior and other constructs in the model. Behavior consists of four elements: action, target, context, and time. The behavior is defined when the elements are specified. These four elements of behavior can be defined at different levels in terms of specificity or generality. Behavior has to be compatible with other constructs for predictive validity. Behavior and other constructs should consist of exactly the same elements. In general, a dichotomous scale is preferred for measuring whether the behavior is performed or not performed. In addition to using a dichotomous scale, researchers may prefer frequency scales that assess how often the behavior is performed (Fishbein and Ajzen, 2010).

Behavior is assessed using two items: "I eat healthy during the pandemic.", "How often do you eat healthy during the pandemic?". In this case, action is healthy eating, and context is pandemic; time and target elements are not specified. Other items of the questionnaire are constructed exactly compatible with behavior. Likert scale and frequency scale are used to assess behavior.

3.2.1.2. Past Healthy Eating Behavior

Researchers have proposed that past behavior can be added as a predictor to the theory of planned behavior. However, past behavior could not meet the causality criterion because past behavior cannot be used to explain future behavior as a predictor (Fishbein and Ajzen, 2010). Nevertheless, research shows that adding past behavior as a predictor to the model increases the explained variance in future behavior (Albarracín et al., 2001; Rise et al., 2006; Sandberg and Conner, 2008). Since the pandemic is a critical turning point, it would be appropriate to add the past behavior to the model in order to understand the change in eating habits before and after the pandemic. Past behavior is added to the model as correlated with behavior, meaning a bidirectional relationship between past behavior and behavior. Past behavior assessed using two

items: “I have been eating healthy before the pandemic.”, “How often have you been eating healthy before the pandemic?”.

3.2.1.3. Attitudes towards Healthy Eating

Attitude is defined as a tendency to respond with favorable or unfavorable to a psychological object. Attitude is measured by obtaining a score that shows an individual's position on a bipolar evaluative dimension towards an attitude object (Fishbein and Ajzen, 2010). The semantic differential (Osgood et al., 1957) is a widely used attitude measurement method in which participants rate an attitude object on a scale of evaluative adjective pairs. Two interrelated aspects of attitude are instrumental (likely positive or negative outcomes) and experiential (perceived positive or negative experiences related to behavior). Attitude is best conceptualized as a hierarchical model consisting of first-order instrumental and experiential factors and a second-order attitude factor (Bagozzi et al., 2001; Hagger and Chatzisarantis, 2005).

Consistent with the theory and empirical findings, attitude is conceptualized as a hierarchical model in which instrumental and experiential constitute first-order factors. Attitude is assessed using six adjective pairs towards healthy eating during the pandemic. Three instrumental adjectives are unimportant/important, unnecessary/necessary, and useless/useful. Three experiential adjectives are boring/fun, unpleasant/pleasant, and untasteful/tasty.

3.2.1.4. Behavioral Beliefs Regarding Healthy Eating

Fishbein's (1963, 1967b) expectancy-value model proposes that assessing behavioral beliefs is necessary to predict attitudes toward behavior. According to the expectancy-value model, every belief links an outcome to behavior. In order to obtain a composite belief score, responses to the belief strength scale (the perceived likelihood that behavior will lead to the outcome in question) and the outcome evaluation scale (positive or negative valence of the outcome) are multiplied. Results are summed to obtain a predictor estimate of attitude toward behavior (Fishbein and Ajzen, 2010).

Twenty-six participants were asked to list the advantages and disadvantages of healthy eating during the pandemic in Study 1 for identifying behavioral beliefs. The

most commonly mentioned outcomes of healthy eating were: strengthening the immune system, overcoming Coronavirus mildly, and feeling energetic. After outcomes had been specified, questionnaire items were constructed to assess belief strength and outcome evaluation with respect to each outcome.

3.2.1.5. Subjective Norm Regarding Healthy Eating

Norms are defined as perceived social pressure to perform a particular behavior. Subjective norm refers to a particular behavioral prescription attributed to a generalized social agent. Individuals perceive that significant others prescribe, desire, and expect the performance of a particular behavior. The term subjective is used because perception may not reflect significant others' actual prescriptions (Fishbein and Ajzen, 2010). Subjective norm is assessed using three items on a seven-point Likert scale: "Most people who are important to me want me to eat healthy during the pandemic.", "Most people who are important to me think that I should eat healthy during the pandemic.", "Most people who are important to me support my healthy eating during the pandemic.".

3.2.1.6. Normative Beliefs Regarding Healthy Eating

Normative beliefs are determinants of subjective norms. Normative beliefs refer to beliefs that a specific referent thinks an individual should perform a particular behavior. Subjective norms involve a generalized social agent, whereas normative beliefs involve specific referents. An individual may not be motivated to comply with a specific referent. Thus, subjected norms can be predicted from the composite score obtained by multiplying normative belief strength and the motivations to comply and then summing the results (Fishbein and Ajzen, 2010). The questionnaire assesses normative belief strength and motivation to comply towards specific referents: family, friends, nutrition specialists in the media, and relatives.

3.2.1.7. Perceived Behavioral Control Regarding Healthy Eating

Perceived behavioral control refers to how much an individual believes in their capability to perform a given behavior and control over its performance. Perceived behavioral control is supposed to consider the availability of information,

opportunities, skills, and other resources necessary to perform the behavior. Perceived behavioral control is the perceived ability and ease of performing a particular behavior. Two aspects of perceived behavioral control are capacity (ability to perform the behavior) and autonomy (extent of control over performing the behavior) (Fishbein and Ajzen, 2010). Perceived behavioral control is assessed with four items: “Eating healthy during the pandemic is up to me.”, “If I want, I can eat healthy during the pandemic period.”, “I have the necessary conditions to eat healthy during the pandemic.” and “For me, eating healthy during the pandemic is easy.”.

3.2.1.8. Control Beliefs Regarding Healthy Eating

Control beliefs refer to believing that specific internal or external factors facilitate performing the behavior, determining perceived behavioral control. Control belief strength (probability of a control factor's presence) and power of the control factor (control factor's degree of facilitation for performing the behavior) are multiplied to obtain a composite score for control beliefs (Fishbein and Ajzen, 2010). In Study 1, control factors were elicited by asking twenty-six participants to list factors they believed would enable them to eat healthy during the pandemic. The seven most frequently mentioned factors are: having good financial possibilities, having suitable time, being highly motivated, living as a family at home, convenient working conditions, having necessary conditions to cook and access to quality food.

3.2.1.9. Intention towards Healthy Eating

Intention shows an individual's readiness to perform a particular behavior. Intention relies on the individual's estimate of the perceived probability of performing a particular behavior. Plans, willingness, and expectations towards performing a particular behavior are manifest indicators of intention as a latent construct (Fishbein and Ajzen, 2010). Intention is assessed using three items: “I intend to eat healthy during the pandemic.”, “I plan to eat healthy during the pandemic.” and “I will try to eat healthy during the pandemic.”.

3.2.2. Reliability Analysis of Variables

Table 13. Reliability analysis of the theory of planned behavior constructs

Constructs	Number of Items	Cronbach's alpha	Mean item Correlations
Behavior	2	.87	.77
Past behavior	2	.85	.75
Attitude	6	.82	.45
Instrumental	3	.85	.67
Experiential	3	.91	.77
Behavioral Beliefs	3	.81	.60
Behavioral Belief Strength	3	.75	.51
Outcome Evaluations	3	.83	.63
Subjective Norm	3	.91	.78
Normative beliefs	4	.84	.57
Normative Belief Strength	4	.70	.39
Motivation to Comply	4	.84	.58
Perceived Behavioral Control	4	.85	.62
Control beliefs	7	.85	.47
Power of control factors	7	.79	.38
Control Belief Strength	7	.85	.45
Intention	3	.92	.79

Reliability analysis was conducted through Cronbach's alpha to assess the internal consistency of the scale constructs. A value of Cronbach's alpha greater than 0.7 is acceptable (Hair et al., 2010). Cronbach's alpha values ranged between .92 and .70, which were acceptable. Belief composites had relatively low internal consistency, which is expected, as Ajzen (2002a) stated. In addition to Cronbach's alpha, inter-item correlations were computed to evaluate internal consistency, and inter-item correlations greater than .30 are acceptable (Hair et al., 2010). In terms of inter-item correlations, belief composites had relatively low internal consistency similar to low Cronbach's alpha values. Additionally, the inter-item correlation value of attitude is low, indicating that the two-dimensional structure of attitude lowers the internal consistency of the construct.

3.3. Results

3.3.1. Data Screening

Data screening analysis was performed through IBM SPSS for outliers, normality, and multicollinearity before main analyses. Data screening analysis was performed by following guidelines provided by Tabachnick and Fidell (2001).

3.3.1.1. Missing Data

The online questionnaire was created with Google Forms, and answering each question was required to complete the survey. Thus, no missing value treatment is needed.

3.3.1.2. Outliers

The sample consisted of 675 participants. Before any statistical analysis, data was reviewed manually. Twelve cases were deleted because they were younger than 18 years old. Four cases were found to be trolls because they give slang answers to open-ended demographic questions. Univariate outlier analysis was conducted through Z scores and found several cases scoring at the extremes in some variables. None of the univariate outliers was deleted. Multivariate outlier analysis was performed using Mahalanobis distance $p < 0.001$, and cases detected as multivariate outliers were examined manually through their answers. Among one of these cases, Case 304 was deleted because of giving either 1 or 7 to all items. Main analyses were conducted with 658 participants.

3.3.1.3. Normality

Univariate normality was assessed through skewness and kurtosis values. The acceptable range for skewness and kurtosis is between -2 and +2 (George and Mallery, 2010). Table 14 shows skewness and kurtosis values of variables. Especially subjective norm and the instrumental dimension of attitude constructs are highly skewed and kurtotic. Skewness and kurtosis values showed that data was not normally distributed. Since univariate normality was violated, no further analysis of multivariate

normality was not performed. Main analysis was conducted through Mplus with MLMV estimator option, a maximum likelihood parameter estimation robust to non-normality.

Table 14. Skewness and Kurtosis Values of Variables

Variable	Min	Max	Skewness	SD of Skewness	Kurtosis	SD of Kurtosis
Behavior	1	7	-0,519	.095	-0,081	.190
Past Behavior	1	7	-0,386	.095	-0,313	.190
Attitude	1.83	7	-0,994	.095	1,227	.190
Instrumental	1.67	7	-2,796	.095	9,530	.190
Experiential	1	7	-0,642	.095	-0,120	.190
Behavioral	8	49	-1,686	.095	2,902	.190
Beliefs						
Subjective	1	7	-2,342	.095	6,712	.190
Norm						
Normative	2.75	49	-0,233	.095	-0,832	.190
Beliefs						
Perceived	1	7	-1,203	.095	1,663	.190
Control						
Control	1	49	-0,333	.095	-0,247	.190
Beliefs						
Intention	1	7	-1,436	.095	2,065	.190

3.3.1.4. Multicollinearity

Multicollinearity was assessed through Collinearity Diagnostics performed by IBM SPSS. Two perceived behavioral control items shared a variance proportion of .75 and .81, respectively, and the condition index was 88.304, which was greater than 30. These items were: “Eating healthy during the pandemic is up to me.” and “If I want, I can eat healthy during the pandemic period.”. The second item was deleted for main analyses.

3.3.2. Demographic Characteristic of Participants

Table 15. Demographic Characteristics of Participants

	<i>n</i>	%
Age		
18-24	90	13.68
25-34	130	19.76
35-44	130	19.76
45-54	151	22.95
55-64	116	17.63
65+	15	2.28
Gender		
Women	403	61.25
Men	253	38.45
Educational Level		
Primary school	11	1.67
High school	83	12.61
University	417	63.37
Master's degree	116	17.63
Doctorate degree	28	4.25
Employment		
Student	103	15.65
Unemployed	46	6.99
Housewife	21	3.19
Retired	72	10.94
Pharmacist, Teacher, Doctor, Civil servant...		

Note. *N*=658. Participants were on average 41.41 years old (*SD*=13.585).

Table 15 shows the demographic characteristics of participants. Statistical analyses were conducted with 658 cases. Most of the participants were women (61.2%). The mean age was 41.4 (*SD*=13.58), and the age of the participants had a normal distribution. The sample was highly educated, %85.25 of the participants had university or higher degree. %15.6 of the participants were students. The remaining participants were from various professions such as pharmacist, teacher, doctor, civil servant, engineer.

3.3.3. Descriptive Statistics

Research question 2: What are behavior, attitude, behavioral beliefs, subjective norm, normative beliefs, perceived control, control beliefs, intention, and past behavior; towards healthy eating during the pandemic?

3.3.3.1. Healthy Eating Behavior

Table 16. Mean, Standard Deviation, and Frequency Distribution of Behavior

	SD			%			SA			
I eat healthy during the pandemic	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>	
	2.9	5.8	7.9	17.8	28.4	20.5	16.7	4.91	1.53	
How often do you eat healthy during the pandemic?	N			%			AA			
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>	
	2.1	4.3	10.2	19.9	28.6	21.7	13.2	4.87	1.44	

Note. SD=strongly disagree; SA=strongly agree. N=never; AA=almost always.

Healthy eating behavior was assessed using two items on a seven-point Likert scale with two different endpoints as agree/disagree and never/always, respectively. More than half of the participants (%66) ate healthy during the pandemic as shown in Table 16. A substantial majority of participants (%20) scored on the midpoint of the seven-point Likert scale, showing they ate neither completely healthy nor completely unhealthy during the pandemic. Remaining participants (16%) ate unhealthy during the pandemic.

3.3.3.2. Past Healthy Eating Behavior

Table 17. Mean, Standard Deviation, and Frequency Distribution of Past Behavior

I have been eating healthy before the pandemic	SD			%			SA			
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>	
	3.2	3.6	11.2	19.8	23.9	22.6	15.7	4.88	1.53	
How often have you been eating healthy before the pandemic?	N			%			AA			
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>	
	1.2	2.3	11.6	22.2	24.3	25.2	13.2	4.95	1.37	

Note. SD=strongly disagree; SA=strongly agree. N=never; AA=almost always.

Past healthy eating behavior was assessed using two items on a seven-point Likert scale with two different endpoints as agree/disagree and never/always, respectively. Overall mean scores of healthy eating behavior for pre-pandemic ($M=4.92$) and during pandemic ($M=4.89$) were almost identical, showing that eating habits have generally remained unchanged in terms of overall healthiness.

3.3.3.3. Attitudes Towards Healthy Eating

Table 18. Mean, Standard Deviation, and Frequency Distribution of Attitude

Eating healthy during the pandemic is...									
Items	%								<i>M</i>
	1	2	3	4	5	6	7		
Instrumental									
Unimportant	0.2	0.3	1.1	2.1	5.3	15.8	75.2	Important	6.60
Unnecessary	1.1	0.3	0.8	1.2	4.7	14	78	Necessary	6.62
Useless	0.2	0.3	0.5	1.2	3.2	14.9	79.8	Useful	6.71
Experiential									
Boring	3.2	4.4	7.8	20.4	23.7	17.2	23.4	Fun	5.02
Unpleasant	2.9	5	7	15.7	19.8	22.2	27.5	Pleasant	5.21
Untasteful	2.1	4.1	5.2	16.3	22	21.4	28.9	Tasty	5.32

Attitude toward healthy eating was assessed using six items on a seven-point Likert scale with adjective pairs. Two sub-dimensions of attitude that were instrumental and experiential showed different patterns. The overall mean score of instrumental ($M=6.64$) was greater than the overall mean score of experiential ($M=5.18$). Most participants thought healthy eating is completely useful (%80), whereas a relatively small majority thought healthy eating is completely pleasant (%28). The instrumental dimension seemed negatively skewed, whereas the experiential dimension demonstrated normal distribution.

3.3.3.4. Behavioral Beliefs

Table 19. Mean, Standard Deviation, and Frequency Distribution of Behavioral Belief Strength

Eating healthy during the pandemic...									
items	SD			%			SA		
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
Strengthens the immune system	0.2	0.3	0.8	1.7	4.9	13.1	79.2	6.67	0.79
Enables me to overcome Coronavirus mildly if I catch the Coronavirus	1.1	0.8	1.7	5.9	14	17.3	59.3	6.20	1.21
Makes me feel energetic	0.5	0.3	0.9	3	8.5	22	64.7	6.44	0.95

Note. SD=strongly disagree; SA=strongly agree.

Table 20. Mean, Standard Deviation, and Frequency Distribution of Outcome Evaluations

How important are the following situations to you?									
items	NI			%			VI		
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
Strengthening my immune system	0	0.3	0.5	0.6	2.9	11.1	84.7	6.78	0.62
Overcoming Coronavirus mildly if I catch the Coronavirus	0.2	0.2	0.8	1.8	2.6	10.5	84	6.74	0.72
Feeling energetic	0.2	0.2	0.3	2.1	4	12.8	80.5	6.70	0.73

Note. NI=not important at all; VI=very important.

Behavioral beliefs regarding healthy eating were assessed with three items on a seven-point Likert scale. Two components of behavioral beliefs, behavioral belief strength and outcome evaluation, showed different patterns. Thus, although items look similar, different patterns support the assumption that participants understood the items correctly. Belief strength scores showed more variability among items than outcome evaluation items. The mean scores of items were high and closed to 7 ($M=6.20-6.78$), and the distribution was negatively skewed. Participants had strong behavioral beliefs regarding healthy eating during the pandemic.

3.3.3.5. Subjective Norm Regarding Healthy Eating

Table 21. Mean, Standard Deviation, and Frequency Distribution of Subjective Norm

Most people who are important to me...

Items	SD			%			SA		
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
Want me to eat healthy during the pandemic	1.2	0.8	0.6	4.6	7.8	17.3	67.8	6.4	1.12
Think that I should eat healthy during the pandemic	0.6	.08	0.9	3.3	8.5	17.3	68.5	6.45	1.03
Support my healthy eating during the pandemic	0.5	0.6	1.1	4.3	9.1	16.6	67.9	6.42	0.92

Note. SD=strongly disagree; SA=strongly agree.

Participants firmly accepted healthy eating as a norm. The mean scores of items were high and closed to 7 ($M=6.4$, $SD=1.12$), and the distribution was negatively skewed. Subjective norm items showed very similar patterns to each other. Participants who scored below the midpoint (2,6%) were the minority and were potential univariate outliers.

3.3.3.6. Normative Beliefs

Table 22. Mean, Standard Deviation, and Frequency Distribution of Normative Belief Strength

These people below think that I should eat healthy during the pandemic

Items	SD			%			SA		
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
My family	0.6	0.3	0.2	3.2	7.6	14.7	73.4	6.55	0.92
My friends	1.2	2.1	3.5	13.4	18.2	18.1	43.5	5.73	1.43
Nutrition specialists in media	3	2.6	5.9	14.4	16.3	20.4	37.4	5.49	1.6
My relatives	2.9	3.8	6.1	16.3	14.7	19	37.2	5.42	1.65

Note. SD=strongly disagree; SA=strongly agree.

Table 23. Mean, Standard Deviation, and Frequency Distribution of Motivation to Comply

When it comes to matters of healthy eating, how important are the expectations of the people below to you?

Items	NI			%			VI		<i>M</i>	<i>SD</i>
	1	2	3	4	5	6	7			
My family	1.4	0.8	3	6.4	10.2	19.9	58.4	6.16	1.29	
My friends	2	2.6	6.1	12	20.2	20.8	36.3	5.54	1.51	
Nutrition specialists in media	13.1	7.9	9.4	18.2	17.9	14.4	19	4.39	1.98	
My relatives	9.1	8.1	10.8	13.5	13.5	16.1	28.9	4.78	2	

Note. NI=not important at all; VI=very important.

Normative beliefs were assessed using four items on a seven-point Likert scale. Participants scored differently across items. The family had the highest priority ($M=6.16$, $SD=1.29$), and nutrition specialists in media were the least important ($M=4.39$, $SD=1.98$) in healthy eating. Nutrition specialists in media had a controversial influence on eating habits because most participants (49%) did not value their opinion. Friends ($M=5.54$, $SD=1.51$) were more influential than relatives ($M=4.78$, $SD=2$) in terms of healthy eating.

3.3.3.7. Perceived Behavioral Control Regarding Healthy Eating

Table 24. Mean, Standard Deviation, and Frequency Distribution of Perceived Behavioral Control

Items	SD			%			SA	<i>M</i>	<i>SD</i>
	1	2	3	4	5	6	7		
Eating healthy during the pandemic is up to me	1.2	0.9	0.9	7.8	14.7	20.	53.8	6.11	1.23
If I want, I can eat healthy during the pandemic period	1.1	0.6	1.2	7	12.8	21.7	55.6	6.17	1.19
I have the necessary conditions to eat healthy during the pandemic	1.7	1.4	3.5	8.8	15	22.5	47.1	5.9	1.39

Table 24 (continued)

For me, eating healthy during the pandemic is easy	4.6	5	7.9	12.8	22	21.4	26.3	5.12	1.70
--	-----	---	-----	------	----	------	------	------	------

Note. SD=strongly disagree; SA=strongly agree.

Perceived behavioral control was assessed using four items on a seven-point Likert scale. Multicollinearity analysis showed that the first and second items were multicollinear. The second item, “If I want, I can eat healthy during the pandemic.” was taken out for further statistical analyses. Participants scored lowest on the item “For me, eating healthy during the pandemic is easy” ($M=5.12$, $SD=1.7$). When frequency distributions were compared, only 26% of the participants agreed that eating healthy is completely easy compared to 54% of the participants who agreed that eating healthy is completely up to them.

3.3.3.8. Control Beliefs

Table 25. Mean, Standard Deviation, and Frequency Distribution of Power of Control Factors

Which conditions below make it easier for you to eat healthy during the pandemic?									
Items	SD			%			SA		
	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
Having good financial possibilities	1.4	0.8	1.2	5.8	9.6	18.4	62.9	6.28	1.20
Having suitable time	2.1	1.7	4.6	6.2	11.6	22.3	51.5	5.97	1.45
Being highly motivated	0.5	0.3	1.8	4.1	9.6	19.1	64.6	6.38	1.04
Living as a family at home	2.7	3.8	4.7	9.3	14.1	19.9	45.4	5.7	1.61
Convenient working conditions	0.5	0.5	1.8	4.3	10.6	19.9	62.5	6.34	1.07
Having necessary conditions to cook	0.2	0.9	1.7	3	7.1	21	66	6.43	1
Access to quality food	0.2	0.8	0.6	3.8	7	16.6	71.1	6.51	0.94

Note. SD=strongly disagree; SA=strongly agree.

Table 26. Mean, Standard Deviation, and Frequency Distribution of Control Belief Strength

Do you have the conditions below to eat healthy during the pandemic?									
Items	SD		%				SA		
	1	2	3	4	5	6	7		
I have good financial possibilities	2.1	3.2	4.9	11.9	21.7	23.7	32.5	5.49	1.50
I have suitable time	2.4	4.7	7.9	14.7	23.6	20.7	26	5.18	1.58
I am highly motivated	5	5.6	7.8	15.8	19.9	21	24.9	5.03	1.73
We live as a family at home	8.7	4	3.2	4.7	10.6	17	51.8	5.63	1.94
My working conditions are convenient	4.6	4.3	8.1	14	21	20.8	27.4	5.14	1.69
I have necessary conditions to cook	2.9	3.6	4.6	9.9	15.5	21.4	42.1	5.64	1.60
I have access to quality food	2.6	3.8	4.9	8.2	22	24.9	33.6	5.52	1.53

Note. SD=strongly disagree; SA=strongly agree.

Control beliefs regarding healthy eating were assessed with seven items on a seven-point Likert scale. Two components of control beliefs, power of control factors and control belief strength, showed different patterns. Thus, although items look similar, different patterns support the assumption that participants understood the items correctly. Overall scores on the power of control factors ($M=6.23$) were higher than overall scores on control belief strength ($M=5.38$). Thus, participants more strongly agreed on conditions that enable healthy eating than meeting necessary conditions. As shown in table 1, access to quality food ($M=6.51$, $SD=0.94$), having necessary conditions to cook ($M=6.43$, $SD=1$), and being highly motivated ($M=6.38$, $SD=1.04$) were the highest power of control factors. Whereas living as a family at home ($M=5.7$, $SD=1.61$) and having suitable time ($M=5.97$, $SD=1.45$) were the lowest power of control factors. Control belief strength items showed similar patterns, and mean scores were similar.

3.3.3.9. Intention Towards Healthy Eating

Table 27. Mean, Standard Deviation, and Frequency Distribution of Intention

Items	SD			%			SA	<i>M</i>	<i>SD</i>
	1	2	3	4	5	6	7		
I intend to eat healthy during the pandemic	1.5	1.4	3.2	7.1	15.5	26.1	45.1	5.93	1.33
I plan to eat healthy during the pandemic	1.5	2	3.5	8.1	16.4	25.1	43.5	5.85	1.38
I will try to eat healthy during the pandemic	1.8	1.4	3.5	6.5	14.9	25.5	46.4	5.93	1.36

Note. SD=strongly disagree; SA=strongly agree.

Intention was assessed using three items on a seven-point Likert scale. The majority of the participants (87%) intended to eat healthy during the pandemic. Distribution was negatively skewed. The minority of participants (6%) did not intend to eat healthy during the pandemic, and these participants were potential univariate outliers. Items showed similar patterns in terms of mean scores and frequency distributions.

3.3.4. Correlation Among Variables

Table 28 shows bivariate correlations among study variables. Behavior had a significant correlation with past behavior ($r=.451, p<0.001$), attitude ($r=.412, p<0.001$), perceived behavioral control ($r=.509, p<0.001$), control beliefs ($r=.517, p<0.001$) and intention ($r=.518, p<0.001$). Healthy eating behavior was strongly related to experiential aspects of attitude ($r=.440, p<0.001$) while weakly related to instrumental aspects of behavior ($r=.158, p<0.001$). This difference in magnitude is noteworthy because both experiential and instrumental were sub-dimensions of attitude. This result shows that evaluating healthy eating as enjoyable is more related to healthy eating behavior than evaluating healthy eating as beneficial. Attitude had a significant correlation with intention ($r=.542, p<0.001$).

Table 28. Correlations among variables

Variables	1	2	3	4	5	6
1. Behavior	-					
2. Past Behavior	.451*	-				
3. Attitude	.412*	.290*	-			
4. Instrumental	.158*	.149*	.665*	-		
5. Experiential	.440*	.290*	.927*	.336*	-	
6. Behavioral Beliefs	.235*	.167*	.502*	.525*	.370*	-
7. Subjective Norm	.194*	.089*	.300*	.260*	.248*	.377*
8. Normative Beliefs	.285*	.225*	.387*	.231*	.372*	.351*
9. Perceived Control	.509*	.309*	.295*	.133*	.305*	.200*
10. Control Beliefs	.517*	.270*	.354*	.233*	.330*	.273*
11. Intention	.518*	.295*	.542*	.359*	.503*	.419*

* $p < 0.001$

Table 28 (continued)

Variables	7	8	9	10	11
1. Behavior					
2. Past Behavior					
3. Attitude					
4. Instrumental					
5. Experiential					
6. Behavioral Beliefs					
7. Subjective Norm	-				
8. Normative Beliefs	.477*	-			
9. Perceived Control	.210*	.271*	-		
10. Control Beliefs	.253*	.388*	.549*	-	
11. Intention	.316*	.443*	.451*	.494*	-

* $p < 0.001$

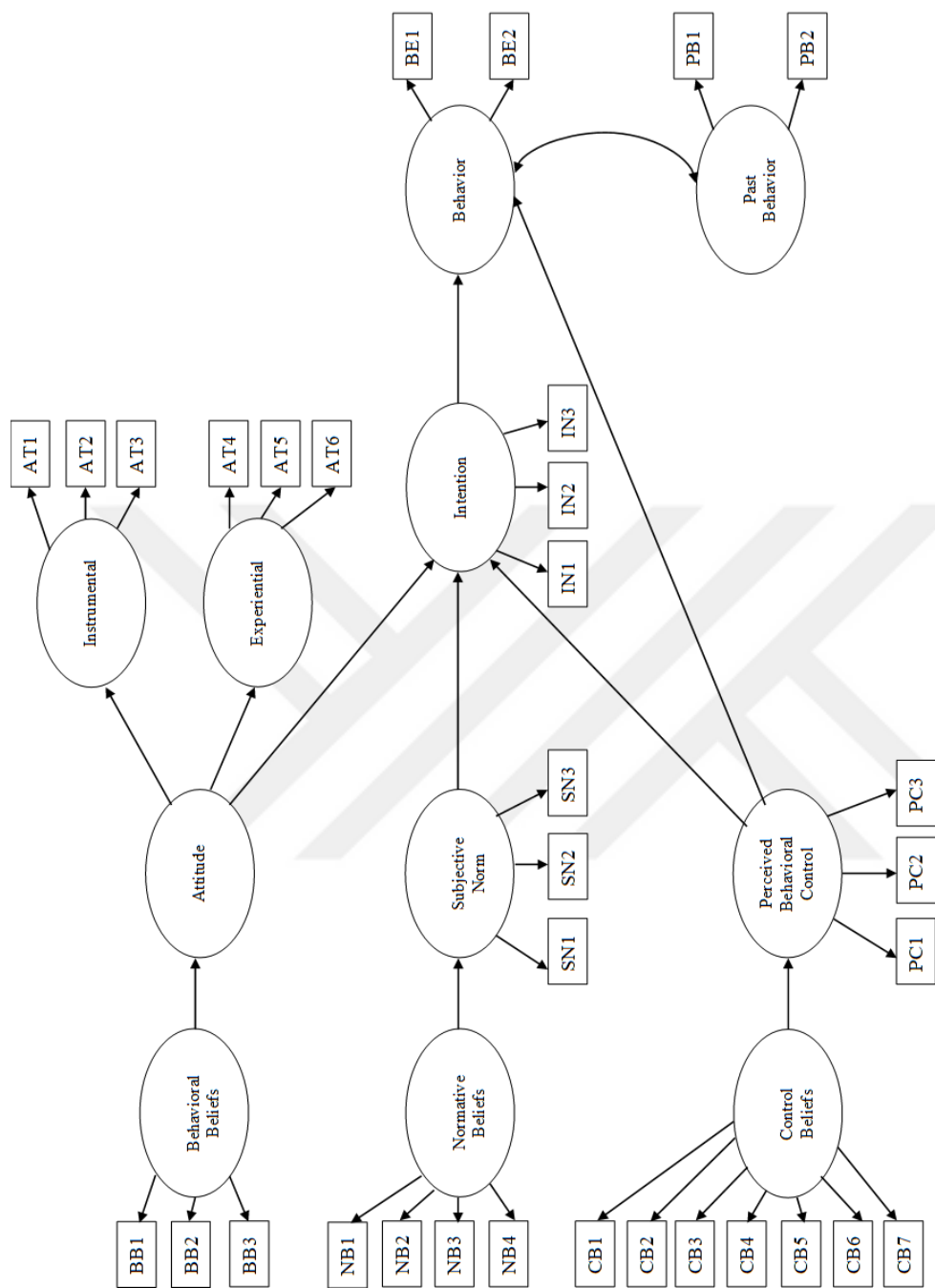


Figure 2. Hypothesized Structural Equation Model Predicting Healthy Eating Behavior During the Pandemic

3.3.5. Structural Equation Modelling

Structural equation modeling (SEM) (Jöreskog, 1973) is a statistical analysis that consists of factor analysis (Tucker, 1955) and path analysis (Wright, 1934). In structural equation modeling terms, factor analysis corresponds to measurement model, and path analysis corresponds to structural model. SEM distinguishes hypothetical constructs that are latent variables and measured indicators of latent variables that are observed variables (Bollen, 1989). SEM simultaneously analyzes how well latent variables are estimated from observed indicators and relationships among latent variables (Wang and Wang, 2019). SEM applications are conducted through five steps: model formulation, model identification, model estimation, model evaluation, model modification (Bollen and Long, 1993).

The model formulation phase is depicted in the diagram shown in Figure 2. In the hypothesized model behavioral beliefs, normative beliefs, control beliefs, attitude, subjective norm, perceived control, intention, behavior, and past behavior are latent variables. These latent variables are estimated from observed variables that are participants' scores on questionnaire items for the corresponding construct. For instance, behavioral beliefs is measured by three items, normative beliefs is measured by four items and control belief is measured by seven items. Latent variables are presented in ovals, and observed variables are presented in boxes. Lines indicate relationships among variables. A line with a single arrow indicates a causal relationship between variables. For instance, a single arrow between intention and behavior represents the effect of intention on behavior. Bi-directional arrows refer to associations between variables. For instance, the bi-directional arrow between behavior and past behavior indicates a correlation among variables.

Model estimation is conducted through Mplus 7 using the STANDARDIZED (STDYX) option in the OUTPUT command. STANDARDIZATION (STDYX) uses both the variances of the continuous latent variables and the variances of the background and outcome variables for standardization (Muthén and Muthén, 1998–2017). Univariate normality assumption was violated; thus, an estimator robust to non-normality was used. Estimator option in the ANALYSIS command specified as MLMV. MLMV is a maximum likelihood parameter estimation robust to non-normality and estimates with standard errors and a variance- and mean-adjusted chi-square test statistic (Muthén and Muthén, 1998–2017).

In the model evaluation phase, SEM aims to conduct a model fit test on the hypothesis to assess how the model estimate covariance matrix differs from the observed sample covariance matrix (Hoelter, 1983; Bentler, 1990). Suppose the model-estimated variance or covariance matrix is not significantly different from the observed data covariance matrix, and the model fits the data well, the null hypothesis is accepted. However, if the model does not fit the data, the null hypothesis should be rejected. Several model fit indices have been developed to assess model fit.

The χ^2 statistic computes the degree of discrepancy between the sample matrix and the model-estimated covariance matrix. Unlike traditional statistical testing, a non-significant χ^2 is desired, meaning the analysis does not reject the null hypothesis and the difference between the model-estimated covariances and the observed sample covariances minimized. χ^2 value of zero indicates a perfect fit; a small χ^2 indicates a good fit; a large χ^2 indicates a bad fit. However, the χ^2 is highly sensitive to sample size. As the sample size increases, rejecting the correct hypothesis is more likely. The significant p values of the χ^2 test by itself should not be a reason to reject a model (Wang and Wang, 2019). Additionally, the relative χ^2 statistic proposed by (Brookings and Bolton, 1988) is the ratio of χ^2 to its degrees of freedom. A ratio of 2 or less indicates a good fit. Several model fit indexes have been proposed to overcome the limitations of the χ^2 test.

The comparative fit index (CFI) is proposed by (Bentler, 1990). The value of CFI ranges from zero to one, and a value greater than .90 indicates a good fit. The Tucker Lewis index (TLI) is proposed by (Tucker and Lewis, 1973). TLI value greater than .90 indicates a good fit. Root mean square error of approximation (RMSEA) is the most favored measure of model fit for SEM. RMSEA value of zero indicates perfect fit; a value lower than .05 indicates close fit; a value less than 0.8 indicates fair fit; a value less than 0.10 mediocre fit; and a value greater than .10 indicates poor fit. Confidence interval is computed for RMSEA to understand sampling error. The lower value of the confidence interval should be lower than .05, and the upper value should be less than .08. A p-value greater than 0.05 is desired for a close fit in the model fit evaluation. Simulation studies show that RMSEA performs better than other fit indices (Browne and Cudeck, 1993).

3.3.5.1. Fit Indices

Table 29. Model Fit Information of Structural Equation Modelling Analysis

Fit Index	Criterion	Current Study
Chi-Square		916.721
<i>p</i> value of chi-square	$p > 0.05$	$p < .001$
Chi-Square/df	< 2	916.721/478=1.92
RMSEA	< 0.05 =close fit 0.05-0.08 =fair fit 0.08-0.10=mediocre fit	0.037
RMSEA CI	Lower value < 0.05 Upper value < 0.08 $p > 0.05$	(0.034, 0.041) $p = 1$
CFI	> 0.90	0.911
TLI	> 0.90	0.901
SRMR	< 0.08 =good fit < 0.10 =acceptable fit	0.085

Research question 1: How well theory of planned behavior model explains healthy eating behavior in the pandemic context?

Fit indices shown in Table 29 demonstrates that the model fits the data well. As a result of SEM analysis Chi-square test of model fit was statistically significant ($\chi^2 = 916.72$, $N = 658$, $df = 478$, $p = 0.00$). As mentioned above, a non-significant *p*-value is desired. Still, *p*-value is highly sensitive to sample size, and just finding a significant *p*-value is not sufficient to reject the model (Wang and Wang, 2019). In addition, the obtained values show that the model has a close fit ($\chi^2/df = 1.92$; RMSEA= 0.037; CFI= 0.911; TLI= 0.901; SRMR= 0.085).

3.3.5.2. Measurement Model

Table 30. Results of Confirmatory Factor Analysis of the Measurement Model (Mplus standardization)

Item	Estimate	SE
Factor 1-Behavior		
I eat healthy during the pandemic	.854	.023
How often do you eat healthy during the pandemic?	.907	.018
Factor 2-Past Behavior		
I have been eating healthy before the pandemic	.760	.039
How often have you been eating healthy before the pandemic?	.984	.033

Table 30 (continued)

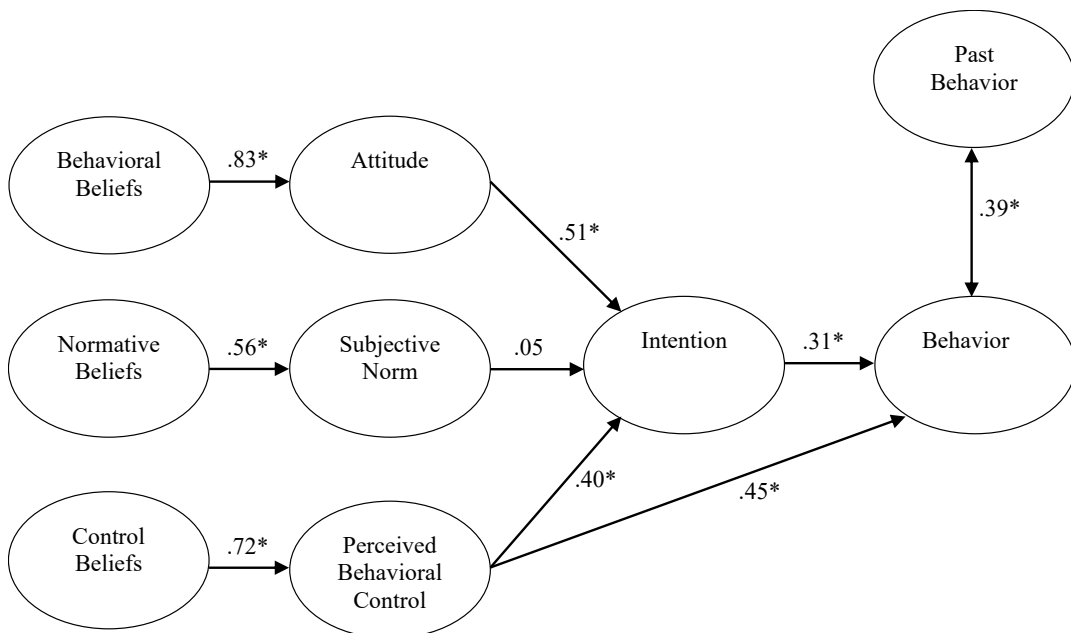
Factor 3-Attitude		
Factor 4-Instrumental	.711	.042
Factor 5-Experiential	.585	.030
Factor 4-Instrumental		
Eating healthy during the pandemic is unimportant/important	.819	.034
Eating healthy during the pandemic is unnecessary/necessary	.795	.056
Eating healthy during the pandemic is useless/useful	.850	.028
Factor 5-Experiential		
Eating healthy during the pandemic is boring/fun	.866	.019
Eating healthy during the pandemic is unpleasant/pleasant	.953	.011
Eating healthy during the pandemic is untasteful/tasty	.819	.019
Factor 6-Behavioral Beliefs		
Eating healthy during the pandemic strengthens the immune system	.730	.032
Eating healthy during the pandemic enables me to overcome Coronavirus mildly if I catch the Coronavirus	.773	.030
Eating healthy during the pandemic makes me feel energetic	.793	.027
Factor 7-Perceived Norm		
Most people who are important to me want me to eat healthy during the pandemic	.879	.031
Most people who are important to me think that I should eat healthy during the pandemic	.930	.017
Most people who are important to me support my healthy eating during the pandemic.	.838	.024
Factor 8-Normative Beliefs		
My family think that I should eat healthy during the pandemic	.739	.020
My friends think that I should eat healthy during the pandemic	.871	.015
Nutrition specialists in the media think that I should eat healthy during the pandemic	.596	.030
My relatives think that I should eat healthy during the pandemic	.822	.017
Factor 9- Perceived Behavioral Control		
Eating healthy during the pandemic is up to me	.633	.033
I have the necessary conditions to eat healthy during the pandemic	.771	.022
For me, eating healthy during the pandemic is easy	.813	.021
Factor 10- Control beliefs		
I have good financial possibilities	.666	.024
I have suitable time	.673	.028
I am highly motivated	.734	.021
We live as a family at home	.504	.030
My working conditions are convenient	.764	.020
I have the necessary conditions to cook	.738	.020
I have access to quality food	.702	.023

Table 30 (continued)

Factor 11-Intention		
I intend to eat healthy during the pandemic	.924	.015
I plan to eat healthy during the pandemic	.951	.015
I will try to eat healthy during the pandemic	.798	.026

Table 30 shows standardized factor loadings of observed variables. All relationships from latent constructs to observed variables were statistically significant ($p < 0.001$). The magnitude of standardized factor loadings should be greater than .30 (Brown, 2015). Factor loadings were between .504 and .984, which were acceptable. Attitude was the second-order factor of instrumental and experiential factors. Experiential had a relatively low factor loading on attitude ($\lambda = .585$, $p < 0.001$). One of normative beliefs items regarding nutritionist specialists in media has relatively low factor loading on normative belief construct ($\lambda = .596$, $p < 0.001$). Finally, one of the control beliefs items regarding living as a family at home had a relatively low factor loading on control beliefs construct ($\lambda = .504$, $p < 0.001$).

3.3.5.3. Structural Model



* $p < 0.001$

Figure 3. Structural Model of Structural Equation Modelling (Mplus standardized estimates)

Figure 3 shows relationships among latent variables. The model consists of four independent and five dependent variables. Independent variables are behavioral beliefs, normative beliefs, control beliefs, and past behavior, whereas dependent variables are attitude, subjective norm, perceived behavioral control, intention and behavior. All paths except the path from the subjective norm to intention were significant. Mplus 7 provides standardized coefficients.

Research question 3: What are the relationships between behavior, attitude, behavioral beliefs, subjective norm, normative beliefs, perceived control, control beliefs, intention, and past behavior; towards healthy eating during the pandemic?

As shown in Figure 1; the effect of behavioral beliefs on attitude ($\beta=.83$, $p<0.001$), the effect of normative beliefs on subjective norm ($\beta=.56$, $p<0.001$), the effect of control beliefs on perceived behavioral control ($\beta=.72$, $p<0.001$) were significant. The effect of attitude on intention ($\beta=.51$, $p<0.001$), the effect of perceived behavioral control on intention ($\beta=.40$, $p<0.001$), the effect of intention on behavior ($\beta=.31$, $p<0.001$), the effect of perceived behavioral control on behavior ($\beta=.45$, $p<0.001$) were statistically significant. Additionally, the association between behavior and past behavior was significant ($\beta=.39$, $p<0.001$).

Table 31. Path coefficients in structural equation modeling

Dependent Variables	Independent Variables	Standardized Structure Coefficients			R^2
		Direct	Indirect	Total	
Attitude	Behavioral Beliefs	.83*		.83*	.68
Subjective Norm	Normative Beliefs	.56*		.56*	.31
Perceived Control	Control Beliefs	.72*		.72*	.52
Intention	Behavioral Beliefs		.42*	.42*	.53
	Normative Beliefs		.03	.03	
	Control Beliefs		.29*	.29*	
	Attitude	.51*		.51*	
Behavior	Subjective Norm	.05		.05	.44
	Perceived Control	.40*		.40*	
	Behavioral Beliefs		.13*	.13*	
	Normative Beliefs		.01	.01	
	Control Beliefs		.41*	.41*	
	Attitude		.16*	.16*	
	Subjective Norm		.02	.02	
	Perceived Control	.45*	.12*	.57*	
	Intention	.31*		.31*	

* $p<0.001$

Mplus 7 provided standardized indirect effects between latent variables, as shown in Table 31. The sum of the indirect and direct effect of perceived control on behavior was statistically significant ($\beta=.57$, $p<0.001$). The only variable which has both direct and indirect effects on behavior is perceived behavioral control.

Research question 1: How well theory of planned behavior model explains healthy eating behavior in the pandemic context?

R-square values were obtained through the Mplus with standardization option in the output command. As shown in Table 31, behavioral beliefs explained %68 of the variance in attitude. Normative beliefs explained %31 of the variance in subjective norm. Control beliefs explained %52 of the variance in perceived behavioral control. Variables that affected intention explained %53 of the variation in intention. The overall model explained %44 of the variation in behavior.

3.4. Discussion

The aim of the current study was to identify predictors of healthy eating during the pandemic from the theory of planned behavior framework. The current study quantitatively investigated the relationships between behavior, attitude, behavioral beliefs, subjective norm, normative beliefs, perceived control, control beliefs, intention, and past behavior toward healthy eating during the pandemic. Findings showed that the theory of planned behavior model well explained healthy eating behavior in the pandemic context. All hypothesized relationships between constructs except the path from the subjective norm to intention were significant.

The theory of planned behavior was tested in dietary change research and found applicable in the literature (Sparks et al., 1995). This study tested the theory for healthy eating behavior in the pandemic context and showed that the theory is valid and replicable. The current study found that attitude is the strongest predictor of intention, and perceived behavioral control is the strongest predictor of behavior in healthy eating during the pandemic. These findings partially support previous research evidence demonstrated in a systematic literature review and meta-analysis of studies that applied the theory of planned behavior to investigate dietary behaviors and identify constructs associated with dietary behaviors in youth. Results of the meta-analysis indicated that attitude had the most robust relationship with intention, and intention was the strongest predictor of behavior (Riebl et al., 2015).

A literature review on psychosocial predictors of fruit and vegetable intake of adults showed that self-efficacy and related construct perceived behavioral control is the most associated construct among other constructs related to fruit and vegetable intake. Intentions, attitudes, and beliefs follow self-efficacy and have sufficient evidence of the effect on fruit and vegetable intake (Shaikh et al., 2008). Internal locus of control, which refers to believing that one's behavior determines life's outcomes, is significantly related to healthy eating (Cobb-Clark et al., 2014). Survey items of perceived behavioral control and control beliefs encompass external and internal resources.

This study finds that control beliefs (believing that specific internal or external factors facilitate performing the behavior) strongly predict healthy eating. Specifically, having good financial possibilities, being highly motivated, convenient working conditions, and access to quality food were strongly related to healthy eating behavior in the pandemic context. These results further support the conclusions of Brug's (2008) narrative review including 400 studies that identified healthy eating determinants as motivation, environmental opportunities, and abilities. Individuals should be motivated to eat healthily, be exposed to environments with accessible opportunities, and be confident concerning their abilities to eat healthily. Environmental opportunities include access to healthy food, household income, and workplaces offering healthful foods (Brug, 2008). Providing environments with external resources and developing personal internal resources are crucial for implementing healthy eating behavior.

Do people attach importance to what everybody else is eating? Social norms determine dietary practices in either healthy or unhealthy directions. A systematic review and meta-analysis of experimental studies show consistent evidence that information about other individuals' eating habits influences food choices (Robinson et al., 2014). A systematic review of 33 correlational and experimental studies shows a relationship between peer social norms and young adults' food intake. They conclude that peer social norms had the potential to improve young adults' food intake (Stok et al., 2016). However, a recent review of experimental studies about the effect of social norms on dietary behavior shows that these studies have limitations and generalization of findings is difficult. Furthermore, the effectiveness of social norm interventions in promoting healthy eating is unclear (Robinson et al., 2015).

This study found a non-significant path from subjective norms to intention. In general, subjective norms make a small contribution to the prediction of intentions and behaviors (Fishbein and Ajzen, 2010). In the theory of planned behavior, subjective norms capture only injunctive norms, which are defined as an individual's perception that salient referents think she ought to perform a specific behavior. Fishbein and Ajzen (2010) stated that injunctive norms may have a small variance for some behaviors. When this is the case, whether the norm impacts the behavior is not clear. The injunctive norm may have the same impact on the behavior of each individual, but it may not account for observed differences among individuals in their behaviors. In other words, the norm may affect the behavioral mean, not its variance (Fishbein and Ajzen, 2010). The current study also finds that the mean score of the subjective norm construct is very high and variation among scale points is very low.

In addition to believing that referent individuals expect to perform a specific behavior, believing that referent individuals themselves perform specific behaviors may enhance normative pressure (Fishbein and Ajzen, 2010). The reason action approach as a revised version of the theory of planned behavior uses the term perceived norm inclusive of injunctive and descriptive norms in contrast to the term subjective norm (Fishbein and Ajzen, 2010). Injunctive norms refer to the perception that referent individuals think one ought to perform a specific behavior. In contrast, descriptive norms refer to the perception that referent individuals themselves perform a specific behavior (Cialdini et al., 1990).

The manipulation of a descriptive social norm, which describes the behavior of a salient social group, influences vegetable intake (Stok et al., 2014). Burger et al. (2010) experimentally studied the effect of the injunctive norm and descriptive norm on women's food choices. Women participants did not change their behavior according to what others thought they should eat but changed it according to how other participants ate. Research conducted with adolescents in food consumption shows that descriptive norms strongly predicted eating behavior, whereas injunctive norms were not related to eating behavior (Lally et al., 2011). One of the reasons for the ineffectiveness of injunctive norms in food choice might be their prescriptive nature. Injunctive norm measures and manipulations containing a strong ought to message were unrelated to food intake or adversely affected healthier food intake. In contrast, injunctive norm measures and manipulations containing a more subtle might be message were positively related to healthier food intake (Stok et al., 2016).

There are cases where the injunctive and descriptive norms do not suggest the same behavior (Burger et al., 2010). In Turkish society, people may agree on what they should do to eat healthily and what healthy eating means. Nevertheless, especially on social occasions such as weddings, celebrations, and family visits, they mostly rely on cultural food, which is half of the time unhealthy. Although the importance of healthy eating is known as an injunctive norm, people generally do not eat healthily, which shows a lack of descriptive norm. Interventions targeting to change the meals eaten in social gatherings as a social norm may be more helpful in promoting healthy eating behavior than teaching what to do for healthy eating.

Results of confirmatory factor analysis (measurement model of structural equation modeling) validated attitude's hierarchical second-order factor structure. Factor analyses of attitude scales consisting of evaluative adjectives generally result in a two-factor solution, especially when the attitude object is a health behavior. This two-factor solution represents instrumental and experiential aspects of attitude, and both factors have high internal consistency. Instrumentality refers to anticipated positive or negative outcomes of a specific behavior. Experiential aspects refer to positive or negative experiences perceived to be related to performing the behavior (Fishbein and Ajzen, 2010).

In a study, competitive swimmers rated training adherence on an attitude scale consisting of evaluative adjective pairs. Factor loadings showed a two-factor structure demonstrating interrelated instrumental and experiential aspects. Instrumental adjective pairs were bad–good, unimportant–important, useless–useful, harmful–beneficial, worthless–valuable, unproductive–productive. In comparison, experiential adjective pairs were dull–exciting, painful–enjoyable, unpleasant–pleasant, aggravating–satisfying, boring–fun, detrimental–constructive (Mummary and Wankel, 1999). A hierarchical model best conceptualizes interrelated aspects of attitude in which instrumental and experiential components are first-order factors and overall attitude is a second-order factor (Bagozzi, Lee, & Van Loo, 2001; Hagger & Chatzisarantis, 2005).

Many behaviors are considered favorably in ways of instrumentality but more negatively in ways of the experience of engaging in behaviors (Fishbein and Ajzen, 2010). The current study finds that the mean score of the instrumental dimension is higher than the mean score of the experiential dimension. Participants are more likely to think of healthy eating as useful than pleasant. This study further finds that

experiential aspects of attitude are more related to healthy eating behavior than instrumental aspects of attitude. In other words, participants who thought healthy eating is pleasurable eat more healthily compared to participants who thought healthy eating is beneficial.

Enjoyment of food and eating is fundamental to individuals' well-being. A study showed that participants who view a forbidden food as a treat that can be enjoyed, eat more healthily and do better weight control (Kuijjer and Boyce, 2014). A study found intercultural differences in food perceptions between French and American participants. French participants consider healthy food tasty, whereas American participants consider unhealthy food tastier. Furthermore, chronic diet changed the perception of food towards the American model. Based on these findings, they suggest interventions should promote the French model (Werle et al., 2013). There is a relationship between loss of pleasure from eating and eating disorders (Lindeman and Stark, 2000). Research showed that participants with high food pleasure tendency were more likely to have healthy food for pleasure. Their findings suggest that food pleasure tendency may increase individuals' likelihood of eating healthy food in general (Huang and Wu, 2016). It may be helpful for healthy eating interventions to focus on the enjoyment of food and eating.

CHAPTER 4

GENERAL DISCUSSION AND CONCLUSIONS

The pandemic as a social setting has changed daily eating habits. This study aimed to investigate attitudes, meanings, and beliefs related to food and healthy eating and their relationship with healthy eating behavior in the pandemic context. The second aim of the study was to identify predictors of healthy eating during the pandemic. Beliefs of the quantitative study are formed based on qualitative study findings and the factors related to healthy eating during the pandemic in the literature. In the quantitative study, behavioral, normative, and control beliefs significantly predicted attitude, subjective norm, and perceived behavioral control, respectively. The quantitative study also found that beliefs are in line with healthy eating behavior during the pandemic.

During confinement, participants felt anxious because they were afraid of getting sick. They stated that they ate more to strengthen their immune system. The most prominent behavioral belief was that healthy eating during the pandemic would enhance immunity. Thus, participants had to eat healthy even if they didn't want to. Although the participants emphasize naturalness and prefer natural products for a nutritious diet, they take supplementary food to protect them from Covid-19. This contradictory situation may be due to the pandemic being a crisis period. Boundaries between thematic dichotomies will be dialogically reconstructed when a crisis occurs (Markova, 2000). The natural/artificial dichotomy seemed to be rebuilt during the pandemic. Social representation studies are crisis period studies. In times of crisis, social representation changes, feeds, emerges more, and is reflected more in words. Representations become barer. Since the pandemic is also a crisis, studying social representations of eating during this period is valuable.

In the qualitative study, participants mentioned that family members motivate each other regarding healthy eating and family forms eating habits at home. Family is one of the normative beliefs of quantitative study. Some research in the literature shows that family support facilitates healthy eating during the pandemic. On the other

hand, one of the control beliefs that is living as a family at home has a relatively low mean score. In the quantitative study, participants were less likely to agree that living at home as a family facilitates healthy eating during the pandemic. It would be helpful to consider that those who live at home with their families during the pandemic may also experience negative experiences and have domestic fights due to confinement.

Participants do not seem to trust nutrition specialists in the media. In the qualitative study, participants thought that media mislead people about healthy eating. Participants believe that accurate information about healthy eating does not reach the public. Participants stated that they trust their own experiences more than experts' opinions. In the quantitative study, one of the normative beliefs was created by taking nutrition specialists in the media as a social referent. Descriptive statistics showed that expectations of the nutrition specialists in the media in terms of healthy eating are not crucial as family or friends. Nutrition specialists in media had a controversial influence on eating habits because most participants (%49) did not value their opinion. Distrust toward nutritionists in the media may create uncertainty about what people should do to eat healthily.

Food and eating have an important place in Turkish culture. Food and eating are complex concepts and have many dimensions: pleasure, necessity, cultural, developmental, traditional, biological, natural, and social. This dissertation studied the belief system of food with the Turkish sample. Turkey has a unique position as it hosts many different cultural cuisines. Food culture shows diversity and differs between the Aegean, Mediterranean, Eastern Anatolia, Black Sea, and Central Anatolia regions. While the food varies, so does the alcohol intake. For example, while some regions in Turkey are conservative, some regions are secular. Religiosity is a factor that causes changes in eating styles. Lo Monaco and Eric Bonetto (2018) argued that culture shapes social representations of food. Findings revealed that Turkish culture is rich in beliefs, meanings, and values about food. Although findings are specific to Turkish culture, the findings are consistent with the international literature.

This dissertation found that the effect of the pandemic on eating habits is generally compatible with the literature. The most critical conditions that cause changes in eating habits are being at home and having more time. Eating out has drastically reduced. Participants think that eating out is risky in terms of virus transmission. According to the participants, eating out is unhealthy even if it is not a pandemic. Participants prepared the dishes themselves they liked to eat in restaurants.

They cooked as a hobby to spend their leisure time. They stated that using their leisure time this way is both good for them and makes their family members happy.

This study found that the pandemic has changed daily eating routines. There are individual differences in the way the pandemic affected eating habits. While the pandemic caused some people to eat healthily, it caused some people to eat unhealthily, and other people's eating habits did not change. Social conditions interact with individual factors in how the pandemic affected eating habits.

The qualitative study found that some of the participants' diets changed in a healthy way, some did not change their diets, and the rest had an unhealthy diet during the pandemic. In the literature, research shows that negative emotions caused by the pandemic, such as stress and anxiety, lead to emotional eating. In the qualitative study, participants did not report emotional eating. Only a few participants stated that they started to eat more out of boredom. Participants may have hidden such negative information in interviews to present themselves more favorably. In other words, participants did not report emotional eating due to social desirability. In the quantitative study, the rate of those who eat unhealthily is only 16%. The reason for this result may be acquiescence bias. People may have agreed more with the statement that "I eat healthy during the pandemic."

This study found that most of the participants eat healthy during the pandemic. There is controversy about whether the pandemic caused healthy or unhealthy eating behavior in the literature. It may be difficult to bring forward reasons for this controversy. Nevertheless, instead of asking whether the pandemic caused unhealthy or healthy eating behavior, it would be more valuable to investigate underlying mechanisms influential on healthy eating in the pandemic context. A limitation of the current study is that the effect of the pandemic on eating habits could not be studied separately or experimentally controlled.

Perceived behavioral control and control beliefs are the strongest predictors of healthy eating. As much as individuals believe in their capability to eat healthily and have internal or external resources that facilitate healthy eating, they will be more likely to eat healthy in the pandemic context. Providing external resources that facilitate healthy eating available to people may help promote healthy eating behavior.

Participants in the qualitative study mentioned that self-control is necessary to be healthy. In the literature, self-control is one of the most critical factors that prevent negative emotions created by the pandemic from causing eating disorders. In the

quantitative study, perceived behavioral control is the strongest predictor of healthy eating during the pandemic.

Perceived behavioral control refers to how much an individual believes in their capability to perform a given behavior and control over its performance. Two aspects of perceived behavioral control are capacity (ability to perform the behavior) and autonomy (extent of control over performing the behavior) (Fishbein and Ajzen, 2010). One of the two aspects of perceived behavioral control, autonomy may correspond to self-control. In general terms, control is the most critical factor preventing eating for emotion regulation and leads to healthy eating.

The current study could not find a relationship between subjective norms and healthy eating behavior. This finding should be interpreted with caution, and it could not be concluded that social norms do not influence eating behavior. This non-significant path from subjective norms to intention may be due to methodological constraints. Future research may better conceptualize social norms to measure perceived social pressure to eat healthily.

How influential are social norms on healthy eating? The quantitative study did not find a significant relationship between subjective norms and healthy eating behavior. On the other hand, the qualitative study brings forward many statements about the normative aspects of healthy eating. The qualitative study indicated that beliefs about eating habits are centered on norms. Although people cannot witness each other's diet, they can infer that someone is overweight because that person is eating unhealthy. Most participants stated that they were afraid of gaining weight. The social pressure people perceive to be at an ideal weight can also be interpreted as a pressure to eat healthily. Participants use others as benchmarks for healthy eating. This finding may indicate that people take others as criteria in terms of eating habits. Based on these qualitative study findings, a significant relationship between subjective norms and behavior would be expected in the quantitative study. Nevertheless, in the quantitative study, descriptive statistics showed that participants firmly accepted healthy eating as a norm, including both healthy and unhealthy eaters.

This dissertation contributes to social psychology literature in several ways. Firstly, studying the interaction between individual, social and environmental factors in the case of the effect of the pandemic on eating habits is compatible with the social psychology perspective. Testing two social psychology theories is one of the strengths of this dissertation. In a time of crisis, tending toward healthy behavior becomes more

difficult. Thus, studying predictors of healthy eating during the pandemic provides evidence to shed light on interventions for promoting healthy eating. These interventions may see eating as a social concept and study it with interrelated variables. Secondly, food and eating have an important place in Turkish culture. Studying its social, cultural, and psychological aspects would be worthwhile.



REFERENCES

- Ajzen, I. (2002a) Constructing a TpB questionnaire: Conceptual and methodological considerations. Retrieved January 13, 2012 from: <http://www.unibielefeld.de/ikg/zick/ajzen%20construction%20a%20tpb%20questionnaire.pdf>.
- Ajzen, I. (2005). Attitudes, personality, and behavior (2nd. Edition). Milton-Keynes, England: Open University Press / McGraw- Hill.
- Ajzen, I. (2006). Constructing a TpB Questionnaire: Conceptual and Methodological Considerations.
- Alah, M. A., Abdeen, S., Kehyayan, V., & Bougmiza, I. (2021). Impact of staying at home measures during COVID-19 pandemic on the lifestyle of Qatar's population: Perceived changes in diet, physical activity, and body weight. *Preventive Medicine Reports*, 24, 101545.
- Albarracín, D., Johnson, B. T., Fishbein, M., & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin*, 127, 142–161.
- Altier, S. (2022). Anadolu Türk Kültüründe Buğday/Başak ve Görsel Dile Aktarımı. *Kültür Araştırmaları Dergisi*, (12), 30-62. DOI: 10.46250/kulturder.1029522
- Ammar, A., Brach, M., Trabelsi, K., Chtourou, H., Boukhris, O., Masmoudi, L., ... & ECLB-COVID19 Consortium. (2020). Effects of COVID-19 home confinement on eating behaviour and physical activity: results of the ECLB-COVID19 international online survey. *Nutrients*, 12(6), 1583.
- Anelich, L., Lues, R., Farber, J. M., & Parreira, V. R. (2020). SARS-CoV-2 and Risk to Food Safety. *Frontiers in nutrition*, 7, 580551. <https://doi.org/10.3389/fnut.2020.580551>
- Anving, T., & Thorsted, S. (2010). Feeding ideals and the work of feeding in Swedish families: Interactions between mothers and children around the dinner table. *Food, Culture & Society*, 13(1), 29-46.

- Armitage, C. J., & Conner, M. (1999). Distinguishing perceptions of control from self-efficacy: Predicting consumption of a low-fat diet using the theory of planned behavior. *Journal of Applied Social Psychology*, 29(1), 72-90.
- Aşan, K., & Kınay-Gargacı, A. (2021). Covid-19 Salgın Döneminde Bir Rekreatif Beslenme Faaliyeti: #evdeekmekyapımı. *Journal of Tourism and Gastronomy Studies*, 9(3), 1661-1678.
- Åström, A. N., & Rise, J. (2001). Young adults' intention to eat healthy food: Extending the theory of planned behaviour. *Psychology and Health*, 16, 223-238.
- Bäckström, A., Pirttilä-Backman, A. M., & Tuorila, H. (2003). Dimensions of novelty: A social representation approach to new foods. *Appetite*, 40, 299-307. [https://doi.org/10.1016/S0195-6663\(03\)00005-9](https://doi.org/10.1016/S0195-6663(03)00005-9)
- Bäckström, A., Pirttilä-Backman, A. M., & Tuorila, H. (2004). Willingness to try new foods as predicted by social representations and attitude and trait scales. *Appetite*, 43(1), 75-83. <https://doi.org/10.1016/j.appet.2004.03.004>
- Bagozzi, R. P., Lee, K.-H., & Van Loo, M. F. (2001). Decisions to donate bone marrow: The role of attitudes and subjective norms across cultures. *Psychology & Health*, 16, 29-56.
- Bartels, J., & Onwezen, M. C. (2014). Consumers' willingness to buy products with environmental and ethical claims: the roles of social representations and social identity. *International Journal of Consumer Studies*, 38(1), 82-89. <https://doi.org/10.1111/ijcs.12067>
- Bartels, J., & Reinders, M. J. (2010). Social identification, social representations, and consumer innovativeness in an organic food context: A cross-national comparison. *Food Quality and Preference*, 21(4), 347-352. <https://doi.org/10.1016/j.foodqual.2009.08.016>
- Barthes, R. (2012). Toward a psychosociology of contemporary food consumption. Counihan, C., & Van Esterik, P. (Eds.), *Food and culture: A reader* (3rd ed., pp. 23-31). Routledge. (Original work published 1961)

- Başaran, B., & Pekmezci Purut, H. (2021). The impact of the COVID-19 pandemic on the frequency of food consumption. *Journal of Tourism and Gastronomy Studies*, 9(1), 47-66.
- Bauer, M. W., & Gaskell, G. (1999). Towards a paradigm for research on social representations. *Journal for the Theory of Social Behaviour*, 29(2), 163.
- Bennett, G., Young, E., Butler, I., & Coe, S. (2021). The impact of lockdown during the COVID-19 outbreak on dietary habits in various population groups: a scoping review. *Frontiers in nutrition*, 8, 53.
- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin* 107: 238–246.
- Bisogni, C. A., Falk, L. W., Madore, E., Blake, C. E., Jastran, M., Sobal, J., & Devine, C. M. (2007). Dimensions of everyday eating and drinking episodes. *Appetite*, 48(2), 218–231. <https://doi.org/10.1016/j.appet.2006.09.004>
- Beşirli, H. (2010). Yemek, kültür ve kimlik. *Milli Folklor Dergisi*, 11(87), 159-169.
- Bhutani, S., Cooper, J. A., & Vandellen, M. R. (2021). Self-reported Changes in Energy Balance Behaviors during COVID-19-related Home Confinement: A Cross-sectional Study. *American Journal of Health Behavior*, 45(4), 756-770.
- Bollen, K.A. (1989). *Structural Equations with Latent Variables*. New York, NY: Wiley.
- Bollen, K.A. and Long, J.S. (1993). *Testing Structural Equation Models*. Newbury Park, CA: Sage Publications.
- Bourdieu, P. (2012). Distinction: A social critique of the judgement of taste (R. Nice, Trans.). Counihan, C., & Van Esterik, P. (Eds.), *Food and culture: A reader* (3rd ed., pp. 31–40). Routledge. (Original work published 1979)
- Brookings, J.B. and Bolton, B. (1988). Confirmatory factor analysis of the interpersonal support evaluation list. *American Journal of Community Psychology* 16: 137–147.

- Brown, T.A. (2015). *Confirmatory Factor Analysis for Applied Research*. New York, NY: Guilford Press.
- Browne, M.W. and Cudeck, R. (1993). Alternative ways of assessing model fit. In: *Testing Structural Equation Models* (eds. K.A. Bollen and J.S. Long), 136–162. Newbury Park, CA: Sage Publications.
- Brug J. (2008). Determinants of healthy eating: motivation, abilities and environmental opportunities. *Family practice*, 25 Suppl 1, i50–i55. <https://doi.org/10.1093/fampra/cmn063>
- Buckland, N. J., & Kemps, E. (2021). Low craving control predicts increased high energy density food intake during the COVID-19 lockdown: Result replicated in an Australian sample. *Appetite*, 166, 105317.
- Buckland, N. J., Swinnerton, L. F., Ng, K., Price, M., Wilkinson, L. L., Myers, A., & Dalton, M. (2021). Susceptibility to increased high energy dense sweet and savoury food intake in response to the COVID-19 lockdown: The role of craving control and acceptance coping strategies. *Appetite*, 158, 105017.
- Burger, J. M., Bell, H., Harvey, K., Johnson, J., Stewart, C., Dorian, K., & Swedroe, M. (2010). Nutritious or delicious? The effect of descriptive norm information on food choice. *Journal of Social and Clinical Psychology*, 29(2), 228-242.
- Carroll, N., Sadowski, A., Laila, A., Hruska, V., Nixon, M., Ma, D., Haines, J., & On Behalf Of The Guelph Family Health Study (2020). The Impact of COVID-19 on Health Behavior, Stress, Financial and Food Security among Middle to High Income Canadian Families with Young Children. *Nutrients*, 12(8), 2352. <https://doi.org/10.3390/nu12082352>
- Cecchetto, C., Aiello, M., Gentili, C., Ionta, S., & Osimo, S. A. (2021). Increased emotional eating during COVID-19 associated with lockdown, psychological and social distress. *Appetite*, 160, 105122. <https://doi.org/10.1016/j.appet.2021.105122>
- Ceylan, V., Muştu, Ç., & Sarıışık, M. (2020). Healthy nutritional attitudes and behaviors during COVID-19 outbreak lockdown. *Journal of Tourism and Gastronomy Studies*.

- Chapman, H. A., & Anderson, A. K. (2012). Understanding disgust. *Annals of the New York Academy of Sciences*, 1251(1), 62-76.
- Childs, C. E., Calder, P. C., & Miles, E. A. (2019). Diet and Immune Function. *Nutrients*, 11(8), 1933. <https://doi.org/10.3390/nu11081933>
- Cialdini, R.B, Reno, R.R., & Kallgren, C.A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58, 1015–1026. doi: 10.1037/0022-3514.58.6.1015
- Cirhinlioğlu, F. G., Aktaş, V., & Öner-Özkan, B. (2006). Sosyal temsil kuramına genel bir bakış. *Cumhuriyet Üniversitesi Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 30(2), 163-174.
- Cobb-Clark, D. A., Kassenboehmer, S. C., & Schurer, S. (2014). Healthy habits: The connection between diet, exercise, and locus of control. *Journal of Economic Behavior & Organization*, 98, 1–28. <https://doi.org/10.1016/j.jebo.2013.10.011>
- Cohen, J., Posluszny, H., Falbe, J., Mueller, M. P., Gearhardt, A. N., Leung, C. W., & Wolfson, J. A. (2022). Restaurant dining during the COVID-19 pandemic among adults with low-income in the United States. *Appetite*, 173, 105976. <https://doi.org/10.1016/j.appet.2022.105976>
- Connors, M., Bisogni, C. A., Sobal, J., & Devine, C. M. (2001). Managing values in personal food systems. *Appetite*, 36(3), 189–200. <https://doi.org/10.1006/appe.2001.0400>
- Conner, M., Norman, P., & Bell, R. (2002). The theory of planned behaviour and healthy eating.
- Coulthard, H., Sharps, M., Cunliffe, L., & van den Tol, A. (2021). Eating in the lockdown during the Covid 19 pandemic; self-reported changes in eating behaviour, and associations with BMI, eating style, coping and health anxiety. *Appetite*, 161, 105082.
- Counihan, C. M. (2005). Food and gender: Identity and power. In C. M. Counihan & S. L. Kaplan (Eds.), *Food and gender: Identity and power* (pp.1–9). Harwood Academic Publishers.

- Crawley, A. E. (1902). *The mystic Rose: A study of primitive marriage and of primitive thought in its bearing on marriage*. Macmillan and Company.
- Cummings, J. R., Ackerman, J. M., Wolfson, J. A., & Gearhardt, A. N. (2021). COVID-19 stress and eating and drinking behaviors in the United States during the early stages of the pandemic. *Appetite*, 162, 105163.
- Çarpar, M. C. (2020). Beslenme, kimlik ve erkeklik: Et yemenin sosyolojisi [Nutrition, identity and masculinity: The sociology of meat eating]. *İstanbul Üniversitesi Sosyoloji Dergisi*, 40, 249–277. <https://doi.org/10.26650/SJ.2020.40.1.0041>
- Demir, G. (2020). Nutrition, health behaviour changes, and eating behaviours of adults during the covid 19 pandemic period. *Turkish Journal of Family Medicine and Primary Care*, 14(4), 639-645.
- Di Renzo, L., Gualtieri, P., Cinelli, G., Bigioni, G., Soldati, L., Attinà, A., ... & De Lorenzo, A. (2020). Psychological aspects and eating habits during COVID-19 home confinement: results of EHLC-COVID-19 Italian online survey. *Nutrients*, 12(7), 2152.
- Dinçer, S., & Kolcu, M. (2021). Covid-19 Pandemisinde toplumun beslenme alışkanlıklarının incelenmesi: İstanbul örneği. *Türkiye Diyabet ve Obezite Dergisi*, 5(2), 193-201.
- Douglas, M. (1972). Deciphering a meal. *Daedalus*, 101(1), 61-81.
- Farr, R. M. (1993). Common sense, science and social representations. *Public Understanding of Science*, 2, 189-204.
- Fischler, C. (1980). Food habits, social change and the nature/culture dilemma. *Information (International Social Science Council)*, 19(6), 937-953. <https://doi.org/10.1177/053901848001900603>
- Fischler, C. (2002). Food selection and risk perception. In: *Food Selection, from Genes to Culture*, pp 135–151. Anderson, G. H., Blundell, J. and Chiva, M., Eds., Danone Institution, Paris.
- Fischler, C. (2011). Commensality, society and culture. *Social Science Information*, 50(3–4), 528–548. <https://doi.org/10.1177/0539018411413963>

- Fishbein, M. (1963). An investigation of the relationships between beliefs about an object and the attitude toward that object. *Human Relations*, 16, 233–240.
- Fishbein, M. (1967b). A consideration of beliefs and their role in attitude measurement. In M. Fishbein (Ed.), *Readings in attitude theory and measurement* (pp. 257–266). New York: Wiley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. Psychology Press.
- Frazer, J. G., Sir. (1890). *The golden bough: A study in magic and religion*. Macmillan.
- Freeman, L. M., & Gil, K. M. (2004). Daily stress, coping, and dietary restraint in binge eating. *The International journal of eating disorders*, 36(2), 204–212. <https://doi.org/10.1002/eat.20012>
- Furst, T., Connors, M., Bisogni, C. A., Sobal, J., & Falk, L. W. (1996). Food choice: a conceptual model of the process. *Appetite*, 26(3), 247–265. <https://doi.org/10.1006/appe.1996.0019>
- George, D., & Mallery, M. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference, 17.0 update* (10a ed.) Boston: Pearson.
- Gombart, A. F., Pierre, A., & Maggini, S. (2020). A review of micronutrients and the immune system—working in harmony to reduce the risk of infection. *Nutrients*, 12, 236. <https://doi.org/10.3390/nu12010236>
- Goody, J. (2012). Industrial food: Towards the development of a world cuisine.
- Counihan, C., & Van Esterik, P. (Eds.), *Food and culture: A reader* (3rd ed., pp. 72–91). Routledge. (Original work published 1982)
- Goossens, L., Braet, C., Van Vlierberghe, L., & Mels, S. (2009). Loss of control over eating in overweight youngsters: the role of anxiety, depression and emotional eating. *European eating disorders review : the journal of the Eating Disorders Association*, 17(1), 68–78. <https://doi.org/10.1002/erv.892>

- Güler, O., & Haseki, M. I. (2021). Positive Psychological Impacts of Cooking During the COVID-19 Lockdown Period: A Qualitative Study. *Frontiers in Psychology*, 12, 829.
- Hagger, M. S., & Chatzisarantis, N. L. D. (2005). First- and higher-order models of attitudes, normative influence, and perceived behavioural control in the theory of planned behaviour. *British Journal of Social Psychology*, 44, 513–535.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2010). *Multivariate Data Analysis*. Pearson Education. Upper Saddle River, New Jersey.
- Health Ministry of Turkey (5 Mart 2021). Genel koronavirüs tablosu. Erişim adresi: <https://covid19.saglik.gov.tr/TR-66935/genel-koronavirus-tablosu.html> adresinden alınmıştır.
- Hoelter, J. (1983). The analysis of covariance structures: goodness-of-fit indices. *Sociological Methods & Research* 11: 325–344.
- Höijer, B. (2011). Social representations theory: A new theory for media research. *Nordicom Review*, 32(2), 3–16.
- Huang, Y., & Wu, J. (2016). Food pleasure orientation diminishes the “healthy = less tasty” intuition. *Food Quality and Preference*, 54, 75-78.
- Hughes, S. O., & Power, T. G. (2018). Parenting influences on appetite and weight. In *Pediatric food preferences and eating behaviors* (pp. 165-182). Academic Press.
- Huotilainen, A., Pirttilä-backman, A.-M., & Tuorila, H. (2006). How innovativeness relates to social representation of new foods and to the willingness to try and use such foods. *Food Quality & Preference*, 17(5), 353–361. <https://doi.org/10.1016/j.foodqual.2005.04.005>
- Huotilainen, A., & Tuorila, H. (2005). Social representation of new foods has a stable structure based on suspicion and trust. *Food Quality and Preference*, 16(7), 565–572. <https://doi.org/10.1016/j.foodqual.2005.01.001>

Interior Ministry of Turkey (2020, 21 Mart). Koronavirüs salgını ile mücadele kapsamında yeni kısıtlama ve tedbirler genelgeleri. Erişim adresi: <https://www.icisleri.gov.tr/koronavirus-ile-mucadele-kapsaminda-sokagacikma-kisitlamalari---yeni-kisitlama-ve-tedbirler-genelgeleri>.

Jaeger, S. R., Vidal, L., Ares, G., Chheang, S. L., & Spinelli, S. (2021). Healthier eating: COVID-19 disruption as a catalyst for positive change. *Food Quality and Preference*, 92, 104220.

Jansen, E., Thapaliya, G., Aghababian, A., Sadler, J., Smith, K., & Carnell, S. (2021). Parental stress, food parenting practices and child snack intake during the COVID-19 pandemic. *Appetite*, 161, 105119. <https://doi.org/10.1016/j.appet.2021.105119>

Jastran, M. M., Bisogni, C. A., Sobal, J., Blake, C., & Devine, C. M. (2009). Eating routines. Embedded, value based, modifiable, and reflective. *Appetite*, 52(1), 127–136. <https://doi.org/10.1016/j.appet.2008.09.003>

Jordan, A. K., Barnhart, W. R., Studer-Perez, E. I., Kalantzis, M. A., Hamilton, L., & Musher-Eizenman, D. R. (2021). 'Quarantine 15': Pre-registered findings on stress and concern about weight gain before/during COVID-19 in relation to caregivers' eating pathology. *Appetite*, 166, 105580. <https://doi.org/10.1016/j.appet.2021.105580>

Jöreskog, K.G. (1969). A general approach to confirmatory maximum likelihood factor analysis. *Psychometrika* 34: 182–202.

Jöreskog, K.G. (1973). A general method for estimating a linear structural equation system. In: *Structural Equation Models in the Social Sciences* (eds. A.S. Goldberger and O.D. Duncan). New York, NY: Seminar Press.

Kahle, L. & Timmer, S.G. (1983). A theory and a method for studying values. In L.R. Kahle (Ed.), *Social values and social change*. pp. 43-69. New York: Praeger.

Kassir R. (2020). Risk of COVID-19 for patients with obesity. *Obesity reviews: an official journal of the International Association for the Study of Obesity*, 21(6), e13034. <https://doi.org/10.1111/obr.13034>

- Khubchandani, J., Kandiah, J., & Saiki, D. (2020). The COVID-19 pandemic, stress, and eating practices in the United States. *European Journal of Investigation in Health, Psychology and Education*, 10(4), 950-956.
- Kleiber, D. A., Hutchinson, S. L., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, self-restoration, and personal transformation. *Leisure Sciences*, 24(2), 219–235.
<https://doi.org/10.1080/01490400252900167>
- Knudsen, S. (2006). Between life giver and leisure: Identity negotiation through seafood in Turkey. *International Journal of Middle East Studies*, 38(3), 395–415. <https://doi.org/10.1017/S002074380641240X>
- Kuijer, R. G., & Boyce, J. A. (2014). Chocolate cake. Guilt or celebration? Associations with healthy eating attitudes, perceived behavioural control, intentions and weight-loss. *Appetite*, 74, 48–54.
<https://doi.org/10.1016/j.appet.2013.11.013>
- Lally, P., Bartle, N., & Wardle, J. (2011). Social norms and diet in adolescents. *Appetite*, 57(3), 623–627. <https://doi.org/10.1016/j.appet.2011.07.015>
- Lévi-Strauss, C. (2012). The culinary triangle. Counihan, C., & Van Esterik, P. (Eds.), *Food and culture: A reader* (3rd ed., pp. 40–48). Routledge. (Original work published 1966)
- Li, Q., Xiang, G., Song, S., Li, X., Liu, Y., Wang, Y., ... & Chen, H. (2021). Trait self-control and disinhibited eating in COVID-19: The mediating role of perceived mortality threat and negative affect. *Appetite*, 167, 105660
- Lindeman, M., & Stark, K. (2000). Loss of pleasure, ideological food choice reasons and eating pathology. *Appetite*, 35(3), 263–268.
<https://doi.org/10.1006/appe.2000.0357>
- Lo Monaco, G., & Bonetto, E. (2019). Social representations and culture in food studies. *Food Research International*, 115, 474–479.
<https://doi.org/10.1016/j.foodres.2018.10.029>
- Lo Monaco, G., & Guimelli, C. (2011). Hegemonic and polemical beliefs: Culture and consumption in the social representation of wine. *Spanish Journal of Psychology*, 14(1), 237–250. https://doi.org/10.5209/rev_SJOP.2011.v14.n1.21

- Mäkinen, J.-P., Pirttilä-Backman, A.-M., & Pieri, M. (2011). Ethical and unethical food. Social representations among Finnish, Danish and Italian students. *Appetite*, 56(2), 495–502. <https://doi.org/10.1016/j.appet.2011.01.023>
- Macht, M. (2008). How emotions affect eating: A five-way model. *Appetite*, 50(1), 1-11.
- Madalı, B., Alkan, Ş. B., Örs, E. D., Ayrancı, M., Taşkın, H., & Kara, H. H. (2021). Emotional eating behaviors during the COVID-19 pandemic: A cross-sectional study. *Clinical nutrition ESPEN*, 46, 264-270.
- Malinowski, B. C. (1929). *The sexual life of savages in northwestern Melanesia*. London: Routledge & Kegan Paul.
- Manzo, L. K. C., & Minello, A. (2020). Mothers, childcare duties, and remote working under COVID-19 lockdown in Italy: Cultivating communities of care. *Dialogues in Human Geography*, 10(2), 120-123. <https://doi.org/10.1177/2043820620934268>
- Marková, I. (2000). Amédée or how to get rid of it: Social representations from a dialogical perspective. *Culture and Psychology*, 6(4), 419–460. <https://doi.org/10.1177/1354067x0064002>
- Markova, I. (2004). Sosyal temsiller ve demokrasi. In S. A. Arkonaç (ed), *Doğunun ve Batının Yerelliği: Bireylik Bilgisine Dair*, 121-159. Alfa: İstanbul.
- Marková, I. (2015). On thematic concepts and methodological (epistemological) themata. *Papers on Social Representations*, 24(2), 1-31
- Masson, E., Debucquet, G., Fischler, C., & Merdji, M. (2016). French consumers' perceptions of nutrition and health claims: A psychosocial-anthropological approach. *Appetite*, 105, 618–629. <https://doi.org/10.1016/j.appet.2016.06.026>
- McGuire S. (2011). Todd J.E., Mancino L., Lin B-H. The impact of food away from home on adult diet quality. ERR-90, U.S. Department of Agriculture, Econ. Res. Serv., February 2010. *Advances in nutrition (Bethesda, Md.)*, 2(5), 442–443. <https://doi.org/10.3945/an.111.000679>

- Miller, S., de Bruin, W. B., Livings, M., Wilson, J., Weber, K., Frazzini, A., ... & de la Haye, K. (2021). Self-reported dietary changes among Los Angeles County adults during the COVID-19 pandemic. *Appetite*, 166, 105586.
- Mills, S., White, M., Brown, H., Wrieden, W., Kwasnicka, D., Halligan, J., Robalino, S., & Adams, J. (2017). Health and social determinants and outcomes of home cooking: A systematic review of observational studies. *Appetite*, 111, 116–134. <https://doi.org/10.1016/j.appet.2016.12.022>
- Minton, E. A., Johnson, K. A., & Liu, R. L. (2019). Religiosity and special food consumption: The explanatory effects of moral priorities. *Journal of Business Research*, 95, 442-454.
- Mintz, S. W. (2012). Time, sugar, and sweetness. Counihan, C., & Van Esterik, P. (Eds.), *Food and culture: A reader* (3rd ed., pp. 91–107). Routledge. (Original work published 1979)
- Moisio, R., Arnould, E. J., & Price, L. L. (2004). Between mothers and markets: Constructing family identity through homemade food. *Journal of Consumer Culture*, 4(3), 361-384.
- Molina-Montes, E., Uzhova, I., Verardo, V., Artacho, R., García-Villanova, B., Guerra-Hernández, E. J., ... & Rodríguez-Pérez, C. (2021). Impact of COVID-19 confinement on eating behaviours across 16 European countries: The COVIDiet cross-national study. *Food Quality and Preference*, 93, 104231.
- Moscovici, S. (2001). The phenomenon of social representations. In G. Duveen (Ed.), *Social representation: Explorations in social psychology* (pp. 18-77). New York University Press. (Reprinted from Social representations, pp. 3-69 by. R. Farr & S. Moscovici, Ed., 1984, Cambridge: Cambridge University Press)
- Moscovici, S. (2008). *Psychoanalysis: Its image and its public*. Polity.
- Moscovici, S. & Vignaux, G (2001). The concept of themata (G. Duveen, Trans.). In G. Duveen (Ed.), *Social representations: Explorations in social psychology* (pp. 156-183). New York University Press. (Original work published 1994)
- Moynihan, A. B., Van Tilburg, W. A., Igou, E. R., Wisman, A., Donnelly, A. E., & Mulcaire, J. B. (2015). Eaten up by boredom: consuming food to escape awareness of the bored self. *Frontiers in psychology*, 6, 369.

- Mummery, W. K., & Wankel, L. M. (1999). Training adherence in adolescent competitive swimmers: An application of the theory of planned behavior. *Journal of Sport and Exercise Psychology*, 21, 313–328.
- Muthén, L. and Muthén, B. (1998–2017). *Mplus User's Guide*, 8e. Los Angeles, CA: Muthén & Muthén. www.statmodel.com.
- Onwezen, M. C., & Bartels, J. (2013). Development and cross-cultural validation of a shortened social representations scale of new foods. *Food Quality and Preference*, 28(1), 226–234. <https://doi.org/10.1016/j.foodqual.2012.07.010>
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The measurement of meaning*. Urbana: University of Illinois Press.
- Öner, B. (2002). Sosyal temsiller. *Kriz Dergisi*. 10(1). 29-35.
- Özdemir, F., İplikçi, A. B., & Çeviker, G. (2021). Problems and solutions in the COVID-19 pandemic: A qualitative study toward the perspectives of women living in Turkey. *Nesne*, 9(22), 787-798.
- Poelman, M. P., Gillebaart, M., Schlinkert, C., Dijkstra, S. C., Derksen, E., Mensink, F., ... & de Vet, E. (2021). Eating behavior and food purchases during the COVID-19 lockdown: A cross-sectional study among adults in the Netherlands. *Appetite*, 157, 105002.
- Povey, R., Conner, M., Sparks, P., James, R., & Shepherd, R. (2000). Application of the theory of planned behaviour to two dietary behaviours: Roles of perceived control and self-efficacy. *British Journal of Health Psychology*, 5, 121-139.
- Qiu, W., Rutherford, S., Mao, A. ve Chu, C. (2016/2017). The Pandemic and its impacts. *Health, Culture and Society*, 9(10),1-11.
- Radcliffe-Brown, A. R. (1922). *The Andaman islanders: A study in social anthropology*. Cambridge University Press.
- Riebl, S. K., Estabrooks, P. A., Dunsmore, J. C., Savla, J., Frisard, M. I., Dietrich, A. M., Peng, Y., Zhang, X., & Davy, B. M. (2015). A systematic literature review and meta-analysis: The Theory of Planned Behavior's application to understand and predict nutrition-related behaviors in youth. *Eating behaviors*, 18, 160–178. <https://doi.org/10.1016/j.eatbeh.2015.05.016>

- Rise, J., Sheeran, P., & Skalle, S. (2006). *The role of self-identity in the theory of planned behavior: A meta-analysis*. Unpublished manuscript, Norwegian Institute for Alcohol and Drug Abuse, Oslo.
- Ristovski-Slijepcevic, S., Chapman, G. E., & Beagan, B. L. (2010). Being a ‘good mother’: Dietary governmentality in the family food practices of three ethnocultural groups in Canada. *Health*, 14(5), 467-483.
- Robinson E. (2015). Perceived social norms and eating behaviour: An evaluation of studies and future directions. *Physiology & behavior*, 152(Pt B), 397–401. <https://doi.org/10.1016/j.physbeh.2015.06.010>
- Robinson, E., Thomas, J., Aveyard, P., & Higgs, S. (2014). What everyone else is eating: a systematic review and meta-analysis of the effect of informational eating norms on eating behavior. *Journal of the Academy of Nutrition and Dietetics*, 114(3), 414–429. <https://doi.org/10.1016/j.jand.2013.11.009>
- Rodríguez-Pérez, C., Molina-Montes, E., Verardo, V., Artacho, R., García-Villanova, B., Guerra-Hernández, E. J., & Ruíz-López, M. D. (2020). Changes in dietary behaviours during the COVID-19 outbreak confinement in the Spanish COVIDiet study. *Nutrients*, 12(6), 1730.
- Roman, S., Sánchez-Siles, L. M., & Siegrist, M. (2017). The importance of food naturalness for consumers: Results of a systematic review. *Trends in food science & technology*, 67, 44-57.
- Rosenbaum, D. L., & White, K. S. (2015). The relation of anxiety, depression, and stress to binge eating behavior. *Journal of health psychology*, 20(6), 887–898. <https://doi.org/10.1177/1359105315580212>
- Rozin, P. (1996). Towards a psychology of food and eating: From motivation to module to model to marker, morality, meaning, and metaphor. *Current Directions in Psychological Science*, 5(1), 18–24.
- Rozin, P., Fischler, C., Imada, S., Sarubin, A., & Wrzesniewski, A. (1999). Attitudes to food and the role of food in life in the USA, Japan, Flemish Belgium and France: Possible implications for the diet-health debate. *Appetite*, 33(2), 163–180. <https://doi.org/10.1006/appe.1999.0244>

- Salari, N., Hosseini-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and health*, 16(1), 57. <https://doi.org/10.1186/s12992-020-00589-w>
- Sandberg, T., & Conner, M. (2008). Anticipated regret as an additional predictor in the theory of planned behavior: A meta-analysis. *British Journal of Social Psychology*, 47, 589-606.
- Saunders-Hastings, P. R. ve Krewski, D. (2016). Reviewing the history of pandemic influenza: Understanding patterns of emergence and transmission. *Pathogens*, 5(4), 1-19.
- Scarmozzino, F., & Visioli, F. (2020). Covid-19 and the subsequent lockdown modified dietary habits of almost half the population in an Italian sample. *Foods*, 9(5), 675.
- Shaikh, A. R., Yaroch, A. L., Nebeling, L., Yeh, M. C., & Resnicow, K. (2008). Psychosocial predictors of fruit and vegetable consumption in adults: a review of the literature. *American journal of preventive medicine*, 34(6), 535-543.
- Short, F. (2006), *Kitchen Secrets: The Meaning of Cooking in Everyday Life*, Berg Publishers, Oxford.
- Siipi, H. (2013). Is natural food healthy?. *Journal of agricultural and environmental ethics*, 26(4), 797-812.
- Simmons, D. and Chapman, G.E. (2012), The significance of home cooking within families, *British Food Journal*, Vol. 114 No. 8, pp. 1184-1195. <https://doi.org/10.1108/00070701211252110>
- Smith, L. P., Ng, S. W., & Popkin, B. M. (2013). Trends in US home food preparation and consumption: analysis of national nutrition surveys and time use studies from 1965-1966 to 2007-2008. *Nutrition journal*, 12, 45. <https://doi.org/10.1186/1475-2891-12-45>
- Sobal, J., & Nelson, M. K. (2003). Commensal eating patterns: a community study. *Appetite*, 41(2), 181-190. [https://doi.org/10.1016/s0195-6663\(03\)00078-3](https://doi.org/10.1016/s0195-6663(03)00078-3)

- Sparks, P., Shepherd, R., Wieringa, N., & Zimmermanns, N. (1995). Perceived behavioural control, unrealistic optimism and dietary change: an exploratory study. *Appetite*, 24(3), 243–255. [https://doi.org/10.1016/s0195-6663\(95\)99787-3](https://doi.org/10.1016/s0195-6663(95)99787-3)
- Stodolska, M. (2021). #Quarantinechallenge2k20: Leisure in the Time of the Pandemic, *Leisure Sciences*, 43(1–2), 232–239. <https://doi.org/10.1080/01490400.2020.1774007>
- Stok, F. M., de Vet, E., de Ridder, D. T., & de Wit, J. B. (2016). The potential of peer social norms to shape food intake in adolescents and young adults: a systematic review of effects and moderators. *Health psychology review*, 10(3), 326–340. <https://doi.org/10.1080/17437199.2016.1155161>
- Stok, F. M., Verkooijen, K. T., de Ridder, D. T., de Wit, J. B., & de Vet, E. (2014). How norms work: self-identification, attitude, and self-efficacy mediate the relation between descriptive social norms and vegetable intake. *Applied psychology. Health and well-being*, 6(2), 230–250. <https://doi.org/10.1111/aphw.12026>
- Şen, M. A., & Şimşek, M. (2021). A research on the change in the nutritional habits of consumers before and after covid-19. *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 24(45), 697-721.
- Tabachnick, B.G. and Fidell, L.S. (2001). *Using Multivariate Statistics*, 4e. Boston, MA: Allyn and Bacon.
- Talbot, L. S., Maguen, S., Epel, E. S., Metzler, T. J., & Neylan, T. C. (2013). Posttraumatic stress disorder is associated with emotional eating. *Journal of traumatic stress*, 26(4), 521–525. <https://doi.org/10.1002/jts.21824>
- Tezcan, M. (2000). *Türk yemek antropolojisi yazıları [Turkish food anthropology articles]*. Kültür Bakanlığı.
- Timurturkan, M. (2020). Biyoiktidar, beslenme ve annelik: emzirmenin kültürel ve politik görünüşleri [Biopower, nutrition, and motherhood: The cultural and political appearances of breastfeeding]. *İstanbul Üniversitesi Sosyoloji Dergisi*, 40, 219–248. <https://doi.org/10.26650/SJ.2020.40.1.0034>

- Tribst, A. A. L., Tramontt, C. R., & Baraldi, L. G. (2021). Factors associated with diet changes during the COVID-19 pandemic period in Brazilian adults: Time, skills, habits, feelings and beliefs. *Appetite*, 163, 105220.
- Tucker, L.R. (1955). The objective definition of simple structure in linear factor analysis. *Psychometrika* 37: 3–27.
- Tucker, L.R. and Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika* 38: 1–10.
- Tuorila, H (2001). Keeping up with the change: Consumer responses to new and modified foods. Food Chain 2001 Programme Abstract (pp. 38– 40).
- Ural, T. (2020). Orhan Pamuk anlatılarındaki yeme içme sahneleri bağlamında, İstanbul burjuvazisi ne yer, nerede yer, nasıl yer, neyi temsil eder [What, where and how do the Istanbul bourgeoisie eat; what do they represent in the context of the food scenes in Orhan Pamuk's narratives]? *İstanbul Üniversitesi Sosyoloji Dergisi*, 40, 397–418. <https://doi.org/10.26650/SJ.2020.40.1.0031>
- Ümmühan, A., Gül, E., & Behice, E. (2022). Religious Rituals Performed by Muslim Palliative Caregivers in Turkey During the Grieving Process: An Exploratory Study. *Journal of Religion and Health*, 1-14.
- Vidal, L., Brunet, G., Curutchet, M. R., Girona, A., Pardiñas, V., Guerra, D., ... & Ares, G. (2021). Is COVID-19 a threat or an opportunity for healthy eating? An exploration of the factors that moderate the impact of the pandemic on eating habits in Uruguay. *Appetite*, 167, 105651.
- Vollmer, R. L., & Baietto, J. (2017). Practices and preferences: Exploring the relationships between food-related parenting practices and child food preferences for high fat and/or sugar foods, fruits, and vegetables. *Appetite*, 113, 134-140.
- Wagner, W., Duveen, G., Farr, R., Jovchelovitch, S., Lorenzi-Cioldi, F., Marková, I., & Rose, D. (1999). Theory and method of social representations. *Asian Journal of Social Psychology*, 2(1), 95–125.
- Wagner, W., & Hayes, N. (2005). *Everyday discourse and common sense: The theory of social representations*. Palgrave Macmillan.

- Wallis, D. J., & Hetherington, M. M. (2004). Stress and eating: the effects of ego-threat and cognitive demand on food intake in restrained and emotional eaters. *Appetite*, 43(1), 39–46. <https://doi.org/10.1016/j.appet.2004.02.001>
- Wang, J., and Wang, X. (2019). *Structural equation modeling: Applications using Mplus*. John Wiley & Sons.
- Weaver, L. J., Tadess, Y., Stevenson, E. G., & Hadley, C. (2019). “I want variety!”: dietary variety as aesthetic pursuit, social signal, and nutritional vehicle in Brazil and Ethiopia. *Human Organization*, 78(2), 122-132.
- Werle, C. O., Trendel, O., & Ardito, G. (2013). Unhealthy food is not tastier for everybody: The “healthy= tasty” French intuition. *Food Quality and Preference*, 28(1), 116-121.
- Wright, S. (1934). The method of path coefficients. *The Annals of Mathematical Statistics* 5: 161–215.
- Wolfson, J. A., Bleich, S. N., Smith, K. C., & Frattaroli, S. (2016). What does cooking mean to you?: Perceptions of cooking and factors related to cooking behavior. *Appetite*, 97, 146–154. <https://doi.org/10.1016/j.appet.2015.11.030>
- Wood, W., Labrecque, J. S., Lin, P.-Y., & R  nger, D. (2014). Habits in dual-process models. In J. W. Sherman, B. Gawronski, & Y. Trope (Eds.), *Dual-process theories of the social mind* (pp. 371–385). The Guilford Press.
- World Health Organization (2003), *Technical Report Series 916: Diet, Nutrition and the Prevention of Chronic Diseases*, Geneva: WHO Press.
- World Health Organization (2020). WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.
- Yee, A. Z., Lwin, M. O., & Ho, S. S. (2017). The influence of parental practices on child promotive and preventive food consumption behaviors: a systematic review and meta-analysis. *The international journal of behavioral nutrition and physical activity*, 14(1), 47. <https://doi.org/10.1186/s12966-017-0501-3>

Yenal, N. Z. (1996). Bir araştırma alanı olarak yeme-içmenin tarihi ve sosyolojisi [Food and cuisine as a field of historical and sociological inquiry]. *Toplum ve Bilim Dergisi*, 71, 195–227.

Zhang, X., Oluyomi, A., Woodard, L., Raza, S. A., Adel Fahmideh, M., El-Mubasher, O., ... & Badr, H. (2021). Individual-level determinants of lifestyle behavioral changes during covid-19 lockdown in the united states: results of an online survey. *International journal of environmental research and public health*, 18(8), 4364.

Zwanka, R. J., & Buff, C. (2021). COVID-19 generation: A conceptual framework of the consumer behavioral shifts to be caused by the COVID-19 pandemic. *Journal of International Consumer Marketing*, 33(1), 58-67.



APPENDICES

A. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER



ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

DUMLUPINAR BULVARI 06800
ÇANKAYA ANKARA/TURKEY
T: +90 312 210 22 91
F: +90 312 210 79 59
ueam@metu.edu.tr
www.ueam.metu.edu.tr

[Redacted text block containing multiple lines of blacked-out content]

Dr.Öğretim Üyesi Ali Emre TURGUT
İAEK Başkan Vekili

B. TURKISH SUMMARY/TÜRKÇE ÖZET

Giriş

COVID-19 pandemisi insanların günlük yeme alışkanlıklarını değiştirdi. İnsanlar değişen koşullarla beraber yeme rutinlerini değiştirmek durumunda kaldılar. Pandemi dışsal bir etki olarak insanların hayatını derinden etkiledi. Karantina döneminde uzaktan çalışmak ve çocukların evden öğrenim görmesi beraberinde yeni sorumluluklar getirdi. Ayrıca evde geçen zamanı yeni hobiler bularak değerlendirmek de kişilerin günlük hayatlarını yeniden düzenlemesine neden oldu.

Pandemi sağlıklı olmanın önemini arttırdığı için insanlar sağlıklı beslenmeye daha çok rağbet göstermeye başladı (Zwanka and Buff, 2021). Beslenme ile sağlık arasında güçlü bir ilişki var. Bilimsel araştırmalar beslenmenin sağlığı olumlu ya da olumsuz hayat boyu etkileyebileceğini göstermekte. Sağlıklı beslenme insanları şeker hastalığı, obezite, kalp hastalıkları, tansiyon ve bazı kanser türleri gibi hastalıklardan korunmada büyük rol oynuyor. Halk sağlığı politikaları hastalıklardan korunmak için beslenmenin çevresel, sosyal, ekolojik, ve davranışsal boyutlarını göz önünde bulundurmalı (WHO, 2003).

Karantina uygulamaları insanların boş zaman faaliyetlerine kısıtlama getirdi. Pandemiden önce, boş zamanlarda alışveriş merkezlerine, barlara, restoranlara, aile ziyaretlerine, konserlere, tiyatrolara gidebiliyordu. Karantina uygulamalarıyla beraber insanlar evde geçen uzun zamanları değerlendirebilmek için yaratıcı yollar bulmaya çalıştı (Stodolska, 2021). Olumsuz olaylar deneyimlemek strese yol açarken, boş zaman faaliyetleri olumsuz olayların üstesinden gelmek için önemli bir kaynak (Stodolska, 2021). Boş zaman faaliyetleri pandeminin yarattığı stresle baş edebilmeyi ve karantinanın getirdiği can sıkıntısından kaçabilmeyi sağlıyor (Stodolska, 2021). Türkiye örneklemleri ile yapılan bir sosyal medya analizi pandemi döneminde boş zaman faaliyeti olarak evde ekmek yapmak ve bunu sosyal medyada paylaşmanın olumlu duygular hissetme, rahatlama, iyileşme ve sosyalleşme gibi olumlu etkileri olduğunu gösteriyor (Aşan and Kınay, 2021). Karantina döneminde kapalı restoranlar ve boş zaman faaliyeti bulma ihtiyacı yüzünden evde yemek pişirme artış gösterdi.

Pandeminin yarattığı stres ebeveynliği besleme açısından olumlu ve olumsuz yönde etkiledi. Olumlu açıdan yemek rutinleri oluşturmayı ve ailece yemek yerken keyifli zaman geçirmeyi sağladı. Olumsuz açıdan ise sağlıksız ve besleyici olmayan ebeveynlik uygulamalarına neden oldu (Jansen et al., 2021). Günlük rutinlerin bozulması ve artan çocuk bakımı sorumlulukları bakım verenlerin ağır yük altında kalması sağlıksız yemek davranışına yol açtı (Jordan et al., 2021). Karantinanın ortaya çıkardığı kaygı, stres, depresyon gibi olumsuz duygular yeme davranışını etkiledi.

Yemeğe yönelik tutumlar tarihsel döneme, kültürel ve sosyal düzene, geçmiş ve şimdiki olayların deneyimine göre oluşur (Furst et al., 1996). Yemeğe yüklenen anlam ve tutumlar yeni bilgilere, yeni ilişkilere, yeni durumlara ve yeni ortamlara göre değişebilir. Bu değişim insanların hayatına girdiğinde kabul gören davranış yeniden tanımlanır ve değerler sistemi yeniden yapılandırılır (Connors et al., 2001).

Bu tez, yemeğe ve sağlıklı beslenmeye yönelik değer, tutum, inanç, anlam ve düşünceleri ve bunların pandemiyle nasıl değiştiğini araştıracaktır. İkincil olarak sağlıklı beslenmeye yönelik inanç, tutum ve davranış arasındaki ilişkiyi inceleyecektir. Ayrıca pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirleyecektir. Bu tez sosyal temsil teorisi ve planlanmış davranış teorisi olmak üzere iki sosyal psikoloji teorisini belirtilen amaçlara ulaşmak için uygulayacaktır. Sosyal temsil teorisi yemek ve beslenme ile ilgili değer, tutum, inanç, anlamları ve davranışları keşfetmek için uygulanacaktır. Planlanmış davranış teorisi yemeğe yönelik inanç, tutum ve davranışlar arasındaki ilişkileri incelemek ve pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirlemek için uygulanacaktır. Bu tez, karma metodoloji kullanacak ve yarı-yapılandırılmış görüşmelere dayalı nitel çalışma ile ankete dayalı nicel çalışma olmak üzere iki çalışmadan oluşacaktır.

Yemek ve sağlıklı beslenmeyi sosyal, kültürel ve psikolojik yönlerine odaklanarak araştırmak değerlidir. Pandemiyle birlikte değişen dışsal koşullar yarı-deneysel bir çalışma gibi sosyal çevrenin yeme davranışını üzerindeki etkisini sosyal psikoloji bakış açısından çalışmak için olanak sağlayacaktır. Literatürde pandeminin sağlıklı beslenmeye mi yoksa sağlıksız beslenmeye mi yol açtığı konusunda bir anlaşmazlık vardır. Kriz dönemlerinde sağlıklı davranışa yönelmek daha zorlaşacağı için böyle bir dönemde sağlıklı beslenme davranışının yordayıcılarını belirlemek değerlidir.

Nitel Çalışma

Temel Yemek Çalışmaları

Yemek psikologlar, antropologlar ve sosyologlar tarafından çalışılmış ve çalışılmakta olan verimli bir konudur. Bu çalışmalar ışığında yemek gıda olmanın yanında sosyal bir olgu olarak görünmeye başlamıştır. Rozin'e (1996) göre yemek anlam kaynağı, metafor, ahlaksal bir şey ve estetik bir deneyimdir. Yemek sanatsal bir biçim olarak kültürel mutfaklarda estetik bir keyfe dönüşür. 19. yüzyılda antropoloji yemeği tabu, totem, kurban, ve cemaat ile ilişkisel olarak çalışmış, yemeği dinsel bir bağlama konumlandırmıştır (Connors et al., 2001). Diğer araştırmacılar birlikte yemek yemenin sosyal ilişkileri kurma ve devam ettirmedeki rolü üzerine odaklanmıştır (Radcliffe-Brown, 1922). Yemek arama eylemi iş birliği gerektirmektedir (Malinowski, 1929). Hayvanlardan farklı olarak insanlar yemeği pişirerek yer (Levi-Strauss, 1966/2012). Mintz'e (1979/2012) göre yemek sosyal ilişkileri ifade eder. Çünkü yemek bir masa ve oturma düzeni gerektirir. Bu oturma düzeni hareketi kısıtlar ve insanları bir araya getirir. Yakınlık ve uzaklık arasındaki çizgi sistemin çalışmasını sağlar. Goody (1982/2012) yemeğin endüstriyelleşmesi sonucu farklı mutfakların birbirine benzemeye başladığını öne sürer. Batı'nın endüstriyel yemekleri standartlaşarak üçüncü dünya ülkelerinin yemekleri arasına girdi. Sosyolojik olarak yemek bir sınıf göstergesidir. Yemek tüketim alışkanlıkları kişiyi başkalarına karşı konumlandırarak bir yaşam biçimi oluşturur. Yemek sunma ve ikram etme biçimleri işçi sınıfı ya da burjuva gibi sosyal grupların özelliklerini yansıtır (Bourdieu, 1979/2012). Yemek insanların sosyal ve biyolojik özelliklerinin kesişiminde yer almasından dolayı büyük önem taşır. Yeme genellikle biyolojik bir işlev olarak düşünülür. Benzer şekilde yeme sosyal bir işlev olarak da düşünülebilir (Fischler, 2011). Çocukların sosyal gelişiminde emzirme ve süttten kesme çok önemli bir yere sahiptir. Bunun yanında yemek anne ve çocuk arasındaki ilişkide belirleyici bir rol oynar (Rozin, 1996). İnsanlar neden beraber yemek yer? Beraber yeme eylemi günlük hayatta normal kabul ettiğimiz bir uygulama. Aynı masada beraber yemek yeme insanların sosyalliğinin bir göstergesidir. Yemek paylaşma insanlar arasında yakın ve güçlü ilişkiler kurmanın bir yoludur (Fischler, 2011). "Ne yersen osun" düşüncesi insanların yemeğe yönelik inançlarını yansıtır. İnsanlar yemek ve sindirimle yedikleri şeyin gerçek ve hayali özelliklerini alacaklarına inanırlar (Fischler, 2002).

Sosyal Temsil Teorisi ve Yemek Çalışmaları

Sosyal temsil teorisi bilginin sosyal bir kaynağı olduğu ve bireyin bilişinin bir çıktısı olmadığı öne sürer (Wagner and Hayes, 2005). Moscovici and Vignaux (1994/2001) “themata” diye bir kavram ortaya atarlar. Themata sosyal temsillerin tam ortasında yer alır ve kavram imgesi olarak varlığını sürdürür. Moscovici and Vignaux’a göre sosyal temsiller analizinin amacı “themata”yı belirlemektir. Themata anlam oluşturan kaynak düşünceler olarak nitelendirilebilir. Themata ikili karşıtlıklar biçimindedir. Themata sosyal temsil üretiminin başlangıç noktasıdır (Markova, 2015). Bu tez de yemek temsillerinin tematik yapısını belirlemeyi amaçlamaktadır.

Literatürde Bäckström et al. (2003) yeni yemeklerin sosyal temsillerini çalışmıştır. Bu çalışma sosyal temsil teorisini yemek çalışmasına uygulayan ilk çalışmalardan biridir. Tema analizi sonucundaki beş tane ikili karşıtlık: doğal/yapay, güven/güvensizlik, tehlikesiz/tehlikeli, geçmiş/gelecek ve keyif/gereklilik. Bäckström’ün boyutları sonraki araştırmacılar tarafından çokça kullanılmıştır.

Lo Monaco and Eric Bonetto (2018) sosyal temsil teorisi uygulayan yemek çalışmalarını incelemiş ve bunun sonucunda kültür ile yemek temsillerinin etkileşimine dikkat çekmiştir. Sosyal temsile odaklanan yemek çalışmaları kültürün yemek temsillerini şekillendirdiğini göstermektedir. Yemeğe yüklenen anlamlar kökünü kültürden alır. Kültürel mutfaklar yemeğin üretim, hazırlama, tüketim şekilleri gibi kültürel olarak tanımlanmış kurallardan oluşur. Bu yüzden yemek tüketimi ile din, sınıf, etnisite, cinsiyet ve milliyet arasında güçlü ilişkiler vardır.

Birçok kültürde kadınlar yemek pişirme üzerinden güç sahibidir. Evde yemek hazırlama ve dağıtma sorumluluğu kadınlara aitken eve yiyecek getiren erkeklerdir. Kadınların yemek hazırlama üzerinden güç sahibi olmasının iki taraflı değerlendirilmesi gerekir. Değerli bir madde olarak yemek sunmak kadınların eşleri ve çocukları üzerinde güç sahibi olmasını sağlar. Öte yandan kadınların yemek hazırlama sorumlulukları çocuklarına ve eşlerine hizmet ederek onları memnun etmeleri gerektiğini gösterir (Counihan, 2005).

Yemek sembolik olarak kadının ve erkeğin sosyal değerini kurarak erkeksilik ve kadınsılık ifade eder. Yemek kadın ve erkek arasında bağlantı kurma ve farklılaşma yoludur. Erkekler ve kadınlar kendi erkeksilik ve kadınsılıklarını yemekle ilgili farklı

roller atfederek ve belirli yemeklerle özdeşleşerek tanımlarlar. Birçok kültürde erkeksilik ve kadınsılık belirli yemeklerle ilişkilidir ve birçok kültür kadın ve erkeğin yemek tüketimini düzenleme ile ilgili kurallar barındırır (Counihan, 2005).

Türk kültüründe, kırsal bölgelerde hızlıca yemek ve masadan erken kalkmak uygun davranıştır. Öte yandan kentsel bölgelerde yemek beslenmenin yanında estetik açıdan keyif alarak yavaş yavaş yenir (Tezcan, 2000).

Araştırma Soruları

1. Pandemi döneminde yemek ve sağlıklı beslenmenin sosyal temsillerinin içeriği ve themata yapısı nedir?
2. Pandemi yemenin ve sağlıklı beslenmenin sosyal temsillerini nasıl değiştirmiştir?

Metot

Katılımcılar

Yarı yapılandırılmış görüşmeler 18 kadın ve 8 erkek ile yapılmıştır. Katılımcıların yaş aralığı 20 ile 68 arasında değişiklik göstermektedir. Katılımcıların çoğunun eğitim düzeyi yüksektir. Katılımcıların 8' i öğrenci, diğerleri öğretmen, eczacı, mühendis, memur, araştırma görevlisi gibi mesleklere sahiptir. Katılımcıların çoğu şehirlerde yaşamaktadır.

Prosedür

Görüşmeler karantina kurallarının esnetildiği 2021 yazında yapılmıştır. Görüşme süreleri 8 ila 30 dakika arasında değişiklik göstermektedir. Görüşmelerin süresi kısa gözükse de elde edilen veri zengindir. Katılımcılar yemek ve sağlıklı beslenmenin kendileri için ne ifade ettiği detaylı bir şekilde açıklamış, cevaplar yeterli bulunmuştur. Görüşmelerin 15 tanesi yüz yüze 11 tanesi Zoom bilgisayar programı aracılığıyla yapılmıştır. Bütün görüşmeler kaydedilmiştir. Görüşmelerin transkriptleri hazırlanmış ve MAXQDA yazılım programı ile tematik olarak analiz edilmiştir.

Görüşme Soruları

1. Yemek deyince aklınıza ne geliyor?
2. Yemek sizin için ne demek?
3. Sağlıklı beslendiğinizi düşünüyor musunuz?
4. Sağlıklı beslenmek size göre ne demek?
5. Sağlıklı beslenmek için neler yapıyorsunuz?
6. Koronavirüs yeme alışkanlıklarınızı değiştirdi mi?
7. Koronavirüs'ten önce ve sonra yeme alışkanlıklarınız nasıl değişti?

Sonuçlar

Sonuçlar yemek temsilleri, sağlıklı beslenme temsilleri ve pandemiden etkilenen yemek temsilleri olmak üzere üç başlık altında toplanmış ve 11 tema çıkarılmıştır. Bu bölümde çıkarılan temalar alt temalarıyla beraber sunulacaktır.

İlk başlık olan yemek temsillerinde 5 tema çıkarılmıştır.

Bunlardan ilki “Yemek benim için keyif”

Alt temaları:

Yemek yemek keyifli bir etkinlik

Güzel yemekler yemek beni mutlu ediyor

Yemek büyük zevk veriyor

Damak tadı benim için önemli

Yemek kendimi ödüllendirmenin bir yolu

Yemek yapmayı seviyorum

Yemeğin verdiği zevk geçici

Kendimi yemeğin zevkenden mahrum bırakmak istemem

Ölüm var madem yemeli badem

İkinci tema “Yemek öncelikle bir ihtiyaç”

Alt temaları:

Yaşamak için yerim

Yemek temel bir ihtiyaç

Vücudumu beslemek için yerim

Doymak için yerim

Yemek ihtiyaçtan ötesi

Üçüncü tema “Sosyal düzen içerisinde yemek”

Alt temaları:

Kendini yeme alışkanlıkları bakımından başkalarıyla karşılaştırmak

Yeme alışkanlıkları aile içinde oluşur

Arkadaşlarla yemek yemek sosyal bir etkinlik

Yemek aileyi bir araya getirir

Başkaları için yemek hazırlamayı severim

Yemek sırasında sohbet etmek gelenektendir

Ailemi sağlıklı beslemek annelik kimliğimin bir parçası

Yemek paylaşmak toplum yanlısı bir davranış

Sağlıklı beslenmek politik bir mesele

Yakınlarım sayesinde sağlıklı besleniyorum

Yemek birliktelik varsa anlamlı

Birlikte yemek yemek dostluk kurmanın bir yoludur

Dördüncü tema “Geleneksel yemek kültürü”

Alt temaları:

Her kültürün kendi mutfağı vardır

Yemeklerde çeşitlilik ararım

Yöresel yemekler bölgeden bölgeye değişir

Yeme gelenekleri kültürün bir parçasıdır

Yeni şeyler denemeyi severim

Geleneksel olarak yemeği anneler hazırlar

Akdeniz diyeti sağlıklıdır

Yeme ile ilgili inançlar normlara dayanır

Yemek pişirme bir sanattır

Din yeme kültürünü etkiler

Yeme kültürümden dolayı sağlıksız besleniyorum

Beşinci tema “Yemek tercihlerinin gelişimi”

Alt temaları:

Damak tadı çocukken gelişir

Beslenme kültürü yetiştiğin aileden gelir

Ailemin yeme alışkanlıklarını sürdürüyorum

Geçmişten gelen yemeğe yönelik önyargılarımı kırmaya çalışıyorum

Yeme alışkanlıklarım büyüdükçe değişti

Yemekle ilgili çocukluk anılarım var

İkinci başlık olan sağlıklı beslenme temsillerinde 4 tema çıkarılmıştır

Altıncı tema “Sağlıklı beslenme”

Alt temaları:

Dengeli beslenme sağlıklıdır

Günde üç öğün beslenmek sağlıklıdır

Sebze ağırlıklı beslenmek sağlıklıdır

Zararlı yiyeceklerden uzak dur

Azı karar çoğu zarar

Sağlıklı beslenme kişiden kişiye göre değişir

Yararlı beslenme alışkanlıkları edinmeye çalışıyorum

Sağlıklı beslenmek için irade gerekir

Sağlıklı beslenmek enerjik hissettirir

Ev yemeği sağlıklıdır

Yedinci tema “Sağlıksız beslenme”

Alt temaları:

Yemeğin dozunu ayarlayamamak sağlıksızdır

Abur cubur yemek sağlıksızdır

Kilo almaktan korkuyorum

Zararlı yiyecekler pişman hissettiriyor

Dışarda yemek sağlıksız

Sağlıksız yemekler lezzetli oluyor

Tek tip beslenmek sağlıksız

Fast food daha ulaşılabilir

Sekizinci tema “Yemek insan biyolojisi için önemli”

Alt temaları:

Yemek vücudun organ sistemlerini etkiler

Vücut akıllı bir makine

İştah hayati

Sağlıksız beslenme hastalıklara yol açar

Dokuzuncu tema “Doğal yemekler sağlıklıdır”

Doğal ürünleri tercih ederim

Katkı maddelerinden uzak dururum

Mevsim meyve ve sebzeleri sağlıklıdır

Doğal ortam sağlığı korur

Geleneksel tarım daha güvenli

Üçüncü başlık pandemiden etkilenen yemek temsilleri altında iki tema çıkarılmıştır

Onuncu tema “Pandemi koşullarından dolayı beslenmede yapılan değişiklikler”

Sağlıklı değişiklikler

Alt temaları:

Dışarıda daha az yedim

Daha çok ev yemeği

Öğün saatlerim daha düzenli oldu

Pandemi daha sağlıklı beslenmem için bir fırsat oldu

Nötr değişiklikler

Beslenmemde herhangi bir değişiklik olmadı

Mutfakta daha çok zaman geçirdim

Normalleşme süreci ile eski yeme alışkanlıklarıma geri döndüm

Sağlıksız değişiklikler

Covid sağlıksız beslenmeme neden oldu

Kilo aldım

Onbirinci tema “Covid’ten korunmak için beslenmede yapılan değişiklikler”

Alt temaları:

Yemeklerin hijyenine önem gösterdim

Dışarda yemekten virüs kapabilirim

Ek gıda kullanmaya başladım

Sağlıklı beslenmeye daha çok özen gösterdim

Bağışıklığım güçlü olsun diye daha çok yedim

Tartışma

Katılımcılar görüşmeler boyunca yemek ve sağlıklı beslenmenin onlara ne ifade ettiği, sağlıklı beslenmek için neler yaptıkları ve pandeminin yemek alışkanlıklarını nasıl değiştirdiği hakkında konuştular. Bu çalışma sosyal temsil teorisi ile uyumlu olarak bazı temaların ikili karşıtlıklar biçiminde ortaya çıktığını buldu: keyif/gereklilik, doğal/yapay, sağlık/mutfak kültürü.

Keyif/gereklilik ikili karřıtlığı görüřmelerde çok yaygındı. Gereklilik olarak yemek ve keyif olarak yemek katılımcıların ifadelerinde beraber yer aldı. Birçok katılımcı yemeęi ihtiya olarak görmektense yemekten keyif aldıklarını belirtti. Bir katılımcı yeme ihtiyaını iřtah açıcı yemekler hazırlayarak gidermek istedięini söyledi. Birçok katılımcı yaşamak için yemek mi yemek için yaşamak mı deyimine atıfta bulunarak bu karřıtlıkta kendi pozisyonlarını belirtti. Yemeęi beslenme olarak gören katılımcı da yemeęin onun için zevk olmadığını söyledi.

Saęlık/mutfak kültürü de bu alıřmada bulunan bir bařka ikili karřıtlık. Bu alıřma Doęu Anadolu mutfaęına sahip ve Akdeniz mutfaęına sahip katılımcılar arasında bir tezat buldu. Akdeniz mutfaęına sahip katılımcılar kültürleri sayesinde saęlıklı beslendiklerini söylerken Doęu Anadolu mutfaęına sahip katılımcılar kültürleri yüzünden saęlıksız beslendiklerini belirtti. Doęu Anadolu mutfaęına sahip katılımcılar saęlıklı beslenmek isteseler de kültürel alışkanlıklarının buna engel olduğunu belirtti. Gelecek arařtırmalar saęlıklı beslenmeye engel olan kültürel bariyerleri alışabilir.

Katılımcıların çoęu yemeklerin doęallığını vurguladı. Bu sonuç genellenebilir ünkü literatürde yer alan bir literatür incelemesi alıřması tüketiciler için yemeęin doęallığının çok önemli olduğunu gösteriyor (Roman et al., 2017). İnsanlar neden yemekte doęallığa bu kadar önem veriyor? Tamamen saęlık sebepleri yüzünden mi? Siipi (2013) tüketicilerin doęal ürünlere olan talebini ve bunun saęlıkla ilişkisini alışmış. Yemeklerde doęalın farklı anlamları olduğunu ve bunların kavramsal olarak saęlıkla ilişkili olmadığını bulmuş. Bu farklı anlamlar: insan etkisinin olmaması, aşinalık, otantiklik. Yine de mevcut alıřmada katılımcılar doęal yemeęin saęlıklı olduğuna inandıklarını belirtiyor. Mevcut alıřmada katılımcılar yemeęin doęal ve yapay özelliklerini beraber ele aldıkları için tema olarak doęal/yapay ikili karřıtlığı elde edilmiştir.

Dięer bir önemli bulgu kadın katılımcıların ailelerini saęlıklı beslemeyi annelik kimliklerinin bir parası olarak görmeleridir. Bu bulgu literatür ile uyumludur. Ristovski-Slijepcevic et al. (2010) annelerin ocuklarını saęlık beslemeyi ahlaki bir sorumluluk olarak gördüklerini öne sürmüřtür. Mevcut alıřmada katılımcılar ocuklarını yetiřtirirken saęlıklı beslenmeye önem verdiklerini belirtti. Buna ek olarak, ocukların sevdikleri yemekleri yaparak onları mutlu etmeye alıřtıklarını belirtti. Bu bulgular literatürdeki bařka alıřmalarla desteklenmektedir. Örneęin Anving and Thorsted (2010) ocuklara saęlıklı besinler sunmak ve ocukların

isteklerini yerine getirmenin annelik rolü ve beslenme ideallerini karşılamak için gerekli olduğunu bulmuştur.

Mevcut çalışma yemek tercihlerinin ve damak tadının çocukken geliştiğini bulmuştur. Bir katılımcı ebeveynlerinin beslenme alışkanlıklarını yetişkin olduktan sonra da devam ettirdiğini belirtti. Bu bulgu sağlıklı beslenmeyi teşvik etme amacı olan erken müdahale çalışmaları planlanırken kullanılabilir. Müdahale çalışmaları sağlıklı beslenmeyi teşvik etmek için çocukluk dönemini ve aileyi hedef alabilir. Literatürdeki önceki çalışmalar da ebeveynlik ortamının çocukların yeme alışkanlıklarının sosyalleşmesindeki önemini göstermektedir (Hughes and Power, 2018).

Çeşitlilik görüşmeler boyunca tekrarlandı ve katılımcılar çeşitliliğe farklı anlamlar yükledi. Katılımcılar beslenmelerinde çeşitlilik aradıklarını ve çeşitli beslenmenin zengin bir beslenme olduğunu söylediler. Katılımcılar çeşitliliği farklı dünya mutfakları, meyve sebze çeşitliliği, çeşitli baharatlar ve farklı beslenme düzenleri anlamlarına gelecek şekilde kullandılar. Weaver'ın (2019) insanların beslenmede çeşitlilik aramalarının farklı sebepleri olabileceğini öne sürdü. Bu sebepler, çeşitliliğin estetik olarak tatmin etmesi, sosyal entegrasyonu kolaylaştırması, besleyici olması ve maddi durum göstergesi olması olarak sıralanabilir.

Yemeğin geleneksel ritüellerde yer alması da ilginç bir bulgu olarak not edilebilir. Katılımcılar yemeğin düğünlerde ve mezar ziyaretlerinde ikram edildiğini belirttiler.

Pandemi insanların beslenme alışkanlıklarını farklı şekillerde etkiledi. Bir başka deyişle pandemiden yeme alışkanlıkları bakımından etkilenmede bireysel farklılıklar var. Aynı evde yaşayan iki katılımcıdan biri pandeminin sağlıklı beslenmesine yol açtığını ifade ederken diğeri pandeminin sağlıksız beslenmesine yol açtığını belirtiyor. Bu nedenle pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirlemeye çalışmak önem taşıyor.

Mevcut çalışma keşifsel bir nitel çalışma olarak yemekle ilgili birçok kavram ortaya atmaktadır. Bu kavramların arasından bazılarını seçerek aralarındaki ilişkiyi nicel olarak çalışmak gelecek araştırmalar için verimli olacaktır.

Nicel Çalışma

Planlı Davranış Teorisi

Planlı davranış teorisi niyetin davranışın en önemli yordayıcısı olduğunu ileri sürer. Planlı davranış teorisinde niyetin üç yordayıcısı vardır: tutum, öznel normlar, algılanan davranışsal kontrol. Tutum bir davranışın olumlu ya da olumsuz değerlendirilmesidir. Öznel normlar bir davranışa yönelik algılanan sosyal baskıdır. Algılanan davranışsal kontrol öz-yeterliliğe karşılık gelir ya da bir davranışın yapılabilir olmasıdır. Eğer insanlar bir davranışı olumlu olarak değerlendiriyorlarsa, eğer bu davranışı sergilemek için sosyal baskı hissediyorlarsa, eğer davranışı sergileyebileceklerini düşünüyorlarsa insanlar bu davranışı sergileme niyetinde olacaklardır (Ajzen, 2005).

Algılanan davranışsal kontrol davranışı niyet üzerinden dolaylı olarak etkileyebilir. Algılanan davranışsal kontrol davranışı aynı zamanda doğrudan etkiler çünkü bir davranışı sergilemek o davranış üzerinde yeterli kontrol sahibi olmaya bağlıdır (Ajzen, 2005).

Planlı davranış teorisi ayrıca tutum, öznel normlar ve algılanan davranışsal kontrolün öncüllerini yani insanların neden belli tutum, öznel normlar ve algılanan davranışsal kontrole sahip olduklarını araştırır. Bir davranışa yönelik tutumun öncülü davranışsal inançlardır. Her davranışsal inanç davranışı o davranışın sonucu ile ilişkilendirir. İnsanlar davranışın olası sonucunu değerlendirir ve bu değerlendirmeyi davranışla ilişkilendirir. Bu ilişkilendirmenin şiddeti davranışa yönelik tutumu belirler. Öznel normların öncülü normatif inançlardır. Normatif inançlar insanların belli kişi ya da grupların söz konusu davranışı desteklemesine yönelik inançlarına karşılık gelir. Algılanan davranışsal kontrolün öncülleri kontrol inançlarıdır. Kontrol inançları söz konusu davranışı kolaylaştıran ya da zorlaştıran faktörlerle ilgilidir. İnsanlar gerekli kaynak ve olanaklara sahip olduklarına inandıkları ölçüde davranışları üzerinde kontrol algırlar. Kontrol inançları kişinin davranışı sergileme kapasitesi olduğunu algılamasına yol açar (Ajzen, 2005).

Birinci düzeyde niyet ve algılanan davranışsal kontrol davranışı belirler. İkinci düzeyde davranışa yönelik tutum, öznel normlar ve algılanan davranışsal kontrol niyeti belirler. Üçüncü düzey tutum, öznel normlar ve algılanan davranışsal kontrolü

davranışsal inançlar, normatif inançlar ve kontrol inançları tarafından açıklar. Son analiz insanların davranışını inançları tarafından açıklar (Ajzen, 2005).

Planlı davranış teori sağlık psikolojisi alanında çokça kullanılır. Birçok araştırmacı planlı davranış teorisini sağlıklı beslenmeye uygulamıştır (Armitage and Conner, 1999; Povey et al., 2000; Astrom and Rise, 2001; Conner et al., 2002).

Pandeminin Yeme Davranışı Üzerindeki Etkisi

Pandemi sağlıklı beslenmek için bir tehdit mi yoksa fırsat mı? Literatürde şu ana kadar yapılan çalışmalar tezat sonuçlar göstermekte. Bazı çalışmalar pandeminin sağlıklı beslenmeye yol açtığını belirtiyor. Özellikle fast food tüketiminin azaldığını ve evde yemek yapmanın arttığını (Molina-Montes et al., 2021), sebze meyve tüketiminin arttığını (Rodríguez-Pérez et al., 2020) belirtiyor.

Pandemi döneminde sağlıklı beslenme ile ilişkili faktörler neler? Yemek pişirme becerileri, uygun vakit, olumlu duygular, aile desteği beslenmede olumlu değişikliklerle ilgili. Yemek yapma işleri aile bireyleri arasında paylaşıldığında beslenmenin olumlu etkilendiği bulunmuş (Tribst et al., 2021). Pandemi döneminde aile bireyleriyle beraber yemek sağlıklı beslenmeye yol açıyor (Bhutani et al., 2021; Rodríguez-Pérez et al., 2020; Scarmozzino and Visioli 2020). Hane halkı geliri ve duygusal desteğin beslenmede olumlu değişikliklere neden olduğunu bulunmuş (Vidal et al., 2021). Gıdaya ulaşım, işsizlik güvencesi ve geniş sosyal çevrenin sağlıklı yönde beslenme değişiklikleriyle ilişkili olduğu görülmüş (Miller et al., 2021).

Pandeminin yarattığı olumsuz duyguların genellikle sağlıksız beslenmeye yol açtığı görülmüş. Pandeminin özellikle kontrolden çıkmış şekilde yemeyi ve öğün aralarında atıştırmaı arttırdığı görülmüş (Ammar et al., 2020). Başka bir çalışmada şeker tüketiminin arttığı, olumsuz duygularla baş edebilmek için alkol alımının arttığı ve yemek bağımlılığı semptomları görülmeye başlandığı gözlemlenmiştir (Cummings et al., 2021).

Pandemi döneminde sağlıksız beslenme ile ilişkili faktörler neler? Düşük hane halkı geliri, kendini suçlama ve kendini dağıtma gibi uyumsuz başa çıkma yolları beslenmede olumsuz değişikliklerle ilişkilendirildi (Vidal et al., 2021). Düşük kendini kontrol etme uyumsuz yeme davranışını olumsuz duygulanım üzerinden yordadı (Li et al., 2021). Fazla kilolu ve obez olmak karantina döneminde sağlıksız beslenme davranışı riskini arttırdı (Poelman et al., 2021).

Literatürdeki bazı çalışmalar da pandeminin yeme davranışını sağlıklı ve sağlıksız yönde değiştirdiğine dair karma sonuçlar ortaya koyuyor. Bir başka deyişle sağlıklı ve sağlıksız değişimleri beraber rapor ediyor (Bennett et al., 2021; Miller et al., 2021; Tribst et al., 2021; Coulthard et al., 2021).

Araştırma Soruları

1. Planlı davranış teorisi pandemi bağlamında sağlıklı beslenme davranışını ne kadar iyi açıklıyor?
2. Pandemi döneminde sağlıklı beslenmeye yönelik davranış, tutum, davranışsal inanç, öznel normlar, normatif inançlar, algılanan davranışsal kontrol, kontrol inançları, niyet ve geçmiş davranış nelerdir?
3. Pandemi döneminde sağlıklı beslenmeye yönelik davranış, tutum, davranışsal inanç, öznel normlar, normatif inançlar, algılanan davranışsal kontrol, kontrol inançları, niyet ve geçmiş davranış arasındaki ilişkiler nelerdir?

Metot

Ölçüm araçları

Sağlıklı Beslenme Davranışı

Davranış iki madde ile ölçüldü: “Pandemi döneminde sağlıklı besleniyorum.”
“Pandemi döneminde hangi sıklıkla sağlıklı besleniyorsunuz?”

Anketin diğer maddeleri davranışa tamamen uyumlu olacak şekilde oluşturuldu.

Geçmiş Sağlıklı Beslenme Davranışı

Pandemi önemli bir dönüm noktası olduğu için geçmiş davranış planlı davranış modeline eklemek yemek alışkanlıklarında pandemiden önce ve sonrası arasındaki değişimi anlamak için yerinde olacaktır. Geçmiş davranış modele davranış ile çift yönlü ilişkili olacak şekilde eklenmiştir.

Geçmiş davranış iki madde ile ölçüldü: “Pandemiden önce sağlıklı besleniyordum.” “Pandemiden önce hangi sıklıkla sağlıklı besleniyordunuz?”

Sağlıklı Beslenmeye Yönelik Tutum

Tutumun birbiriyle ilişkili iki boyutu vardır: araçsal (olası olumlu ya da olumsuz sonuçlar) ve deneyimsel (davranışla ilişkili olumlu ya da olumsuz deneyimler). Tutum en iyi şekilde birinci seviyede araçsal ve deneyimsel faktörlerden oluşan iki seviyeli hiyerarşik bir model olarak kavramsallaştırılır (Bagozzi et al., 2001; Hagger and Chatzisarantis, 2005). Tutum pandemi döneminde sağlıklı beslenmeye yönelik altı sıfat çifti ile ölçülmüştür. Üç araçsal sıfat çifti: önemli/önemsiz, gerekli/gereksiz, faydalı/faydasız. Üç deneyimsel sıfat çifti: eğlenceli/sıkıcı, keyifli/keyifsiz, lezzetli/lezzetsiz.

Sağlıklı Beslenmeye Yönelik Davranışsal İnançlar

Fishbein'in (1963, 1967b) beklenti-değer modeline göre her inanç davranışı bir sonuç ile ilişkilendirir. Bileşik bir inanç puanı elde etmek için inanç şiddeti ölçeğine verilen cevaplar ile sonuç değerlendirme ölçeğine verilen cevaplar çarpılır.

Sağlıklı beslenmeye yönelik davranışsal inançları belirlemek için 25 katılımcı ile pilot çalışma yapılmıştır. Katılımcılardan pandemi döneminde sağlıklı beslenmenin avantaj ve dezavantajlarını listelemeleri istenmiştir. Pandemi döneminde sağlıklı beslenmenin en çok belirtilen sonuçları bağışıklık sistemini güçlendirmek, koronavirüsü hafif atlatmayı sağlamak ve enerjik hissetmek. Pandemi döneminde sağlıklı beslenmenin olası sonuçlarına yönelik olarak anket maddeleri inanç şiddeti ve sonuç değerlendirme ölçekleri için ayrı ayrı oluşturulmuştur.

Sağlıklı Beslenmeye Yönelik Öznel Normlar

Öznel normlar üç madde ile ölçülmüştür: “Değer verdiğim insanlar pandemi döneminde sağlıklı beslenmemi ister.” “Değer verdiğim insanlar pandemi döneminde sağlıklı beslenmem gerektiğini düşünür.” “Değer verdiğim insanlar pandemi döneminde sağlıklı beslenmemi destekler.”

Sağlıklı Beslenmeye Yönelik Normatif İnançlar

Normatif inançlar belirli kişi ya da grupların söz konusu davranışın sergilenmesi gerektiğine yönelik inançlarına karşılık gelir. Bileşik bir inanç puanı elde etmek için inanç şiddeti ölçeğine verilen cevaplar ile beklentiye uyma motivasyonu

ölçeğine verilen cevaplar çarpılır (Fishbein and Ajzen, 2010). Anket maddeleri inanç şiddeti ve beklentiye uyma motivasyonu ölçekleri için aile, arkadaşlar, medyada yer alan beslenme uzmanları ve akrabalara göre oluşturulmuştur.

Algılanan Davranışsal Kontrol

Algılanan davranışsal kontrol dört madde ile ölçülmüştür: “Pandemi döneminde sağlıklı beslenmek benim elimde.” “Eğer istersem pandemi döneminde sağlıklı beslenebilirim.” “Pandemi döneminde sağlıklı beslenmek için gerekli imkanlara sahibim.” “Pandemi döneminde sağlıklı beslenmek benim için kolay.”

Sağlıklı Beslenmeye Yönelik Kontrol İnançları

Kontrol inançları belirli içsel ve dışsal faktörlerin davranışı sergilemeyi kolaylaştıracağına inanmaya karşılık gelir. Bileşik bir kontrol inancı puanı elde etmek için inanç şiddeti ölçeğine verilen cevaplar ile kontrol faktörünün gücü ölçeğine verilen cevaplar çarpılır (Fishbein and Ajzen, 2010).

Sağlıklı beslenmeye yönelik kontrol faktörlerini belirlemek için 25 katılımcı ile pilot çalışma yapılmıştır. Katılımcılardan pandemi döneminde sağlıklı beslenmelerini kolaylaştıran faktörleri listelemeleri istenmiştir. En sık belirtilen faktörler: maddi imkanlarının iyi olması, uygun vakit bulmak, motivasyonunun yüksek olması, evde ailecek yaşamak, çalışma koşullarının elverişli olması, yemek yapacak koşullarının olması, kaliteli besinlere ulaşabilmek. Bu faktörlere göre inanç şiddeti ölçeği ve kontrol faktörü ölçeği maddeleri ayrı ayrı oluşturulmuştur.

Sağlıklı Beslenmeye Yönelik Niyet

Niyet üç madde ile ölçüldü: “Pandemi döneminde sağlıklı beslenme niyetindeyim.” “Pandemi döneminde sağlıklı beslenmeyi planlıyorum.” “Pandemi döneminde sağlıklı beslenmeyi deniyorum.”

Prosedür

Planlı davranış teorisine göre hazırlanan pandemi döneminde sağlıklı beslenme anketi Google Form kullanılarak oluşturuldu. Sosyal medya üzerinden paylaşılan ankete 675 kişi katıldı. 17 katılımcının cevapları çeşitli nedenlerle geçersiz bulunduğu

için veri setinden çıkarıldı. İstatistik analizleri 658 katılımcının verdiği cevaplarla yürütüldü. Katılımcıların %61'i kadın %38'i erkekti. Yaş ortalaması 41 ve yaş dağılımı orantılı idi. Katılımcıların eğitim düzeyi genel olarak yüksekti. Katılımcıların %85'i üniversite ya da daha yüksek eğitim derecesine sahipti. Katılımcıların %16'sı öğrenci idi. Geri kalan katılımcılar eczacı, öğretmen, doktor, mühendis, memur gibi çeşitli mesleklere sahipti.

Sonuç

İstatistik analizleri SPSS ve Mplus7 bilgisayar programları kullanılarak yürütüldü. Güvenirlik analizi değişkenlerin iç tutarlılığının yüksek olduğunu gösterdi.

Betimsel analizler katılımcıların %66'sının pandemi döneminde sağlıklı beslendiğini gösterdi. Pandemi döneminde ($M=4.92$) ve pandemiden önce ($M=4.89$) sağlıklı beslenme ortalama değerleri karşılaştırıldığında ortalamaların birbirine çok yakın olduğu bulundu. Bu ortalama değerleri yeme alışkanlıklarının sağlık bakımından genel olarak değişmediğini gösteriyor. Pandemi den önce sağlıklı beslenme ile pandemi döneminde sağlıklı beslenme arasındaki korelasyon değeri orta büyüklüktedir ($r=.451, p<0.001$). Ortalama değerler her ne kadar birbirine yakın olsa da korelasyon değerine bakarak pandeminin yeme alışkanlıklarını değiştirdiği çıkarımında bulunulabilir.

Katılımcıların pandemi döneminde sağlıklı beslenmeye yönelik tutumları incelendiğinde çoğu katılımcının (%80) pandemi döneminde sağlıklı beslenmeyi tamamen yararlı bulduğu, ona kıyasla katılımcıların %28'nin sağlıklı beslenmeyi tamamen keyifli bulduğu görülmüştür. Korelasyon değerlerine bakıldığında sağlıklı beslenme davranışı ile tutumun deneyimsel boyutu arasında güçlü bir ilişki ($r=.440, p<0.001$) varken araçsal boyutu arasında zayıf bir ilişki ($r=.158, p<0.001$) vardır. Bu sonuç sağlıklı beslenmenin keyifli olduğunu düşünenlerin sağlıklı beslenmenin yararlı olduğunu düşünenlere göre sağlıklı beslenme davranışını sergileme ihtimallerinin daha çok olduğunu göstermektedir.

Planlı davranış teorisini pandemi bağlamında sağlıklı beslenme davranışı açıklamak için istatistiksel bir analiz olan yapısal eşitlik modeli kullanılmıştır. Yapısal eşitlik modeli gizil değişkenler olan varsayımsal yapıları ve gözlenen değişkenler olan gizil değişkenlerin ölçülen göstergelerini ayırt eder (Bollen, 1989). Yapısal eşitlik modeli gizil değişkenlerin gözlenen göstergeler tarafından ne kadar iyi ölçüldüğü

analiz ederken aynı zamanda gizil değişkenler arasındaki ilişkileri de analiz eder (Wang and Wang, 2019).

Yapısal eşitlik modeli analizinden elde edilen uyum indeksleri öne sürülen modelin toplanan veriye uygun olduğunu gösterdi ($\chi^2= 916.72$, $N=658$, $df=478$, $p=0.00$). Özellikle elde edilen verilen modelin sıkı uyum sağladığını gösterdi ($\chi^2/df=1.92$; RMSEA= 0.037; CFI= 0.911; TLI= 0.901; SRMR= 0.085). Gizil değişkenler arasında öne sürülen ilişkiler öznel normlardan niyete giden yol dışında istatistiksel olarak anlamlı bulundu. Algılanan davranışsal kontrol davranışın en güçlü yordayıcısı idi. Niyeti etkileyen değişkenler, niyetteki varyasyonun %53'ünü açıklamıştır. Genel model, davranıştaki varyasyonun %44'ünü açıklamıştır.

Tartışma

Mevcut çalışmanın amacı planlı davranış teorisi çerçevesinde pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirlemektir. Mevcut çalışma pandemi döneminde sağlıklı beslenmeye yönelik davranış, tutum, davranışsal inançlar, öznel normlar, normatif inançlar, algılanan davranışsal kontrol, kontrol inançları ve geçmiş davranış arasındaki ilişkileri nicel olarak inceledi. Bulgular planlı davranış modelinin pandemi bağlamında sağlıklı beslenme davranışını iyi bir şekilde açıkladığını ortaya koydu. Değişkenler arasında öne sürülen ilişkiler öznel normlardan niyete giden yol dışında istatistiksel olarak anlamlıydı.

Mevcut çalışma kontrol inançlarının (içsel ve dışsal kaynakların davranışı kolaylaştıracağına dair inanç) sağlıklı beslenmeyi güçlü bir şekilde yordadığını buldu. Özellikle maddi imkanların iyi olması, motivasyonun yüksek olması, çalışma koşullarının elverişli olması ve kaliteli besinlere ulaşabilmek pandemi kontekstinde sağlıklı beslenme davranışı ile güçlü bir şekilde ilişkili idi. Bu bulgular literatürde Brug'un (2008) araştırmasında vardığı sonuçlara paraleldir. Brug sağlıklı beslenmenin yordayıcılarını motivasyon, çevresel olanaklar ve yetenekler olarak belirlemiştir. İnsanlar sağlıklı beslenmek için motive olmalı, ulaşılabilir olanaklar sağlayan bir çevreye maruz kalmalı ve sağlıklı beslenme için kendi yeteneklerine güven duymalıdır.

Mevcut çalışma öznel normlarla niyet arasında istatistiksel olarak anlamlı olmayan bir ilişki buldu. Fishbein and Ajzen (2010) öznel normların genel olarak niyetleri ve davranışları yordamada küçük bir katkı sağladığını belirtmektedir. Planlı

davranış teorisinde özne normlar sadece buyruksal normları kapsar. Buyruksal normlar belli kişi ya da grupların söz konusu davranışın sergilenmesi gerektiğini düşünmesine dair algıdır. Fishbein and Ajzen (2010) özne normların bazı davranışlar üzerinde az varyans gösterebileceğini belirtmişlerdir. Az varyans gösterdiği durumda normun davranışı etkileyip etkilemediği açık değildir. Buyruksal norm her bir birey için aynı etkiye sahip olabileceği gibi bireyler arasında davranışta gözlenen farkları açıklamayabilir. Başka bir deyişle norm davranışsal ortalamayı etkileyebilir ama davranışın varyansını etkilemez. Mevcut çalışma da bu açıklamayla uyumlu olarak özne normların ortalamasını çok yüksek ama varyansını çok düşük bulmuştur.

Planlı davranış teorisinin revize edilmiş hali olan sebep eylem yaklaşımında (Fishbein and Ajzen (2010) özne normlar yerine algılanan normlar terimini kullanılmış; algılanan normlar buyruksal normlara ek olarak betimsel normları da kapsar hale getirilmiştir. Buyruksal normlar belirli kişilerin söz konusu davranışın sergilenmesi gerektiğini düşünmesine karşılık gelirken betimsel normlar belirli kişilerin söz konusu davranış kendilerinin sergiliyor olmasına karşılık gelir (Cialdini et al., 1990). Buyruksal normlar ile betimsel normların aynı davranış önermedikleri durumlar olabilir (Burger et al., 2010). Örneğin Türk toplumunda sağlıklı beslenmek için neler yapılması gerektiği yani buyruksal norm açıkken özellikle düğün, kutlama, aile ziyaretleri gibi etkinliklerde çoğunlukla sağlıklı olmayan kültürel yemekler yenir. Bu da betimsel normun buyruksal norma karşıt olarak sağlıklı sayılabilecek yemekler yemenin toplum tarafından benimsenmiş olduğunu gösterebilir. Sağlıklı beslenme davranışı ile özne normlar arasındaki ilişki incelenirken normu iyi tanımlamak ve ölçmek önem taşımakta. Literatürdeki çalışmalar insanların başkalarının ne yediğine önem verdiğini yani sosyal normların yeme davranışını sağlıklı ya da sağlıklı olmayan yönde etkileyebileceğini gösteriyor. (Robinson ve arkadaşlarının (2014) literatür incelemesi başka insanların yeme alışkanlıklarının bireylerin yeme seçimlerini etkilediğini gösteriyor.

Genel Sonuç

Pandemi sosyal bir ortam olarak günlük yeme alışkanlıklarını değiştirdi. Mevcut çalışmanın amacı pandemi kontekstinde sağlıklı beslenmeye yönelik tutum, anlam, inançları belirlemeyi ve bunların sağlıklı beslenme davranışı ile ilişkisini incelemektir. Pandemi gibi insanı psikolojik olarak zorlayan dönemlerde sağlıklı

davranışa yönelmek daha çok önem taşır. Mevcut çalışmanın ikinci amacı pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirlemektir.

Yemek Türk kültüründe önemli bir yere sahiptir. Yemek kompleks bir kavram olarak birçok boyuta sahiptir: keyif, gereklilik, kültürel, gelişimsel, geleneksel, biyolojik, doğal ve sosyal. Mevcut çalışma pandeminin yeme rutinlerini değiştirdiğini bulmuştur. Yeme alışkanlıklarının pandemiden etkilenmesinde bireysel farklılıklar vardır. Pandemi bazı kişilerin sağlıklı beslenmesine yol açarken bazı kişilerin sağlıksız beslenmesine yol açmış bazı kişilerin beslenme alışkanlıkları ise hiçbir değişim göstermemiştir. Pandeminin yeme alışkanlıklarını etkilemesi durumunda sosyal koşullar bireysel faktörlerle etkileşim halindedir.

Mevcut çalışma katılımcıların çoğunun pandemi döneminde sağlıklı beslendiğini gösterdi. Literatürde pandeminin sağlıklı beslenmeye mi sağlıksız beslenmeye mi yol açtığı konusunda karşıt görüşler ve bulgular var. Bu karşıtlığın sebebini bulmak zor olabilir. Yine de pandeminin sağlıklı mı sağlıksız mı beslenmeye yol açtığını sormak yerine pandemi kontekstinde sağlıklı beslenme davranışında etkili olan altta yatan mekanizmaları araştırmak daha değerli olacaktır. Mevcut çalışmanın bir sınırlılığı pandeminin yeme alışkanlıklarındaki etkisini ayrı olarak çalışmamak ya da deneysel olarak kontrol edememektir.

Algılanan davranışsal kontrol ve kontrol inançları sağlıklı beslenme davranışının en güçlü yordayıcılarıydı. İnsanlar sağlıklı beslenmek için kapasiteleri olduğunu düşündükleri ölçüde ve sağlıklı beslenmeyi kolaylaştıran içsel ve dışsal kaynaklara sahip oldukları ölçüde pandemi döneminde sağlıklı beslenme davranışını gösterme ihtimalleri o kadar çok olacaktır.

İnsanlara sağlıklı beslenmeyi kolaylaştıracak dışsal kaynaklar sağlamak sağlıklı beslenme davranışını teşvik etmek için yararlı olabilir. Mevcut çalışma sağlıklı beslenmeyi keyifli bulanların sağlıklı beslenme davranışını göstermeye daha eğilimli olduğunu göstermiştir. Sağlıklı beslenme davranışını teşvik etmek için geliştirilen müdahale çalışmaları yemekten alınan zevk ve keyfe odaklanabilir. Mevcut çalışma öne sürülenin aksine öznel normlar ile niyet arasında istatistiksel olarak anlamlı bir ilişki bulamamıştır. Bu bulgu dikkatle değerlendirilmelidir. Sosyal normların yeme davranışını etkilemediği sonucuna varılamaz. Öznel normlardan niyete giden anlamlı olmayan yol metodolojik sınırlılıklardan kaynaklanabilir. Gelecek araştırmalar sosyal normları sağlıklı beslenmek için algılanan sosyal baskıyı ölçecek şekilde daha iyi kavramlaştırabilir.

Mevcut çalışma sosyal psikoloji literatürüne çeşitli şekillerde katkıda bulunur. Öncelikle pandeminin yeme alışkanlıkları üzerindeki etkisini bireysel, sosyal ve çevresel faktörlerin etkileşimi olarak incelemek sosyal psikoloji bakış açısıyla uyumludur. Pandemi gibi zor dönemlerde sağlıklı davranışa yönelmek zorlaşır. Bu nedenle pandemi döneminde sağlıklı beslenme davranışının yordayıcılarını belirlemeye çalışmak sağlıklı beslenmeyi teşvik eden müdahale çalışmalarına ışık tutacaktır. Bu müdahale çalışmaları yemeyi sosyal bir kavram olarak ele almalı ve ilişkili olduğu değişkenlerle beraber incelemelidir. İkincil olarak yemek Türk kültüründe önemli bir yere sahiptir. Yemeğin sosyal, kültürel ve psikolojik yönlerini çalışmak değerli olacaktır.



C. CURRICULUM VITAE



EDUCATION

Degree	Institution	Year of Graduation
BS	Koç University Psychology	2016
High School	Mehmet Emin Resulzade Anadolu High School	2011

WORK EXPERIENCE

Year	Place	Enrollment
2014-2015	Koç University Language and Communication Development Lab	Research Assistant

FOREIGN LANGUAGES

Advanced English

PRESENTATIONS

Sen, H., Altan, S., Karadag, S., Bakir, Z. E., As, G., Kosegil, E., & Kuntay, A. C. (2015, March). *Turn-taking in peers' conversations: Does inhibitory control matter?* Poster presented at the 2015 Society for Research in Child Development Biennial, Philadelphia, the USA.

HOBBIES

Contemporary Dance, Art (Painting, Photography, Literature, Cinema), Sports (Yoga)

D. THESIS PERMISSION FORM / TEZ İZİN FORMU

(Please fill out this form on computer. Double click on the boxes to fill them)

ENSTİTÜ / INSTITUTE

- Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences ☐
- Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences ☒
- Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics ☐
- Enformatik Enstitüsü / Graduate School of Informatics ☐
- Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences ☐

YAZARIN / AUTHOR

Soyadı / Surname : Kösegil
Adı / Name : Ekin
Bölümü / Department : Psikoloji / Psychology

TEZİN ADI / TITLE OF THE THESIS (İngilizce / English): Social Representations of Food and Healthy Eating During COVID-19 Pandemic

TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master ☐ Doktora / PhD ☒

1. **Tezin tamamı dünya çapında erişime açılacaktır. /** Release the entire work immediately for access worldwide. ☒
2. **Tez iki yıl süreyle erişime kapalı olacaktır. /** Secure the entire work for patent and/or proprietary purposes for a period of **two years**. * ☐
3. **Tez altı ay süreyle erişime kapalı olacaktır. /** Secure the entire work for period of **six months**. * ☐

* Enstitü Yönetim Kurulu kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir. /
A copy of the decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

Yazarın imzası / Signature

Tarih / Date

(Kütüphaneye teslim ettiğiniz tarih. Elle doldurulacaktır.)
(Library submission date. Please fill out by hand.)

Tezin son sayfasıdır. / This is the last page of the thesis/dissertation.