

HEALTHY EATING WHEN EATING OUT: A QUALITATIVE
STUDY AMONG MALAY PARENTS IN KEDAH FROM
SOCIAL COGNITIVE THEORY PERSPECTIVE.

BY

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A thesis submitted in fulfillment of the requirement for the degree
of Master of Health Sciences

Kulliyyah of Allied Health Sciences
International Islamic University Malaysia

JUNE 2025

ABSTRACT

Rapid urbanisation in Kedah has led to an increase in eating out, raising concerns about dietary behaviours among families. Despite the health implications, little is known about how Malay parents adhere to healthy eating when eating out. This study aimed to explore Malay parents' perceptions, practices, and perceived barriers to healthy eating when eating out, mapped under the lens of Social Cognitive Theory (SCT). An interpretative qualitative research design was adopted, using purposive sampling to recruit 37 Malay parents (27 females and 10 males) from Sungai Petani, Kedah. Data collection was held between November 2023 and March 2024. In-depth face-to-face interviews were conducted and the qualitative data analysed thematically. Aligned with SCT, the parents' narratives highlighted personal, behavioural, and environmental influences on parental perception, practices, and barriers to healthy eating. Personal factors encompassed Malay cultural and social dimensions of food choices, perceived health benefits, and struggling with cravings and social influences. Behavioural factors were reflected in the parents' nutritional preferences and mindful consumption practices. Environmental factors included sociocultural dynamics, restaurant quality and standards, and the practicality of health guidelines. Many parents demonstrated a positive understanding of healthy eating and actively practised it when eating out. However, parents faced difficulties navigating modern food environments dominated by "viral" and visually appealing foods. These findings highlight the reciprocal interaction of personal, behavioural, and environmental influences on food choices when eating out. This study offers culturally grounded insights for the field of health psychology, informing tailored nutrition education, behavioural interventions, and health promotion strategies. Such efforts can support interventions that consider the psychological, social, and environmental realities of eating out, enabling healthier decision-making among parents in diverse food settings.

ملخص البحث

أدى التوسع الحضري السريع في ولاية فدح إلى زيادة في تناول الطعام خارج المنزل، مما أثار مخاوف بشأن السلوكيات الغذائية لدى الأسر. ورغم الآثار الصحية المترتبة على ذلك، لا يُعرف الكثير عن كيفية التزام الآباء الماليزيين بتناول طعام صحي عند تناول الطعام خارج المنزل. هدفت هذه الدراسة إلى استكشاف تصورات الآباء الماليزيين وممارساتهم والعوائق التي يرونها أمام تناول الطعام الصحي عند تناول الطعام خارج المنزل، وذلك من خلال منظور النظرية المعرفية الاجتماعية. اعتمد البحث على تصميم بحث نوعي تفسيري، باستخدام أخذ عينات هادف لاستقطاب 37 من الآباء الماليزيين (27 أنثى و10 ذكور) من سونغاي بيتاني، قدح. جُمعت البيانات بين نوفمبر 2023م، ومارس 2024م. أُجريت مقابلات شخصية معمقة، وحُللت البيانات النوعية موضوعيًا. وتماشيًا مع النظرية المعرفية الاجتماعية، سلّطت روايات الآباء الضوء على التأثيرات الشخصية والسلوكية والبيئية على تصورات الآباء وممارساتهم والعوائق التي تحول دون تناول الطعام الصحي. شملت العوامل الشخصية الأبعاد الثقافية والاجتماعية الماليزية لاختيارات الطعام، والفوائد الصحية المتصورة، ومعاناة الرغبة الشديدة في تناول الطعام والتأثيرات الاجتماعية. وانعكست العوامل السلوكية في تفضيلات الوالدين الغذائية وممارساتهم الاستهلاكية الواعية. وشملت العوامل البيئية الديناميكيات الاجتماعية والثقافية، وجودة ومعايير المطاعم، ومدى تطبيق الإرشادات الصحية عمليًا. أظهر العديد من الآباء فهمًا إيجابيًا للتغذية الصحية وممارستها بنشاط عند تناول الطعام في الخارج. ومع ذلك، واجه الآباء صعوبات في التأقلم مع بيئات الطعام الحديثة التي تهيمن عليها الأطعمة "الفيروسية" والجذابة بصريًا. تُسلط هذه النتائج

الضوء على التفاعل المتبادل بين التأثيرات الشخصية والسلوكية والبيئية على خيارات الطعام عند تناول الطعام في الخارج. تُقدِّم هذه الدراسة رؤى ذات أساس ثقافي في مجال علم نفس الصحة، تُثري التفهيم الغذائي المصمَّم خصيصًا، والتدخلات السلوكية، واستراتيجيات تعزيز الصحة. يمكن لهذه الجهود أن تدعم التدخلات التي تُراعي الحقائق النفسية والاجتماعية والبيئية لتناول الطعام في الخارج، مما يُتيح اتخاذ قرارات صحية أفضل بين الآباء في بيئات طعام متنوعة.



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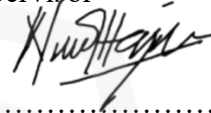
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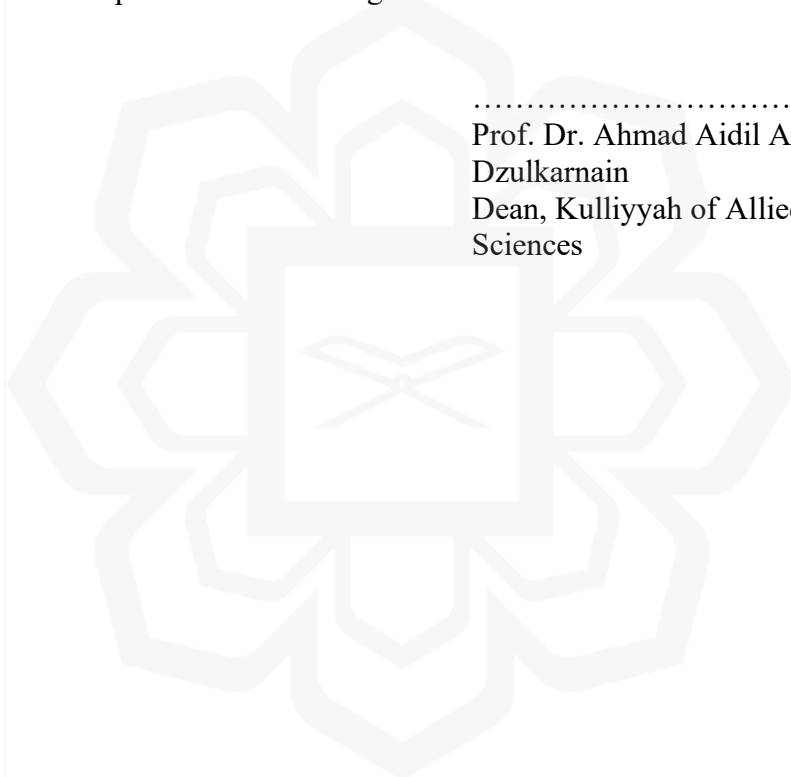
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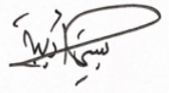
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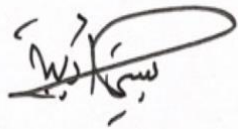
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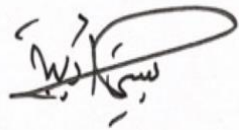
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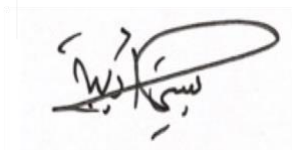
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This thesis is dedicated to my family, friends, and myself.

Juga buat orang-orang yang tangguh, sabar dan nyala hatinya dalam kehidupan.

ACKNOWLEDGEMENTS

All glory is due to Allah, the Almighty, whose Grace and Mercies have guided me throughout the duration of my programme. Though this journey has been challenging, His endless blessings and kindness eased the herculean task of completing this thesis. Alhamdulillah. I am most indebted to my supervisor, Asst. Prof. Dr. Muhamad Ariff Ibrahim, whose enduring patience, kindness, promptitude, thoroughness, and friendship have been instrumental in the successful completion of this work. I deeply appreciate his detailed comments, insightful suggestions, and inspiring questions, which have considerably improved the quality of this thesis. His brilliant understanding of the aim and content of this research helped me tremendously. Despite his numerous commitments, he always made time to listen and support me whenever needed. The moral support he extended has been a driving force in building and writing this research. I am also profoundly grateful to my co-supervisor, Assoc. Prof. Dr. Aliza Haslinda, who has consistently supported my research journey, and Asst. Prof. Dr. Nurul Hazirah Jaafar, with endearing support and feedback, has helped with my progress. My sincere thanks also go to Asst. Prof. Dr. Nurulwahida Saad always demonstrated warmth and care during my postgraduate studies which contributed greatly to the outcome of this work.

Lastly, my deepest gratitude goes to my family and friends for their prayers, understanding, and patience. To my Ayah, Waisulqrnai Bin Isa, your perseverance, resilience, and hard work have inspired me to embrace passion and purpose in life. To my Mommy, Izah Binti Ramli, your unwavering support always enlightened me, especially in moments when I felt lost in my life. Despite my weaknesses and shortcomings, thank you both for never giving up on me. To my adik, Muhammad Haziq, thank you for the sacrifices you've made for me since childhood. You mean the world to me. To Mey, thank you for always being there and patiently listening to my academic complaints, even when they made no sense to you. You made me feel heard and seen. A special thanks to Fit, Mir, Aini, and Hanis, words cannot fully express how grateful and blessed I am to have you in my life. From the very beginning to the finish line, you stood by me, validating my efforts and emotions, and giving me the strength to keep going. You are my saviors. Thank you for offering your wholesome and unwavering support. Without you, this journey would have been so much harder. To all the people who directly and indirectly supported me, thank you.

I also wish to thank the Kulliyah of Allied Health Sciences at the International Islamic University Malaysia, Kuantan, for providing the resources, guidance, and a conducive environment to conduct this research. This journey has been both challenging and rewarding, offering me growth opportunities both academically and personally. It has made me reflect deeply on myself, and I am forever grateful for the guidance and support I received along the way. Once again, we glorify Allah for His endless mercy, which has allowed me to complete this thesis successfully. Alhamdulillah. I pray that everyone who has shown kindness to me will be rewarded with Jannatul Firdaus. While I may not have anything valuable to offer, my sincere prayers will always be with you all.

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LIST OF ABBREVIATIONS

NCD	Non-Communicable Diseases
SCT	Social Cognitive Theory
NHMS	National Health Morbidity Survey
TPB	Theory of Planned Behaviour
HBM	Health Belief Model
FoMO	Fear of Missing Out



CHAPTER ONE

RESEARCH BACKGROUND

1.1 INTRODUCTION

A healthy eating pattern plays a crucial role during childhood, as it supports holistic growth and development, which includes physical, cognitive, emotional, and mental well-being (Brushett et al., 2024; Wu et al., 2022). It involves consistent food choices that provide sufficient energy and essential nutrients to meet developmental needs. Establishing such patterns early in life can contribute to long-term health benefits and help prevent nutrition-related conditions such as obesity and non-communicable diseases (NCDs). In line with this, the Ministry of Health Malaysia (2021), through the Malaysian Dietary Guidelines 2020, defines a healthy diet as one that promotes the appropriate balance of energy and nutrients. This includes regularly consuming a variety of foods from all major food groups in recommended portions, while limiting the intake of fats, sugars, and salt.

Maintaining such dietary patterns from a young age is associated with positive long-term health effects (Calcaterra et al., 2024; Hart et al., 2022; López-Gil et al., 2024). In contrast, poor eating habits during childhood increase the risk of chronic illnesses in later life, including diabetes mellitus, hypertension, cardiovascular diseases, sleep disorders, and even mental health issues (Abdoli et al., 2023; Adan et al., 2019; Du et al., 2021; Calcaterra et al., 2023; Giontella et al., 2019; Powell-Wiley et al., 2021). The increasing prevalence of unhealthy eating behaviours is further influenced by modern lifestyle factors such as the availability of unhealthy foods, a culture of eating out, time constraints among working parents, and the omnipresence of food marketing have influenced people to practice unhealthy eating behaviour. Thus, eating a balanced, moderate, and varied diet from childhood is essential for promoting emotional well-being, cognitive development, and optimum behavioural performance (Abdoli et al., 2023; Hashim & Saniff, 2020; Roberts et al., 2022).

Disregarding healthy eating can lead to dire consequences for health, for instance, obesity. In Southeast Asian countries, childhood obesity increased by 48% between 2010 and 2016, according to the World Health Organization (2019). Malaysia, in particular,

experienced a growth rate of 9.2% in childhood obesity from 2006 to 2019, and in 2020, obesity among children aged 5 to 17 years old was recorded as high as 29.8% (Institute for Public Health, 2021; Institute for Public Health, 2017). The prevalence of non-communicable diseases in Malaysia has escalated largely due to shifts in dietary patterns. According to the latest statistics reported by the National Health and Morbidity Survey (NHMS) 2023, 54.4% of Malaysian adults are either overweight (32.6%) or obese (21.8%), with the prevalence of abdominal obesity recorded at 54.5%. These figures reflect a 10% increase in overweight, obesity, and abdominal obesity rates compared to 2011, highlighting a growing public health concern. Alarmingly, a similar trend is evident among adolescents. In 2022, the NHMS reported that 14.3% of Malaysian adolescents were obese and 16.2% were overweight, representing an increase of approximately 10% from 2017. This parallel rise across age groups signals a persistent and widening burden of obesity nationwide, raising concerns about the long-term health implications if early preventive measures are not prioritised.

Beyond the immediate health consequences, the growing prevalence of NCDs is closely linked to obesity and imposes a significant economic burden on the country. The effects of non-communicable diseases (NCDs) on Malaysia's gross domestic product (GDP) include lost productivity due to absenteeism, premature deaths, and presenteeism. In response to this burden, the government is forced to allocate substantial financial resources to mitigate its impact. According to the Ministry of Health Malaysia (2020), the total economic cost of NCDs was estimated at RM 64.2-billion-ringgit Malaysia, reflecting the immense strain these diseases place on the national economy. This impact is further highlighted by an estimate from the Ministry of Health (2020), which valued the economic loss from disability-adjusted life years (DALYs) due to cardiovascular disease, diabetes, and cancer at RM100.79 billion in 2017. This reflects in healthcare expenses and the broader economic loss from reduced productivity and premature mortality. To combat these growing concerns, the Ministry of Health Malaysia has introduced Malaysian Dietary Guidelines, including the *Piramid Makanan* or Food Pyramid to promote healthier eating habits. These guidelines recommend a balanced diet, emphasising fruits, vegetables, whole grains, and legumes while limiting the intake of fats, sugars, and salt. In addition to dietary advice, the Ministry also promotes physical activity, portion control or *Suku Suku Separuh*, to curb the rise of NCDs and alleviate their long-term economic and health impact on the nation.

Urbanisation and globalisation have brought significant changes to Malaysia's landscape, prompting shifts in lifestyle and eating behaviours (Department of Statistics Malaysia, 2022). These transitions are reflected in changing meal patterns, with a rising intake of food high in protein, fat, and carbohydrate (Baker & Friel, 2014; Goh et al., 2020; Mohd Hatta et al., 2022; Sarkar et al., 2021). One clear manifestation of these changes is the increasing trend of eating out. Recent findings show that 64.1% of Malaysians consume at least one meal outside the home daily (Poulain et al., 2020). This figure is expected to rise alongside continued sociodemographic improvements, demographic evolution, and the rapid growth of the food service industry.

Eating out, broadly defined as consuming food prepared outside the home, has become increasingly common (Ashari et al., 2022). This practice is frequently associated with higher caloric intake, increased total fat consumption, and inadequate levels of dietary fibre, vitamin C, and essential minerals (Gesteiro et al., 2022; Ju, 2020; Matsumoto et al., 2021). Consequently, frequent eating out poses nutritional risks and may contribute to adverse health outcomes. These concerns highlight the importance of promoting healthy eating practices even when eating outside the home. In this context, the home environment plays a crucial role in cultivating healthy habits, especially among children, who lack the cognitive maturity and self-regulatory capacity to make informed dietary choices (Savage et al., 2007; Scaglioni et al., 2018). As primary role models and gatekeepers of food access, parents hold a pivotal influence over their children's dietary behaviour (Chan et al., 2022). Strengthening parental awareness and involvement in healthy eating, particularly during meals outside the home, is therefore essential for fostering long-term health behaviours in children.

Parental perception plays a pivotal role in shaping the children's dietary behaviours, as it influences how food-related practices, attitudes, and values are introduced and reinforced (Xiang et al., 2021; Prada et al., 2021; Scaglioni et al., 2018). Perception in this context can be understood as the mental construction of reality based on sensory experiences, which informs how parents interpret and respond to their children's nutritional needs (Uccula & Nuvoli, 2017). Parents serve as the prominent role in structuring their children's first experiences with food and eating through their beliefs, food practices, perspectives, eating attitudes, dietary knowledge, and understanding of the nutritional role in health (Romanos-Nanclares et al., 2018). In the Malaysian context, where eating out is common

and diverse food is readily accessible, the influence of parental modelling, food selection, and eating-out practices becomes even more pronounced. Children tend to emulate their parents' food choices and eating behaviours, which in turn shape their preferences, attitudes, and long-term dietary habits (Mahmood et al., 2021; Maia et al., 2025). When parents demonstrate healthy eating, such as consuming fruits and vegetables, choosing balanced meals when eating out, and practising portion control, children are more likely to adopt these habits (Jeżewska-Zychowic et al., 2025; Mahmood et al., 2021; Maia et al., 2025). These everyday practices contribute not only to shaping children's dietary knowledge but also to fostering sustainable healthy eating patterns (Almeida et al., 2021; García-Blanco et al., 2022; Savage, 2007). Additionally, parental feeding styles, whether authoritative, permissive, or controlling, can further determine how children internalise and practise healthy eating (Scaglioni et al., 2018).

From the statistical data on childhood obesity and non-communicable diseases, it is evident that barriers hinder the application of healthy eating in daily life. Perceived barriers can be identified as a person's estimation of the obstacles that impede the behaviour change or execute the desired behaviour (Glasgow, 2008). The barriers to the implementation of healthy eating can be the unavailability of healthy foods, the unpleasant taste of food, the preference for fatty foods and meat, lack of willpower, cost of healthy eating, lack of support or encouragement from others, hedonics, early exposure to the unhealthy eating, lack of time, picky eaters, social influences, expressing identities through food and eating, and taste preferences. (Mc Morrow et al., 2017; Nepper & Chai, 2016; Pinho et al., 2018; Stern et al., 2021; van der Heijden et al., 2021). From the parents' perspective, they would rather eat out because it is convenient, cost-effective, and allows for quality time, avoids food wastage, and allows for indulgent eating (Robson et al., 2016). In Malaysia, this commonly involves frequent visits to hawker stalls, food courts, and casual dining restaurants, where a wide array of affordable and palatable foods is readily available. However, meals in these settings often prioritise taste and portion size over nutritional balance, which may limit healthier choices and contribute to unhealthy eating habits. The ease of access to such food environments encourages frequent eating away from home among families, potentially reinforcing dietary patterns high in sugar, fat, and sodium. Practical alternatives should be suggested to address the barriers families encounter in adhering to healthy eating practices.

In the Islamic framework, nourishment is crucial for preserving bodily and moral well-being. Prophet Muhammad said improper nutrition could result in morbidities, including spiritual illness. Quoted prophet Muhammad says, *“The stomach is the home for all illnesses. Abstinence is the best drug and give your body what you have made it accustomed to”*. Indeed, one should emphasise their eating patterns, food sources, and ethics to preserve their health. Eating healthy can be perceived as one of the good deeds and responsibilities that have been accounted to us as a role of vicegerent to obey Him according to the Qur’an in Surah Dhariyat verse 56: *“I did not create jinn and humans except to worship Me.”*



1.2 PROBLEM STATEMENT

Malaysia is renowned for its diverse and traditional cuisines, earning a reputation as a food paradise in Asia. However, with socioeconomic advancement and the rapid expansion of the food industry, the frequency of eating out among Malaysians has increased significantly (Poulain et al., 2020). While this shift offers convenience and social benefits, it also raises concerns about dietary habits and long-term health outcomes, particularly among families. Malay parents with children aged five to 12 years old play a central role in shaping their children's eating behaviours both at home and in public food settings, acting as primary role models and decision-makers in guiding their children's food choices (Alsharairi & Somerset, 2015; Burke et al., 2019; Watson et al., 2022). However, eating out presents challenges for parents, who must navigate health considerations alongside cultural, social, and practical demands.

Despite national efforts to promote healthy eating, adherence to dietary guidelines remains low among Malaysians. The Malaysian Ministry of Health (2021) introduced the Malaysian Dietary Guidelines, or Panduan Diet Malaysia, originally formulated in 1996 to promote accurate and reliable nutrition information. However, awareness and application remain limited, particularly in the eating-out contexts. In 2019, 79% of Malaysian adults, approximately 17 million, had never heard of the Malaysian Healthy Plate Concept (Mohamad et al., 2023). Among those who were aware of it, only 80.8% (3.5 million) correctly understood the concept, and just 70.5% (2.5 million) reported actively practising it either daily or occasionally. These figures highlight a gap between policy and practice, particularly as eating out becomes increasingly common. Ashari (2022) found that frequent eating out is associated with higher sodium consumption and contributes to non-communicable diseases. Yet, awareness of the importance of adhering to dietary guidelines when eating out remains low. According to Poulain et al. (2020), approximately 64% of Malaysians frequently eat out, suggesting that dining out has evolved into a social activity enjoyed across all age groups. As such, understanding family eating-out practices is crucial, given its prevalence as a contemporary social trend (Abdullah et al., 2015; Wardiyanta et al., 2019).

For parents, eating out presents unique challenges, as they must balance multiple, and sometimes conflicting, goals when making food choices for their children versus themselves. Parents are expected to provide and model healthy eating behaviours as they serve as primary

role models and gatekeepers of the home food environment, particularly during childhood when eating habits are still forming (Linde et al., 2022). According to the Social Cognitive Theory, children learn by observing and imitating significant others, especially their parents (Bandura, 1977). Research has demonstrated that parenting styles have profound impacts on the development of healthy eating behaviours in children, influencing food preferences, self-regulation, and long-term dietary outcomes (Alsharairi & Somerset, 2015; Burke et al., 2019; Burnett et al., 2020; Brown & Roman, 2019; Johnson, 2016; Kasparian et al., 2017; Watson et al., 2022). Therefore, understanding how parents perceive and practise healthy eating, particularly in food environments outside the home, is crucial to promoting sustainable dietary behaviours in children. Moreover, when families eat out, parents often make key decisions about where and what to eat, reinforcing their influential role in guiding healthy eating practices beyond the home.

The Malay community represents the largest ethnic group in Malaysia, accounting for over 63% of the total population (Department of Statistics Malaysia, 2022). Within this community, food is often positioned as a central element of social life, where generous, flavourful, and high-calorie meals are associated with celebration, togetherness, and hospitality. These cultural practices may contribute to more permissive feeding behaviours, particularly when eating out, as parents may allow for greater indulgence in response to the social expectations or to create a pleasurable family experience. Such norms can pose challenges for maintaining healthy eating, especially when parents are balancing their own choices with those of their children. Studies have shown that Malays are more likely to engage in unhealthy dietary behaviours compared to other ethnic groups, with higher preferences for fast food, sweetened beverages, and fried snacks, and lower intake of fruits and vegetables (Abdullah et al., 2016; Eng et al., 2022). Malay children, in particular, have been identified as vulnerable to obesity and unhealthy eating environments (Chee Cheong et al., 2019).

In light of these challenges, this study aims to explore how Malay parents of children aged 5 to 12 navigate food choices when eating out, particularly in balancing health considerations for their children versus themselves. While existing researches have examined general dietary habits, school-based nutrition programs, and university students' eating behaviours, little attention has been given to how Malay parents navigate food choices in eating-out contexts (Amore et al., 2019; Banna et al., 2016; Eng et al., 2022; Gunasekaran

et al., 2018; Hilger-Kolb & Diehl, 2019; Lambert et al., 2019; Mamun et al., 2020; Mete et al., 2019; Mohammadi et al., 2020; Nordin et al., 2023; Rashid et al., 2022; Sharif Ishak et al., 2020; Shyam et al., 2020; Teo et al., 2019; Yunus et al., 2022). Using Social Cognitive Theory (SCT), this study explores how personal, behavioural, and environmental factors interact to shape parental practices on healthy eating when eating out. Understanding their perceptions, practices, and barriers can provide valuable insights into strategies for promoting healthier eating habits among Malay families when eating out.

1.3 RESEARCH QUESTIONS

These are the research questions that arise based on the problem statement for the research topic of exploration of perception, practices, and perceived barriers among Malay parents towards healthy eating when eating out:

1. What are the perceptions, practices, and perceived barriers to healthy eating when eating out from the perspective of Malay parents?
2. How do personal, behavioural, and environmental factors, as conceptualised in Social Cognitive Theory interact to be implemented into healthy eating when eating out among Malay parents?

1.4 RESEARCH OBJECTIVES

The current study aims to explore Malay parents' perceptions and practices of healthy eating when eating out, as well as the perceived barriers to such behaviours. Specifically, the study will pursue the following objectives:

1. To explore Malay parents' perceptions, practices, and perceived barriers to healthy eating when eating out.
2. To apply Social Cognitive Theory to determine the interrelation of personal, behavioural, and environmental factors in shaping healthy eating perceptions, practices, and perceived barriers when eating out.

1.5 SIGNIFICANCE OF THE STUDY

This study is valuable as it holds significant theoretical, methodological, and practical implications for both the health psychology field and broader society. It provides a recent view on how Malay parents define and manifest healthy eating while eating out, while advancing the field by exploring cultural influences on dietary behaviours and providing insights for promoting healthier eating habits in communities.

The present study makes a theoretical contribution by applying the Social Cognitive Theory (SCT) to explore the factors influencing the perception, practice, and perceived barriers of Malay parents towards healthy eating when eating out. By incorporating the core theoretical construct of SCT, reciprocal determinism, the research provides a comprehensive framework to comprehend the intricate interplay between personal factors, environmental factors, and behaviour in the context of healthy eating practices among parents and children when eating out. This study extends the existing body of knowledge on health psychology by focusing on how Malay parents adhere to healthy eating behaviours in the context of eating out. Integrating Social Cognitive Theory (SCT) constructs would allow for a nuanced understanding of the individual, social, and environmental factors that shape parental attitudes, behaviours, and decision-making processes concerning healthy eating during eating out with their children.

The practical implication of this research lies in the insight into the Malay parents' practice of healthy eating when eating out. Their execution will be additional information on factors that influence their food choices when eating out. Also, as this study will locate the environmental factors that influence food choices outside, these findings will help the local health policymakers and service providers to design culturally relevant interventions and support systems, particularly for Malay parents, while also offering insights that may be adapted to similar sociodemographic contexts. The attachment of Malay cultural tradition in the health initiatives and policies can enhance in enhancing the relevance and effectiveness, ultimately in promoting the well-being and quality of life among Malay parents and their children.

The methodological significance of this study lies in its qualitative approach, which enables an in-depth exploration of individuals' subjective perspectives on healthy eating when eating out. This approach allows for the collection of rich, nuanced data on eating

patterns, and compliance with healthy behaviour, providing a comprehensive understanding of the factors influencing healthy food choices. Given the rising prevalence of eating out in Malaysia, this study also highlights the importance of examining this practice within its specific cultural and environmental context. Additionally, the qualitative design facilitates an exploration of the perception, practices, and barriers that are experienced by the Malay parents, offering insights into their decision-making processes. Moreover, this study contributes to a deeper appreciation of unique cultural influences exercised within Malay parents shaping food preferences and eating behaviours while eating out.

In summary, this study has provided valuable insights into Malay parents' perceptions, practices, and perceived barriers related to healthy eating when eating out. The findings contribute to the existing knowledge base, offer practical implications for policymakers, and demonstrate the significance of employing qualitative methodologies in understanding the unique cultural context of Malay communities. Overall, this research has paved the way for further exploration and intervention in promoting healthier eating behaviours among Malay parents and their children in the context of eating out. This study is the first to report on the perceptions, practices, and perceived barriers to practicing healthy eating while eating out among Malay parents in Kedah.

1.6 THEORETICAL FRAMEWORK

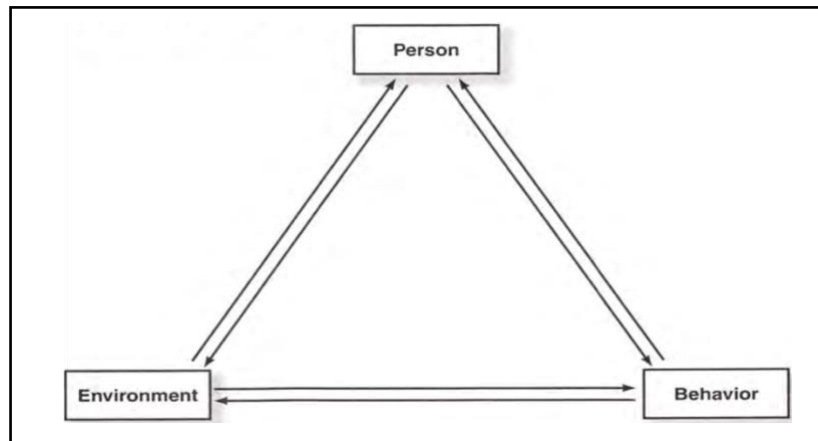


Figure 1.1 Social Cognitive Theory

Source: Social cognitive theory and of self-efficacy: for motivation and practice (Stajkovic, & Luthans, 2003).

Albert Bandura introduced Social Cognitive Theory (SCT) in the late 1950s as an approach rooted in observation, social learning, and aggressive behaviour (Hayden, 2014). Social Cognitive Theory (SCT) posits that individual behaviour is shaped by a dynamic interplay of personal, behavioural, and environmental factors which know as reciprocal determinism (Bandura, 1977). This framework emphasises that individuals are not merely passive recipients of environmental influences but active agents in their learning processes (Bandura, 2023). The point of this approach is that changing one of these factors changes all of them and, therefore, their behaviour. Glanz et al. (2008) also emphasise that this theory focuses on people's potential abilities to alter and construct their environments to suit the purposes they devise for themselves. Additionally, SCT emphasises collective efficacy representing shared beliefs in the power to produce desired effects by collective collection (Bandura, 2002).

Social cognitive theory has been adopted to guide this study to answer the research questions on how personal, behavioural, and environmental factors influence an individual to practice healthy eating when eating out. The theory offers a comprehensive framework for understanding the factors that influence human behaviour and the processes through which the behaviour takes place in the context. Based on reciprocal determinism comprised of personal, environment, and behaviour, the parents' personal factors in this study will be identified as their cognitive abilities, knowledge, values, goals, beliefs, personal experiences,

expectations, and any internal characteristics of an individual that influence their behaviour (Gifford, 2014). Their personal view about their eating pattern and food intake (or healthy behaviour) will be captured through an open-ended question that they might be asked about the perception of healthy eating when eating out, goals of healthy eating when eating out, perceived benefits of healthy eating, knowledge on the healthy eating and nutritional guidelines, perception of accessibility and availability of healthy choices when outside, and the influence of personal belief related to religion, culture, and societal norms. Their sociodemographic are also included as the personal components which are believed to impact the desired behaviour, healthy eating while eating out.

These personal factors, particularly in the Malay Malaysian context, are shaped by the interplay between cultural heritage and religious practices. A study found that religious behaviour directly influences health-related lifestyle choices among Malaysian Muslims, highlighting the importance of faith in daily eating habits (Hassan, 2015). Resonating with another study conducted by Hamzah et al. (2019) demonstrated that cultural heritage and religious practice significantly influence personal beliefs regarding healthy eating. The Malay community's perception of food quality, cleanliness, and food safety has been focusing on the *halalan tayyiban* (permissible and wholesome) as per Islamic principles (Abdullah, 2019). Thus, in this study, Social Cognitive Theory (SCT) provides a robust framework to explore how these personal factors interact with the behavioural and environmental factors to influence healthy eating practices among Malay parents in eating-out contexts. This theoretical framework highlights the importance of understanding not just what parents eat but why and how the dynamic interplay of internal and external influences shapes their choices

Next, the behavioural factors were denoted as the individual behaviour in certain learning situations, both influenced and influenced by environmental and personal factors (Bandura, 2023). In this study, healthy eating while eating out can be explored through interrogating the parents on the food choices when eating out, the readiness to adopt healthy eating, adherence to local nutritional and religious guidelines, and any parents' behaviour related to the practice of healthy eating while eating out. By exploring parents on these behaviours, this study seeks to uncover patterns in their decision-making process and readiness to prioritise healthier options when eating out. These insights will contribute to a deeper understanding of how parents influence their children's food choices in out-of-home

settings, aligning with the Social Cognitive Theory's which emphasise the reciprocal relationship between behaviours, personal, and environmental factors (Bandura, 1977). Exploring these behavioural factors provides a foundation for promoting collaborative and sustainable healthy eating practices among families, offering a pathway to address broader public health challenges related to dietary habits. Adherence to healthy behaviours such as making healthy food choices requires both intrinsic motivation and external support (Deslippe et al., 2023; Liu et al., 2023; Sirasa et al., 2019; Sharma & Agrawal, 2017; Waisulqrnai et al., 2024). Thus, understanding these patterns offers valuable insights into designing interventions that promote resilience against external pressure, enabling families to maintain healthier eating habits even in challenging eating-out contexts.

Additionally, environmental factors refer to the factors that can influence a person's behaviour (Bandura, 1977). Food culture, food trends, family and peer influences, health policy and guidelines, accessibility, affordability, and mass campaigns all make up for the environmental factors that might affect their practicability of healthy eating. The environmental factors must be reviewed as they can provide a framework for understanding how this reciprocal determinism leads to healthy eating among parents and children (Colón-Ramos et al., 2017; Yunus et al., 2022). Lastly, Social Cognitive Theory has been known to revolve around a central concept entitled self-efficacy, which Bandura (1977) defines as one's estimation of one's ability to do something. This study solely focuses on the concept of reciprocal determinism as Bandura (1977) further proposed that self-efficacy does not always result in actually performing the behaviour instead integrating the dynamic interplay of the personal, behavioural, and environmental factors will offer a comprehensive understanding of the complexities behind healthy eating practices among Malay parents when outside of the home.

1.7 CONCEPTUAL FRAMEWORK

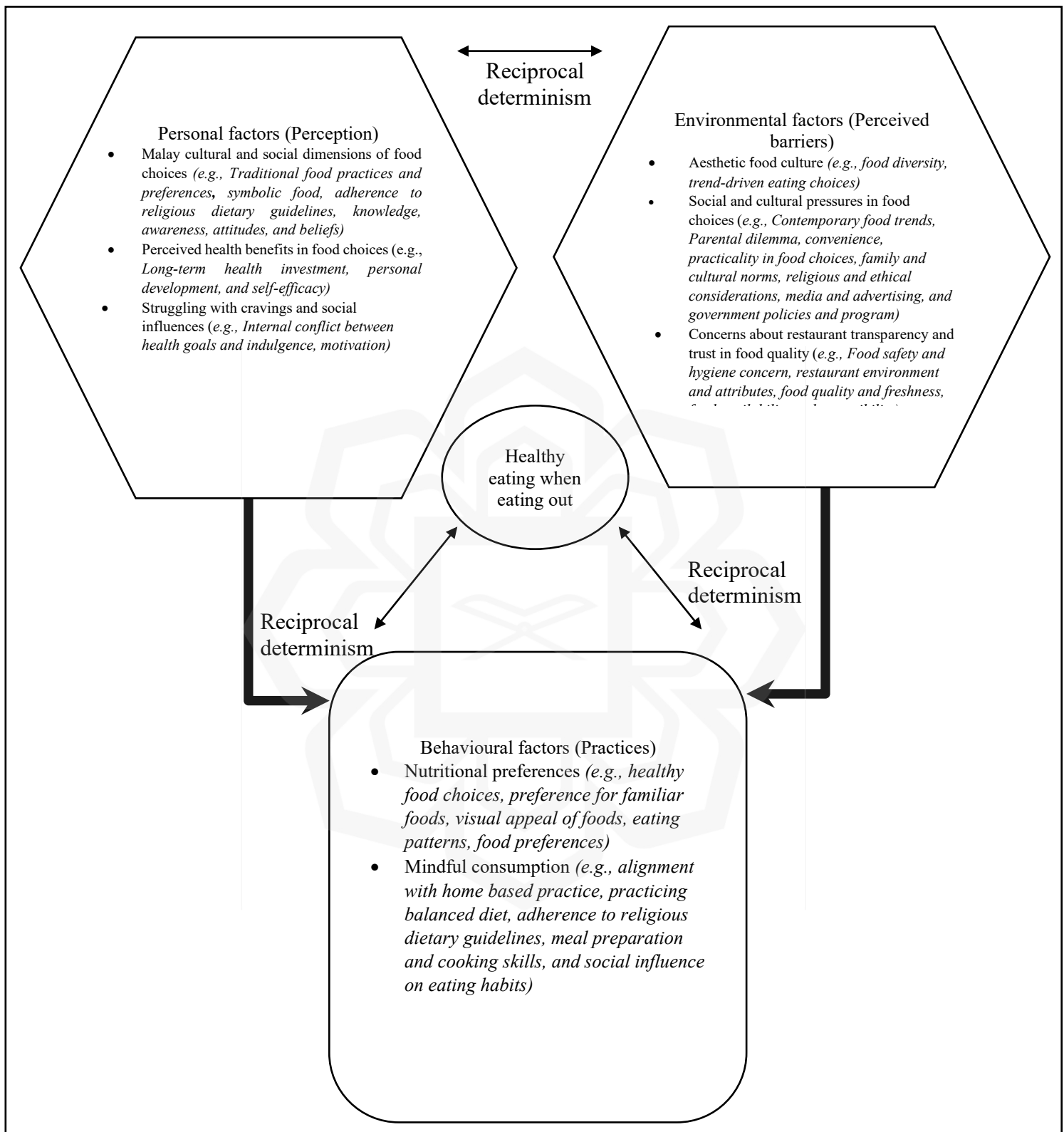


Figure 1.2 A conceptual framework of healthy eating when eating out among Malay parents based on the Social Cognitive Theory

This study adopted reciprocal determinism (RD) as the conceptual framework guiding this study based on the study's objectives in exploring the psychosocial phenomena of intrapersonal development, interpersonal interactions, and interactive environment functioning (Bandura, 1978). This study postulates that individuals can modify and create environments that align with their desired qualities; hence, this approach has been chosen to explain how the perceptions, practices, and perceived barriers among the parents regarding healthy eating are shaped by their personal factors, environment, and barriers in their life context.

The reciprocal relationship between personal, behavioural, and environmental determinants provides a structured lens to explore the Malay parents' healthy behaviour adherence in food selection when eating out. Personal factors such as cultural values, health beliefs, knowledge motives, personality traits, goals, expectations, preferences, and internal constructs shape perceptions of healthy eating (Ettridge et al., 2023; Cheikh Ismail et al., 2025; Hamzah et al., 2019; Zwierczyk et al., 2022). The parents' perceptions towards healthy eating may influence food preferences, expectations, readiness to practice healthy eating, and concerns about eating patterns among the children. For instance, parents who believe a healthy eating pattern is vital for their children's well-being may be more motivated and ready to seek healthy options when eating outside the home.

On the other hand, behavioural determinants are vital in understanding the practice of eating behaviours among parents when eating out. The behaviour in the reciprocal determinism concept relates to the strategies implemented by the parents, which are the strategies aimed at controlling unhealthy eating behaviour while eating out. Food choices, food preferences, and mindful consumption have been included as the behavioural factors influencing the practice of healthy eating (Baradia & Gosh, 2021; Laureati, 2022; de Tomas et al., 2022). As highlighted by Mahmood et al. (2021), which found that parental dietary behaviours and practices significantly shape children's eating habits, underscoring the importance of creating a healthy family food environments inside and outside the home that accommodate optimal child development and help attenuate non-communicable diseases.

Lastly, the environmental determinants include the social context, roles, relationships, and models in the settings. The environmental factors can be referred to as the food culture, guidelines for healthy eating, availability of healthy options, peer pressure, and social media (Kvalsvik et al., 2021; Mingay et al., 2021; Sina et al., 2022; Thomas &

Crankurt, 2024; Zhou et al., 2023). One decisive environmental factor affecting the parents' perceptions and practices is the availability and accessibility of healthy food options. In Peninsular Malaysia, 945 fast-food outlets and 388 supermarkets were identified (Chee Cheong et al., 2019). Additionally, Sinar Harian mentioned that approximately 179,000 restaurants and eateries were available in Malaysia in 2020. This number suggested that the range and quality of healthy food options when eating out can vary significantly, profoundly affecting parents' dietary choices. Research has shown that the proximity of fast food outlets contributes to the likelihood of being overweight among children (Chee Cheong et al., 2019). This demonstrates that the accessibility and availability of healthy food options in the settings are essential, as it will influence the parents' decision on what to feed their children, which can affect their children's health. Therefore, addressing the environmental factors to healthy eating is crucial to prevent the establishment of an obesogenic or poor food environment.

The conceptual framework demonstrates that the concept of healthy eating behaviour while eating out can be contributed by the construct of the social cognitive theory, which is reciprocal determinism. This integration posits the bi-directional and reciprocal interaction between personal factors, behavioural patterns, and environmental factors, shaping desired behaviour, which is about adherence to healthy behaviour in the external settings. Exploring this reciprocity is cardinal as it offers a comprehensive and nuanced understanding of the realities parents encounter in attempting to practice healthy eating behaviours among their children.

1.8 DEFINITION OF TERMS

The following terminologies were defined in two contexts: theoretical and operational.

1.8.1 Definition of Eating Out

Different contexts define eating out diversely. In this context, eating out can be elucidated as consuming foods prepared outside of the home by any food vendor at the food premises (Zang et al., 2018). According to the Institute of Public Health in the report of the National Health and Morbidity Survey (2017), eating out is eating at a restaurant or hawker stall, and it does not include buying outside food and eating it at home.

Operationally, eating out in this study refers to the practice of consuming food prepared outside the home, such as at a restaurant, food stall, food court, café, or any other food outlet where patrons consume food on-site (including fast foods). The consumers must dine in and sit at the food outlets. The definition excludes food obtained via delivery, take-away, or drive-through services when consumed off-premises.

1.8.2 Definition of Healthy Eating

Ogden (2010) described healthy eating as a balanced and varied diet high in fruit and vegetables, complex carbohydrates, and low in fat. Malaysian Dietary Guidelines (2020) defined healthy eating as a healthy diet combining energy and nutrients properly. The four characteristics of a healthy diet are varied, adequate, balanced, and moderate. Referring to the Dietary Guidelines for Americans 2020-2025 (2020) suggests healthy eating based on the types and proportions of foods Americans of all ages, genders, races, and ethnicities typically consume, but in nutrient-dense forms and appropriate amounts. According to Rarback (2013), a healthy diet preserves well-being and lowers the risk of developing chronic diseases, including obesity, cancer, heart disease, and diabetes.

Qualitatively, healthy eating was captured by interviewing Malay parents about their perceptions of the concept of healthy eating. This includes healthy eating concepts, portion size, Malaysian food pyramid intake, health outcomes, food selection, number of serves consumed, and food preferences. Healthy eating will be included as identifying specific foods, the presence of micronutrients and macronutrients (carbohydrates, protein, and from the food groups), the occurrence of consumption (balanced, moderate, and variety), the

perceived value of the food (good vs. bad), and intention of the practice (benefits vs. barriers) (Metz et al., 2019).

In contrast, unhealthy eating typically refers to the frequent consumption of energy-dense foods but nutrient-poor, those high in added sugars, saturated and trans fats, and excessive sodium. While this study does not include laboratory-based analysis to measure the exact nutritional content of foods consumed, the classification of certain dishes as “unhealthy” is based on established nutritional literature and dietary guidelines. Foods such as deep-fried items, processed meats, sweetened beverages, and rich or creamy gravies are commonly understood, both in public health discourse and everyday practice, to be less healthy. In addition, this study also considers parents’ perceptions of what constitutes unhealthy food, such as dishes described as oily, overly sweet, or heavy, which are aligned with these broader nutritional indicators.

1.8.3 Definition of Perceptions

Perception can be identified as a process by which one interprets and organises sensations to produce a meaningful and recognisable experience of the world (Blackman & Kvaska, 2011; Mendoza, 2018; Malim & Birch, 1998). Operationally, the identification of perception can be achieved by exploring the interplay of personal, behavioural, and environmental factors that shape parents’ perceptions of healthy eating and the practice of eating out.

1.8.4 Definition of Practice

According to the Kamus Dewan Bahasa Edisi Keempat (2005), practice is defined as something carried out as a habitual practice. The present study operationalised practice as the parents’ behaviours in practising healthy eating while eating out.

1.8.5 Definition of Perceived Barrier

The perceived barrier can be depicted as a person’s estimation of the obstacles that impede the behaviour change or execute the desired behaviour (Glasgow, 2008). Most of the studies did not correctly mention and address the definition of the perceived barrier, as they expected the readers to know the construct. Operationally, the perceived barriers will be confined as a construct that impedes the parents from practising healthy eating while eating out.

1.8.6 Definition of Parents

Parents are commonly called individuals responsible for nurturing and educating their children from birth through childhood to adulthood (Baharudin & Ibrahim, 2008). In this study, the term parents specifically refers to Malay mothers or fathers who are the biological parents of at least one child aged 5 to 12 years old.

1.8.7 Definition of Children

Children, according to the Ministry of Women, Family, and Community Development Malaysia (KPWKM), are individuals below the age of 18, as stipulated in the Convention on the Rights of the Child and the Child Act 2001. For this study, children are categorized as individuals aged from 5 to 12 years old. This age range includes both school-going and non-schooling children as long as they fall within the defined age bracket.

1.9 SUMMARY

This chapter has provided an overview of the research background, emphasizing the importance of healthy eating particularly in the context of eating out among Malay parents in Kedah. It highlighted the prevalence of eating out as a social and cultural trend and the associated health risks posed by the unhealthy dietary patterns. The research problem was introduced, focusing on the set of perceptions of the parents about the practice healthy eating and the established healthy practices that practiced by the parents in external setting accompanied the barriers Malay parents face in practicing healthy eating when eating out. This chapter also outlined the research questions and objectives, which aim to explore the perceptions, practices, and barriers to healthy eating when eating out, as well as the application of Social Cognitive Theory constructs; personal, behavioural, and environmental, in shaping these practices. Lastly, this chapter also posited the study as a vital contribution to promoting healthier eating behaviour within specific cultural and social frameworks in Kedah.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter aims to provide an overview of the literature that is relevant to the exploration of healthy eating generally and among parents. Firstly, the first section of the literature seeks to define healthy eating, emphasising the importance of healthy eating, while also exploring the broader geographical and cultural context of Kedah. This includes examining the dietary patterns among Malay parents. Next, the chapter extended into the elaboration of the theoretical framework that guides this study, focusing on Social Cognitive Theory (SCT). This section highlights key constructs of SCT which are personal, behavioural, and environmental factors that shape an individual's health behaviours and provide insights into how Malay parents' perceptions and barriers to healthy eating when eating out can be better understood.

Finally, this chapter discussed parents' perceptions and practices related to healthy eating, emphasising the barriers they encounter in promoting healthier food choices within the family context. This includes personal, environmental and social barriers, which are prominent for understanding the challenges parents face in encouraging healthy eating habits, particularly when eating out. By synthesising these diverse areas of research, this chapter sets the foundation for examining how external and internal factors intersect to influence healthy eating behaviours among Malay parents in Kedah.

2.2 HEALTHY EATING

The importance of dietary patterns for a human being has been publicly discussed by previous literature to emphasise the contribution to the quality of well-being (Dolui et al., 2023; Gropper, 2023; Wang et al., 2023). The dietary pattern has gained attention because the nutrients and food intake will produce synergistic health outcomes. Healthy dietary patterns or eating have been the utmost recognised as the dietary patterns that contribute to human functioning, mortality outcomes, optimal well-being, and development (Jonsson et al., 2024; Lengelé et al., 2023; Nasab et al., 2023; Oncina-Cánovas et al., 2024; Zhang et al., 2024). National Coordinating Committee on Food and Nutrition Ministry of Health Malaysia (2023) defined healthy eating as a dietary pattern that is abundant in vital nutrients and

characterised by balance, variety, moderate, and adequacy. Healthy eating is a complex and ever-changing concept, shaped by sociocultural, historical, and individual influences. Moreover, Banna et al. (2016) emphasised that opinions about healthy eating were subjective and influenced by sociocultural norms and personal beliefs. It is vital to acknowledge that eating is not just about satisfying hunger; it also shapes our quality of life and daily functioning (Heidari et al., 2023; Firth et al., 2020; Manoogian et al., 2019; Wu et al., 2022).

A study by Hart et al. (2015) described healthy eating from parents' perspective as variety, balance, and including a range of foods and limiting the intake of sugar, salt, and processed foods. Meanwhile, according to Cena and Calder (2020), a healthy diet can be denoted as one in which macronutrients are ingested in proper quantities to support energetic and physiologic needs without excess intake while also supplying sufficient micronutrients and hydration to meet the body's physiological needs. In another study by Mete et al. (2019), adults defined healthy eating as food choices, perceptions of their own food choices, and facilitators and barriers to healthy food choices. Perceptions of healthy eating were largely dependent on food choices, with fruits and vegetables frequently regarded as components of healthy eating (Alissa, 2024; Paquette, 2005; Mohammadi et al., 2021; Sharif Ishak et al., 2020). A study by Plasek et al. (2020) found that the perceived healthiness of foods can be accounted for by the health labels and claims, the type of product, the design and colour of the packaging, the product's ingredients, the organic sources of the product, and the taste and sensory features of the products. Apart from that, moderation and balance are also recognised as key aspects of healthy eating, extending beyond mere food classification (Banna et al., 2016; Coumans et al., 2021; de Moraes Prata Gaspar et al., 2024). Moreover, healthy eating involves not only the selection of foods but also the manner of their preparation and consumption (Coumans et al., 2021; Rafacz, 2019).

The understanding of healthy eating evolves around cultural influences, economic position, changing lifestyles, the roles of food, social status, and its significance in health and disease prevention, demonstrating the uniqueness of dietary practices within different societies (Cena & Calder, 2020; Francis-Granderson & McDonald, 2018; Ishak et al., 2020; Hazley et al., 2024; Monterrosa et al., 2020; Taverno Ross et al., 2018; Paquette, 2005; van der Heijden et al., 2021). These social constructs highlight that healthy eating practices can vary widely and are often shaped by personal, behavioural, and environmental factors. While the definition of healthy eating emphasises the concept of balance, moderation, and inclusion

of fruits and vegetables, these ideals often conflict with the realities of eating out in Malaysia. Malaysian cuisine is often characterised by flavourful dishes that are high in fats, sugar, and salt, which are frequently cited as barriers to healthy eating (Perry, 2017; Ismawati Sharkawi et al., 2014; Zainal Arifen et al., 2024; Zainal Badari et al., 2012). For instance, street fried foods, local desserts (*kuih muih*) such as *kuih peneram*, *kuih bunga pudak*, *kuih dangai*, and *pek nga*, and hawker foods like *nasi campur*, *laksa Kedah*, and *ais batu campur (ABC)* make it challenging to align with the balanced dietary patterns (Ministry of Health, 2023; Hart et al., 2015).

2.3 IMPORTANCE OF HEALTHY EATING

The significance of healthy eating is widely acknowledged, as it plays a crucial role in maintaining good health and preventing various chronic diseases (Calder et al., 2020; Dolui et al., 2023; Gropper, 2023; Proia et al., 2021; Wang et al., 2023). Researches indicated a direct correlation between dietary intake quality and physical health, mental well-being, and overall quality of life across diverse cultures and regions, including Kedah, Malaysia (Deligiannidou et al., 2024; Muscaritoli, 2021; Wan et al., 2024; Wang et al., 2024). A balanced diet, comprising fruits, vegetables, lean proteins, and whole grains, significantly contributes to maintaining a healthy body weight and optimal bodily functions (Dreher, 2018; Wang et al., 2020; Wu, 2016). Essential nutrients such as omega-3 fatty acids, antioxidants, and vitamins are vital for brain health, affecting mood regulation and cognitive function (Fauzy et al., 2023; Huiberts & Smolders, 2021). Within Malay families, traditional diets rich in fish, local fruits, and vegetables are not only beneficial for physical health but also support mental health, thereby enhancing learning outcomes and emotional well-being (Dharmayani et al., 2022; Tajik et al., 2017).

Kedah, where rice is a staple, incorporates other locally sourced foods that can prevent common nutritional deficiencies and combat health issues such as diabetes, overweight, hypertension, and hypercholesterolemia, which are prevalent in the region (Dipti et al., 2012; Hami et al., 2021; Institute for Public Health (IPH), 2020; Syed Soffian et al., 2019). For children in Kedah, a diet that supports optimal growth and development is crucial. Nutrient-rich meals contribute to stronger immune systems, healthier physical growth, and cognitive development, laying a foundation for lifelong health and educational achievement. Beyond individual health, the societal benefits of healthy eating are immense, including reduced healthcare costs and increased productivity. This can be seen from a study

conducted on the estimation of the economic burden cost attributable to chronic disease in not meeting the food recommendations in Canada, which took up to CAD\$13.8 billion per year, direct health care cost: CAD\$5.1 billion, indirect health care cost: CAD\$8.7 billion (Lieffers et al., 2018). Through the Malaysian landscape, the direct healthcare cost of noncommunicable diseases in Malaysia revealed that the cost to the Malaysian economy exceeded RM 9.65 billion (Ministry of Health Malaysia, 2022). The high cost is a national burden and a sign of underlying systemic issues related to food environments, policies, and societal norms that urgently need to be addressed. Nonattainment of healthy behaviour issues, such as healthy eating, has a grave impact on the human ecosystem, highlighting the importance of the healthy eating notion to be advertised.

2.4 HEALTHY EATING AND CHILDREN

A study assessing the adherence to the 2015-2020 Dietary Guidelines for Americans and 2018 Physical Activity Guidelines adherence among children aged 5 years old yielded that 29% of children were non-adherent to both guidelines, only 6% adhered to the dietary guidelines, while 50% adhered to the activity guidelines and 14% adhered to both (Bekelman et al., 2021). The adequate intake of nutrients is essential for average growth and development in children. The Malaysian Dietary Guidelines recommend that children consume a varied diet according to the Malaysian Food Pyramid while reducing the intake of fats, oils, salts, sugar, and flavour enhancers such as monosodium glutamate and flavouring cubes in their meals (National Coordinating Committee on Food and Nutrition, 2013). This dietary approach is crucial for promoting children's holistic development and achieving optimal psychosocial growth, as their eating habits in childhood may persist into adulthood (Dubois et al., 2022; Mikkilä et al., 2007). Failure to monitor their diet and adopt unhealthy eating patterns may lead to obesity and impaired cognition as evidenced by previous studies (Barg et al., 2023; Karki et al., 2019; Min et al., 2021; Peña-Jorquera et al., 2024; Wang et al., 2021).

Children are highly influenced by familial, environmental, and socio-cultural factors when it comes to their eating habits (Scaglioni et al., 2011). The Malaysian Dietary Guidelines promote a balanced nutritional intake and emphasise reducing unhealthy dietary components (National Coordinating Committee on Food and Nutrition, 2023). It is compulsory to understand the motivations, beliefs, and behaviours associated with healthy eating which requires an exploration of individual perception, knowledge levels, and the

broader social and cultural context that shapes these factors. Central to this analysis is the recognition that individuals' conceptualisation of 'nutritional quality' is intricately linked to a wide array of factors, including food-related aspects like food's colour and aroma, and extrinsic elements such as packaging and information, alongside individual differences such as biological, physical, psychological, cognitive, and social factors (Chen & Antonelli, 2020). For example, interventions that increase awareness of the health benefits of certain nutrients can motivate individuals to adjust their eating patterns accordingly. The choices made in childhood regarding nutrition can have enduring effects, predisposing individuals to obesity and related health issues as adults (Min et al., 2021). This accentuates the crucial role of parents in constructing their perception and practising healthy choices in influencing their children's eating habits, especially in areas like Kedah, where familial bonds are highly valued. It is crucial to comprehend parental perceptions and practices related to healthy eating to create successful interventions customised for Malay families in Kedah.

Recent shifts in dietary trends among children have raised significant public health concerns worldwide. Globally, there is a noticeable trend towards increased consumption of processed foods, sugary beverages, and snacks high in salt and fats, coupled with a decline in the intake of fruits, vegetables, and whole grains. The World Health Organization (WHO) has highlighted this shift as a contributing factor to the rising rates of obesity and non-communicable diseases among children and adolescents across different regions (World Health Organization, 2020). Reflecting on these global patterns, it is crucial to explore how they manifest within the unique socio-cultural landscape of Malaysia. Local dietary trends can exhibit unique characteristics shaped by cultural, economic, and environmental factors. For instance, in Malaysia, there were significant signs of shifting food trends, particularly in the supply of wheat, rice, sugar, sweeteners, meat, fish and seafood, and eggs, including the plant or animal protein ratio has decreased over time (Goh et al., 2020). Malaysians are adopting unhealthy dietary patterns due to factors such as rising prosperity, urbanisation, changing lifestyles, trendy food culture, availability, affordability, and geographical indicators (Eng et al., 2022; Ganasegeran et al., 2024; Goh et al., 202; Ramadas et al., 2021).

The development of dietary patterns in children is a complex and dynamic process that can be influenced by many factors, such as environmental and cultural values (Baloch et al., 2020; Gubbels, 2020). However, for children, their parents are the "main provider" and "main educator," responsible for modelling and providing healthy options to them. The

significance of family meals has been considered a leading contributor to shaping children's eating habits and has been highlighted (Mahmood et al., 2021). Parents must exhibit healthy behaviour as their eating behaviours and preferences may shape their children's preferences and habits (Mahmood et al., 2021; Yee et al., 2017). By this, it is essential to highlight the parents' beliefs, which are the centre of influence in promoting healthy eating behaviour.

2.5 EATING IN MALAY CONCEPT

Malay people and eating are an interwoven link that cannot be separated. Malay culture is known for its customs and traditions that uniquely contribute to an individual's lifestyle. In Malay culture, food has been identified as an identity of the society and a cultural symbol (Jaafar et al., 2022). Food can carry deep symbolic meanings that reinforce social bonds, cultural identity, and the collective memory of the community in which certain foods somehow can signify or represent specific cultural practices, identities, or milestones in life, such as births, weddings, funerals, and religious or cultural festivals (Perry et al., 2017).

While foods hold significant cultural values, their nutritional implications must also be considered. The rise of noncommunicable diseases has increasingly been attributed to unhealthy dietary patterns (Azadnajafabad et al., 2021; Bhattacharya et al., 2020; Marmot & Bell, 2019). Studies have shown that the Western diet or those who preferred the Western dietary pattern had higher risks of non-communicable diseases (Clemente-Suárez et al., 2023; Fedacko et al., 2022). The Western diet is characterised by low in fruits and vegetables, high in fat and sodium, high in calories, excess sugar, and high in saturated and trans fats (Clemente-Suárez et al., 2023; Rakhra et al., 2020). These characteristics can trigger eating addictive-like behaviours, including bingeing on fat and sugar intake, compulsive consumption of obesogenic foods, and causing neuronal dysfunction (López-Taboada et al., 2020). Few studies link Malay dietary patterns to noncommunicable diseases or epidemiological diseases. Even if the case of obesity and diabetes overtook Malaysia's landscape as the main public health concern, one must reflect on the factors that could account for the obesity and diabetes issue in Malaysia. The traditional foods offered in the Malaysian landscape have been reported to be a great source of vitamins, rich in antioxidant activities, and a remedy to the body's ailments (Harmayami et al., 2019).

2.6 GEOGRAPHIC AND CULTURAL CONTEXT OF KEDAH, MALAYSIA

Kedah, located in the north-western part of Peninsular Malaysia, is often heralded as the “Rice Bowl of Malaysia,” or in Bahasa Malaysia, known as the “*Jelapang Padi*”, owing to its vast, fertile paddy fields that contribute significantly to the nation’s rice production. This predominantly rural state boasts a rich tapestry of cultural heritage, deeply influenced by its history as part of the ancient Malay kingdom of Langkasuka (Winstedt, 1920). Today, Kedah’s culture is a vibrant amalgamation of traditional Malay customs, influenced by Islamic tenets, and a rural lifestyle that is increasingly intersecting with the pressures and conveniences of modern urban life. The dietary practices in Kedah, like much of Malaysia, are a reflection of the country’s multicultural makeup, yet they remain distinct in their reliance on locally grown ingredients and traditional cooking methods. Malay cuisine in Kedah is characterised by its generous use of spices, coconut milk, and rice, presenting a culinary tradition that is both rich in flavours and deeply embedded in the community’s social fabric (Aziz & Pawi, 2017; Hutton, 2012). The transition towards urbanisation and the global integration of food markets have introduced significant changes to the local diet and eating habits, prompting an increase in eating out and consumption of non-traditional, often less healthy, food options. These shifts pose challenges to maintaining healthy dietary practices, particularly among families with young children, where parental perception and behaviours play a pivotal role in shaping food preferences and consumption patterns.

2.7 UNHEALTHY EATING BEHAVIOUR AMONG MALAY

Recent research indicates a concerning shift towards unhealthy lifestyle choices among the Malay population. This trend is defined by a high consumption of sugar-sweetened beverages, a substantial intake of fried street foods and traditional desserts, and an inadequate amount of fruits and vegetables in the diet (Eng et al., 2022). Malay adolescents demonstrate a preference for less nutritious Western eating patterns, such as fast food burgers and pizzas, and local eating patterns, like fried street foods, in contrast to Chinese Malaysian teenagers who consume more balanced meals (Man et al., 2021; Mohammadi, 2019). Similar patterns are observed in Malay families, whose eating habits fail to match the necessary daily intakes for different food groups, hence not meeting national nutritional guidelines (Yang et al., 2016). These dietary decisions are especially noticeable while eating out, a frequent habit that intensifies the difficulty of following healthy eating recommendations. Choosing convenient, culturally familiar, and palatable but nutritionally poor cuisine when eating out increases the risk of health problems such as obesity, diabetes, and cardiovascular illnesses.

Overweight and obese school children frequently skip breakfast and exceed the recommended energy intake for their age group, exacerbating the issue, as noted by Wan Dali et al. (2018).

The prevalence of diabetes among people in Malaysia surged from 11.2% in 2011 to 13.4% in 2015 and further to 18.3% in 2019 (Ministry of Health, 2019). Approximately 95% of adults fail to eat the recommended five servings of vegetables and fruits daily. This represents a gradual increase in prevalence from 92.5% in 2011 to 94.9% in 2019. The Malaysian Ministry of Health's recent figures emphasise the importance of changing these dietary patterns promptly. In 2019, the obesity rate among adults in Malaysia increased to 50.1%, showing a significant jump from prior years. The latest report in 2023 by NHMS demonstrated an upward trend in the prevalence of diabetes among adults, and what's scarier is the statistical number on the prevalence of overweight, obesity, and abdominal obesity, as it shows that half of the Malaysian adults are obese. The elevation in obesity and diabetes rates is closely linked to dietary choices, especially in urban areas where eating out is prevalent. A national survey found that just 5% of Malaysian adults adhere to the recommended daily intake of fruits and vegetables, indicating a widespread deficiency in nutritious consumption (Ministry of Health Malaysia, 2019). A recent report on nutritional status in the consumption of fruits and vegetables of 5 servings per day reported that 95.1% of Malaysian adults did not fulfil the requirement intake of fruits and vegetables in a day. This inadequacy poses a high risk not just for Malay but Malaysian generally to grave health outcomes. Chong et al. (2023) found that Malay had the highest risk of being overweight compared to Indian and overweight individuals had the highest risk of diabetes and hypertension. The data highlights the urgent need for specific programs and interventions to encourage better eating habits, particularly within Malay families that often visit food establishments.

The findings also indicate that the idea of healthy eating is well ingrained in the cultural and social customs of the specific ethnicity. It is important to comprehend how these norms affect food choices to determine what motivates Malay parents to adopt healthy eating habits when eating out. This involves balancing traditional dietary practices with the increasing presence of fast-food choices that cater to contemporary, fast-paced lifestyles. The challenge resides in both individual decision-making and the larger socio-cultural and environmental influences that impact these decisions. Malay families frequently eat out for

socialisation and family bonding, therefore, the choices offered in these eating settings significantly influence their food choices. Therefore, interventions promoting healthy eating behaviours while eating out should consider these ingrained cultural norms and preferences, providing appealing and nutritionally beneficial alternatives.

2.8 THEORY

This section will review the theoretical framework applied for this study in exploring the phenomenon of healthy eating when eating out among Malay parents. The study adopts Social Cognitive Theory (SCT) as a guiding framework, offering a comprehensive lens to explore and understand the interplay of personal, behavioural, and environmental factors that influence healthy eating among Malay races. SCT provides valuable insights and guides into how individuals' perceptions, practices, and surroundings interact, making it an appropriate framework for analysing the contributing factors of dietary behaviours in the context of eating out.

2.8.1 Social Cognitive Theory

Albert Bandura, the pioneer of Social Cognitive Theory (SCT), has been implemented as a framework to guide this study. Social Cognitive Theory, initially known as social learning theory, was built based on the theorisation of Miller and Dollard (1941). They proposed that for learning to occur, observers needed to be motivated to act, be given a model of the desired conduct, behave in a manner consistent with the model, and have their imitative action positively reinforced (Bandura, 1971). Later, Bandura (1971) extended the theory's roots to observation, social learning, symbolic communication, aggressive behaviour, and reciprocal determinism (Bandura, 1971; Bandura, 1977; Glanz et al., 2008; Hayden, 2014).

This theory has emphasised the reciprocal determinism concept in explaining the interaction of people and their environments. This concept also advocated human behaviour as the product of the dynamic interplay of personal, behavioural, and environmental influences. Linking social cognitive theory with health behaviour has positively affected health outcomes (Islam et al., 2023). The theory also displayed an incredible impact on the planning and compliance of health behaviours such as physical activity, dietary behaviour, breakfast consumption, and nutrition education program (Hall et al., 2015; Harris et al., 2021; Sebastian et al., 2021).

Personal factors, which consist of cognitive abilities, conception, beliefs, self-perceptions, knowledge, and emotional states, have been stated as a powerful influence in the regulatory system (Bandura, 1978). These personal factors are predicted to play a pivotal role in constructing and translating healthy behaviour, as per this study's objective, which is to explore the influence of personal factors among Malay parents in practising healthy eating when eating out. Bandura (1978) affirmed that false beliefs would trigger avoidance behaviour that would disconnect individuals from their environment. A study by Wehling and Lusher (2019), found a link between unhealthy eating patterns and negative thinking. This will create a cycle where beliefs and actions reinforce each other and resist behaviour from environmental influences.

Next, behavioural factors denote actions and responses that influence and are influenced by personal and environmental factors (Bandura, 1978). This interaction promotes behaviour enactment, which highlights the dynamic interplay between personal and environmental factors. Examples of behavioural can range from capability, skills, and decision-making strategies to adaptive actions tailored to specific ecological contexts. Accompanied by a study by Scaglioni et al. (2018) found that children's eating behaviour and food choices are strongly influenced by the parents' food habits and feeding style and strategies. Thus, this study aims to understand how and what influences the healthy behaviour being performed in the external context, which is outside of the home.

Lastly, environmental factors refer to the external influences that influence cognitive development and behaviour manifestation (Bandura, 1978). Environmental factors such as availability, affordability, and acceptability have been known to influence food consumption and dietary patterns among individuals (Higgs & Ruddock, 2020; Thomas & Cankurt, 2024; Waisulqrnai et al., 2024). Additionally, environmental factors also included social influences such as peer and family support (Waisulqrnai et al., 2024; Zhou et al., 2023), dining atmosphere (Spence, 2019), marketing and advertisements (Verma et al., 2023), and geographical location (Abang Brian et al., 2023; Su et al., 2023; Man et al., 2020) further amplify the governed behaviours. Thus, this study aimed to explore the environmental determinants associated with personal and behavioural factors in exploring the phenomenon of healthy eating when eating out among Malay parents.

This social-cognitive approach suggests that individual adherence to healthy behaviours is fashioned from their social interactions and personal experiences, which structure their health pattern and prevalence.

2.8.2 Personal Factors

Personal factors, which focus on the individual's interpersonal and internal level, significantly impact the performed behaviour (Bandura, 1978). Among examples that can be listed are self-efficacy, perceived benefits, health beliefs, psychological state, and socio-demographic factors, which collectively shape an individual's approach to health (Reiners et al., 2019; De Ridder et al., 2017; Kamimura et al., 2016; Salahshoori et al., 2014). The individual conceptions of health hold a vital role in ensuring healthy behaviour execution and maintenance (Bandura, 1978). This is demonstrated through a review by Rollo et al. (2016) that demographics and cognitive factors contribute to pursuing health behaviour.

2.8.3 Behavioural Factors

Behavioural factors refer to the actions of individuals and others that influence the decision-making on adherence to healthy behaviour (Bandura, 1978). This factor is closely connected to personal factors, as individual behaviours are often shaped by personal beliefs, attitudes, and knowledge. In the context of healthy eating, behavioural factors encompass various actions such as food choices, meal planning, portion control, and food consumption that are influenced by both internal and external pressures (Bhardwaj & Baljinder, 2023; Shen, 2022; Rafacz, 2019; Spence et al., 2013). Studies have shown that individual behaviours, such as actively seeking healthy food options or moderating food intake based on health goals, are influenced by factors like knowledge, past experiences, and immediate environmental cues (Fernqvist et al., 2024; Ettridge et al., 2023).

However, social and environmental pressures, for instance, peer influence or the convenience of fast food, may lead to unhealthy choices, despite a person's intentions (Zhou et al., 2023; Imtiyaz et al., 202; Ragelienė et al., 2020). Behavioural factors also include self-regulation mechanisms, such as the ability to resist unhealthy food temptations, and the adoption of moderation strategies when eating out (Bouwman et al., 2022). These behaviours are critical for ensuring adherence to long-term healthy eating practices, particularly in

challenging environments like restaurants, when unhealthy options are often more accessible and appealing.

Overall, behavioural factors are shaped by complex interactions of personal beliefs, social influences, and environmental cues; all of these attributes contribute to the decisions individuals make about what and when to eat. Understanding these factors provides valuable insights into promoting healthier eating habits, especially in a context where external influences may override individual intentions.

2.8.4 Environmental Factors

Environmental factors are expounded as the external stimuli that govern one's behaviour. The body of literature recognised that the food choices or dietary patterns of individuals are influenced by food prices, access to food outlets offering a wide range of healthy foods, foodscapes, platescapes, the proximity of food establishments from home, mobility, food properties, vendor properties, food messaging, and convenience (Greene et al., 2024; Downs et al., 2022; Hanemaayer et al., 2022; Bivoltsis et al., 2020; Lim et al., 2018; Caswell & Yaktine, 2013).

Modern foodscapes have shifted the global palate toward diverse cuisines, reshaping traditional dietary patterns and encouraging the transition toward unique and quick food choices (Nurhasan et al., 2024). This shift underscores the growing demand for food outlets that can deliver exceptional dining experiences while meeting the practical needs of consumers. This cultural evolution reflects the growing appreciation for food diversity, where novel flavours and exotic dishes have significantly influenced one's preferences. A study by Greene et al. (2024) found that novelty and convenience are the key factors influencing food choices when eating out. This cultural shift is closely tied to the demands of a modern and fast-paced lifestyle, which has given rise to a convenience-driven culture where time constraints and practicality often take priority over nutritional considerations (Leu et al., 2023).

Distance to healthy food sources has an impact on food purchasing behaviour (Kerr et al., 2012). The distance individuals must travel to access healthy food options can deter them from making healthier choices. The study by Kerr et al. (2012) found that participants travelled significant distances for food, suggesting that if healthy options are not

conveniently located, individuals may resort to unhealthy alternatives. A study by Loh et al. (2022) extends our understanding that the limited number of fast-food outlets in the neighbourhoods and limited variety have contributed to the high frequency of visitation to fast-food outlets once or more a week. These findings highlight the importance of improving access to healthy and diverse food options to support better dietary habits.

Accessibility alone is not sufficient to predict healthy eating, affordability also merges a pivotal factor influencing healthy foods. Studies have established that lower-cost, calorie-dense foods often compete with more expensive, nutrient-rich options, creating affordability barriers to healthy eating (Briazu et al., 2024; Eng et al., 2022; Tong et al., 2018). The price and perceived value of a meal have always been the central considerations in meal selection in restaurant settings where financial constraints often lead individuals to prioritise quantity over quality. This value-driven focus frequently resulted in unhealthy meal selections when eating out (Greene et al., 2024).

In addition to accessibility and affordability, the qualities of the dining environment also play a critical role in shaping food choices and eating behaviours. Another study by Rajput and Gahfoor (2020) found that positive food quality, restaurant service quality, physical environment quality, and customer satisfaction have influenced the intention of consumers to repeat their visits to fast food restaurants. In contrast, a study by Liguori et al. (2022) emphasised that food safety concerns, such as poor hygiene of food outlets, profoundly impact consumer behaviours and diets. Despite this concern, barriers like affordability, accessibility, and appeal often hinder consumers from consuming safe foods, underscoring the complexity of achieving healthier diet practices.

Lastly, food and beverage advertising on broadcast media has been consistently implicated in promoting calorie-dense, low-nutrient diets. In a harmonised cross-sectional analysis of nine Asian countries, Karupaiah et al. (2024) found that unhealthy food and non-alcoholic beverage ads outnumber healthy ones by a ratio of 4:1 in Malaysia. The ratio demonstrated that Malaysia is one of the highest proportions among the countries studied, among other Asian countries. Marketers reported employing cartoon characters, celebrity endorsements, and health-related claims to enhance product appeal. Concurrently, a recent analysis of Malaysia's food environment by Ni (2024) underscores that targeted advertising, particularly towards children, amplifies the desirability of energy-dense, nutrient-poor

options. This is further compounded by increased screen time and urban lifestyles that favour eating out. This makes it more difficult for families to maintain healthy dietary practices.

Despite the ongoing dissemination of nutritional guidelines as a part of health promotional strategies, adherence to dietary recommendations remains unsatisfactory (Leach et al., 2024). This gap is largely attributed to the complex and often competing determinants that shape individuals' food choices, including economic, social, and physical environments. For example, healthy foods are commonly perceived as more expensive and less accessible than processed alternatives, discouraging their purchase, particularly among lower-income groups (Daniel, 2020; Domosławska-Żylińska et al., 2023; Waisulqrnai et al., 2024). These intersecting environmental and commercial factors demonstrate how broader systemic influences can override health knowledge, making it more difficult for families to practice healthy eating outside the home.

In conclusion, environmental factors, as outlined in the Social Cognitive Theory, significantly shape individuals' food choices and eating behaviours. The literature emphasises how external stimuli, ranging from the accessibility of healthy food outlets to the influence of food advertising, can either facilitate or hinder healthy eating practices. As the global food landscape evolves, factors such as convenience, affordability, and the dining environment interact to create a variety of influences that guide individuals' dietary decisions. However, there remains a critical gap in the literature concerning how SCT is applied to understand eating behaviour in the Malaysian context, particularly among Malay parents. Much existing research is situated in Western settings, with limited attention paid to the interplay of personal, behavioural, and environmental factors within the unique cultural and social frameworks of Malaysia. This lack of culturally contextualised understanding limits the development of effective, locally relevant health promotion strategies. Therefore, the present study aims to address this gap by exploring Malay parents' perceptions, practices, and perceived barriers to healthy eating when eating out, and by applying the SCT framework to determine how personal, behavioural, and environmental factors interact to shape these behaviours.

2.9 PARENTS' PERCEPTIONS ON HEALTHY EATING

Parents strongly influence their children's eating patterns and behaviours. Pivotal for parents to have and possess the proper knowledge about nutritional food and eating patterns (Shahid

et al., 2022; Sharif Ishak et al., 2020; Zarnowiecki et al., 2012). A study assessing the association of parenteral nutrition knowledge and healthy-eating attitudes with their children's adherence to the Mediterranean dietary pattern and micronutrient adequacy disclosed the parental nutritional knowledge regarding the recommended servings per day of different food groups was positively associated with an adequate child mean intakes of dairy products, fruit, vegetables, grains and cereals, meat, fish, eggs and olive oil (Romanos-Nanclares, 2018). Parental attitudes and knowledge play a role in ensuring nutritional adequacy and diet quality among pre-schoolers; thus, a good perception of a healthy eating pattern might lead to the likelihood of adopting healthy behaviour. This is an essential construct for the parents, as if they had a wrong perception of eating healthily. The children will experience the aftermath through executing unhealthy dietary patterns and poorer health outcomes.

Another study conducted among Orang Asli aborigine mothers in Peninsular Malaysia to assess the knowledge and perceptions of child health and nutrition among mothers from the Temuan and Mah Meri sub-groups is worth noting. The mothers exhibited limited knowledge, and their perceptions appeared based on it. For example, in defining healthy and unhealthy food, the mothers from Mah Meri groups provided examples of vegetables, milk, and eggs as healthy foods. Meanwhile, sugar, cola beverages, ice cubes, and ice cream are categorised as bad foods. For the Temuan groups, when labeling the bad food, they do mention salty foods, but interestingly, they state that durian and rambutan are bad foods. It is intelligible that different societies depict divergent cultural practices, beliefs, and contexts. However, reunification can be made through having the same knowledge. With the right knowledge, the parents can select and provide proper food (Ng et al., 2005).

Nevertheless, affordability remains a significant challenge in providing nutritious food. Fresh foods may be expensive and force the marginalised to consume the basics, namely eggs, the standard protein that the lower-class people always consume. The practicality of healthy eating is still ambiguous among the Aborigine parents as they also had an issue with nutritious food accessibility as they lived far away from the sources of healthy foods. Thus, they had no choice except to consume the food already available in their context. In this study, cultural beliefs, practices, and contexts greatly influence how they select foods. The background of the society also influenced their perception and knowledge as they lived in a collectivist society and believed in their ancestors. The ancestors are holy to them; thus,

spreading formal knowledge and breaking food stereotypes is difficult. Even so, applying the knowledge would be a great effort to keep them informed instead of stagnating.

A study by Sharif Ishak (2020) assessed Malaysian adolescents' perceptions of healthy eating. They appeared to have good ideas of healthy eating and displayed profound perceptions about healthy and unhealthy eating, cooking methods, and eating behaviours. Adolescents' perspective about healthy, nutritious, and safe food is mainly influenced by their parents and family members, who mentioned that the parents had control over their food choices and provision. For children, everything starts at home with their parents. Here, parents should recognize how crucial their role towards their children's perspective is to construct an accurate view of healthy eating. This type of eating is not about choosing the food to live free from disease, but it is beyond that context, as one should have holistic personal growth to pursue their life. So, identifying the parents' perception will carve the path for the researcher to construct and advocate the concept and the practicality of healthy eating.

Hendaus et al.'s (2020) findings in investigating the parental perception of a healthy childhood diet demonstrated an optimistic view that a healthy diet leads to good school performance and healthy physical activity. Francis-Ganderson and McDonald (2018) found that parents defined healthy eating as consuming food that is good for an individual, often in terms of individual nutrients. However, the study also revealed a lack of awareness among parents regarding the relationship between food consumption and six Caribbean food groups. This indicates the need to better understand cultural beliefs regarding food and health. The unbothered attitude of the parents suggests a risk of poor practice of healthy eating and neglect of the benefits of healthy dietary patterns. Therefore, parents need a sound knowledge of healthy eating to ensure they have the right knowledge, which leads to proper healthy behaviour.

A study of perceptions of healthy eating among Hispanic Parent-Child-Dyads, demonstrated that the parents defined healthy eating as the categorisation of food they should not eat, for example, processed foods (Lilo et al., 2019). They also mentioned that the consumption of fruits and vegetables varied in size and quantity in daily intake. This study portrayed that the illustration of healthy eating is about prohibiting food consumption and centered around fruits and vegetables. One should not be prohibited from consuming

any food. However, one must know that portion size and moderation are essential when eating. Even merely eating vegetables is unsuitable for one's health if other food groups are not consumed. This shows the importance of local dietary guidelines being promoted among parents, as the issue is that parents still lack proper knowledge about healthy eating.

Eliason et al. (2020), in examining children's consumption patterns and parents' perception of a healthy diet, demonstrated that most parents strongly agreed that their children engage in eating healthy. However, there was a discrepancy between parental perceptions and the actual sugar consumption of children. Unfortunately, this mismatch could not be thoroughly explored because the perception was measured numerically. More in-depth exploration of parental perceptions would be beneficial as it would provide a more nuanced understanding of the social and historical context of human experiences. Additionally, the study revealed that parents tend to overestimate their children's health, which can lead to engaging in unhealthy eating behaviours due to the false perception that the children are always practising healthy behaviours. Thus, examining parental perceptions in more detail is crucial to promoting a better understanding of healthy eating behaviours and avoiding poor eating patterns.

2.10 PARENTS' PRACTICES FOR HEALTHY EATING

Parents play a pivotal role in shaping their children's eating habits and attitudes towards food. Their practices and beliefs about healthy eating significantly influence their children's dietary patterns and overall health. This section explores how parents' practices impact healthy eating in their families. The parents' involvement in the children's dietary patterns had a significant impact on their practices towards food provision and the awareness of their children's diet patterns (Muzaffar et al., 2020; Williams et al., 2022). Parenting style also exerts an influence on the dietary outcome of the children. However, a study by Tauriello et al. (2024) showed that the parenting style is different when eating at home versus eating out. This style has led to differences in the practices of food choices, in which children tend to choose unhealthy foods when eating out. Positive parental habits, such as eating meals with children, having breakfast together regularly, and encouraging children to enjoy healthy snacks with reasonable limits, have shown favourable effects on children's dietary behaviours, according to a prior study (Mahmood et al., 2021).

In sum, parental practices are a critical determinant of children's dietary behaviours, with both the home and out-of-home contexts. This will shape how healthy eating is being promoted or undermined. While positive habits such as shared meals and dietary discouragement are associated with better nutrition outcomes, studies suggest that these practices are not always consistently applied, particularly when families eat outside the home (Brindal et al., 2021; Screti et al., 2024). The shift in parenting dynamics during eating-out occasions may reduce parental control over food choices, increasing children's exposure to unhealthy options. These findings underscore the need to further explore how Malay parents navigate healthy eating practices in public food environments. External influences and situational demands often challenge their intentions, making it difficult to consistently uphold healthy choices when eating out.

2.11 PARENTS' PERCEIVED BARRIERS TO HEALTHY EATING

Understanding the barriers to healthy eating is essential to addressing the complexities surrounding dietary choices, especially among parents who serve as primary influencers of their family's eating habits. This section explores parents' challenges in fostering healthy eating practices, categorised into personal, environmental, and social barriers. By identifying these obstacles through various studies, this review aims to provide insight into the multifaceted factors that hinder adherence to healthy eating and how they intersect with cultural, societal, and familial dynamics.

2.11.1 Personal Barriers

Amore et al. (2019) conducted a study that classified these obstacles according to the socio-ecological model, which includes barriers at the individual, relationship, community, and societal levels. For instance, adolescents identified a lack of knowledge about healthy and unhealthy foods and personal taste preferences as key obstacles to healthy eating (Ishak et al., 2020). In contrast, a study on children's perspectives revealed that food and taste preferences were influential factors that motivated them to adopt healthy eating habits (Chan et al., 2022). The economically disadvantaged population, the bottom 40% of the economic spectrum (B40), reported that healthy foods' price, availability, and taste hindered their ability to access nutritious options (Eng et al., 2022). Similarly, parents of young children cited child behavioural factors and parental influences, such as lack of time, family dynamics, and external pressures, as impediments to establishing healthy eating habits (Arthur et al., 2022). In the workplace setting, work commitments and time constraints were

identified as barriers to healthy eating, while male employees reported a lack of knowledge about nutrition as a significant obstacle (Lima et al., 2021).

These personal barriers, including limited nutrition knowledge, taste preferences, time constraints, and family dynamics, significantly shape individuals' food choices when eating out. For example, limited awareness about healthy options or prioritising taste over nutrition often leads to selecting convenient but less nutritious meals. Moreover, parental challenges such as managing children's preferences and busy schedules can reduce the likelihood of choosing healthier dining options. Collectively, these factors highlight how internal, individual-level obstacles can complicate healthy eating decisions in outside environments.

2.11.2 Environmental Barriers

A study among Malay adolescents described the availability of food at home and school as a perceived barrier for them to execute healthy behaviour (Ishak et al., 2020). Parents also become an environmental barrier that impedes the children from practising healthy eating, as their parents are the primary providers of their meal provision (Chan et al., 2022). From the children's perspective, accessibility and proximity of food outlets and peer food choices have been identified as constraints to a healthy diet (Magalhães et al., 2022). In the context of two rural areas in the U.S. communities, lack of public transportation and limited access to healthy food outlets were the main barriers (Pope et al., 2023). Another study among King Faisal University's students disclosed that the availability of fast food is a significant barrier that disrupts them from eating healthily (AbdelHafiz et al., 2023). In addition, the role of packaging has been reported to be an enabler in influencing both children's and parents' purchase decisions regarding a product, with visual elements playing a leading role in shaping children's food selection and potentially conditioning their cognition (Ares et al., 2022; Letona et al., 2014).

Convenience also emerged as a major factor influencing eating-out decisions, especially for families with limited time. Studies, including Liu et al. (2023), indicated that time constraints are a primary reason families opt for dining out or takeaway options, as they provide a quick solution that fits their busy schedules. However, this convenience often comes at a nutritional cost. Liu et al. (2023) found that families frequently turn to chain restaurants and fast-food outlets for quick meals, which, while convenient, tend to promote less healthy food choices due to the prevalence of calorie-dense and highly processed options. Research by Fulkerson (2018) also demonstrated that a lack of cooking confidence,

time pressures, and perceptions of ease and convenience influence fast-food consumption, which thwarts healthy choices when eating out. Supported by McGuffin et al. (2015), time constraints and convenience are always interlinked factors in initiating eating out with fast-food restaurants, with quick service was most certainly the best option. Families, particularly parents with younger children, favoured venues with fast service times since it prevented children from growing bored and potentially becoming chaotic.

Environmental barriers such as limited access to healthy food outlets, availability of predominantly fast-food options, and convenience pressures strongly influence dining decisions. The proximity and accessibility of food venues often dictate meal choices, especially for families pressed for time who prioritise quick service and ease over nutritional quality. Packaging and marketing elements further shape food selection, particularly among children. These external, situational factors can override personal intentions to eat healthily by constraining the available choices or promoting less nutritious options, thereby complicating efforts to maintain healthy eating habits when eating out.

2.11.3 Social Barriers

Research indicates that multiple social factors, including parental and peer influences, workplace settings, and cultural context, significantly shape healthy eating behaviours. For instance, Amore et al. (2019) observed that parental and peer influences could affect students' approach to healthy eating, particularly where parental nutrition knowledge is limited. Ismail et al. (2022) further noted that peer pressure, particularly among mothers of female adolescents, could impact young people's food choices, often swaying them toward or away from healthier options. Similarly, van der Put and Ellward (2022) found that colleagues' encouragement within workplace settings positively influenced fruit and vegetable consumption. This continuous reinforcement within social settings can bolster individuals' motivation, encouraging sustained adherence to healthy eating behaviours.

The cultural context also plays a critical role in shaping perceptions and practices around healthy eating. Banna et al. (2016) demonstrated this in a comparative study of Chinese and American students, where differing cultural views influenced dietary choices. Chinese students prioritised fruit and vegetable intake, while American students emphasised high-fiber foods and the consumption of vitamins, minerals, and protein. Yunus et al. (2022)

expanded on this by exploring the socio-cultural influences on dietary practices among obese individuals, illustrating how food culture profoundly affects eating behaviours. In Malaysia, for example, food is a central expression of cultural identity, with traditional practices influencing food choices that may not always align with healthy eating guidelines.

Social influences, including parental and peer norms, workplace encouragement, and cultural food practices, profoundly impact eating behaviours outside the home. Peer pressure and family habits can either support or undermine healthy choices, while cultural traditions often dictate food preferences and acceptance. The social environment acts as a powerful motivator or deterrent, shaping not only what people eat but also their commitment to healthy eating practices. Recognising these social barriers underscores the complexity of decision-making in food choices beyond individual control, highlighting the need to consider social contexts in promoting healthier eating when eating out.

Together, personal, environmental, and social barriers interact to create a challenging landscape for healthy eating outside the home. Individual knowledge and preferences, constrained food environments, and social-cultural influences converge to affect food choices in complex ways. These multi-level obstacles contribute to the difficulty in adopting and maintaining healthy dietary behaviours when eating out, particularly for families balancing convenience, cost, and cultural expectations. This intricate interplay justifies the current study's focus on understanding Malay parents' perceptions and practices regarding healthy eating when eating out, aiming to uncover nuanced barriers and facilitators within this unique socio-cultural context. Insights gained will help tailor effective strategies to support healthier dining behaviours in community settings.

2.12 EATING OUT

Eating out has become increasingly infused into the modern lifestyle globally and in Malaysia (Ashari et al., 2022; Poulain et al., 2020; Sharif Ishak et al., 2020). This shift is driven by various factors, including urbanisation, evolving social norms, dual-income households, and the pursuit of convenience to counteract time constraints (Ashari et al., 2022; Poulain et al., 2020). Eating out is no longer merely a means to satisfy hunger but reflects broader societal and cultural transformations. In Malaysia, eating out is deeply ingrained in the culture, with the country often celebrated as a “food paradise.” This has created a dynamic food landscape ranging from traditional hawker stalls to fast-food chains,

attracting individuals seeking diverse culinary experiences and time-saving options. However, the increasing prevalence of eating out has also raised concerns about its implications for public health, particularly in terms of diet quality and the associated risks of non-communicable diseases. This section explores the prevalence, trends, and health-related implications of eating out in Malaysia, contextualising its significance within dietary practices and nutritional health.

2.12.1 The Prevalence and Trend of Eating Out in Malaysia

Recent evidence indicates a notable shift in Malaysians' dietary behaviours, particularly in the increasing trend of eating out. In a comparative study involving five ASEAN countries and one European country, Malaysia ranked third, with 31.3% of respondents reporting frequent eating out. This demonstrated the rising prevalence of out-of-home food consumption (Mognard et al., 2023). This observation aligns with national-level concerns raised by Ni (2024), who highlights the rising reliance on out-of-home meals due to urbanisation and the convenience of the modern food environment. Supporting this trend, national household expenditure data show that spending on restaurants and accommodation services increased from 13.6% to 16.2% in 2022 (Department of Statistics Malaysia, 2022). This shift in spending patterns signals not only behavioural transformation in food consumption but also evolving individual preferences toward eating out.

The increasing prevalence of eating out reflects broader social and cultural changes in Malaysian society (Ni et al., 2024). The growing appeal of convenience and time efficiency is often attributed to the rise of dual-income households and the experience of time poverty in contemporary urban life (Magano et al., 2023). Eating out offers a practical solution, with readily available, diverse, and often affordable options (Amin et al., 2023; Waisulqrnai et al., 2024). These changes suggest an ongoing departure from traditional home-cooked meals, reinforcing the need to examine how modern lifestyle patterns intersect with dietary health and family food practices. With the rapid urbanisation process, there is a lifestyle change, especially in their eating pattern. In Malaysia, the impact of the global revolution is evidenced by the proliferation of fast food restaurants over the past two decades, coupled with a dearth of regulatory oversight regarding the market of processed foods and sugary beverages (Shamsudin et al., 2020). This has contributed to the widespread availability and accessibility of unhealthy food options, which has led to an escalation in the incidence of non-communicable and

nutrition-related diseases (NHMS, 2023). According to the 2019 Household Expenditure Survey report by the Department of Statistics Malaysia (DOSM) in 2020, nearly one-third (28.5%) of Malaysia's average monthly household expenses are spent on food and drinks, including expenses for eating out.

A study by Goh et al. (2020) observed that as Malaysia's economic prosperity has increased, so too has the population's intake of calorie-dense foods, with a marked rise in the consumption of fats and sugar. These nutritional shifts are reflected in national eating patterns. For instance, a study found that 86.8% of Malaysians eat out daily, while only 13.2% cook and eat at home (Poulain et al., 2020). This reliance on external food sources is further reinforced by economic data showing that household expenditure on eating out nearly tripled from 2010 to 2019, suggesting an intersection of greater purchasing power and evolving social behaviours (Department of Statistics Malaysia, 2020). While these trends indicate increased convenience and modern lifestyle preferences, they also raise concerns about the deterioration of dietary quality. Meals eaten outside the home are frequently associated with higher energy intake, excessive portion sizes, and lower nutritional density, contributing to the growing burden of non-communicable diseases in Malaysia. These patterns highlight the need to critically explore how Malay parents perceive and practice healthy eating when eating out within culturally embedded practices and increasingly convenience-driven food environments.

2.12.2 Eating Out is Associated With a Higher Intake of Calories and Larger Portion Sizes

There is an association between eating out and poorer diet quality. For example, a study that compared meal consumption at home versus outside showed that individuals who eat outside were prone to higher energy intake, fat, and lower fibre, phosphorus, potassium, niacin, and vitamin C (Lee et al., 2016). Research has shown that eating out is linked to higher energy intake and unhealthy dietary patterns, with restaurant meals often contributing to excessive caloric consumption and poor nutritional choices (Gesteiro et al., 2022; Llanaj et al., 2018; Moyeda-Carabza et al., 2023; Vepsäläinen et al., 2015). Additionally, restaurant servings are typically larger and have a higher caloric density, further exacerbating the issues (Kraak & Davy, 2022; Liu et al., 2024; Papagiannaki & Kerr, 2025).

There is also a concern about the more significant portion size when eating out, as there is no fixed standard on the portion size practised. Malaysia has introduced the concept of “*Pinggan Sihat Malaysia,*” which recommends the portion is “*Suku, Suku, Separuh*” (quarter, quarter, half) (Ministry of Health, 2020). The study on the need for standardised portion sizes when eating out in Malaysia is still understudied. Still, in the United States, a study mentioned that restaurants tend to serve more than the needs of an individual (Cohen & Story, 2014). The urge to control the portion should be paid attention to due to the high number of people consuming food outside of the home and the possibility of exceeding caloric intake. It also raises the issue that an individual’s caloric intake would differ based on age, sex, metabolic rates, and physical activity. Still, it is advised to be anchored to the caloric intake provided by the Ministry of Health, which is 2000 to 2,500 calories per day (Ministry of Health, 2020).

In addition to identifying the nutrient intakes of those who eat out, a study compares Malaysia’s energy and nutrient intakes. They found that people mostly eat out at lunchtime, showing a high sodium consumption of 2934 mg (Ashari et al., 2022). However, a study that looked into the consumption of food away from home and the association with high sodium intake among adults in Malaysia suggested that the frequency of eating away from home was not associated with high sodium intake. However, 52.1% reported high sodium intake in their dietary pattern (Salleh et al., 2021).

2.12.3 Association of Eating Out and Nutritional Health

Based on the ecological data available, there appears to be a positive correlation between the frequency of eating out and the incidence of obesity. Notably, a study conducted among 6 to 17-year-old children in China found a statistically significant association between eating out three times per week or more and a higher frequency of overweight and obesity (Ma et al., 2021). Similarly, a study of adults in Korea demonstrated that the frequency of eating out was positively correlated with the likelihood of being obese and increased BMI for those who consumed meals away from home one to four times per week (Kim & Ahn, 2020). Additionally, a study conducted in Malaysia confirmed that the frequency of eating out predicts cardiovascular risk over ten years (Ang et al., 2022). In a study conducted on the prevalence of obesity in Peninsular Malaysia, the authors identified that one of the contributing factors to obesity in the Malaysian population is the cultural emphasis placed on food. Specifically, they noted that the trend of “cafe hopping” and the societal importance

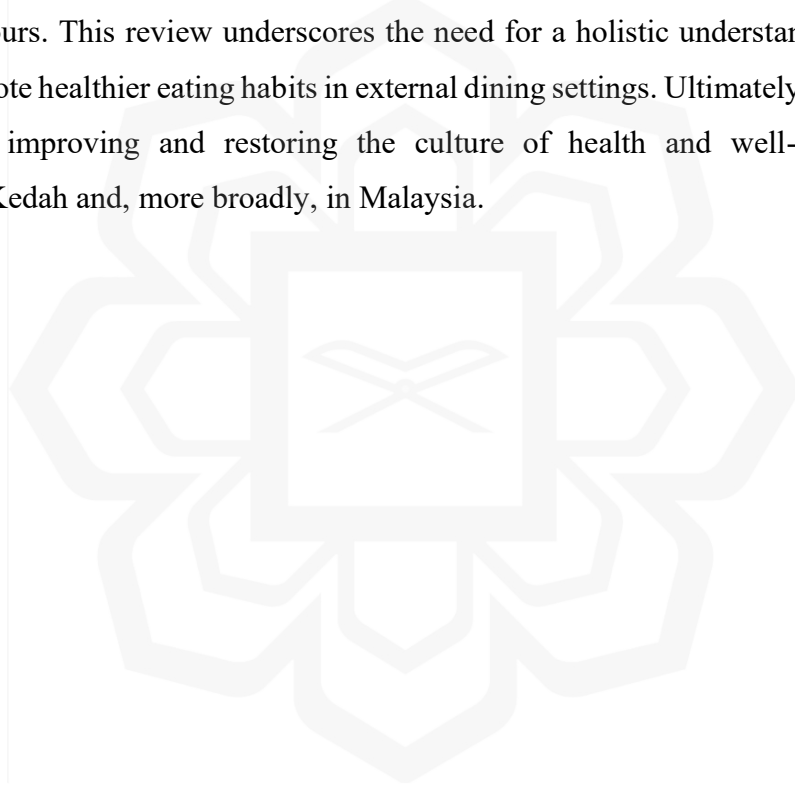
placed on food make individuals struggle with regulating their food consumption (Yunus et al., 2022).

Eating out, especially for Western fast food, was associated with high fat, high sugar and high energy food intake. Frequently eating out increased the risk of overweight and obesity in children, which was related to children's age, gender, and weight status (Du et al., 2021). A study of the prediction of the 10-year cardiovascular disease (CVD) risk among community dwellers in Malaysia showed that Malays had a high CVD risk compared to the Indian ethnicity (Ang et al., 2022). This study suggested that changes in dietary patterns that focused on eating out practices lead to 10-year cardiovascular disease risks. These risks could be attributed to rapid urbanisation, a sedentary lifestyle, and fast-food outlets, which profoundly impact dietary patterns (Casari et al., 2022; Ren et al., 2021; van Erpecum et al., 2022). Their changes in dietary patterns can be seen through the high consumption of energy-dense food and the low consumption of fruits and vegetables. These trends are alarming as individuals tend to deviate from healthy eating practices, citing high cost and time commitment as significant barriers that hinder them from adopting healthier behaviours (Musaiger et al., 2013; Seguin et al., 2014). The perceived high cost and time-consuming nature of healthy eating practices have led individuals to view healthy eating as a cumbersome and complex process requiring a significant commitment, such as reading food labels, monitoring calorie intake, and avoiding fast food.

A study conducted in Indonesia indicated that the process of urbanisation is connected with dietary patterns conducive to increased non-communicable diseases (NCD) risk, for example, rich in soft drinks and ultra-processed foods, but also with higher consumption of healthy foods such as vegetables and fish (Colozza et al., 2023). Urbanisation and globalisation also bring Western dietary habits and processed foods into the local context, which compete with local dietary patterns and increase diet-related chronic illnesses (Casari et al., 2022). In Malaysia, urbanisation has led to the practice of eating out in which it shown that eating out has led to a high intake of sodium compared to individuals who eat at home (Ashari et al., 2022). This indicates that while urbanisation can also bring opportunities for improved nutrition, it also presents significant challenges in maintaining healthy dietary patterns and ensuring balanced nutritional intake, which invites the potential risks of non-communicable diseases.

2.13 SUMMARY

Established literature highlights the vital role of healthy dietary patterns in supporting the optimal developmental growth of an individual. The importance of adhering to and maintaining healthy behaviours is deeply intertwined with the reciprocal interaction of personal, behavioural, and environmental factors, as outlined by the Social Cognitive Theory. These factors collectively influence the practices and perceptions surrounding dietary habits, including healthy eating when eating out. In the context of Kedah, Malaysia, where cultural norms, urbanisation, and globalisation intertwine, leading to the increased practice of eating out, which raises significant nutritional concerns. Parents' perceptions and practices, alongside barriers to healthy eating, play a pivotal role in shaping and improving dietary behaviours. This review underscores the need for a holistic understanding of these factors to promote healthier eating habits in external dining settings. Ultimately, this research contributes to improving and restoring the culture of health and well-being among individuals in Kedah and, more broadly, in Malaysia.



CHAPTER 3

METHODS

3.1 STUDY DESIGN

This qualitative study, grounded in Social Cognitive Theory, aimed to elucidate the nuanced elements of healthy dietary practices observed among Malay parents when eating out. The research employed an interpretative approach, aligning with the study's objectives and research questions, and drew from Creswell's (2007) definition of qualitative research as interpretive. As Lincoln and Guba (1985) note, interpretative practice values the depth of individual experience, making it an appropriate choice for this study.

The interpretative approach was used in this study for several reasons. First, it enabled an exploration of the personal and social perspectives of Malay parents, who constituted the participants of this study. This approach provided them with the space to articulate the meanings they attach to their actions and choices regarding healthy eating when eating out. By centering on their insights, the study captured how they interpret and navigate these experiences in their own words. Additionally, this approach facilitated a deeper understanding of the phenomenon through the lens of the parents themselves, allowing their narratives to unfold without being shaped by the researcher's preconceptions.

Recent studies, such as Buksh et al. (2023) and Cook et al. (2021), demonstrated the continued relevance of interpretative approaches in exploring healthy eating behaviours, particularly in culturally specific contexts. Buksh et al. (2023) explored how urban Indigenous mothers perceived healthy eating and how these impacted family food decisions. Their study revealed that mothers held complex, multifaceted perceptions of healthy eating, influencing both positive and negative food choices, as well as strategies they adopted for healthy eating. Likewise, Cook et al. (2021) explored parental beliefs and practices regarding healthy diets for young children in a culturally diverse United Kingdom population. Their findings highlighted intricate psychological and sociocultural factors that underpin parental feeding practices, reinforcing the importance of understanding these beliefs in varied cultural contexts.

The interpretative approach provided a pathway for a deeper understanding of healthy eating practices among Malay parents when eating out. The paradigm offered valuable insight into the challenges they encounter in adhering to these practices. This approach aligned seamlessly with the study's theoretical framework, which highlights the influence of personal, behavioural, and environmental factors on parental decisions and practices around healthy eating in eating-out contexts.

3.2 STUDY LOCATION

This study was conducted in Kedah, a state in northern Malaysia that has experienced notable population growth from 2021 to 2022. One of its districts, Sungai Petani, has undergone rapid urbanisation and industrialisation, contributing to a significant rise in food and beverage operations in Kedah (Portal Rasmi Pihak Berkuasa Tempatan Negeri Kedah, 2022; the Department of Statistics Malaysia, 2022; Department of Statistics Malaysia, 2020; Mapjabil, 2010). NHMS (2022) reported 11% fast food consumption in Kedah from 2012 to 2017, along with a decline in vegetable intake, from 39% in 2017 to 24% in 2022. These shifts reflect a growing reliance on convenience foods that suggest potential nutritional risks for families. Comparatively, the northwestern states of Peninsular Malaysia, including Kedah, have higher prevalence rates of newly diagnosed diabetes and dyslipidaemia, with an average total cholesterol level of 6.1 mmol/L above the national average (NHMS, 2020).

Local studies indicate that eating out substantially impacts dietary habits and health outcomes in the region. For example, among diabetes patients in Kedah, eating out has been identified as a factor influencing adherence to diet therapy (Mohd Suan et al., 2019). Furthermore, a study among children aged 7-12 years old from B40 families in Kedah revealed that 56.6% of households were food insecure, and only 1.9% of the children had good diet quality, with 28.3% having poor diet quality (Chang & Ali, 2020). While specific statistics on eating-out frequency in Sungai Petani remain limited, regional evidence supports a strong link between urbanisation and nutritional transition. These trends highlight the relevance of Sungai Petani as a study site to examine how personal, behavioural, and environmental factors influence Malay parents' healthy eating when eating out. Addressing this gap can provide grounded insights for improving family dietary behaviours in similar urbanising contexts.

3.3 POPULATION AND SAMPLE

The study population consisted of Malay parents with children aged 5 to 12. Purposive sampling was used in the selection of the 37 participants. The subjects were chosen based on the study's aims and objectives in exploring factors contributing to healthy eating when eating out among Malay parents, hoping each participant would contribute unique and valuable information to the study (Ahmad & Wilkins, 2024). While Creswell (1998) suggests 20 to 30 participants are ideal for qualitative studies, this research included 37 participants to ensure data saturation, given the diversity of parental backgrounds and experiences. The inclusion of 37 participants was guided by several factors such as the scope of the study, the nature of the phenomenon, the paradigm of the study, the study design, and the level structure of the questions. These factors ensured the richness of the data collected (Ogden & Cornwell, 2010; Vasileiou et al., 2018; Morse, 2011). Thematic saturation was reached after 29 participants, when no new themes emerged during interviews, indicating that the data collected was sufficiently comprehensive to address the research questions. Additional interviews were conducted to capture diverse economic perspectives.

The inclusion criteria of this study were parents of Malay ethnicity who have at least one child between the ages of 5 to 12 years old and reside in Sungai Petani, Kedah, and children must be free from any chronic diseases and disabilities to minimise potential confounding factors that could influence eating habits and parental decision-making. The exclusion criteria focused on circumstances that might affect the consistency of parental influence on mealtime decisions. Families were excluded if their children had issues related to comorbidities that could bias the results, such as chronic diseases, eating disorders, history of eating disorders, and developmental disorders that could limit the ability of the parents to participate in the study. Furthermore, families where children lived with their parents less than 50% of the time or did not share at least one meal together were also excluded, as regular shared mealtimes play a crucial role in shaping parental influence on eating behaviours. Since Social Cognitive Theory emphasises the interplay of personal, behavioural, and environmental factors, participants needed to have consistent opportunities to model, regulate, and reinforce eating behaviours in real-life family dining settings. This ensured that the study captured the full spectrum of influences on parents' perceptions, practices, and barriers to healthy eating when eating out. The inclusion and exclusion criteria are further presented in Table 3.1.

The age range of 5 to 12 years was purposefully selected as this developmental stage represents a crucial period in which parents play a dominant role in shaping their dietary behaviours. Unlike adolescents who begin to exercise greater autonomy in their food choices, younger children are still largely dependent on parental decision-making regarding meal selection, portion sizes, and eating environments (Scaglioni et al., 2018; Yee et al., 2017). This dependency makes parental influence a key factor in understanding how healthy eating practices are formed, particularly when eating out. There is also a limited number of studies available on this specific population. Most existing studies have focused on the under-5 or over-18 age groups, rendering this age range of children underrepresented in the literature (Anggraeni et al., 2023; Ashari et al., 2022; Garcia et al., 2022; Ghaffar, 2020; Lee & Yoon, 2014; Man et al., 2021; Mognard et al., 2023; Robson et al., 2016; Salleh et al., 2021; Wang et al., 2020). A local study on overweight primary school-age children in Malaysia stated that one out of five 7-12-year-old children in Malaysia were overweight (Naidu et al., 2013).

Table 3.1 Inclusion and Exclusion Criteria for Participant

Inclusion Criteria	Exclusion Criteria
Parents with Malay ethnicity have at least one child between the ages of 5 to 12 years old.	Participants were families with children aged 5–12 years old who lived with parents 50 % of the time and did not share at least one meal together.
Resides in Sungai Petani, Kedah.	Parents and children who are diagnosed with chronic diseases, eating disorders, history of eating disorders, and developmental disorders.
Children must be free from any chronic diseases and disabilities.	

3.4 METHOD OF DATA COLLECTION

The interview was selected as a method for the data collection in this research. Using the interview method, following Paradis et al. (2016)'s approach, allows us to tap into participants' perspectives, perceptions, and personal stories. This helps researchers gain valuable insights into understanding and responding to different situations or phenomena. By providing deep information on the phenomenon (Turner, 2010), this method is more suited to this study compared to the quantitative approach, which focuses on numerical and statistical data. Most interviews were conducted face-to-face, allowing for observation of

participants' nonverbal cues, such as body language and facial expressions which enriched the data by providing additional context to verbal responses.

However, due to the logical constraints, three interviews were conducted via Google Meet, which limited the ability to observe certain nonverbal cues that might be visible in face-to-face interviews. Despite this, virtual interviews still facilitated a strong rapport between the interviewer and participants and allowed for flexible scheduling. The use of video conferencing also enabled the study to maintain accessibility and inclusivity for participants who might not have been able to attend in-person interviews. Though some nonverbal cues were missed in the virtual interviews, the depth and quality of the verbal responses remained consistent across both methods, contributing to rich and valuable data.

As Renner (2001) suggested, semi-structured interviews effectively understand individuals' cognitive and conceptual models of health behaviour and the frames of reference that individuals use to organise health behaviours. Semi-structured interviews are also useful when working with complex issues such as the practice of healthy eating as the technique allows for probing and spontaneous questions to explore, deepen understanding, and clarify answers to questions (Wilson, 2014). Also interview method was chosen over focus group discussion (FGD) due to their ability to minimise social desirability bias, allowing parents to share their genuine experiences without being influenced by group dynamics (Bispo, 2022). Given that parental food choices are highly personal and shaped by household routines, financial constraints, and cultural beliefs, the interview provided a private and flexible setting for participants to articulate their decision-making processes in-depth (Guest et al., 2023).

Furthermore, semi-structured interviews also allow the parents to share their own stories, which leads to a rich amount of data being gathered. Interviews allow the researcher to explore the complexity of parents perceptions related to healthy eating while eating out, their practice, and the perceived barriers they experience. Moreover, discussing the topics related to healthy eating, food restrictions, or struggles with parental control can be sensitive. Interviews fostered greater emotional honesty and openness compared to focus group discussion (FGD) where participants might hesitate to disclose challenges (Hoffman, 1957). By selecting interviews, this study ensured a comprehensive and individualised exploration of how Malay parents navigate healthy eating when eating out.

3.5 MATERIALS AND INSTRUMENTS

Below is a description of the materials and instruments used for the data collection of this study.

3.5.1 Recording tool

A digital voice recorder, Philips Voice Trace Audio Recording DVT1250 was used to record the interview. A mobile phone was also used to record the timer. Field notes were also taken during and immediately after each interview to capture nonverbal cues, contextual observations, and initial expressions.

3.5.2 Sociodemographic information

The demographic section included the parents' characteristics such as gender, age, occupational status, educational level, annual income, number of children within the household, and the features of children being talked about during the interview (gender and age). The second section covers eating out habits and practices, for example, frequency of eating out, visited food outlets (notably, fast food, casual dining, fine dining, food courts, and more), and time of day for eating out (morning, afternoon, and night).

3.5.3 Interview Questions

An interview guide was used to guide the flow of the interview session and to get a general idea of the topics being discussed by the researcher in conducting the interviews. The interview guide listed numerous open-ended questions aligned with the objectives of the study: perception, practice, and perceived barriers, and the social cognitive theory domain of healthy eating while eating out. The interview guide was prepared in English (Appendix I) and Bahasa Melayu, the national language of Malaysia (Appendix II).

The interview guide contained three sections: main questions, follow-up questions, and probe questions. Even though there were listed questions, the interview sessions were still conducted casually, allowing for flexibility in collecting participant data. The researcher developed an interview protocol through a comprehensive review of existing literature on parental dietary behaviours, eating out habits, and healthy eating practices. Particular attention was given to the qualitative studies that explored similar constructs to ensure relevance and comprehensiveness. Questions were also structured to reflect the core construct of Social Cognitive Theory, such as personal, behavioural, and environmental

factors. This theoretical grounding helped ensure that the data collected would support a meaningful analysis aligned with the study's conceptual framework. Lastly, the initial draft of the interview protocol was reviewed and revised by academic experts, who are the supervisors in qualitative research and the health psychology field. Their feedback led to refinement in the wording, order, and scope of the questions to enhance clarity and relevance.

3.6 ETHICAL CLEARANCE AND CONSENT CONSIDERATIONS

This study was reviewed and approved by the Research Management Centre (RMC) of the International Islamic University Malaysia (IIUM) under the identification number IREC 2023-192, before data collection (Appendix III: Ethical Approval). In conducting research, a researcher should seek ethical approval to minimise any potential risks and benefits, the right to fair treatment, and the right to privacy for research participants (Miracle, 2016). Therefore, this study needs to be reviewed and obtain approval from the relevant organisations. The consent was also obtained from the parents, and a copy of the consent form that was used in this study is attached in Appendix IV.

Before each interview, participants were provided with an information sheet detailing the purpose of the study, their rights as participants, and the voluntary nature of their participation. They were given ample time to read the information and ask any questions before signing the consent form. Verbal explanations were also provided when necessary to ensure clarity, especially for participants who sought further clarification. Some parents initially expressed concerns about how their responses would be used and whether their identities would remain anonymous. These concerns were addressed by reassuring them all data would be kept confidential, used solely for research purposes, and anonymised in any published findings. Additionally, participants were informed that they were free to discuss their potential involvement with third parties such as a family doctor, dietitian, or legal advisor before deciding to participate.

Written consent was obtained from all participants before the interviews commenced, and a copy of the consent form is included in Appendix IV. The consent form followed Creswell's (2007, p.123) guidelines and contained the following key information:

- i. The right of participants to voluntarily withdraw from the study at any time
- ii. The central purpose of the study and the procedures to be used in data collection
- iii. Comments about protecting the confidentiality of respondents

- iv. A statement about known risks associated with participation in the study
- v. The expected benefits to accrue to the participants in the study
- vi. The signatures of the participants, as well as the researcher's

3.7 PILOT STUDY

Pilot-testing the interview guide was vital to ensure the feasibility, readability, comprehension, and appropriateness of language. This step was crucial to ensure the participants understood the constructed questions and that the guide aligned with the study's research areas and objectives. Thus, a pilot study was conducted on 18th October 2023, after receiving approval from the International Islamic University Malaysia (IIUM) Research Management Centre (RMC) committee board on 11th October 2023, before the actual data collection began. During the pilot study, four participants which including two Malay mothers and two Malay fathers who were not participating in the actual data collection, were interviewed. The pilot study served multiple purposes, including assessing whether the interview guide was appropriate and suitable for use in the study, as well as estimating the interview duration. Additionally, it allowed the researcher to familiarise themselves with the interview process, ensuring smoother data collection during actual sessions.

Overall, the results of this pilot study demonstrated that the interview guide was appropriate. However, some refinements were needed as it was perceived as structured and did not allow for natural conversation to take place. Probing questions were added to the interview guide to explore participants' perspectives further, prompting them to elaborate on their thoughts, experiences, and reasoning.

3.8 DATA COLLECTION PROCEDURES

Target participants were sought through social media and online communities using a combination of purposive and snowball sampling. Initially, purposive sampling was employed to identify individuals who met the study's criteria. Subsequently, snowball sampling was utilised, relying on these participants to refer other within their network who shared similar characteristics and experiences. Participants who expressed interest in the study received a consent form, information sheets, and a sociodemographic form to complete. Participants have been informed of their right to withdraw from the study without penalty.

Before each interview, participants were briefed on voluntary participation, informed consent, anonymity, confidentiality, potential harm, and conflict of interest. They were also informed that the interview session would be recorded using a digital voice recorder. The interview session, rather than feeling like formal research sessions, the interviews often felt like conversations, where parents shared their thoughts openly, sometimes pausing to reflect on their own eating habits. Most interviews took place in the comfort of participants' homes, where they naturally settled into the discussion. Some parents spoke casually while seated at their dining tables, while others preferred to talk while attending to daily tasks such as folding laundry, watching over their children, or sipping on a cup of tea. In a few cases, the presence of children added an endearing element to the session, as little voices occasionally chimed in, asking questions or simply playing in the background.

For those who opted for online interviews, the setting was slightly different but no less engaging. Some participants adjusted their screens, ensuring they were comfortably positioned, while others spoke freely from their living rooms or home offices. At times, the sound of a child giggling in the background or the rustling of kitchen utensils subtly framed the realities of family life, reinforcing the authenticity of the study. To minimise distractions and ensure smooth interviews, participants were encouraged beforehand to select a quiet, uninterrupted time and location for their session. Despite the natural flow of family life, efforts were made to maintain focus. If interruptions occurred, such as children needing attention or background noise, the researcher respectfully paused the session, waited until the participant was ready to continue, repeated key questions, and reaffirmed responses at the end. This approach helped to maintain the quality of data without compromising the comfort or natural rhythm of the participants' environments.

Throughout the interviews, parents expressed a range of emotions. Some were animated and eager to share their perspectives, while others needed a little encouragement to open up. Moments of nostalgia surfaced, especially when discussing childhood food traditions, and at times, laughter lightened the conversation. There were also pauses of deep reflection, as participants reconsidered their own habits and the challenges of maintaining a balanced diet when eating out. On average, each interview lasted between 30 to 60 minutes, though some conversations extended naturally as participants grew comfortable sharing their experiences.

The procedure of the interview began with the participant information sheet in English or Malay version as requested by participants (Appendix V & Appendix VI). The purpose of the information sheet is to provide the participant with brief information about the study: (i) the purpose of the study, (ii) the nature of participation, (iii) the benefits and risks of involvement, (iv) the confidentiality of the data (v) the complaints towards the study. Participants were also reminded that: (i) participation in the study is voluntary, (ii) the participant has the right to withdraw the consent or stop from participating at any time without penalty, (iii) they have the right to refuse to answer particular questions or to decline any procedure, and (iv) all information collected during the interview session strictly confidential.

The interview session was recorded audibly and participants were mostly interviewed in Bahasa Melayu by the researcher, a native Bahasa Melayu speaker. Most of the participants preferred to use a Bahasa Melayu or in Kedah accent during the interview session due to their first language. Parents who participated in this study, known as participants, have been assigned a code number to ensure their anonymity and confidentiality regarding their identity. The mother participant has been assigned with code “M” and the father with the alphabet “F”, and the participant code number in this study ranges from M1 to M27 and F28 to F37. Audio recordings were stored securely on a password-protected computer, and the consent forms were stored in a private folder with limited access. Transcripts have been stored in shared drives with specific password access within International Islamic University Malaysia (IIUM) and were accessible only to authorised research team members.

The researcher took several steps to ensure that the data collection process ran smoothly, including:

- i. Testing the audio recorder one time before the interview began to make sure it was working.
- ii. Two spare batteries were packed in case the voice recorder’s power ran out.
- iii. After every interview, the voice recorder was checked multiple times to hit the record button, and the entire interview session was recorded.
- iv. The participants were contacted right away by the researcher if any information was missing so they could provide any further details that were required.

Lastly, as the interviews progressed, the researcher paid close attention to recurring themes, emerging patterns, and the emotions behind participants' words. Mental notes were taken throughout the sessions, and these insights shaped the development of additional open-ended questions in later interviews. This iterative approach allowed the researcher to delve deeper into the nuances of parents' perceptions and behaviours surrounding healthy eating when eating out. Interestingly, some parents expressed that the conversation itself made them more aware of their own eating habits, with a few remarking that they had never really thought about these choices in depth before. These candid exchanges provided a rich and textured understanding of the personal and cultural influences shaping their decisions.

3.9 DATA ANALYSIS

Data from the interviews were analysed thematically. Nowell et al. (2017) mentioned that thematic analysis (TA) is a highly adaptable method that can be tailored to various research needs, resulting in a rich, detailed, yet complex account of data. They also argued that thematic analysis is a powerful tool for assessing different study participants' viewpoints, showing parallels and variations, and uncovering unexpected findings (Nowell et al., 2017).

Mohamed et al. (2016) suggested that, due to its nature, thematic analysis is best suited for exploratory studies from the interpretive perspective in which the phenomenon that took place in the social context (Chan et al., 2022; Cook et al., 2021; Erica Yates et al., 2018; Liu et al., 2024). Responses to the open-ended questions about perceptions, practices, and perceived barriers to healthy eating were analysed using an inductive coding approach. Inductive analysis is a process of coding the data without trying to fit it into a pre-existing coding frame or the researcher's analytic preconceptions (Nowell et al., 2017). However, the researcher eventually performed both inductive and deductive coding strategies. This was performed independently by reading the transcripts to elaborate on the code from the data set delivered from the field. Apart from that, the researcher manually coded and extracted the quotes and themes.

The translation process occurred at two distinct stages, prior to data collection and during data analysis. Initially, the interview guide was developed in English to facilitate discussion with English-speaking supervisors. Then, this interview guide was translated into Bahasa Malaysia as many participants preferred to be interviewed in Malay, particularly in the Kedah dialect. The researchers and supervisory team are bilingual Malay Malaysian with

shared sociodemographic and cultural backgrounds, and collaboratively ensured the accuracy and appropriateness of the translation. The researcher began by translating the interview questions independently, then discussed the translation and decided on the most appropriate words in Malay to ensure conceptual equivalence across languages. The researcher consulted with bilingual supervisors to cross-check translations and ensure semantic equivalence. This dual-language approach aimed to uphold the integrity and cultural richness of the data while making it accessible to non-academic audiences.

A second phase of translation occurred during data analysis. The researcher transcribed the interviews in Bahasa Malaysia and then translated selected quotations into English for the purpose of presenting data in the thesis. This approach enabled the thematic analysis to be communicated effectively to both local and international academic audiences, while still preserving the original meaning conveyed by participants. The translated excerpts were chosen based on their relevance to emerging codes and themes. Throughout the analysis, regular discussions with the supervisory team were held to review coding decisions, refine themes, and verify interpretations. This iterative process contributed to the trustworthiness and rigour of the findings.

Seven phases of thematic analysis are involved in analysing the data as per Table 3.2. The first phase of thematic analysis is transcription, followed by reading and familiarisation, coding, searching for themes, reviewing themes, and defining and naming themes. The final phase is writing or finalising the analysis (Braun & Clarke, 2021). The process of data analysis is not linear, as it involves a recursive process, which means that the researcher is allowed to move back and forth between phases when necessary (Braun & Clarke, 2021; Braun & Clarke, 2020; Braun & Clarke 2013).

Table 3.2 Thematic analysis process of coding and analysis

Step	Process
Step 1	Transcription
Step 2	Reading and familiarisation
Step 3	Coding
Step 4	Searching for themes
Step 5	Reviewing themes
Step 6	Defining and naming themes
Step 7	Writing- finalising analysis

3.9.1 Transcription

The first step of the data analysis began with the transcription of the raw data (Braun & Clarke 2021). The collected audio recordings were transcribed verbatim through a careful and repeated listening process. The process of transcribing typically requires between two to four hours for each interview, resulting in a comprehensive transcript that was also influenced by the pace of participants, their vocal tone, and pauses during their dialogue. Irrelevant details such as repeated words, stutters, pauses, and indescribable words were excluded to yield clean verbatim transcripts. Each transcript was “labelled” with details including interview date, interview location, interviewer and interviewees’ annotation, time stamps, and storage location for the quotation extraction. Lastly, the researcher has proofread and revised the transcript against the audio recording to ensure the accuracy of the transcription.

3.9.2 Reading and Familiarisation

The second step according to Braun and Clarke (2021), involved a process of ‘immersion’ in the data. The researcher reviewed each transcript one by one repeatedly to familiarise with the data’s content. This helped the researcher spot conceptual ideas that may be of relevance to the study’s research questions. As the process of repeated reading took place, familiarisation came into place, which helped the researcher to make sense of the overall data. This step facilitated the subsequent steps, which were the coding and theming processes. Through this process, the researcher spent quite some time reflecting on the data, taking notes, and jotting down thoughts or issues that arose during the reading. Memoing allowed the researcher to collect insights, identify patterns, and concepts in the dataset.

3.9.3 Coding

The coding process has been defined as a process of labelling data concepts related to the research questions (Point & Baruch, 2023). The researcher performed a manual coding process. In this coding phase, the researcher sought to identify words and phrases that reflect and represent the personal, behavioural, and environmental factors that influence the practice of healthy eating when eating out. The initial list of codes was created based on the first transcript. The first transcript identified 14 codes that represented the findings of healthy eating when eating out through the Social Cognitive Theory perspective. This list of codes became the back-and-forth reference in coding for the remaining transcripts. A list of 18 codes was identified for the entire data set for the first transcript.

3.9.4 Searching for Themes

This phase involved identifying unique themes that captured the most salient patterns in the data to answer the research questions (Braun & Clarke, 2021). This study used a deductive-inductive approach to identifying the themes from the collated data relating to each code. In this phase, the themes identified at this phase were considered provisional, which means they are only *candidate* themes and will be revised and refined throughout the process of developing the analysis. Three themes emerged in the process of differential theme. Then, the researcher collated all the extracted data that was relevant to each theme, which was the collection of potential themes, subthemes, codes earlier. The three themes were separated into the Social Cognitive Theory frame and witnessed that there was revision done towards naming, organizing, and restructuring the themes, subthemes, and codes.

3.9.5 Reviewing Themes

This phase involves reviewing and refining the processes of candidate themes (Braun & Clarke, 2021). The potential themes identified in the previous phase were then reviewed by the research teams. The research teams consists of her supervisor and co-supervisors. She called for a meeting to sit together to review these themes. This procedure started with distributing the same 5 transcripts picked at random and cross-checking the theme with the coded and collated data to ensure it fit and captured the meaning of the dataset. It was found that all members in the research team produced the same results at this phase, and the themes, therefore, were confirmed by all members. The purpose of this research team was also to verify that the identified themes answer the research questions and, thus, the objectives of

the study are achieved. The literature was also revisited where appropriate to support the derivation of the themes and sub-themes in the study. The themes were also refined in order to ensure either they need to be separated or themes that can be combined with one another. Some of the initial themes were used to form sub-themes while others were discarded, since they did not have a sufficient amount of data to support them.

3.9.6 Defining and Naming Themes

At this point, defining the themes is useful to stay focused on the essence of the themes or what each theme is about (Braun & Clarke, 2021). This ensures the theme provides a clear, meaningful, and coherent picture of dominant patterns in the data that address research questions. Three themes were finalised to answer how healthy eating was perceived, followed by practice among Malay parents when eating out, and types of barriers that impede them from practising healthy eating. The names of the themes and subthemes were derived from the researcher's reading on the research topics, concepts from the previous literature, phrases articulated by the participants, and suggestions from the supervisors. The themes were then interlinked with the subthemes as illustrated in Figure 4.1 for the concept of healthy eating when eating out.

3.9.7 Writing: Finalising Analysis

Lastly, the researcher reported the findings and the analysis is presented in the following chapter. The reported findings include related information on the concept of healthy eating when eating out through the application of Social Cognitive Theory among Malay parents. The themes also presented to convey the story and analysis to the reader in a compelling way, which starts from the personal, followed by behavioural, and ends with environmental factors. Next, the participants' voices have been manifested in the form of quotations and were selected and inserted as the evidentiary basis for structuring claims and storyboard findings (Rockmann & Vough, 2024).

3.10 ISSUES OF TRUSTWORTHINESS IN QUALITATIVE RESEARCH

In qualitative research trustworthiness measures have been frequently raised by scholars to address the issues of reliability and validity (Creswell, 2007). To establish the trustworthiness in qualitative research Lincoln and Guba (1985) used unique terms for example “credibility”, “transferability”, “dependability”, and “confirmability”. Several strategies enhancing trustworthiness have been used to strengthen this study and are described in detail below.

3.10.1 Credibility

Credibility is a term that describes whether the participants’ views are in line with the researcher’s standpoint (Patton, 2015). To ensure the credibility and validity of the research findings, triangulation and member checking were employed. This involved using multiple methods and sources to cross-verify the data collected. Triangulation enhances the depth of understanding and provides a more comprehensive perspective on the research problem.

- i. Triangulation of data source triangulation method: Triangulation refers to the use of multiple and different methods, sources, investigators, and theories in qualitative research to provide a comprehensive understanding of phenomena (Patton, 1999). As for the interviewing process and techniques, this study developed an interview protocol. The researcher was tested and corrected by the supervisors in regular meetings and conducted a pilot interview with four parents, which consisted of two Malay mothers for the first session and two Malay fathers for the latter session. The regained feedback from the pilot study was used to adjust and refine the study design as needed. The sample of the study also included parents from various socioeconomic backgrounds, educational levels, and variations in children’s age within Kedah to capture a wide range of experiences and viewpoints. Followed by referring to the relevant documents, for instance, the National Health and Morbidity Survey (2011, 2015, 2017, 2019 & 2022) and other local health reports such as Malaysian Dietary Guidelines (MDG), to contextualise the interview findings and provide external validation.
- ii. Peer debriefing: Lincoln and Guba (1985) define peer debriefing as the process of consulting with peers or experts to validate interpretations and findings, thereby reducing the potential for researcher bias. In this study, peer debriefing was conducted with other researchers to ensure the accuracy of data interpretation. This

process aimed to confirm that participants' perspectives were accurately represented. The research findings were shared with experienced researchers during physical meetings, where feedback was solicited. The emerging themes identified during data analysis were presented for review and the expert researchers provided feedback on their accuracy and relevance. All members of the research teams affirmed that the identified and presented themes of findings accurately reflected the participants' perceptions and experiences.

3.10.2 Transferability

Transferability is a term that describes the extent to which it can be applied in other contexts and studies. Thick description was described by Lincoln and Guba (1985) as a method of obtaining external validity in qualitative research. By describing phenomena in sufficient detail, one might begin to assess the extent to which the findings apply to different times, settings, situations, and people. The transferability of this study's findings was demonstrated by describing the study context and participants, allowing the reader to examine the findings' application to different circumstances. Participants were also chosen based on a range of demographic criteria, such as variation in child age, frequency of eating out, and socioeconomic position.

3.10.3 Dependability

Dependability is a term that describes the ability to replicate the results of a qualitative inquiry using the same set of participants, coders, and circumstances. This term may be analogous to reliability in the quantitative studies (Lincoln & Guba, 1985). In this study, dependability was achieved by requesting research team members to code several interview transcripts, picked at random, and verified the codes. As a result, the coding was generally found to be consistent. The level of agreement of the identified codes and themes is achieved using consensus coding.

3.10.4 Confirmability

Confirmability is to ensure that the findings of the study are purely derived and represent participants' interpretations and the findings are free from the researcher's interpretation (Lincoln & Guba, 1985). Thus, the present study provided quotes from the interviewees to exhibit the findings of the study and to allow the readers to connect directly with the voices of the participants. The inclusion of rich descriptions and quotes from interviewees was also

to ensure that the findings of the study authentically reflect the viewpoints expressed by the participants during the interview session.

3.11 Data Retention and Management Policy

All data collected in this study, including audio recordings, transcripts, and field notes, were securely stored in password-protected digital folders accessible only to the researcher and the research team. Physical documents, such as consent forms, were stored in a locked cabinet in the researcher's office. All data will be retained for three years from the date of completion of the study based on the International Islamic University Records Management Policy. This retention period allows for verification, secondary analysis, and auditing if required by the university. After the retention period, all digital files will be permanently deleted using data-erasure software to ensure complete removal. Any physical documents will be shredded and disposed of securely. Throughout the retention period, access to the data will remain strictly limited to researcher and supervisors, ensuring confidentiality and integrity of participants' information. This policy reflects best practices in the responsible management of qualitative data.

3.12 SUMMARY

An interpretative study and paradigm were employed as the framework to guide this study. A total of 37 Malay parents have been purposively selected as the participants in this study. Face-to-face interviews were carried out to explore the experience of healthy eating while eating out and to comprehend how this experience was developed through the intersubjective social process shaped by individuals' perceptions, actions, and interactions with their environment. Thematic analysis was applied to identify the value of healthy eating when eating out through the personal, behavioural, and environmental dimensions. The issues of trustworthiness have also been discussed to address the reliability and validity of the study. The next chapter will present the results of the study in exploring healthy eating when outside in the context of personal, behavioural, and environmental factors in constructing the phenomenon of healthy eating among Malay parents.

CHAPTER FOUR

RESULTS

4.1 INTRODUCTION

The purpose of this study is to explore the practice of healthy eating among Malay parents when eating out, framed through the Social Cognitive Theory. This chapter presents the participants' demographics, followed by the key findings of healthy eating obtained from 37 face-to-face interviews with the Malay parents in Kedah based on a thematic analysis. The findings or generated themes will be presented and supported with the participants' quotes or excerpts. The findings have been organised into three main categories: Personal, Behavioural, and Environmental factors. Each category is further divided into themes and subthemes that emerged from the data. The analysis is grounded in Social Cognitive Theory, highlighting how personal, behavioural, and environmental factors influence Malay parents' healthy eating practices when eating out.

4.2 DESCRIPTION OF PARTICIPANT CHARACTERISTICS FROM INTERVIEWS

For this study, a total of 37 parents were interviewed, consisting of 27 mothers and 10 fathers. The ages of the participants ranged from 25 to 49 years, with the mean age falling between the mid-30s and early 50s. The sample included a variety of occupations, including self-employed parents, private sector employees, government servants, and housewives, demonstrating a diversified socioeconomic background. The majority of the women were housewives, whereas men were primarily in the private or public sector. Educational levels varied, with many participants holding diplomas or degrees, especially among young moms in the private sector. However, a sizable proportion of the sample received secondary or pre-university education, such as Sijil Pelajaran Malaysia (SPM), Sijil Tinggi Pelajaran Malaysia (STPM), and Sijil (certificates). The household income ranged from less than RM 2500 to more than RM 10,000. Interestingly, many housewives claimed no income, indicating a reliance on spousal incomes. The number of children per participant ranged between 1 and 9, with an average of 2 to 4 per home. Larger families were more prevalent among older adults, particularly men in government positions. This diverse sample provides a solid platform for investigating how personal, educational, vocational, and economic

characteristics interact to influence parental behaviour, beliefs, and decisions within families. The diverse backgrounds improve the generalisability and depth of the qualitative analysis. The description of the parents is shown in Table 4.1.



Table 4.1 Description of Participant Characteristics from Interviews (n=37)

Parent	Gender	Age	Occupation	Educational level	Income	Count of child	Children being talked about	
							Gender	Age
M1	Female	45	Self-employed	PMR	RM <2500	3	Female	6
M2	Female	27	Private sector	Degree	RM 2500- RM 3169	1	Female	5
M3	Female	27	Government	Degree	RM 3970 - RM 4849	1	Female	5
M4	Female	30	Self-employed	Diploma	RM 3970- RM 4849	2	Female	6
M5	Female	25	Self-employed	Diploma	RM 8700- RM 10,959	1	Male	5
M6	Female	25	Housewife	Diploma	RM0	1	Male	5
M7	Female	39	Self-employed	SPM	RM <2500	2	Female	9
M8	Female	34	Self-employed	Diploma	RM 2500- RM 3169	2	Female	11
M9	Female	28	Housewife	Diploma	RM0	2	Female	5
M10	Female	31	Housewife	SPM	RM0	3	Female	10
M11	Female	42	Housewife	Primary school	RM0	4	Male	9
M12	Female	39	Housewife	SPM	RM0	3	Male	7
M13	Female	43	Self-employed	Diploma	RM <2500	2	Female	8
M14	Female	45	Housewife	SPM	RM0	3	Male	11
M15	Female	48	Self-employed	STPM	RM <2500	4	Female	10
M16	Female	26	Self-employed	SPM	RM <2500	2	Male	6
M17	Female	40	Self-employed	SPM	RM <2500	4	Male	11
M18	Female	38	Private sector	Degree	RM <2500	3	Male	10
M19	Female	43	Government	Degree	RM 8700- RM 10,959	4	Female	10
M20	Female	47	Self-employed	SPM	RM <2500	2	Female	12
M21	Female	40	Self-employed	Secondary school	RM <2500	2	Male	9

Table 4.1 Continued

M22	Female	31	Self-employed	Certificate	RM <2500	2	Male	7
M23	Female	27	Private sector	Degree	RM 2500- RM 3169	1	Female	5
M24	Female	33	Self-employed	STPM	RM 3170- RM 3963	2	Male	11
M25	Female	39	Housewife	SPM	RM 0	2	Female	12
M26	Female	33	Private sector	Diploma	RM 2500- RM 3169	2	Female	12
M27	Female	34	Private sector	Diploma	RM 3170- RM 3963	2	Male	10
F28	Male	32	Private sector	Degree	RM 3170- RM 3963	3	Male	6
F29	Male	36	Private sector	SPM	RM 2500- RM 3169	3	Female	10
F30	Male	36	Private sector	PhD	RM 7110- RM 8699	4	Male	10
F31	Male	49	Government	Diploma	RM 5880 - RM 7109	9	Male	12
F32	Male	36	Government	PhD	RM 5880- RM 7109	2	Female	9
F33	Male	41	Government	PhD	RM 10 960 - RM 15 039	4	Male	12
F34	Male	41	Private sector	Diploma	RM <2500	1	Female	7
F35	Male	39	Private sector	Diploma	RM 3970- RM 4849	3	Female	7
F36	Male	37	Government	PhD	RM 8700- RM 10,959	4	Female	8
F37	Male	40	Private sector	Master Degree	RM 8700- RM 10,959	4	Female	11

Note. This table presents the sociodemographic characteristics of the study participants, including gender, age, occupational status, educational level, monthly income (RM), and details on the specific child(ren) discussed during the interviews as reported by the participants in a socio-demographic form completed by participants. RM= Ringgit Malaysia, PMR= Penilaian Menengah Rendah, SPM= Sijil Pelajaran Malaysia, STPM= Sijil Tinggi Persekolahan Malaysia, PhD= Doctor of Philosophy.

4.3 DESCRIPTION OF CHARACTERISTICS OF PARTICIPANTS AND EATING-OUT PRACTICES

This study also provides insights into the participants' eating-out habits and practices as per Table 4.2. The participants of Malay parents reported a range from occasional outings to more regular habits of up to six times a week in terms of eating-out frequency. These variations were closely tied to work schedules, family routines, and availability of time and energy for meal preparation at home. The most common preferred food establishments for eating out included casual restaurants, food courts, and fast-food outlets. The preferred times for eating out varied, with lunch and dinner being the most frequent. Families with busy daytime schedules opted for dinner meals outside, while those with flexible schedules preferred lunch outings. This contextual information highlights the complex interplay of personal, behavioural, and environmental factors influencing Malay parents' eating-out habits. These insights form the foundation for understanding their perceptions, practices, and barriers to healthy eating when eating outside the home.

Table 4.2 Demographic and Contextual Information on Eating-Out Practices (n=37)

Parent	Gender	Age	Frequency of eating out for a week	Preferred types of dining venues	Time of day for eating out
M1	Female	45	1	Casual restaurant	Afternoon
M2	Female	27	2	Cafe	Night
M3	Female	27	1	Casual restaurant	Night
M4	Female	30	3	Food court	Night
M5	Female	25	3	Casual restaurant	Afternoon
M6	Female	25	3	Casual restaurant	Night
M7	Female	39	1	Casual restaurant	Night
M8	Female	34	2	Fast food	Afternoon and night
M9	Female	28	1	Casual restaurant	Afternoon
M10	Female	31	2	Food court	Afternoon and night
M11	Female	42	2	Casual restaurant	Night
M12	Female	39	1	Food court	Afternoon
M13	Female	43	2	Casual restaurant, Food court	Night
M14	Female	45	3	Casual restaurant	Night
M15	Female	48	3	Food court	Afternoon and night
M16	Female	26	4	Casual restaurant	Afternoon and night
M17	Female	40	1	Casual restaurant	Afternoon
M18	Female	38	1	Casual restaurant	Night
M19	Female	43	4	Food court	Afternoon and night
M20	Female	47	>6	Casual restaurant	Morning, afternoon, and night
M21	Female	40	3	Casual restaurant and Food court	Afternoon and night
M22	Female	31	3	Food court	Afternoon and night

Table 4.2 Continued

M23	Female	27	2	Casual restaurant	Night
M24	Female	33	2	Casual restaurant	Afternoon
M25	Female	39	2	Casual restaurant	Night
M26	Female	33	3	Casual restaurant	Afternoon and night
M27	Female	34	2	Casual restaurant	Afternoon and night
F28	Male	32	1	Casual restaurant	Night
F29	Male	36	2	Casual restaurant	Night
F30	Male	36	1	Fast food, casual restaurant, food court, kopitiam, mamak, cafe	Night
F31	Male	49	1	Casual restaurant	Night
F32	Male	36	1	Casual restaurant	Night
F33	Male	41	2	Fast food, casual restaurant, food court	Afternoon and night
F34	Male	41	1	Casual restaurant	Night
F35	Male	39	1	Casual restaurant	Night
F36	Male	37	3	Fast food and food court	Afternoon and night
F37	Male	40	1	Casual restaurant	Night

4.4 EMERGING THEMES

Tables 4.3, 4.4, and 4.5 show the mapping of research questions and the emerging themes. The thematic analysis identified three main themes and a series of sub-themes as listed in Tables 4.3, 4.4, and 4.5 and Figure 4.1. These three themes were also identified as emerging themes because the participants of the study consistently discussed them. The first theme was on personal factors demonstrated how Malay parents perceived and viewed the concept of healthy eating when eating out. The second theme that emerged was the behavioural factors that described the practice of the participants on healthy eating when eating out. Lastly, the third theme found on environmental factors which the barriers that contributed to the impediment of healthy eating when eating out among Malay parents.

Table 4.3 Themes, Subthemes, and Codes for Personal Factors of Healthy Eating When Eating Out

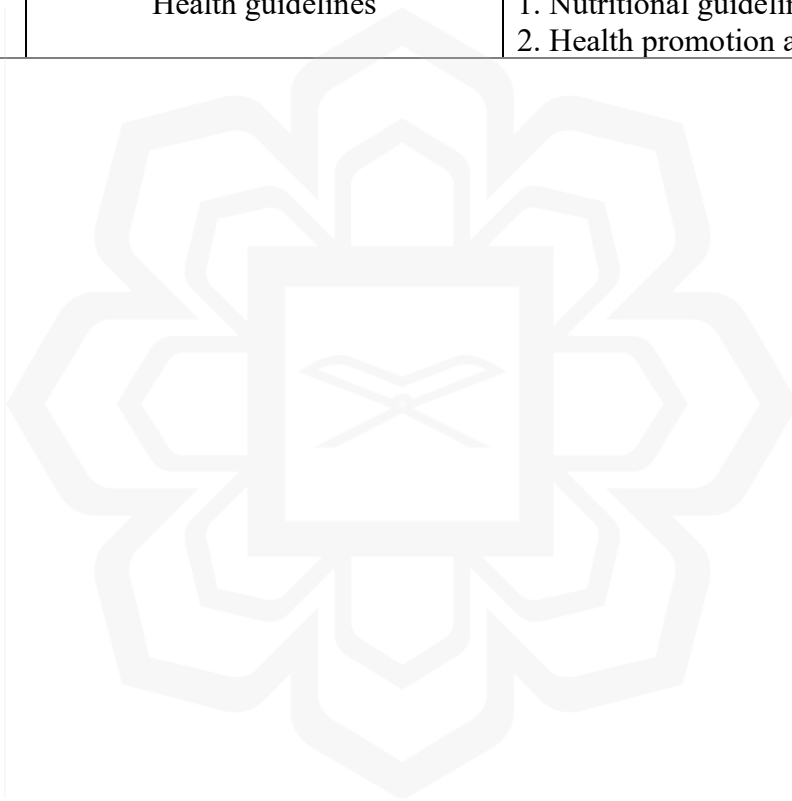
Themes	Subthemes	Codes
Personal factors	Malay cultural and social dimensions of food choices	1. Traditional food practices and preferences 2. Symbolic foods
	Perceived health benefits in food choices	1. Long-term health investment 2. Personal development and identity formation
	Struggling with cravings and social influences	1. Internal conflict between health goals and indulgence

Table 4.4 Themes, Subthemes, and Codes for Behavioural Factors of Healthy Eating When Eating Out

Themes	Subthemes	Codes
Behavioural factors	Nutritional preferences	1. Healthy food choices 2. Preference for familiar foods 3. Visual appeal of foods
	Mindful consumption	1. Alignment with home based eating practices 2. Practicing balanced diet 3. Adherence to religious dietary guidelines

Table 4.5 Themes, Subthemes, and Codes for Environmental Factors Affecting Healthy Eating When Eating Out

Themes	Subthemes	Codes
Environmental factors	Sociocultural dynamics in eating behaviours	<ol style="list-style-type: none"> 1. Contemporary food trends 2. Parental dilemma 3. Convenience and practicality in food choices
	Restaurant quality and standards	<ol style="list-style-type: none"> 1. Food safety and hygiene concern 2. Restaurant environment and attributes 3. High cost of healthy foods 4. Diversity of food choices
	Health guidelines	<ol style="list-style-type: none"> 1. Nutritional guidelines 2. Health promotion and education



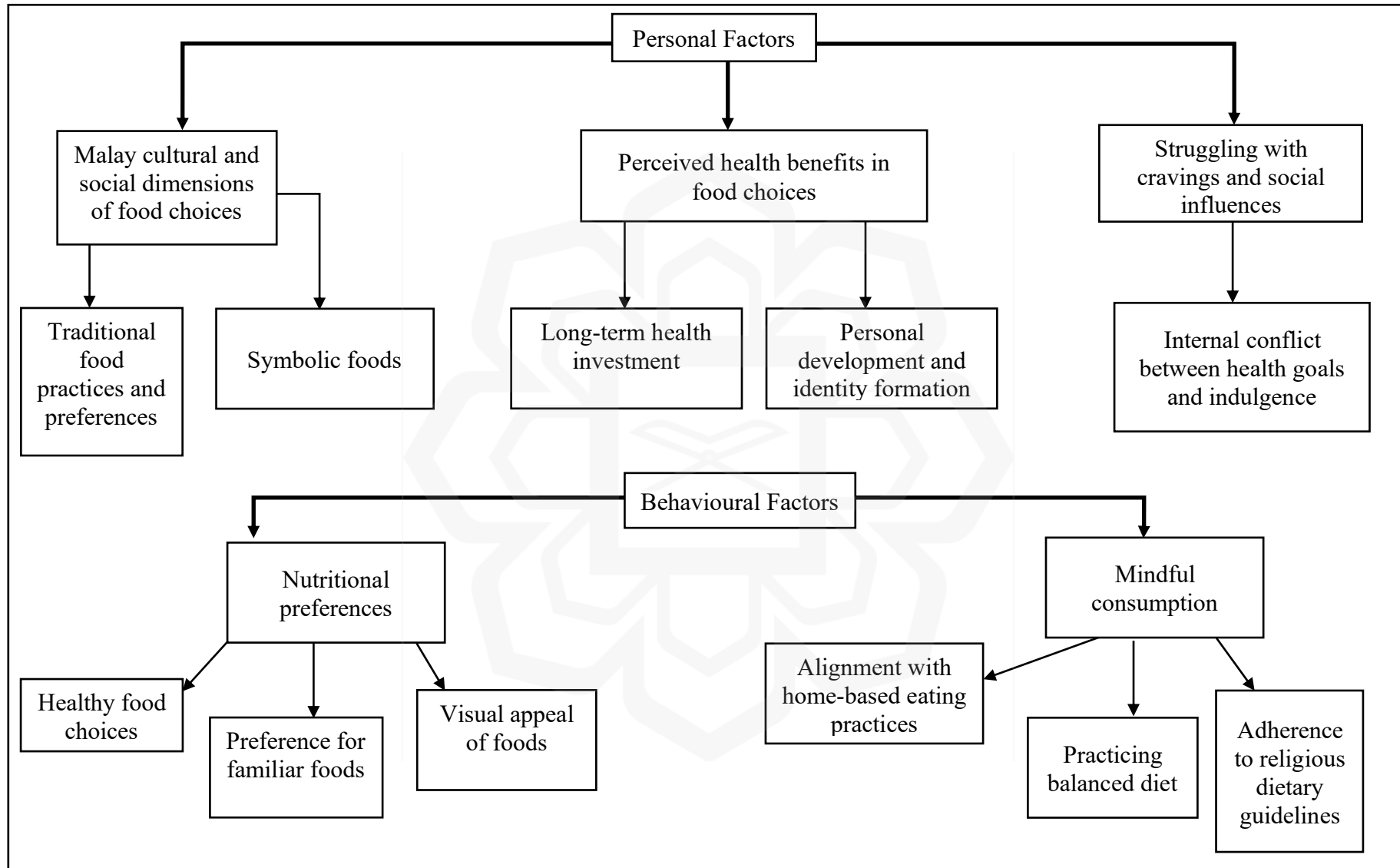


Figure 4.1 Themes, Subthemes, and Codes for Healthy Eating When Eating Out

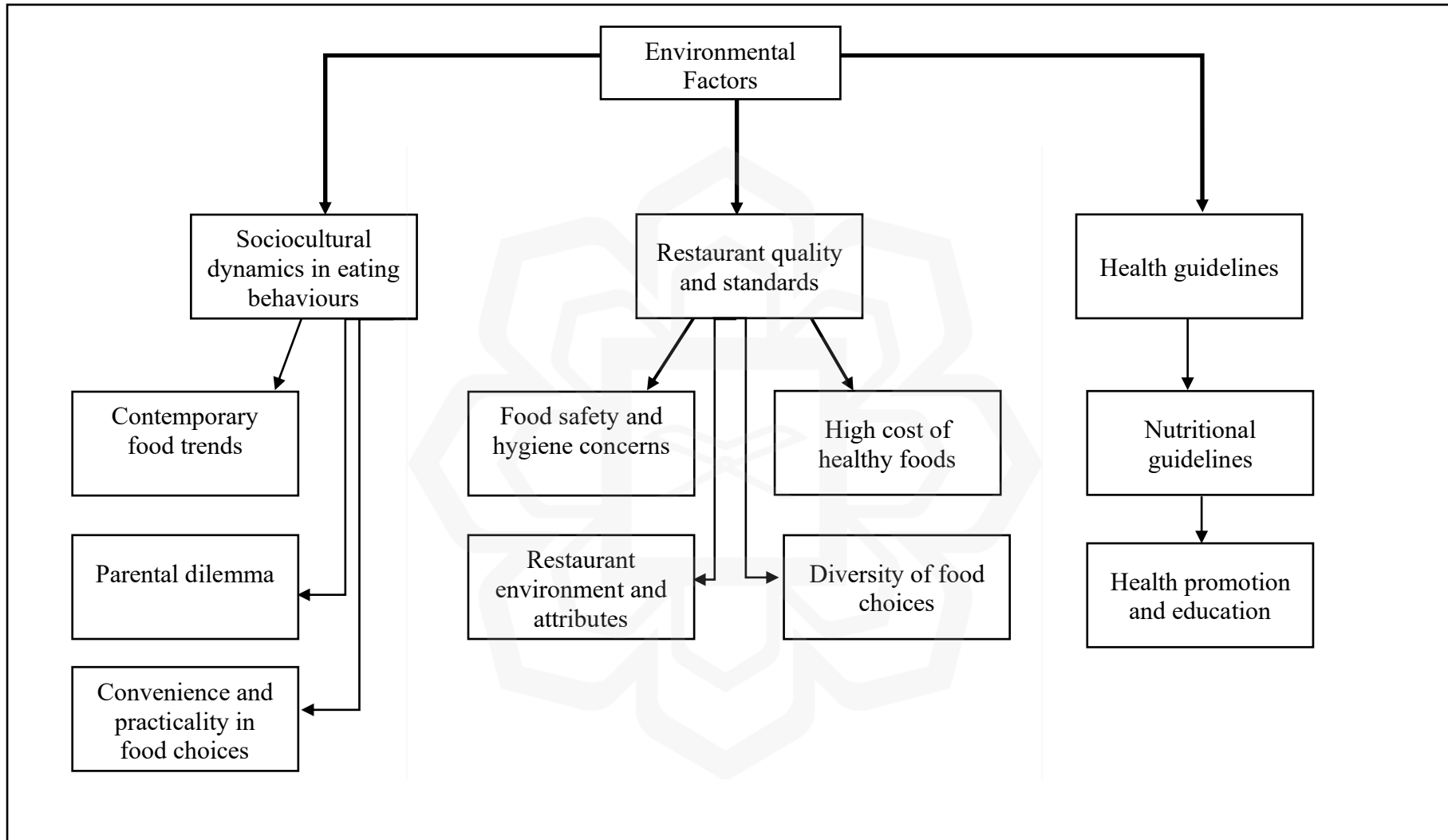


Figure 4.1 Continued

4.5 PERSONAL FACTORS

This theme explores the individual-level influences that shape both the perceptions and practices of Malay parents regarding healthy eating when eating out. The subthemes reflect how cultural norms, personal beliefs, and internal motivations interact with dietary behaviours. These include the Malay cultural and social dimensions of food choices, perceived health benefits of food choices, and struggling with cravings and social influences. Together, these factors illustrate how Malay parents make sense of and navigate their food choices in eating-out contexts.

4.5.1 Malay Cultural and Social Dimensions of Food Choices

This subtheme highlights the definition of healthy eating when eating out with Malay parents through the denotation of traditional food practices and preferences practised among the Malay race. Malay cuisine, such as rice, vegetables, and side dishes, has frequently been referred to as a representative of healthy eating when eating out. This association underscores the interplay between cultural and dietary habits, demonstrating how traditional norms shape their perception of healthful eating practices. This can be illustrated through one of the participants' quotations,

“It’s actually more about Malay cuisine as well. Meaning, there’s rice, there’s side dishes, and there’s vegetables.”

(F31, 49 years old, employed).

Another participant described the connection between traditional Malay eating patterns and health, emphasising the preference for natural and unprocessed ingredients such as *ulam* (fresh herbs), which are both culturally and nutritionally beneficial. This has been encapsulated in the participant's quotation,

“I think the eating pattern of the Malays is healthy. Here in Kedah, we tend to prefer foods like fresh herbs (ulam). It’s mostly like that even when eating out.”

(M24, 33 years old, self-employed).

Moreover, this alignment between cultural traditions and health benefits also extends to the broader food environment. For example, a participant noted that healthy eating when eating out aligns with the offerings commonly available at Malay eateries. This is illustrated by the participant's quotation,

“When talking about healthy eating while eating out, I think it's the kind of food available at Malay eateries...”

(M15, 40 years old, female, self-employed).

In the context of healthy eating when eating out, the symbolism of certain foods reflects the cultural familiarity and significance associated with the Malay dietary practices. Central to this familiarity is the inclusion of *ulam* (fresh herbs) on the plate, which is not only seen as a marker of healthy eating but also as a cornerstone of traditional Malay meals. Any deviation from this symbolic food practice is perceived as a departure from the healthy dietary pattern. This can be captured through the shared quotation of the participant, who shared how their personal food choices align with these traditional values,

“When talking about healthy foods when outside is... the foods that usually I choose to eat such as fresh herbs (ulam), sambal belacan, fish, chicken, beef, and other types of seafood as I think that's the most healthiest food choices when eating out...”

(M24, 33 years old, self-employed).

The cultural association of healthy eating extends to regional dishes like *laksa*, a popular dish in Kedah, which is recognised for its balanced and nutritious meals due to its combination of fish, a source of protein, and fresh vegetables, including *ulam*. This perception of the inclusion of protein and vegetables as healthy foods has been demonstrated in the participants' notion, which depicted the participants' cultural understanding of what constitutes healthy eating. This can be observed through the participant's quotation,

“Healthy food in Kedah, hmm... what’s healthy in Kedah... laksa is healthy, I guess... because it’s made with fish... and it has vegetables like fresh vegetables (ulam), right?”

(F37, 40 years old, employed).

This quotation served as the interlinkage of the nutritional value of *laksa* and the symbolic resonance within the cultural amalgamation of Kedah. For many parents, dishes like *laksa* represent a bridge that connects heritage and health, serving as a reminder of the traditional dietary practices rooted in the use of fresh, locally sourced ingredients.

The notion of symbolic foods extends further when the participant reflects on the value of traditional practices of the older generations. This is further emphasised in the nostalgic reflections of participants, who describe the preparation and consumption of foods were seen more natural and organic process in the past. The foods of the past, including (*ulam*) and other local ingredients, are remembered as symbols of purity and health. This is depicted in the following quotation from the participants,

“Back in the traditional days, it was so different from the modern era. Everything used to be natural and organic, we could say. Like vegetables, fresh herbs (ulam), fruits... even rice—we planted the paddy ourselves, processed it ourselves. So, we knew whether the preparation process was clean or not, right? Back then, everything we ate was free of artificial colouring, flavouring, low in calories, and completely free of pesticides. We could confidently say that even the raw ingredients themselves were healthy.”

(M15, 48 years old, self-employed).

This reflection on the past reinforces the symbolic value of food choices as representations of a healthier, more authentic way of life. Foods like *ulam* and freshly grown rice are symbolic of a time when food was perceived as pure, and untainted by modern industrial processes. These symbolic foods serve as a cultural touchstone for Malay parents, reminding them of the values of simplicity, sustainability, and health that they hope to pass on to future generations.

4.5.2 Perceived Health Benefits in Food Choices

While Malay parents' perception of healthy eating is strongly rooted in cultural and symbolic meaning, such as the inclusion of *ulam* and traditional dishes that reflect their heritage and way of living, their food choices are also influenced by their views on the long-term benefits perspective on these foods. This perspective accentuates the recognition of diet as a critical factor in maintaining long-term well-being and preventing chronic diseases. For many parents, healthy eating, whether it takes place at home or outside, represents an investment in their family's future, combining cultural values with a practical focus on health outcomes.

The perception of healthy eating among Malay parents extends beyond immediate dietary satisfaction to encompass a broader investment in long-term health and well-being. This proactive approach reflects their awareness of the significant role diet plays in preventing chronic illnesses and ensuring a healthier future for themselves and their families. This can be seen through the participant's quotation, which expresses,

“Our expectation is the same when talking about healthy eating at or outside of home. It's like I want these children to grow up normally and according to their developmental age. We want to avoid chronic diseases because this disease not only affects our well-being but also the cost of treatment; the medicine is expensive, and sometimes our dietary patterns change. So, it's important to take care of our diet and lifestyle now for a healthier future”

(F35, 39 years old, employed).

This quotation reflects the personal factors of Social Cognitive Theory, which parents' awareness of health risks and their aspirations for their children's well-being serve as a cognitive driver for adopting healthier eating practices when eating out.

The participants conveyed their preferences for certain cooking methods, such as steaming and nutrient-rich food choices. This has been considered as a meaningful strategies in their pursuit of healthy aging. This inclination was shaped by an awareness of their vulnerability to age-related illnesses, which they viewed as a natural yet manageable process through conscious and early dietary practices. This has been demonstrated through the participants' quotations,

“I believe that steamed dishes and vegetables are good for the body. We should reduce the consumption of fatty dishes like curry and oil-rich foods. As we age, it becomes very easy to develop illnesses”

(M1, 45 years old, self-employed).

In a similar vein, another participant elaborated on how the consistency of healthy eating habits, even when eating out can contribute to the long-term health security for the family, as per the illustrated quotation,

“For me... I like to practice healthy eating when eating out so that my health and my family’s health are more assured... to avoid diseases like high blood pressure, and diabetes... and of course, because we want to live a long and healthy life, right? So, like it or not, we have to put in some effort.”

(M6, 25 years old, housewife).

This quotation reflects the integration of health consciousness and perceived benefits by the participants. Such an evaluative outlook on future health outcomes has led them to reinforce the importance of mindful dietary decisions, even in the context of eating out. Collectively, these quotes depict how Malay parents perceive healthy eating as a vital step toward securing long-term health benefits. The notion of food as an investment has translated into a deliberate intention to make thoughtful food choices when eating out. This perspective emphasises the belief that making informed and health-conscious food choices today can help safeguard the well-being of families in the future.

The notion that food choices influence personal development and identity formation emerged clearly in the participants’ views. The idea that “we are what we eat” reflects the perception of the parents that food choices are not just a means of nourishment, but the translation, manifestation, and expression of values, character, and self-discipline. In Arabic, it can be addressed as *sahsiah*. One participant shared that,

“Our traits come from the food we eat. The things we consume shape our identity and personality. If we choose good food sources, then our character will also be good. We are what we eat”

(M24, 33 years old, self-employed).

This quotation reflects the strong belief that the act of choosing healthy foods is not only a reflection of self-care but an embodiment of values and discipline. Another participant added by saying,

“For me, food is not just about filling the stomach. It reflects who we are, what values we hold, and how we present ourselves to others. Choosing healthy food, especially when eating out, shows discipline and care for our well-being. I believe it also teaches our children about balance and making responsible decisions.”

(M12, 39 years old, housewife).

This quotation portrays that food is not just a tool for survival or quality well-being. However, it extends to the characteristics of the individual, which reflect deeply held values and virtues. For the participants, food choices go beyond simply satisfying hunger or maintaining physical health, they embody discipline, care, and personal responsibility. The act of selecting healthy foods when eating out is seen as a manifestation of the individual’s character.

The participant also underscored the role of self-control in food selection when eating out, promoting the notion that healthy eating is not only a means of maintaining physical health but also an opportunity for character-building. The emphasis on teaching children the importance of moderation, discipline, and responsibility in their food selection reinforces the idea that eating habits are closely tied to the values and virtues passed down through generations. In this way, healthy eating becomes not just a personal practice but a vehicle for transmitting knowledge, fostering long-term health behaviours, and supporting the development of healthy identities for both parents and children. This has been demonstrated in one of the participants’ quotations,

“We follow the principle of eating in moderation, whether at home or outside. I believe this not only helps in keeping the body healthy but also reflects good character. Overindulgence, to me, shows a lack of self-control, and I want my children to learn the value of restraint in everything, including food.”

(F36, 37 years old, employed).

Moreover, this is supported by another quotation that highlights the role of parents in shaping their children’s health and cognitive processes, which later will contribute to the formation of a high-quality society. This illustrates that a healthy and balanced diet, both in quality and quantity, is essential for nurturing an individual with noble character, civility, and a sense of discipline following Islamic principles. As mentioned by the participant,

“At the same time, we explain the ingredients and their effects on health, memory, character, and thought processes. We want to teach them the reasons behind our food choices”

(M18, 38 years old, employed).

These quotations manifest a broader cultural and societal shift, where the act of healthy eating becomes a means of instilling enduring virtues. Educating their children on how foods impact not just their physical health but also their mental clarity, memory, and character shows that parents aim to raise individuals who will continue these practices in the future. In this way, they hope to cultivate a generation that embodies self-control, balance, and ethical responsibility, which, in turn, leads to a more thriving and well-rounded community. Food choices must be understood that it is not just for today but for a healthy and responsible future.

4.5.3 Struggling with Cravings and Social Influences

This subtheme explored the internal conflict or desire that influences the intention of making healthy food choices when eating out. The competing influences of personal cravings have made the healthy practice harder to execute, even though the importance of selecting healthy options for their families is recognised. This concern has been voiced by the participants,

they often find their personal desires and temptation to indulge in less healthy foods thwart them from practising healthy eating when eating out.

“When eating out, there are so many types of food, right? It’s all mixed up. I feel it depends on the type of restaurant and on the parents themselves. If parents really care about their children’s health, of course, they’ll choose healthy food, right? Who doesn’t love their children? But sometimes, it’s our own cravings that become the obstacle to practicing healthy eating. Also, it’s about our desires. Even if there are 1,000 healthy food restaurants, if our cravings and desires are directed toward unhealthy food, it’s the same... it’s like those healthy restaurants don’t even function.”

(M16, 26 years old, self-employed).

This quotation illustrates the recurring tension between prioritising family health and succumbing to personal desires. The pull of cravings and indulgence outweighs the intention to make healthy choices despite the abundant availability of healthy options. This reflects that desires act as a powerful force that needs to be empowered to reconcile these competing priorities to attend to the complexity of practising healthy eating in the diverse food options context of a culturally rich and food-centric society like Malaysia.

Next, participants viewed eating out as an opportunity to break from their usual routines and indulge in unique or less frequently consumed foods. In the external context, the desire to eat something rare and new has dominated the type of food selection when eating out, which has resulted in the ignorance of healthy eating when eating out, as per the quotation,

“For me, healthy eating when eating out is important, but we don’t do it often. Occasionally, we try to choose healthier options, but it’s not really a priority. Because when we eat out, we want to eat something that we rarely eat or something new. We don’t want to eat the same things we always eat at home.”

(M25, 39 years old, housewife).

Also supported by another participant who agreed on the food selection when eating out, who mostly focused on their cravings and personal desire instead of health considerations,

“It’s hard to see parents really making healthy choices when eating out... because most of the time, parents choose what they want to eat or crave. Sometimes it’s because we don’t get to eat those kinds of food often, so we want to try them.”

(M4, 30 years old, self-employed).

These quotations show that the novelty of food experiences often takes precedence over health considerations when eating out. The participant’s notion on the concept of eating out underscores a common conception that eating out is not merely about nourishment, however enjoyment, exploration, and escaping the monotony of home-cooked meals.

Another participant coupled the personal desire, Malaysian context, and the Malay community specifically, which tends to indulge itself when it comes to eating style. The criteria of foods described as “filling” and “delicious” are the top-notch criteria that influence their food selection when eating out. This can be seen from the participants’ quotation,

“I don’t think my knowledge is a barrier to making healthy food choices when eating out... the barrier is our own desire. For us Malays in Malaysia, as long as it’s filling and delicious... health considerations in eating just go out the window.”

(M2, 27 years old, employed).

This quotation reveals that cultural context, perception, and preferences toward foods can override health considerations. In the Malaysian context, where food culture celebrates richness, diversity, and enjoyment, the notion of “healthiness” can sometimes be perceived as secondary to a deep appreciation for indulgence and communal dining. This accentuates the difficulty of integrating personal health goals with cultural standards, in which the pleasure of eating often comes first.

The current food trends and social environments further intensify the internal conflict between health goals and indulgence. Participants described how the trendy food options and cultural phenomena, such as aesthetic cafes, food festivals, and globally inspired cuisines, create a strong pull toward indulgent eating. These contributory factors often overpower the intention to choose healthier options, as they cater to personal cravings and align with the desire to explore new and exciting food experiences. This can be illustrated through the participant's quotation,

“I think it's the current trend. The food trends nowadays. Everything has cheese, then there's the Korean food, aesthetic cafés, and now people love trying new things. Oh, and now there are so many events like food festivals and whatnot. That's where you see all sorts of foods. So, of course, businesses will follow the current market, the type of food people prefer these days. I think that's what makes it hard for me and my children to choose healthy food when eating out. These things make our preferences change and follow our current environment.”

(M25, 39 years old, housewife).

These quotations demonstrated that healthy dietary patterns are perceived as a “confinement,” which sounds like a “punishment” for them to consume unpalatable foods based on their conception of healthy eating. Thus, they will redeem themselves by consuming something that is “flavoursome” outside to complement their healthy food consumption at home. A healthy dietary pattern should be perceived not as a barrier to enjoying foods but as an opportunity to explore flavourful, satisfying, and nutritionally balanced options that align with personal and cultural preferences. Reframing healthy eating as a flexible and enjoyable practice, parents may feel less constrained and more motivated to integrate healthier choices when eating out. This approach emphasises the importance of shifting perceptions from restriction to empowerment, encouraging parents to view healthy eating as an enriching experience rather than a sacrifice.

4.6 BEHAVIOURAL FACTORS

This theme delves into the behavioural factors that Malay parents practice when eating out. The subthemes that emerged in response to the theme included nutritional preferences and mindful consumption. This factor explains the actions taken by Malay parents when they are in an eating-out context.

4.6.1 Nutritional Preferences

The first subtheme that appeared is nutritional preferences, which describes the deliberate selection of food items and preparation methods by Malay parents when eating out, driven by their awareness of health, taste, and dietary considerations. These preferences are reflected in their choices of healthier food options when eating out, which capture active prioritisation of nutritional quality and health-conscious eating practices amidst the different eating contexts.

One prominent pattern observed among the participants was the intentional avoidance of fried foods, which they perceived as overly oily and unhealthy. For instance, one participant shared,

“When eating out, we avoid choosing fried foods, and that’s our small effort to practice healthy eating”

(M10, 31 years old, housewife).

Another participant noted that they will turn down oily foods when eating out, further emphasising the effort to avoid excessively oily dishes. This is illustrated through the participant’s quotation,

“I mostly cut down on fried foods... For example, omelettes or fried eggs at restaurants are really oily. So I avoid eating fried eggs or omelettes at restaurants”

(M3, 27 years old, employed).

Beyond avoidance, participants also exhibit prioritisation of healthier such as grilled foods, soups, and dishes that incorporate vegetables. These choices reflect the active

prioritisation of nutritional quality during family meals when eating out. A participant shared that,

“I prefer grilled foods as it is better than fried foods and I am also keen more on the fresh herbs (ulam) in my meals intake and would suggest to my family too”

(M24, 33 years old, self-employed).

Another participant shared her typical choices, which showed the inclination towards grilled foods, saying,

“When we eat out, we usually choose grilled fish, sometimes grilled chicken, chicken soup, beef soup, and also fresh salads...”

(M10, 31 years old, housewife).

This shows a consistent effort to opt for nutrient-rich, wholesome meals when eating out. The cooking methods have been a way for the participants to practice healthy eating when eating out, which displayed the awareness of choosing healthy food selection,

“I usually choose foods like chicken soup, rice, and vegetable soup for our family when eating out as it is healthy and safe to eat”

(M3, mother, 27 years old, employed).

Healthy eating practices have also been associated with the incorporation of healthier components, such as vegetables and the reduction of sugar in their drinks. This can be noted in the participant’s quotation,

“When eating out, we try to include foods with vegetables... and avoid or reduce sugar in drinks”

(M7, 39 years old, self-employed).

Children's familiarity with food is also taken into consideration when applying the concept of healthy eating, as it is a part of making the experience of eating as easy and enjoyable. This subtheme is strongly aligned with the theme, as familiar foods often reduce the likelihood of children rejecting healthier options. Familiarity also plays a key role in ensuring that children consume their meals more readily, which is important for parents looking to maintain a stress-free dining experience. This preference for known dishes reflects the ease and allows for healthier eating patterns, as familiar foods are often simple, traditional meals that are easier to moderate and balance nutritionally.

Participants frequently highlighted the importance of choosing familiar dishes when eating out to make the experience smoother for their children. One parent emphasised the simplicity of their children's preferences, stating,

"The children usually choose rice when eating out... they eat what they are already familiar with..."

(M13, 43 years old, self-employed).

Furthermore, one parent described their typical eating-out routine, demonstrating how consistency in their children's food choices helps simplify the dining process,

"We usually order white rice, soup, and fried chicken. Especially in the evenings, we tend to repeat this order. The children usually pick the same menu every time. We, the parents, might change the side dishes occasionally, but the children stick to what they know"

(M22, 31 years old, employed).

This excerpt highlights the repetition of familiar meals, showing that children find comfort in ordering the same dishes repeatedly. This routine not only makes dining more predictable but also allows parents to focus on maintaining a balanced meal by altering their orders while ensuring the children stick to their preferred, familiar foods.

Participants also further expanded on their children's food preferences, noting that their familiarity with soups and rice often plays a role in selecting meals that are both comforting and relatively healthy,

“We often go to restaurants that serve Malay dishes because the kids like white rice with fried eggs or simple soup. They’re comfortable with these options, and it’s easier for us to manage”

(F37, 40 years old, employed).

This statement illustrates how familiar foods like soups and rice can be both practical and nutritious. Soups are relatively easy for children to eat and digest, indicating that the familiarity extends to healthy, simple foods. This balance between comfort and nutrition highlights the role familiarity plays in encouraging children to eat healthier options without resistance.

“My youngest always asks for plain rice with soy sauce or soup when eating out. It’s what she’s used to, and she doesn’t like to experiment with new foods”

(F32, 36 years old, employed).

Lastly, this preference for familiar foods reflects parents’ awareness of their children’s eating habits, which is key to maintaining a positive dining experience. By offering foods that their children know and enjoy, parents can steer the meal toward healthier options without the challenge of introducing new, potentially rejected foods. Familiarity also ensures that eating out remains an easy, stress-free activity, which is essential for maintaining harmony, particularly when dining in public or in environments where time and patience may be limited.

In addition to a preference for familiar foods, the visual appeal of foods significantly influences children’s food choices when eating out. Many parents described how their children were often drawn to dishes based on their appearance, even if those dishes turned out to be unsuitable for them to eat. This code complements the practice of healthy food choices and preferences for familiar foods by showing how visual attractiveness can either facilitate or hinder a smooth dining experience for children. A participant shared her experience,

“Sometimes, we go to cafés with very aesthetic menus. The kids love ordering food that looks Instagram-worthy—like rainbow cakes or colourful drinks. They’re drawn to the look, but we as parents have to remind them about balancing it with proper meals”

(M25, 39 years old, housewife).

A parent further explained that their son’s food selection was based on the attractive visual, with bright colours playing a significant role in their attraction to certain foods. As expressed by the M26, which her son is particularly drawn to, vividly coloured foods such as bright red spaghetti sauce or rainbow ice-cream. However, despite his initial excitement, he does not always finish the food, as its taste does not meet his expectations. This reflects a disconnect between visual attraction and actual taste preferences, which can shape children’s eating behaviours when eating out.

“My son loves anything with a lot of colours. He’ll see something like a bright red spaghetti sauce or rainbow ice cream, and he wants it immediately. But when he eats it, he sometimes doesn’t even finish it because it’s too sweet or not what he imagined”

(M26, 33 years old, employed).

This highlights how children’s attraction to visually appealing dishes can lead to situations where the meal is not appropriate or enjoyable for them, resulting in wasted food and additional effort for the parents. The additional effort arises in several ways. Firstly, parents often have to manage food wastage, either by encouraging their children to finish the meal, sharing the unfinished portion, or ordering a replacement meal that the child will actually eat. Secondly, parents must continuously guide their children’s food choices, reminding them to balance visually appealing but less nutritious foods with proper meals. This aligns with M25’s statement about needing to remind their children to balance Instagram-worthy foods with nutritious options. Additionally, parents may also have to mediate between children’s desires and practical considerations, such as cost, nutritional value, and portion size, ensuring that dining experiences remain enjoyable yet balanced.

Another parent commented on how visual appeal drives excitement and adventurousness in their children's food choices,

“When we're at a buffet, the kids always pile their plates with the most colourful desserts or the food that looks the most exciting. It's about how it looks more than how it tastes or whether it's healthy”

(M27, 34 years old, employed).

This further reinforces the idea that children's food selections are largely influenced by aesthetics, sometimes leading to choices that may not necessarily align with their actual preferences or dietary needs. While this sense of excitement encourages them to explore new foods, it also presents a challenge for parents, who must balance allowing their children's curiosity with ensuring that they consume nutritious and satisfying meals when eating out.

4.6.2 Mindful Consumption

This subtheme highlights the practice of mindful consumption among Malay parents when eating out, as they strive to align their dietary habits with those established at home. These parents demonstrate a commitment to maintaining balanced diets that incorporate key food groups, for instance, protein, vegetables, and carbohydrates, while practising a balanced diet, adhering to the religious dietary guidelines, and fostering continuity between home and eating-out practices. This approach reflects the integration of health-consciousness, family values, and religious principles into their eating-out routines.

A recurring practice among the participants is the emphasis on preserving the dietary variety and balance typically observed at home. This is evident in the remarks of one participant, who shared,

“Our rule is simple: the meal must have a variety, including protein, vegetables, and carbs. We don't compromise on that, whether at home or outside.”

(F35, 39 years old, employed).

This quotation showcases how behavioural factors, such as maintaining a balance, are central to their eating practices when eating out. Another parent emphasises consistency in habits established at home, ensuring that healthy patterns extend into eating-out contexts.

“I believe the habits we set at home should carry on outside. It’s easier for my kids to adjust because they’re already used to eating vegetables or avoiding sugary drinks.”

(M18, 38 years old, employed).

This quotation reflects the behavioural continuity, where parents consciously extend home-based healthy eating routines into external dining environments, reinforcing mindful consumption.

Participants’ preference for simplicity and nutritional consistency of meals that align with their usual home-based eating routines when eating out illustrates their deliberate choices to avoid extravagance or overly indulgent foods. For instance, one participant noted,

“We try to keep it simple. Even when eating out, we don’t go for extravagant or unhealthy meals. We prefer foods that match our usual home meals, just made outside.”

(F33, 41 years old, employed).

This quotation highlights a behavioural commitment to maintaining familiarity and healthfulness in meal choices, reinforcing mindful eating principles even in the less-controlled eating out environment. In summary, these behavioural factors, ranging from prioritising balanced diets to maintaining home-based eating habits, demonstrated Malay parents’ conscious efforts to practice healthy eating when eating out, ensuring that their consumption aligns with their health and lifestyle goals.

Building on this foundation of home-based eating habits, parents also focus on practising a balanced diet when eating out. They strive to select meals that align with the

principles of the food pyramid and contain a mix of carbohydrates, protein, and vegetables. For instance, one participant described their approach to ensuring balanced meals for their family,

“When we eat out, we try to follow the food pyramid by choosing meals that are balanced. For example, if we order rice, I always make sure it’s paired with protein like fish or chicken, and I ask for a side of vegetables to make sure the meal is balanced, with all the essential nutrients like protein, carbs, and fiber”

(M23, 27 years old, employed).

Portion control was also mentioned by another participant alongside the variety in meals, particularly when planning meals for her child. This is illustrated in the participants’ quotation,

“When we eat out, I always focus on offering a variety of foods in appropriate portions. For example, I make sure my child has more vegetables than rice and limit protein portions to one serving to avoid overeating. I try to pick dishes that balance everything – like a vegetable stir-fry with grilled chicken – to make sure the meal is both nutritious and satisfying”

(M3, 27 years old, employed).

This quotation demonstrates the parental strategies for building healthy eating habits by focusing on portion control. This mindful consumption extends to the parents’ act of sharing meals to regulate portion sizes and ensure variety, as one participant stated,

“For me, healthy eating when eating out means choosing meals that include all the necessary components, like protein, carbs, and vegetables. For example, when we dine at a restaurant, I always try to order a dish that includes vegetables, protein, and some form of carbs, like rice or noodles, to keep the meal balanced.”

(M26, 33 years old, employed).

Another participant reiterated the significance of shared meals and selecting dishes that offer a mix of nutrients,

“Sometimes we order mixed dishes to ensure there’s protein, carbs, and vegetables for everyone to share. It’s a bit of effort, but that way, everyone gets a balanced meal even if we’re eating out.”

(M27, 34 years old, employed).

These excerpts collectively illustrate the parents’ deliberate efforts to practice mindful consumption by prioritising balanced meals when eating out. By focusing on a mix of essential food groups and managing portion sizes, parents demonstrated their ability to adapt their eating-out practices to align with their broader dietary goals.

For Malay parents, practising healthy eating when eating out goes beyond nutritional considerations, extending to the assurance of halal food choices. This subtheme also focuses on the importance of the selection of halal-certified restaurants and foods to their eating out practices. This selection is influenced by religious beliefs and the perception that halal certification not only guarantees adherence to Islamic dietary laws but also assures food hygiene and safety. The halal certification is viewed as a holistic marker of trust, encompassing both religious and practical dimensions, which shapes their choices when eating out with family. A participant explicitly stated that they consumed everything as long as it adhered to the religious standard. They perceived the halal-certified foods as healthy because the order of the eating pattern has been mentioned in the Qur’an, or the Divine revelation of Muslims. Malay, whose majority are Muslim, perceive that Divine revelation as holy and no challenge can be made, and any orders in the revelation are considered as pure as it has been bestowed from the Divine. Then, they applied the order to their dietary pattern through the concept of halal and *tayyib*. This can be depicted through the participant’s quotation,

“We eat everything. As long as it’s halal, pure, and good, we considered as healthy. Because, as mentioned in the Qur’an, we shouldn’t prohibit what is halal for us, right? So that’s how it is, when it comes to food, as long as it’s halal and tayyib, inshallah, we consume it when eating out.”

(M18, 38 years old, employed).

Similarly, another participant emphasised the importance of halal food at every stage, starting from sourcing ingredients, which displayed that the entire food preparation process must be aligned with religious standards. This participant’s statement underscores how religious dietary principles not only guide food choices but also provide a sense of reassurance and alignment with their faith,

“If we truly want to be healthy when we eat out, we have to start from the very first step, which is selecting the ingredients. The ingredients must be pure, halal, and clean.”

(M21, 40 years old, self-employed).

Parents’ decisions to eat healthy when eating out were also often influenced by their confidence in the integrity of the food’s preparation and sourcing. This approach reflects an active engagement with the ethical and spiritual dimensions of food, where health and religious values intersect. Another participant mentioned their vigilance in ensuring halal compliance, stating,

“The first thing I emphasise when eating out is the source of the food. What is halal, and what is not halal. And who produces it.”

(M24, 33 years old, self-employed).

This statement illustrates how parents’ decision-making is grounded in their religious values, with the primary concern being that the food adheres to Islamic dietary guidelines. This indicates that for many Malay parents, healthy eating is not solely about physical health but also about spiritual well-being, where food is viewed through both a health and faith-based lens.

Another participant mentioned how their husband would frequently choose halal restaurants not only for religious compliance but also for their perceived cleanliness and trustworthiness,

“Usually when eating out, my husband will choose a halal restaurant, because halal restaurants are, inshallah, clean... in terms of their food sources and trustworthy”

(M27, 34 years old, employed).

The emphasis on halal certification extended beyond the food itself to the establishment’s overall reputation and preparation methods. The accentuation on the source of the foods has been frequently noted by the participants, which exhibited the high standards of hygiene and healthiness that lay under the concept of halal foods. Another feature that has been taken into consideration by the participants is the appearance of the worker, which they perceived in the cultural and religious context. This can be supported by another participant who pointed out this description,

“For me, choosing halal food isn’t just about what’s on the plate. It’s about ensuring the entire process is halal—from sourcing to preparation. That’s why we prefer well-established halal restaurants or chains or like us Malay has kedai nasi campur but we also looked at their appearance as it symbolised their practicality as a Malay and Muslim in providing food and beverage service.”

(M15, 40 years old, employed).

This perspective reflects a comprehensive understanding of halal, emphasising the interconnectedness of dietary practices, religious values, and cultural norms.

Moreover, some participants noted their cautious approach to exploring new dining establishments, preferring recommendations from trusted sources or opting for familiar venues with verified halal status. As one participant articulated,

“We rarely try new places unless someone we know has recommended it. Like us being Malay and Muslim, halal is a big thing for us—not just the

food, but how it's prepared. My husband always says, 'Better to stick to familiar places with a proven halal status than take risks.'

(M19, 32 years old, self-employed).

This adherence intersects with their personal factors as their perception of healthy food influences identity development; thus, by magnifying halal food consumption, it will be rewarding for them in the physical and mental forms. These highlight how halal certification acts as a key criterion in determining the suitability of a restaurant, suggesting that parents associate it with a broader assurance of quality and safety. The participants' comments also imply that their dining choices are grounded in religious and practical considerations, such as the restaurant's cleanliness and popularity. This pragmatic approach ensures that the family consistently eats at places that align with their religious beliefs and values.

These findings demonstrated that nutritious and halal food choices are fundamental to the practice of healthy eating among Malay parents. The emphasis on religious compliance, coupled with the perception of halal certification as a guarantee of cleanliness and safety, reveals that their approach to eating out is a comprehensive one. This practice reflects a deeply embedded cultural and religious framework, where maintaining halal standards is seen as essential to both spiritual fulfilment and physical health. Therefore, for these parents, healthy eating involves a complex interaction of religious, ethical, and practical considerations, ensuring that their dining choices align with both their faith and their commitment to family well-being.

4.7 ENVIRONMENTAL FACTORS

This theme explores the external influences that shape the Malay parents' practice of healthy eating when eating out. The subthemes that emerged included sociocultural dynamics in eating behaviours, restaurant quality and standards, and health guidelines, which highlight the interplay between the sociocultural, environmental, and institutional factors in supporting or challenging parents to practice healthy eating when eating out.

4.7.1 Sociocultural Dynamics in Eating Behaviours

This subtheme explores how contemporary food trends, parental dilemmas, and the convenience or practicality of food choices intersect to influence decision-making about

healthy eating. Firstly, contemporary food trends have emerged as a concerning issue for Malay parents striving to eat healthy when eating out. These trends are often characterised by visually appealing dishes and distinct flavours, which usually do not parallel the nutritional standard. A participant expressed their concern about how the popularity of trendy foods complicates their ability to make health-conscious choices for themselves and their families. This struggle can be seen through the participant's quotation,

“I think it's the food trends now. Everything is about cheese, Korean dishes, and aesthetic cafes... and with all the food festivals, there's just so much new stuff to try. It's like businesses are just responding to what people want these days, and for me and my children, it makes choosing healthy food so much harder. All these trends change our tastes and make us go with the flow of what's popular.”

(M25, 39 years old, housewife).

This quotation underscores the influence of food businesses capitalising on consumer preferences, which are highly focused on aesthetic appeal and are likely to abandon nutritional quality. Loads of food festivals and trendy menus also create a challenging environment for parents to resist unhealthy foods, simultaneously affecting their dietary preferences and routines.

“When we're out, it's hard to say no to trendy foods... My children always ask for what's viral. And with so many new places and dishes, it's hard to avoid. We just try to limit them, but we can't stop the trends.”

(M16, 26 years old, self-employed).

The trendy foods culture complicates the efforts of the parents to practice healthy eating, coupled with the children's demands, resulting in healthy eating practices when eating out. Participants described the relentless flow of food trends as an almost unstoppable force which shapes their dining choices and dietary habits. Parents often find themselves “trapped” in situations where trendy foods are everywhere, and they are left with no choice but to consume unhealthy foods.

Moreover, participants mostly perceived viral foods as unhealthy, as they associated the viral foods with high sugar and excessive richness of unhealthy ingredients. A participant explained viral foods like crepes with cream are indulgent and appealing, but inappropriate for regular consumption due to their potential impact on one's health,

“Right now, there are way more viral foods than healthy ones... Like crepes with cream and all that rich stuff. It's just not suitable for frequent consumption over the long-term.”

(M17, 40 years old, self-employed).

This quotation emphasises the long-term health implications of succumbing to trendy, indulgent foods, which often lack nutritional balance. It reflects the parents' awareness of the disparity between viral food trends and healthy options available in the eating-out environment. Another participant firmly stated that the current food preparation focused on “unhealthy fusion”, which made him conclude that it contributes to the “unhealthy food trends”, for instance, healthy foods like fruits are often turned into less nutritious versions by the addition of excessive chocolate or cheese,

“When we eat out, most places don't even sell healthy food. It's all viral stuff. For example, if they sell fruit, the fruit is healthy, but then they add an excessive amount of chocolate, and it becomes unhealthy. Or like corn—steamed corn is healthy, but when they make it into excessive cheesy corn, it's not healthy anymore.”

(M23, 27 years old, employed).

This quotation highlights how contemporary food trends often transform healthy ingredients into calorie-dense, unhealthy alternatives, further limiting parents' choices for nutritious meals when eating out. These trends not only restrict dietary choices but also propagate an eating culture that prioritises appeal and taste over nutrition. Next to that, participant also stressed the influence of food advertisements and promotions on their decision-making to eat healthy when eating out,

“I'm usually drawn in by the image of the food itself... When we look at it, the food in the ads looks realistic and appetising... the texture, the sauces,

everything... it makes me feel like the food looks delicious, so I end up buying it for my family... Compared to promotions, I'm more attracted to how the company portrays the food... I don't care much about promotions, as long as the food looks good, we grab it... that's it"

(M2, 27 years old, employed).

This quotation describes the powerful impact of the food advertisements' visuals, which look realistic and appetising, attracting parents and further shaping their purchasing decisions. The participant's response also implies that the frequent exposure to advertisements, likely facilitated by digital platforms or billboards, portrays the pervasive nature of marketing efforts. This underscores the omnipresence of marketing efforts, making it harder for parents to avoid their influence while attempting to prioritise healthy eating. Consequently, the promotion of unhealthy foods will construct unhealthy purchasing habits not only among the participants but also among the wider public.

Similarly, another participant agreed that the food advertisements promotion did influence her purchase behaviour, which led to the culture of indulgence and impulsive food choices,

"For me, it's a bit affected too (food advertisements)... when we see it (food advertisements), we think, 'Wow, that looks delicious...' The ad knows how to make us drool with the way they present the food. My style is if it's something new... we try it once... just to satisfy that craving... it's like people say, 'just to get it out of our system.' Taste it once, and then that's enough... like that.

(M3, 27 years old, employed).

This quotation framed the fact that the culture of unhealthy food advertisements often elevates indulgent eating to a socially acceptable, even desirable behaviour. The participant's quotation exemplifies how trying new foods aligns with the societal norms of exploration and participation in shared culinary trends. In sum, the influence of contemporary food trends alters individual tastes and normalises a culture where indulgence, variety, and excitement take precedence over health considerations. This dynamic illustrates how societal

pressures and evolving food preferences can hinder efforts to maintain a balanced diet when eating out.

These circulating food trends have deepened the parental dilemma in which the persistent exposure to external pressures such as from social media and other influences, has influenced their decision-making in practising healthy eating when eating out.

“My friends mostly post pictures of food... that’s definitely one of the challenges, and it’s quite tempting... I know that my friends really enjoy eating and it’s influenced my decision-making when eating out with my family”

(M13, 43 years old, self-employed).

A participant noticed how social media, specifically WhatsApp, has triggered her cravings for tempting foods through visual sharing,

“My WhatsApp group is full of food pictures—desserts, fried chicken, you name it. Even if I don’t want to eat out, when I see those pictures, I’ll start craving it. Then, I end up taking my family to those places.”

(M14, 31 years old, self-employed).

These quotations illustrate how social context, particularly digital platforms, can cause a contradiction between parents’ goals to make healthier choices and the instant temptation of indulgent food selections celebrated by peers. The consequent parental dilemma underscores the impact of sociocultural and environmental factors on healthy eating practices, where external pressures challenge parents’ ability to adhere to their health-conscious goals.

Another dilemma arises from the family institutions, particularly the need to prioritise the children’s preferences. Parents often mention that the decision-making process around eating out is heavily influenced by the children’s preferences, with parents feeling compelled to prioritise children’s preferences to ensure a positive dining experience. A father further described the difficulty of balancing these priorities,

“When it’s coming to eating healthy when eating out, I think it is quiet hard when there are children. It’s not that we’re blaming the children, but we do tend to prioritise them. Whatever they prefer is what we’ll choose when we go out to eat. As parents, we don’t really mind what we eat, as long as the kids can eat. We can’t follow our preferences or choose the restaurant we want, because there’s no guarantee that the children will eat there. For example, if one day they want fast food, we have to take them. But we do try to tell them that once they’ve had it, it might be a few months before they can have it again, because we want to limit their fast food intake.”

(F28, 36 years old, employed).

While parents try to set boundaries, such as restricting fast food consumption to infrequent treats, prioritising children’s choices sometimes overrides their nutritional goals. Similarly, another participant mentioned that their children’s preference for vegetables or healthy foods has led to the difficulty in encouraging healthy eating habits in children at once, impeding the practice of healthy eating when eating out. This dilemma was directly mentioned by the participant,

“It’s a bit difficult to practice healthy eating habits when you have kids, especially when they don’t like vegetables or other healthy foods. Children tend to lean more towards strong flavours, like sweet foods or fast food that’s salty and full of flavours.”

(M26, 33 years old, employed).

To put it briefly, the parental dilemma in sustaining healthy eating habits when eating out is determined by the interaction of external social forces and internal family dynamics. These problems highlight the difficult balance that parents must strike in the external dining environment, where their health-conscious goals frequently conflict with urgent demands such as children’s preferences.

Convenience and practicality in food choices also play a big role in practising healthy eating when eating out. Time constraints, affective state, and cost of meal preparation pose a burden for parents to practice healthy eating; they opt for convenient meals, which are mostly unhealthy. This practice has been recorded in a participant's quotation,

“I think time, fatigue, the need for quick meals, and the abundance of choices make it difficult to practice healthy eating. Sometimes we just want a little to eat, so we end up needing to buy many ingredients, and then we have to cook. It's all about costs too. When eating out, we can sample various dishes in small quantities, which feels more worthwhile”

(M1, 45 years old, self-employed).

Another concern of the participant is the perception of healthy foods as being “expensive,” “time-consuming,” and “less convenient,” which deters the participant from eating healthy when eating out. Fast foods often emerge as a practical alternative, offering a quicker and easier solution, which is reflected in the participant's quotation,

“I find it challenging to eat healthy when eating out because healthy food tends to be more expensive... it also takes longer to prepare. Fast food, like burgers, is quicker and easier; you can eat in the car. But for meals with rice and vegetables, you have to eat on-site, which can be slow and cumbersome”

(M6, 25 years old, housewife).

Time scarcity, coupled with work commitment and fatigue, were definitely significant factors that thwarted the participant from having healthy meals. Parents shared that after the long working hours, convenience is the top-notch priority when they need to spare time and energy with their family, resulting in sacrificing the nutritional value. This notion has been elucidated in the participant's quotation,

“Time is a factor... we work for ourselves, and after a long day, my husband and I often just buy easy and quick meals for our family. Sometimes we opt for fast food, like at Marry Brown, where they have options like porridge or curry noodles. It’s just more convenient”

(M8, 34 years old, self-employed).

This is noted by another participant in which the role of convenience is a pivotal factor that drives them to select convenient meals due to their physical, mental, and streamlined daily routines. These choices are not only shaped by external demands such as contemporary food trends or parental dilemmas but also by internal needs to conserve energy and manage stress. The participant has mentioned this,

“Convenience really dictates our choices. During busy workdays, my husband and I prefer to eat out with our children from nearby hawker stalls. They serve meals that are cheap and fast, even though we know they’re oily or salty. It’s just more practical than going to a healthier restaurant. But what to do... we need to save time and energy for our family when we arrived at home”

(M14, 40 years old, self-employed).

Convenience in this context has become a coping mechanism for the parents to enable them to manage their hectic schedule while preserving their well-being. They believed that by choosing something easy to grab and accessible, they could minimise their physical strain of meal preparation and alleviate the mental burden of balancing work, family, and personal responsibilities. Although this practicality comes at the expense of nutritional quality, it highlights the prominent role convenience plays in easing parents’ daily lives and prioritising their family’s needs.

For some families, children’s hectic schedules, including after-school activities and tuition classes, further restricted their ability to prepare meals at home, leading to reliance on nearby hawker stalls. This time constraint places children’s immediate needs likely timely

meals and avoidance of hunger, at the front face leaving little room for healthy meal preparation or healthier food options. A participant summarised this hassle in a quotation,

“For us, after-school activities and tuition classes make it impossible to cook at home sometimes. We just eat out food from nearby stalls—it’s quick, and the kids won’t have to wait for too long. But of course, it’s usually fried food or snacks, which aren’t the healthiest.”

(M10, 38 years old, employed).

These quotations showed that the reliance on convenience-based choices reflected the demands of present-day lifestyles where busy schedules, dual-income households, and fast-paced routines dominate and interfere with daily life. The parents’ shift towards convenience options has been evidence that it is necessary to fulfil the societal expectations of efficiency and immediacy in today’s context.

4.7.2 Restaurant Quality and Standards

The parents’ practice can be translated into the evaluation and assessment of restaurant quality and standards. The parents’ focal point in the restaurant evaluation is the hygiene standard. Informed of their responsibility to ensure safe and healthy meals for the families, participants asserted the importance of food safety and hygiene when choosing food establishments. This focus highlights the environmental influence on the parents’ decision-making processes, which interplay with personal and behavioural factors to shape healthy eating practices.

Cleanliness emerged as a top priority when choosing a place to eat out because participants believed that hygienic food preparation would aid in reducing health risks. For example, a participant expressed a preference for dining at mall restaurants due to their perceived higher cleanliness and ingredient quality compared to roadside stalls,

“Plus, the restaurants in malls are usually cleaner than roadside stalls, and the quality of ingredients and food is better maintained. Like, at the roadside stalls, the food is often left uncovered, which isn’t very good”

(M27, 34 years old, employed).

Similarly, agreed by another participant agreed that their meticulous observation of cleanliness is a non-negotiable factor in selecting a dining venue. The understanding of the parents of healthy eating extends beyond the food components but also towards the environmental factors. Parents recognised that even nutritionally balanced meals could pose harm if prepared or served in unsanitary conditions. As expressed by a participant,

“For example when eating out, I observed their cleanliness, because even if the food has all the nutrients if it’s prepared in an unhygienic way... it can still cause harm to us, right?”

(M5, 25 years old, self-employed).

Other participants expressed similar opinions, emphasising their disfavour for dining that lacks cleanliness, as a participant observed,

“If we see that the restaurant isn’t clean, we won’t eat there. We’ll look for and choose restaurants that are proper and clean; that’s how we always pick where to eat.”

(M1, 45 years old, self-employed).

Another participant valued the importance of upbringing and selective eating practices which stated that cleanliness and the absence of unhealthy additives like monosodium glutamate, or known as MSG, are essential considerations,

“First, we look at cleanliness, right? We also need to check the kind of food available at the restaurant. We don’t go to fast food places anymore. We’ve been taught that way since we were young. For Thai food, we are also selective... If there’s no choice, we’ll ask the restaurant to avoid using MSG. We will always request for no MSG.”

(M18, 38 years old, employed).

The perception of hygiene extended to the entire dining environment, as a father described his family's immediate decision to avoid establishments with a visible sign of poor cleanliness,

“When eating out, we always pay attention to the restaurant's cleanliness. If we see dirty stalls or restaurants or an untidy kitchen, we immediately leave. It's not just about the food; the whole environment must be clean to ensure it's safe to eat”

(F32, 36 years old, employed).

Apart from the whole environmental dining, a participant also expressed her concerns about the handling of food by the restaurant staff. Unsanitary practices, for instance, mentioned by a participant, workers not wearing gloves or using the same utensils for raw and cooked foods, have heightened worries about food safety,

“Sometimes, even when the food looks okay, the way it's served can be off-putting. I've seen workers not wearing gloves or using the same utensils for raw and cooked food. That makes me worry about hygiene and food safety.”

(M14, 40 years old, self-employed).

For some parents, halal certification of a restaurant was an additional layer of assurance, but cleanliness and food preparation standards remain equally important. Mixed rice stalls, known as *kedai nasi campur*, are often chosen for convenience and cultural familiarity. Even in these situations, parents closely watched food preparation techniques. One participant highlighted this dual emphasis, saying,

“We like to eat at restaurants with halal certification, or if in Kedah, kedai nasi campur la mostly, but even then, I still check how they prepare the food. Cleanliness and how they handle the ingredients are just as important as the halal status.”

(F31, 49 years old, employed).

The environmental factors influencing healthy eating practices among parents covered the attributes of restaurants, including their cleanliness, atmosphere, staff appearance, and operational standards. The findings reveal that parents use a thorough evaluation process while making eating decisions, taking into account numerous aspects of a restaurant's setting. Some parents stated a preference for dining at less crowded venues, expressing concerns about rushed food preparation that could jeopardise quality and cleanliness. For example, a participant shared,

“I prefer to choose a place that’s not too busy... like mamak restaurants, I avoid them altogether... I thought that crowded restaurants would prepare foods nonchalantly and ignore the quality of foods as they want to be fast to prepare the customers’ orders... ”

(M11, 42 years old, housewife).

Furthermore, another restaurant feature that has been looked forward to by the parents in eating out with the children is “child-friendly.” Parents emphasised the necessity of creating a child-friendly setting that makes eating out with children easier and more convenient.

“Usually, cleanliness is one thing I look for. But the main priority is, that restaurants is easy for me to eat with my family and that it’s child-friendly. Because some restaurants aren’t suitable for bringing kids. It can be a bit of a hassle when bringing the children along”

(F28, 32 years old, employed).

Agreed by another parent agreed that choosing dining venues is often guided by the suitability of the environment for their children. The need for a family-friendly atmosphere is evident as it ensures a more comfortable and stress-free dining experience for the family and public,

“I usually avoid restaurants that are too fancy or quiet because my kids can be noisy. It’s better to go to places where families are common, and the environment feels more forgiving for kids.”

(F33, 40 years old, employed).

This remark highlights that the parents who choose family-friendly restaurants not only manage the practical challenges of eating out with their children, but also cultivate a positive and calm environment conducive to healthy and enjoyable eating behaviour. This quotation also demonstrates that parents are acknowledging the children’s natural behaviour, such as being rowdy, which may not correspond with the outside-of-home setting. Lastly, this insight outlines how the qualities of the environment influence parents’ beliefs and practices of healthy eating when eating out, magnifying the role of external factors in supporting or impeding their efforts to balance the practicality of healthy eating and family needs.

The appearance and sanitation of restaurant staff also had a major impact on eating decisions. Participants saw staff presentation as a sign of overall restaurant quality, as a mother observed,

“I look at the appearance of the staff. Their clothes and cleanliness...and if the chef is wearing short sleeves, I won’t go there.”

(M24, 33 years old, self-employed).

When asked further the reason that they do not choose the improper appearance of the staff, she voiced her concern about the overall food handling, which relates too much to the quality of the foods prepared,

“If the staff look untidy or their clothes are dirty, it makes me question their hygiene practices. I worry if the food is being handled properly.”

(M24, 33 years old, self-employed).

Parents' decisions were further influenced by their familiarity and trust in a restaurant's quality and cost. Some participants preferred returning to the same restaurant once they were satisfied with its attributes, such as affordability, meal quality, and consistency. A participant elaborated,

"I think it depends on the restaurant. It depends on which place we go to. Usually, my family and I go to the same restaurant. Once we know which place is cheap and has good food, we just keep going there."

(F29, 36 years old, employed).

A participant's concerns extend to the big portion that the restaurants serve, which always makes it harder to stay on track with the "healthy portion."

"Yes, in these restaurants, we can't know for sure if the ingredients they use are really fresh or how they handle them... sometimes we see that the portions are just too large. This makes it harder for me to make healthier choices when eating out with my family"

(M6, 25 years old, housewife).

This finding underscores how a restaurant's physical and operational aspects, such as portion sizes and ingredient management, influence dietary choices. Oversized portions, which are sometimes viewed as a value-driven practice by eateries, unintentionally promote overconsumption, making it harder for families to maintain appropriate portion management.

The high cost of eating out with their families today is a big obstacle to parents in maintaining healthy eating habits. This barrier freezes them despite their recognition and awareness of the importance of providing nutritious meals to their families. The high prices of healthier options available outside the context often led them to make compromises between health and needs. This concern was described by a participant,

“We try to eat healthily, but the high price of vegetables and healthy foods in restaurants makes it difficult. My family’s health is important to me, but I also have to consider the cost, so I have to choose wisely”

(M25, 39 years old, housewife).

Participants also described that healthy foods available in the restaurants are overpriced. This concern is further compounded by the number of households and limited income which directly thwarted their efforts to practice healthy eating when eating out,

“Healthy food at restaurants is often overpriced. Can you imagine a bowl of healthy foods costing RM30 and above per person, that would be crazy if I had to feed four stomachs for my family. So, what I can do is, find myself choosing cheaper, less healthy options because it’s more practical for my budget. It’s frustrating because I want to provide better meals for my family, but the cost is a barrier.”

(M8, 31 years old, employed).

For many parents, the costs of nutritious meals made it difficult to balance healthy eating and other budgetary goals. A participant stated that, while his desire to feed his family healthy foods was strong, the financial constraints of daily life, such as paying bills and funding children’s expenditures, have pushed him to choose more economical options,

“Healthy food options in restaurants are always more expensive. It’s hard to justify spending that much money when we have other financial priorities such as paying bills, children’s tuition fees, and other commitments. So, we tend to go for cheaper options that aren’t necessarily the healthiest.”

(F29, 45 years old, employed).

Apart from the high cost of healthy foods in food establishments, the diversity of food choices has also been a part of shaping the practice of parents towards healthy eating when eating out. Some of the parents claimed that the limited choices of healthy foods and abundant availability of unhealthy choices have accelerated their decision-making in eating out.

“ So, I feel that with these limited choices (healthy foods), it’s difficult for me to make healthy food choices when eating out.”

(M2, 27 years old, employed).

Likewise, another participant signalled their intention to practice healthy eating. However, they perceived that the options were predominantly unhealthy, which cut off their initial intention to practice healthy eating when eating out. The participant has disclosed this,

“Sometimes I do want to follow a healthy diet. But it’s always a bit difficult to find healthy foods when you’re out. Especially when we go to food stalls or even in cafés, it’s the same. At cafés, we might have chicken chop, and at food stalls, it’s fried rice; both are unhealthy options. They’re quite similar.”

(M23, 27 years old, employed).

In contrast, the participant also acknowledged that the availability of Malay mixed rice restaurants (*kedai nasi campur*) in offering diverse and plenty of healthy options has made them confident in practising healthy eating when eating out in Kedah. This has been enunciated by the participant in a quotation,

“In Kedah, there are many types of nasi campur Malay restaurants. There’s a wide variety of vegetables available, and the food options range from grilled, steamed, to boiled dishes. So, I feel like there are plenty of healthy food choices that allow me to make better decisions when eating out.”

(M8, 34 years old, self-employed).

Further stated by the participant, regardless of the availability of the mixed rice stalls, which they perceived as offering various types of healthy meals that shape their dietary pattern and preferences when eating out,

“In Sungai Petani, there are many nasi campur stalls, so we can choose healthier options like grilled foods or boiled dishes. In Kedah, these kinds of restaurants offer a lot of healthy food choices, unlike fast food outlets, which are much harder to find healthy options. It really depends on our preferences and how we choose the food.”

(M26, 33 years old, employed).

Lastly, a participant emphasised that the diversity of food choices served in the mixed rice stalls has encouraged and influenced their children to choose foods that on healthy sides.

“When we go to nasi campur restaurants, I choose fish, vegetables, and ulam, along with sambal belacan. Meanwhile my children will choose like soup, fish, chicken, and sometimes vegetables. What I can say is, there’s a wide range of healthy options, like soups and grilled fish, which makes it easy to pick healthier food when eating out with the family.”

(M12, 39 years old, housewife).

These findings underscore the critical role of the restaurant attributes, particularly the diversity in food choices, in influencing healthy eating practices. While the limited availability of healthy options in certain establishments acts as a barrier, the abundant and varied offerings in Malay mixed rice restaurants empower families to make healthier dining decisions. This contrast highlights the importance of promoting diverse, nutritious food options in restaurants to support families in achieving their health goals.

4.7.3 Health Guidelines

While the diversity of food choices has been one of the influential factors in shaping the parents’ dietary practice, the nutritional guidelines also provide an important framework for encouraging healthy eating. The nutritional guidelines that have been introduced in Malaysia is the food pyramid, which has been a reference to practice healthy eating. However, parents often have difficulties balancing these principles with the realities of eating out, particularly in Malay cuisine and cultural norms. While the food pyramid offers clear guidance, practicality is still a large barrier to adherence, as shown by this study,

“If we look, not everyone follows the food pyramid... for example, if one restaurant follows the food pyramid, we feel like people aren’t interested. I run a food and beverage business too, so I know my customers well... their styles, preferences, and likes. Malaysians, when it comes to food, they just eat everything... for me, that’s how it is... yes, it’s like we live in a food heaven... there’s nothing Malaysians won’t eat, right?”

(M4, 30 years old, self-employed).

The issue of the practicality of the food pyramid remains stable to be applied in the eating-out context. The nutritional guidelines turned out to be just a mere symbolic outline and just a “veil”, a distant ideal overshadowed by the inadequacies of menu design and portion standards. The participant has justified this,

“The problem with the food pyramid is that it’s easy to understand, but it’s not easy to apply, especially when eating out. For example, if we want to balance carbs, protein, and vegetables, the portions served are usually off. It’s rare to find a balanced meal”.

(F35, 39 years old, employed).

Apart from that, the portion size also became a concern, as the concept of “*Suku-Suku Separuh*” as per the nutritional guidelines emphasises the balance, meanwhile it diverges with the eating out experience, as they described the portion outside as either too big or too small.

“Outside food portions are too big or too small. For example, if I follow the food pyramid, I’ll end up wasting food, especially when they serve so much rice and not enough vegetables. So, I leave with no choice just to eat that provided portion as wasting foods is considered as bad deeds...”

(M5, 25 years old, self-employed).

Another hard reality shared by the participants is the cultural composition embedded in Malay culture, which is considered not tailored to the cultural eating behaviours and

preferences. The deviation of adherence to the food pyramid has been seen through the “big portion” and “vegetables as garnishes” rather than the fundamental components in meals,

“It’s hard to apply the food pyramid outside because the meals are not designed that way. For example, the portion is always plenty in Malay cuisine, but the vegetables are only garnishes. That’s just how it is.”

(M4, 30 years old, self-employed).

The children’s unpredictable, unhealthy preferences have departed from the concept of the food pyramid as being healthy. The efforts to ensure enjoyable dining experiences have led to the desertion of healthy eating,

“When we’re eating out with the kids... their appetites are unpredictable... sometimes they want this... sometimes they want that... that’s why it’s difficult to follow (the food pyramid)... usually, we just go with whatever each of us feels like eating, right?”

(M12, 39 years old, housewife).

The issue of preferences extends to another participant who she mentioned the challenges of catering to family preferences when eating out. Balancing the food pyramid with the varied tastes of family members often requires compromise which the worst could be the abandonment of the healthy adherence in the external environment. The participant has voiced this,

“The problem with eating out is that healthy options don’t appeal to everyone in the family. For example, if I want to follow the food pyramid, I’d choose dishes with more vegetables, but my children and husband won’t eat them. So, we just compromise.”

(M9, 28 years old, housewife).

The availability of balanced meals that follow dietary requirements, such as the food pyramid, continue to be significant difficulty while eating out. Restaurants frequently

prioritise taste and customer happiness over health guidelines, resulting in menu items that are flavourful but nutritionally imbalanced. A participant brought up this point, emphasising that the lack of consistency with the dietary pyramid makes eating out less appropriate for individuals who want to follow such guidelines,

“Most restaurants don’t design their menus with the food pyramid in mind. You get choices that are delicious but not always balanced. It’s easier to just eat at home if you want to follow those guidelines properly.”

(M18, 38 years old, employed).

The participant’s observation of a scarcity of low-fat milk in traditional Malay settings demonstrates how cultural preferences and ingredient availability frequently conflict with the food pyramid’s guidelines. This discrepancy highlights a frequent topic in participants’ stories, which on how external influences such as restaurant menus and cultural norms influence their eating choices. The saying that the participant has focused on the general menu design in most of the local eateries seldom coincides with the concept of the food pyramid,

“It depends on the food, I guess... for example, in the food pyramid, it suggest that we need to consume low-fat milk, sometimes we can’t find it... It’s because sometimes those things aren’t part of our tradition, right? Like us Malays, our favourite foods are usually rich and fatty... and sweet too, right? For example, like teh tarik... where do you find a Malay shop using low-fat milk, right? So... like it or not, we’re forced to eat whatever is available...”

(M9, 28 years old, housewife).

Health promotion and education emerged as a vital component in raising awareness and guiding parents to adopt healthy eating habits when eating out. Parents recognised the importance of practical and engaging advertisements, preferring skill-based methods over traditional talk-based ones. Tailored campaigns, commercials, educational materials, and hands-on workshops were found to be useful strategies for initiating and reinforcing healthy eating behaviours. A participant indicated that marketing on social media sites has a

significant impact on food decisions. She emphasised the importance of short, powerful information that is easily disseminated among peers,

“It ’ s probably advertisements. There should be more advertisements on social media... If there are ads about healthy eating and such... people become influenced and it’s easier to follow because the information provided is concise yet impactful. And we can easily forward it to others... Unlike when KKM (Ministry of Health) organises talks—it’s rare for us to attend those...”

(M1, 45 years old, self-employed).

Another participant pointed out that interactive, skill-based activities are more effective than passive, lecture-based forms in engaging both children and parents through campaigns,

“From KKM, I think campaigns about healthy eating are good... because through these campaigns, not only do they attract children’s interest, but also the parents to join in...and I hope that it skill-based campaigns as the talk-based would be boring...”

(M6, 25 years old, housewife).

A participant pointed to the importance of skill-based workshops, describing a successful bento-making activity in which children could actively engage alongside their parents. He brought up the significance of family involvement and hands-on experiences in encouraging healthy eating habits among families,

“It depends on how the workshop is conducted. There was one time an activity at work where they organized a bento-making session. If it’s something like that, where children can also participate, then it’s fine. But if it’s just a lecture or a talk, I don’t think so. I feel like I could get the same information by reading for 10 minutes rather than sitting through a talk. And I think eating is a family event, so if we’re going to learn, it should involve the whole family.”

(F30, 36 years old, employed).

Advertisements and engaging media, such as cartoons, have emerged as effective techniques for increasing children's interest in nutritious food options such as vegetables and fruits. These visual media provide accessible platforms for conveying good messages about healthy eating in ways that engage young audiences. A participant emphasised the efficacy of such techniques, stating that children are more likely to show an interest in healthy eating when exposed to relatable and interesting information. The participant also capitalised that, while external initiatives such as commercials might pique children's interest and awareness, parents must actively complement these influences by modelling healthy eating habits themselves,

“For me, sometimes it's through showing advertisements or cartoons about eating healthy... like eating vegetables... fruits... So, when children watch them, they'll be interested in eating healthy food too... And I think parents need to set a good example by starting themselves—eating and choosing healthy food so that children can follow the same habits wherever they are...”

(M6, 25 years old, housewife).

Not forgetting the power and wide usage of social media as a platform for health promotion and education, which they always referred to when searching about healthy eating. The convenience and accessibility to explore information on healthy eating practices have made parents turn to social media platforms like Facebook and TikTok to seek guidance on nutrition, healthy recipes, and child-specific dietary needs. The visuals and interactive nature offered by these platforms, combined with the simplicity and variety of information, make them appealing resources for busy parents. This can be observed in a participant's quotation,

“I also watch on Facebook... TikTok... but I don't have specific people I follow... Sometimes, it's just random... but mostly it's nutritionists. We can see healthy food recipes they promote... Sometimes they share what foods are needed for children based on their age... stuff like that. Sometimes I also Google to check if it's accurate or not... I don't want to follow blindly... I want to know what's good about it... its nutritional value...”

(M7, 39 years old, self-employed).

Another participant commented on how the social media platforms motivate her to try out nutritious meals at home,

“Usually, I see advertisements on Facebook... or TikTok... people talk about this and that... I also try to do it sometimes... Sometimes, I do try to make it at home like the simple and healthy recipe as they demonstrated...”

(M9, 28 years old, housewife).

A father also spoke about the widespread healthy eating promotions on social media, remarking on their significance as a main source of digital health education,

“I mostly see the promotion a lot on social media. As of right now, everything can be searched online right...”

(F29, 36 years old, employed).

When asked further about the information that has been shared or consumed, they vented their concern about the interposition of an interweaving of unhealthy promotions on these sites. Viral foods, which are frequently associated with less healthy foods, have been affecting decision-making and shaping eating choices in unexpected ways. The participant has conveyed this worrisome as per the provided quotation,

“They did promote healthy eating, I’m not denying that fact. However, sometimes we also will see viral foods on social media. Everything is mixed up. It’s actually challenging. And this is the problem.”

(F29, 36 years old, employed).

The appeal of social media stems from its simplicity, speed, and variety of content. Making it an efficient tool for the parents seeking health-related information. However, its influence is a double-edged sword, as the plethora of conflicting signals can cause confusion and difficulties for parents attempting to make informed nutritional decisions. This underlines the importance of selected and reputable content to fully realise social media’s potential as a platform for encouraging healthy eating.

These findings magnify the vital role of health promotion and education towards healthy eating behaviour in families. The awareness demonstrated by the parents towards the need to follow health recommendations, while emphasising the need for practical, engaging techniques to guide their decisions. While social media can be the vehicle for disseminating health-related information, it does pose potential risks of mixed details, which can baffle the execution of health-conscious practices. This emphasises the necessity of selecting credible and tailored knowledge to help parents make healthy decisions.

It is interesting to note a participant who reiterated the pivotal function of parents as role models in exercising and encouraging healthy behaviour, as the children frequently mimic their parents' actions and habits. Parental decisions and behaviours impact their children's developmental growth, therefore, the foundation for fostering healthy eating habits begins there,

“In my opinion, it's good for parents to practice healthy eating habits among their children, right? Nowadays, there's a lot of fast food and viral food trends... Parents shouldn't encourage their children too much to buy and eat those kinds of food, you know. Like, if they want to eat it once in a while, it's fine to allow it... But parents themselves need to start as role models by practicing healthy eating habits... Who else will the children imitate if not us, their parents, right? So, it's important for parents to have knowledge, to do the right thing, before becoming role models for their children, right?”

(M8, 34 years old, self-employed).

4.8 SUMMARY

This chapter presents findings from 37 semi-structured interviews with Malay parents in Kedah, exploring healthy eating practices when eating out through the Social Cognitive Theory framework. The results are organised into three main categories: personal, behavioural, and environmental factors, each with relevant themes and subthemes supported by participant quotes. Personal factors demonstrated that Malay parents' perception of healthy eating is deeply rooted in the culture and symbolism, such as traditional Malay foods like rice and fresh vegetables, which intersect with health and heritage. Perceptions also extend to long-term health benefits, preventing chronic diseases, and instilling the value of

personal identity. Struggles with cravings and social influences highlight the conflict between health goals and societal pressures. Building on these perceptions, behavioural factors revealed how parents practice healthy eating by aligning their eating-out habits with home-based dietary routines. Many prioritise nutritional preferences by avoiding fried foods, choosing healthier cooking methods, and ensuring balanced meals that include essential food groups. Halal compliance and child-friendly practices further guide their decisions, reflecting a proactive effort to maintain mindfulness in their consumption even in external dining contexts. Extending beyond personal and behavioural influences, environmental factors underscore the role of external conditions in shaping eating-out practices. Parents consistently prioritise cleanliness, halal certification, and family-friendly restaurant environments. However, they face significant barriers, such as the high cost of nutritious meals, limited healthy food options, and the pervasive influence of food trends and advertisements that promote indulgent eating. Convenience often takes precedence, particularly for busy families, resulting in compromises in dietary quality. Together, these findings illustrated the complex interplay of personal beliefs, behavioural patterns, and environmental barriers in shaping Malay parents' healthy eating practices when eating out. These insights lay the groundwork for understanding the socio-cultural and practical challenges of adhering to healthy eating behaviours in external-dining contexts.

These insights have set the stage for the next chapter, which explores the interplay of personal beliefs, behavioural patterns, and environmental constraints in shaping Malay parents' healthy eating practices when eating out. Various socio-cultural factors, such as cultural food traditions, contemporary food trends, and nutritional guidelines, will be discussed for the broader implications for dietary behaviours and health outcomes.

CHAPTER FIVE

DISCUSSION

5.1 INTRODUCTION

This chapter will discuss the findings that have been presented in the previous chapter, offering a comprehensive analysis of the factors that influence Malay parents' practices of healthy eating when eating out. Framed within the Social Cognitive Theory, this chapter also delves into the interplay of personal beliefs, behavioural patterns, and environmental factors. This discussion also aims to contextualise the findings and provide insights into the complexities of dietary behaviours within the Malay cultural and societal framework. Then, some recommendations for helping Malay parents to empower healthy eating when eating out will be offered. This study will suggest recommendations for future research, and this chapter will end with concluding statements.

5.2 PERSONAL FACTORS

Personal factors refer to the internal forces that influence an individual's adherence to healthy behaviours, particularly in eating out contexts. In this study, Malay culture and social norms strongly shape how parents perceive food and dietary practices, particularly when eating out. This theme explores three interrelated dimensions: Malay cultural and social dimensions of food choices, perceived health benefits in food choices, and struggling with cravings and social influences. These dimensions revealed the dynamic interplay of individual factors, social norms, and environmental factors that influenced healthy eating decisions when eating out. Social Cognitive Theory (SCT) provided a lens to understand these influences by focusing on personal factors, environmental dynamics, and behavioural patterns. This decision unpacks how these dimensions interact with the SCT framework, offering a comprehensive view of Malay parents' perceptions of healthy eating.

5.2.1 Cultural and Social Influences on Malay Parents' Food Choices When Eating Out

Findings demonstrated that personal factors, such as cultural and social dimensions, play a significant role in shaping food choices when eating out among Malay parents. Many parents viewed traditional Malay foods such as rice, fresh vegetables (*ulam*), and side dishes (*lauk*

pauk) as healthier due to their unprocessed nature. Culture, as Matsumoto and Hwang (2021) argue, is a guiding framework that shapes thought, behaviour, and lifestyle. The shared knowledge and behaviours later act as the memory and control device of society (Baecker, 1997). Likewise, food beliefs are also shaped by early exposure and cultural socialisation (Razak et al., 2023; Ibrahim, 2023). For instance, Raji et al. (2017) highlighted how Malay cuisines were shaped by Arab, Indian, and Chinese influences, which creates a diverse yet familiar food landscape that informs what is seen as “healthy”. Parents in this study often chose dishes aligned with this cultural palate, such as *nasi campur* or *ulam*, especially when eating with family.

Brindal et al. (2021) further claimed the influence of social settings on parental food choices. Many parents reported choosing foods that were widely accepted by family members or seen as appropriate within a cultural context. These choices were often less about nutrition and more about fulfilling communal expectations. Supported by Nemeč (2020), noting that dietary patterns reflect shared cultural values and practices that promote social cohesion. The metaphor of food as a “cloth with different designs and patterns” illustrates how cultural food choices serve both nutritional and symbolic roles.

This study found that traditional food choices extended to eating-out situations, where parents used them to maintain cultural identity and family continuity. Reddy and van Dam (2020) observed that food practices serve as a tool for preserving cultural identity, especially in multicultural societies. Similarly, Barthes (1961) proposed that food acts as a “system of communication”, expressing values, identity, and social belonging. In this study, parents’ preference for Malay dishes did more than address health concerns; it conveyed care, tradition, and identity to their children. Terms like “natural”, “fresh”, or “organic” used to describe traditional foods reflected not only health beliefs but also inherited cultural pride. This supports Barthes’s idea of food as a language for transmitting social meaning. Yet, it also reveals limitations in his theory. In today’s globalised Malaysia, food choices often represent both identity and resistance.

Parents contrasted traditional Malay foods with Western options, which they demonised as “oily”, “junk”, “sugary” and “high-density”. These dichotomous views were not always rooted in objective nutritional knowledge but reflected cultural biases (Contreras-Manzano et al., 2022; Manippa et al., 2020; Provencher & Jacob, 2016; Shafiee et al., 2024). While Barthes’s work focused on the symbolic role of food, these findings suggested that

food is also a site of conflict, shaped by modernisation, cultural pride, and social judgement. In this sense, Bourdieu's (1984) view of taste as a classed and culturally embedded practice may offer a more comprehensive understanding. Malay parents, therefore, do not merely express tradition through food. They also used food choices strategically to assert cultural identity and navigate modern food environments. These meanings are especially visible in public dining settings, where food selection becomes a performance of both health awareness and cultural belonging.

Additionally, modernisation has further complicated this landscape. The shift in eating habits is not merely a matter of ethnicity but also of changing routines, aesthetic preferences, and societal approval. As such, some Malay parents' perceptions of healthy eating appear more culturally driven than nutritionally grounded, reinforcing what might be considered a "modern society disease" where convenience and social image often outweigh dietary quality. To address these findings, culturally sensitive interventions can help reframe healthy eating without alienating traditional values. Restaurants can play a key role by offering traditional food prepared with a healthier twist, preserving the sense of familiarity while supporting better nutritional practices. Such effort can appeal to both the emotional and health-related needs of Malay families.

As Bourdieu (1984) aptly noted, "There's no way out of the game of culture." In Malaysia, where food signifies more than sustenance, promoting health must include cultural continuity. Collaborations between public health agencies and local eateries could highlight healthier versions of traditional dishes, supporting both heritage and health in eating-out contexts.

5.2.2 The Intersection of Belief and Behaviour: Health Benefits and Identity in Malay Parents' Food Choices when Eating Out

The findings indicated that perceived health benefits were the direct determinants of behavioural intention regarding food choices when eating out. Parents often prioritised meals they associated with specific health advantages, such as long-term health investment and personal development and identity formation. A study of parental perceptions of childhood healthy diet in the State of Qatar demonstrated that the parents agreed that healthy diets lead to better school performance and better physical activity quality, which in turn leads to healthier food choices (Hendaus et al., 2020). Similarly, Mäkelä et al. (2023) found that

parents with more health-conscious views on child feeding were associated with better diet quality and lower BMI in their children. Health-conscious parents also prioritise health and nutrition factors, which positively impact their children's long-term health. These findings demonstrated that personal factors such as beliefs, values, and knowledge are the key drivers for the healthy dietary pattern and behaviours (Francis-Ganderson & McDonald, 2018; Moura & Aschemann-Witzel, 2023; Shahid et al., 2022; Sharif Ishak et al., 2020; Tchoua et al., 2024; Waisulqarnai et al., 2024; Zarnowiecki et al., 2012).

The emphasis of Malay parents' on long-term health benefits aligns with the Social Cognitive Theory's construct of personal factors, which guide individual decision-making in external contexts. Parents' strong beliefs in the importance of healthy eating, even in eating out settings, highlight their commitment to instilling sustainable habits within their families. However, for these behaviour to be consistent, parents must perceive tangible benefits associated with maintaining a nutritionally balanced diet. When parents do not recognise clear advantages, the likelihood of adopting and sustaining healthy dietary behaviours diminishes. Therefore, perceived health benefits serve as key motivators, reinforcing consistent nutritional practices, food provisions, and family discussions about healthy eating (Buksh et al., 2023; Saipudin et al., 2022).

Despite this emphasis on health awareness, a study by Sha An Ali et al. (2020) found a crucial gap, revealing that more than 50.0% of Malay children were aware of the health benefits of eating fruits and vegetables, yet their intake remained unsatisfactory. This discrepancy suggests that awareness alone is not enough to translate into actual behaviour change. Drawing on the Theory of Planned Behaviour (TPB), awareness may contribute to shaping a positive attitude, but actual behaviour is contingent on additional factors such as subjective norms and perceived behavioural control.

A study by Sogari et al. (2023), in a cross-national study, found that attitudes toward traditional food significantly mediated the relationship between health intention and healthy eating behaviour. This is particularly relevant in the Malaysian context, where Malay parents perceived traditional dishes such as *nasi campur*, *ulam*, and *lauk pauk* as inherently healthy. While these foods may be rooted in fresh and natural ingredients, their healthfulness can vary greatly depending on preparation methods. Such culturally embedded attitudes can therefore both support and undermine health goals. Integrating this insight into the TPB

framework suggests that in order to bridge the gap between awareness and action, health promotion efforts must go beyond general nutrition education and instead engage with cultural attitudes toward food.

The Health Belief Model (HBM) similarly complicates the assumption that knowledge leads to change. It suggests that even if individuals recognise the benefits of healthy eating, behaviour is shaped by perceived susceptibility, severity, barriers, and self-efficacy. In the context of eating out, healthy options may be seen as less accessible, more costly, or less appealing, thereby diminishing perceived benefits and heightening perceived barriers. Furthermore, without salient cues to action or a strong sense of agency, individuals may default to habitual or socially reinforced eating behaviours despite knowing the health implications. In the context of eating out, perceived barriers such as higher costs, limited availability, social influences, or lower palatability of healthier options may reduce the perceived value of healthy eating (dos Santos Leal et al., 2024; Francis-Granderson & McDonald, 2018; Medina et al., 2024; Ragelienė & Grønhøj, 2020). Moreover, without strong cues to action such as family modelling, supportive environments, or clear nutritional labelling, individuals may revert to familiar or socially reinforced eating habits despite being aware of health implications.

Critically, both models exposed a common flaw in many health promotion strategies, as they overemphasise individual responsibility while underplaying the influence of environmental and sociocultural constraints. In contexts where eating out is embedded in cultural routines, social bonding, and convenience, knowledge alone is not unlikely to override entrenched habits or perceived norms. Therefore, interventions must move beyond awareness campaigns and engage more holistically with the factors that support or hinder behavioural execution, particularly in real-world, social eating contexts.

Furthermore, the subtheme of perceived health benefits extends to personal development and identity formation, highlighting the role of food choices in shaping one's character and values. Parents perceived healthy eating as a reflection of discipline, responsibility, and values, which they hope to instil in their children. This resonates with Almerico's (2014) assertion that food choices signify group identity and individual uniqueness. For Malay parents, the dietary habits should be aligned with the eating out context, as practicing healthy eating when eating out exhibits the value of self-control and a

sense of responsibility. This perspective aligns with the SCT that focuses on personal agency and self-regulation, emphasising how individual factors influence health behaviours. Bouwman et al. (2022) found that self-regulation plays a vital role in healthy eating behaviour, particularly in the context where external factors like social and physical environments influence decision-making. Their study demonstrated that self-regulation is higher when individuals are less distracted, less tired, and eating at home compared to out-of-home settings.

To deepen this understanding, HBM adds a valuable dimension by explaining how the perceived benefits of a behaviour can directly influence whether individuals choose to act on their health knowledge. In this case, Malay parents perceived healthy eating not only as beneficial for physical health but also with moral and developmental values such as responsibility and self-discipline. However, the HBM underscores that these perceived benefits must outweigh perceived barriers, such as limited healthy options, social inconvenience, or additional costs (Domosławska-Żylińska et al., 2023; Glick et al., 2024). While perceived benefits can strengthen the motivational pull toward healthy choices, they must be accompanied by a realistic sense of feasibility. As Fink et al. (2021) demonstrated in their think-aloud study, even highly motivated individuals with strong intentions to adopt healthier diets were frequently impeded by practical constraints such as time, social influence, and availability. This finding illustrates how practical feasibility acts as a necessary bridge between motivation and behavioural execution. When the perceived cost or effort of eating healthily outside the home surpasses the symbolic or health-related value, the intention may not translate into behaviour. In this regard, both SCT and HBM converge in highlighting that personal factors, including value-driven motivations and perceived benefits, are essential as intention is not sufficient on its own in shaping consistent dietary behaviour in real-world environments.

Parents further mentioned how foods also affect their mental clarity, memory, and character related to their Islamic tenets. In Islam, food is viewed as a means to nurture both the body and soul. The Qur'an instructs the believers: "*O believers! Eat from the good things We have provided for you. And give thanks to Allah if you 'truly' worship Him 'alone'*" (Surah Al-Baqarah 2:172). This divine guidance verifies the Malay parents' perception that carefully selecting meals when eating out reflects gratitude and adherence to Allah's provisions. Besides, parents also mentioned their efforts to avoid overindulgence

and moderation when eating out, as they said it symbolises a lack of self-control. This can be reflected in the Prophetic tradition: “*The son of Adam does not fill a vessel worse than his stomach...*” (Ibn Majah, 1952). By modelling moderation, parents teach their children the values of self-discipline and responsibility, which are foundational to the formation of character (*sahsiah*) and morality (*akhlak*). In the broader context, these perception contributes to the development of an ummah that prioritises both physical, moral, emotional, and social well-being. As Malay parents strive to cultivate these values in their children, they uphold the principles of balance (*wasatiyyah*) and responsibility fostering a community that embodies the teachings of Islam in everyday life.

Conversely, while food choices can enhance personal identity, they may also lead to exclusion or division among groups, as differing dietary preferences can create social barriers and reinforce stereotypes (Jacob & Chattaraj, 2022; Vartanian et al., 2007). This duality underscores the complexity of food’s role in identity formation. Overall, the findings suggest that perceived health benefits significantly shape Malay parents’ food choices when eating out. By prioritising long-term health outcomes and leveraging dietary practices to build personal identity, these parents embody the principles of SCT. Their actions highlight the dynamic interaction between personal beliefs, behavioural intention, and the broader goal of fostering a healthier lifestyle for themselves and their families.

5.2.3 The Battle of Temptation and Tradition: Malay Parents’ Struggle to Balance Health and Cravings in Eating Out

The findings highlight the ongoing internal conflict and desire experienced by Malay parents when striving to balance health goals with personal cravings and indulgence when eating out. Despite knowing the necessity of providing healthy options for their children, parents frequently cave to their cravings and desires. This conflict illustrates the difficulty of selecting healthy eating choices in Malaysia’s vibrant and diverse culinary culture, where luxurious and flavourful options abound. This is exhibited in Claessens et al. (2023), which highlighted that motives, such as taste and social factors, are more significant in determining restaurant food choices than personal values. This reflects the ongoing struggle parents face who may prioritise the enjoyment and social aspects of eating out over their health goals. Again, Claessens et al. (2023) found out that health is not the top priority when eating out, as taste and social motives came first and second when choosing meals at the restaurant. The desire to indulge can overshadow their intention to provide healthier meals for their children

in the eating-out context, which illustrates how personal values are indeed context-dependent in food choices.

This pattern arises because eating out is often perceived as an opportunity for enjoyment, relaxation, and social bonding, rather than strictly adhering to health goals (Dunbar, 2017; Karimikonda, 2020; Robson et al., 2016; Warde, 2000). In the Malaysian context, where food is deeply intertwined with cultural and communal experiences, the act of eating out goes beyond mere nourishment. Eating out, as per parents' perceptions, has been a mechanism for them to spend quality time with family, rewards, and celebration (Ghaffar et al., 2020). However, this comes with the nutritional cost as Verain et al. (2022) highlights a stark contrast in food choices when eating at home versus eating out, emphasising how eating out often leads to more indulgent selections. Bauer et al. (2022) similarly found that taste, convenience, and speed frequently override health considerations, even among health-conscious individuals. For many parents, eating out represents a rare opportunity to relax and indulge, which makes resisting cravings even more difficult. Additionally, participants further justified that the abundance of indulgent and aesthetically appealing food options in Malaysia further reinforces this behaviour, their cravings make it more challenging for parents to maintain self-regulation and prioritise health goals in such an environment and personal temptation. This highlights the dynamic interplay of personal, cultural, and environmental factors that shape eating-out practices.

Beyond the inherent cultural and social dynamics, parents also expressed their cravings that were stimulated by the trendy food phenomena, aesthetic cafes, and global fusion foods, which act as powerful external triggers to prioritise their health in the external environment. Recent research by Bouwman et al. (2023) highlights how cravings are amplified by external environmental factors, including the availability of visually and sensory-stimulating food options. Devoto et al. (2023) demonstrated that food imagery activates brain reward systems, increasing the likelihood of indulgence in less healthy options. Another study by Saunders et al. (2025) emphasises that individuals with strong instigation habits for healthy eating can experience reduced cravings for diet-inconsistent foods. This suggests that developing habits can help mitigate the impact of external food trends, such as aesthetic cafes and global fusion cuisines, which often present tempting options that conflict with health goals.

The insight from this study offers a guide for the public health campaign and initiatives aimed at promoting healthy eating among families in an eating-out context. Recognising the personal factors influencing eating behaviours or adherence towards healthy behaviours among Malay parents can help design an intervention that focuses on being culturally resonant. For example, restaurants can offer their menus to include a wider range of traditional Malay dishes prepared with healthier techniques or visually appealing. Healthy foods are not confined to (*ulam*) or merely vegetables. However, the term healthy goes beyond that. The nutritional guidelines suggest the key to healthy eating is balanced, varied, and moderate. However, it should add on “cultural relevance” as different culture has different perceptions of the concept of healthy eating due to their geographical context, source of staples, cultural norms, religious practices, and origin of ancestors, which shape their dietary behaviours and adherence to the nutritional guidelines (Haghighian Roudsari et al., 2019; Ibrahim, 2023; Kama & Kama, 2024).

Based on this study, people are more likely to adhere to healthy eating when the concept aligns with their cultural identity and are more likely to develop a sense of self-efficacy, believing that they can make and maintain healthier behaviour in any context without abandoning their cultural identity. A participant mentioned that their unfamiliarity with food such as “acai seeds” had been associated with lower consumption, as it is not a regular or familiar food practised by Malay society. These cultural nuances emphasise that dietary recommendations must be adaptable to local practices and preferences, ensuring they resonate with the target populations. The public health campaigns should consider tailoring educational initiatives to reflect the local and culturally specific terms that are familiar to the target audience. For example, using the phrase “*makan beringat ingat, bialq badan sihat, penyakit pun tak dapat*” that resonates with Malay societal norms that favour moderation, humility, and balance. This phrase encapsulates more than just a dietary caution but it reflects a broader Malay cultural ethos of *berhemat* (prudence) and *kesederhanaan* (moderation), which are core values in both traditional Malay upbringing and Islamic teachings. Islam, which is central to Malay identity, promotes eating in moderation (*wasatiyyah*) and avoiding excess as a sign of piety and self-control. By embedding these values into health messaging, such culturally resonant phrases not only enhance the relatability of public campaigns but also reinforce behavioural guidance that is already legitimised by cultural and religious frameworks.

This alignment may increase the emotional and moral salience of healthy eating messages, helping individuals to perceive such behaviours not as external impositions but as extensions of their identity and values. In doing so, health interventions can move beyond generic education and foster a sense of collective cultural efficacy, making behaviour change feel both attainable and socially affirmed.

5.3 BEHAVIOURAL FACTORS

Parents exhibit nutritional preferences and mindful consumption when striving to uphold healthy eating habits while dining out. These preferences include opting for healthy choices, favouring familiar foods, and valuing the visual appeal of dishes.

5.3.1 Eating Out, Eating Healthy: Parents' Practices when Eating Out

When asked the parents how they practice healthy eating when eating out, the parents mentioned avoiding fried foods, ordering soup-based, preferring grilled foods, including vegetables, and reducing sugar in drinks. This reflects their health consciousness of making healthy choices when eating out as per their perceived health benefits in food choices in the personal factors discussion. Parents seem to opt for healthy choices when eating out with their children, and this can be concord with the study by Brindal et al. (2021), which found that parents often seek healthier alternatives when in the eating-out context and suggested that it should be available for the children too. Nonetheless, a study by Bensko et al. (2024) stated that parents are more likely to order less healthful food options at restaurants when they prioritise hassle-free eating experiences with their children.

The contradictions of the parents' practices of healthy eating, according to the literature, stem from parenting feeding styles, socioeconomic status, education status, perception, and attitudes toward dietary patterns (Anderson et al., 2023; Bensko et al., 2024; Chan et al., 2022; dos Santos Leal et al., 2024; Waisulqrnai et al., 2024). However, not all parents consistently make healthy eating when eating out. Although many found it difficult to articulate concrete barriers, their narratives pointed to a multifaceted tension between individual intentions and situational constraints. The interplay of family dynamics, unfamiliar dining environments, and sociocultural expectations often disrupted their ability to adhere to healthful practices outside the home. These complexities appeared to shift parental prioritise, with many defaulting to hassle-free decisions as a pragmatic response to external demands. This underscores the essential role of self-regulation in sustaining health-

related behaviours, as such behaviours require more than just motivation or knowledge. The ability of parents to exercise the control over behaviour in varying contexts becomes a key determinant of actual eating practices. This finding underscores the need to recognise behavioural pattern as fluid and context-dependent, shaped by ongoing negotiations between personal agency and environmental pressures.

This concurs with a study by Bensko et al. (2024), which stated that parents who prioritise hassle-free when eating out with their children are more likely to order less healthful food options at restaurants. This shows that parents are trying to make the eating experience enjoyable for both parties. The majority of the parents, when asked about their strategies for choosing healthy foods when eating out, are in a state of unsure. The parents are trying to recall and align their “healthy practice” to the food pyramid’s outline. The parents also did not describe their practices thoroughly and always denoted their practices through the recall process of their eating habits and preferences. This study identified that there were varied practices of healthy eating by the parents when eating out, depending on the age of their children. The parents with younger children aged 5-9 years old mostly had restricted their food choices compared to parents with older children 10-12 years old. A study by Anderson et al. (2023) found that parents with children aged 3-8 years old are more likely to practise indulgent feeding styles, which are prone to unhealthy food consumption.

This issue arises because of uncertainty and a lack of knowledge regarding healthy food practices. Most of the parents’ knowledge about healthy eating is rooted in the collective recall, which is a practice that has been passed down through family traditions and influenced by social surroundings. Parents often rely on and learn through vicarious experiences, which they perceive as long-standing practices as the appropriate practice without seeking empirical evidence to support their claim (National Academies of Sciences, Engineering, and Medicine, 2019). This reliance on tradition and observation over scientifically supported knowledge highlights a gap in nutritional literacy that may hinder parents’ ability to make informed decisions when eating out with families. Particularly among Malay families where the influence of elders and community norms has projected the parenting roles and the reliance also fosters adherence to the cultural norms and Islamic beliefs, which frequently outweigh empirical facts on parental decisions (Hossain & Madon, 2022).

Still, knowledge alone is not sufficient to ensure adherence to healthy eating in any context. The parents needed to be equipped with the practical skills, motivation, and supportive environments to translate the knowledge into actionable practices (Czarniecka-Skubina et al., 2023; Hart et al., 2015; Screti et al., 2024). Factors such as convenience, modern food gastronomy, and time constraints have further complicated the effort to practice and adhere to healthy behaviours (Fruh et al., 2013; Gaupholm et al., 2022; Screti et al., 2024). These barriers are often exacerbated in the eating-out context, where parents must navigate external influences such as social norms and restaurant attributes, all of which can conflict with their health goals (Scott et al., 2022; Gómez-Carmona et al., 2021).

5.3.2 Mindful Consumption: Bridging Home-Based Practices with Eating-Out Behaviours

This subtheme explained how the parents' execution of healthy eating through mindful consumption, which they always ensure to align with their home-based dietary eating practices, practising a balanced diet, and adhering to religious dietary guidelines. All these practices portrayed a sense of behavioural continuity, which parents perceived that their home-based diet are healthy and wanted to extend to the eating-out dietary pattern. This can be demonstrated in a study by Mills et al. (2017), which reported that eating at home-cooked meals was associated with greater adherence to healthier dietary patterns and having a normal BMI. The perception of parents that consuming foods prepared outside of the home has always been associated with unhealthy eating can be supported by a study by Fulkerson et al. (2018), which emphasised that the frequent consumption of fast food can contribute to the prevalence of obesity and overweight. These health consequences are always a grave concern for the parents, which they link to the food choices that are available outside of the home.

The concern has been verified by many researchers that foods prepared outside of the home typically contain more calories, fat, sodium, and cholesterol compared to home-cooked meals (Ashaari et al., 2022; Golper et al., 2021; Hodge et al., 2023). According to Claessens et al. (2023), the contradiction of food choices when eating at home and in restaurants has been blamed on the personal values and motives of healthiness in food choices. Another participant mentioned that they practised healthy eating due to their partners' influences, as they mentioned that their partners are more knowledgeable about the concept of healthy eating generally and religiously. The awareness of their partners of the

importance of making healthy eating choices when eating out has pushed the children or families to practice healthy eating when eating out. The less superior partner always said their eating style is open and carefree when it comes to eating out.

These findings contribute significantly to the theoretical framework, which demonstrates how behavioural continuity is maintained across context, as proposed by the Social Cognitive Theory (SCT). This can be seen through the interlinked interaction of personal factors (e.g., religious adherence and health awareness), environmental (e.g., restaurant food choices and availability), and behavioural factors (decision-making processes) in the context of eating out. This emphasises the relevance of self-regulation in influencing dietary behaviours across different situations. Furthermore, focusing on partners' influence emphasises the importance of social reinforcement and collective decision-making, complementing the SCT approach by demonstrating how social circumstances shape individual health practices.

5.4 ENVIRONMENTAL FACTORS

Lastly, the findings on environmental factors depicted several perceived barriers that shape the practicality of healthy eating when eating out among Malay parents. These barriers are rooted in sociocultural dynamics, restaurant quality and standards, and interpretation of health guidelines. These environmental influences shape not only the availability and accessibility of healthier food options but also the social acceptability and ease of making health-conscious choices in real-world settings.

5.4.1 Navigating the Landscape of Healthy Eating: The Influence of Sociocultural Norms and Environmental Barriers on Parents' Choices when Eating Out

The parents mentioned the influence of sociocultural dynamics in eating behaviours, ranging from contemporary food trends, parental dilemmas, and the preference for convenience and practicality as the prominent environmental factors that thwarted the Malay parents from maintaining and sustaining the practice of healthy eating in the external environment. A study by Popkin (2011), which tracked the nutritional shift in contemporary society, has found that the current nutritional dietary pattern has been shifted to reduced water intake, higher intake of sugary and sweetened beverages, frequent eating out, reduced intake of vegetables and fruits (Anyanwu et al., 2022; Bodirsky et al., 2020; Colozza, 2024; Golper et al., 2021; Hoffman & Posluszny, 2023). These nutritional transitions have led to health issues

such as obesity, diabetes, cardiovascular diseases, and risk of mental health issues and other chronic conditions (Grajek et al., 2022; Huang et al., 2021; Pressler et al., 2022; Suárez-López et al., 2023; Sun et al., 2023). Malaysia also cannot escape from this nutritional transitional phenomenon as a local study by Goh et al. (2020) found that urbanisation, economic growth, and lifestyle shifts have increased the consumption of processed foods high in fats and sugars, contributing to the high number of non-communicable diseases such as obesity and diabetes among the Malaysian.

This study found that the shift in dietary patterns has shaped contemporary food trends. The trend has been described as “unhealthy” and consists of “viral foods” by the parents. They expressed that their children are exposed to the abundance of “viral foods” in Kedah, especially in Sungai Petani. The availability of viral foods such as “ramen,” “cheese-based,” and other fusion foods at food establishments has been a grave concern for parents, as it directly influences the food choices and preferences of children towards foods when eating out. It is demonstrated that food trends have served as the social mechanism that shaped the social patterning of health and diseases in Malay parents. This can be seen in a study conducted by Islam et al. (2019) on the sociocultural factors that shape food choices among adolescents, which found that market taste-driven preference and popularity of street foods posed significant influences on their food choices and eating habits.

These food trends have put parents in a dilemma in executing the practice of healthy eating among Malay parents. The dilemma arises when the constant exposure to the availability of viral foods has created social acceptance, which sculpts the social norms. Previous studies proposed that social norms strongly influence food choices, particularly in communal and social dining settings (Higgs, 2015; Mollen et al., 2023; Robinson et al., 2014). The constant sharing of trending foods on any platform, especially social media, has strengthened social norms, creating a sense of social acceptance and encouraging individuals to conform to these norms despite health considerations. The parental dilemma is also tied to the children’s preferences. Parents recognise that children prefer strong flavours, such as sweet and salty, in their food selection. However, to turn down their preferences leads to uncomfortable eating experiences when eating out and leaves the parents with no choice except to follow their food choices. This can be seen from a study by Kielb et al. (2024) that avoiding fights is the top consideration for parents when it comes to food provisions for their children, instead of their awareness of food selection for their children’s well-being.

Beyond these social pressures, parents also encounter practical barriers that hinder healthy eating when eating out. Factors mentioned by the parents, such as time constraints, high cost, and perceived inconvenience of healthier options, further limit their ability to adhere to healthy eating practices. It is worth mentioning that this study found that the pattern of time constraints as a barrier is regularly mentioned among working parents, and cost is often stated by housewives. This distinction aligns with Wu's finding (2018), which claimed that dual-working parents were substantially associated with a higher consumption of unhealthy foods due to time scarcity and convenience. Additionally, Wu et al. (2024) found that occupational fatigue had an influence on the dietary pattern and directly impacts overall well-being. Time scarcity and work-related fatigue often lead to greater reliance on convenience foods and less nutritious meals when eating out (Ashari et al., 2022; Celnik et al., 2012; Jabs & Devine, 2006). These findings reinforce the structural and behavioural constraints that shape parental food choices, highlighting the need for accessible, affordable, and convenient healthy dining options to support working families.

Parents also mentioned their “fear of missing out” if they are not following the food trends, convenience, and practicality culture, which leads to the parental dilemma. The phenomenon of “fear of missing out”, known as FoMO, was first introduced in 2004 to explain a phenomenon observed on social networking sites (Gupta & Sharma, 2021). FoMO consists of two processes, which are the perception of missing out and habitual conduct to retain these social relationships. In this context, parents stated that their disengagement from the adherence to healthy eating when eating out resulted from missing out on the trends. The pervasiveness of these trends on social media platforms and their integration into everyday dining culture has cultivated an environment where conformity to these trends is equated with social relevance. Failing to follow these trends, according to the parents has been perceived as “not updated”, which ignites a sense of FoMO among parents, thereby influencing their choices to prioritise trending foods over healthier options. This can be concord with many studies which found that FOMO significantly influences consumer purchasing decisions and drives them to prioritise trending foods over healthier options to stay connected with the current trends and perceived social relevance (Alfina et al., 2023; Chakrabarti, 2024; Wachyuni et al., 2024).

The findings of this study offered critical insights into the interplay between environmental factors, sociocultural dynamics, and the practicality of healthy eating among

Malay parents, which enriches the understanding of the environmental constructs within Social Cognitive Theory. This study also demonstrates how external environmental influences, such as sociocultural food trends and practical barriers, shape parents' food choices and behaviours when eating out. The role of sociocultural dynamics, such as contemporary food trends and the normalisation of "viral foods", highlights the strong influence of social norms on dietary practices. The current social norms exhibited among Malay parents are evident that sense of efficiency and immediacy are the pivotal factors in adapting to today's fast-paced lifestyle. At the same time, the conventional social norms rooted in Malay culture illustrated that the collectivist culture appreciates the sense of belonging and loyalty which sometimes overrides individual or regulatory considerations.

Moreover, the emphasis on collectivist values and current lifestyles underscores the need for culturally sensitive interventions that address both the modern sociocultural dynamics and deeply ingrained collectivist values influencing food choices. By situating the findings within the broader framework of Social Cognitive Theory, this study highlights the necessity of addressing environmental pressures not just through individual behaviour but also via community-driven initiatives and structural interventions.

5.4.2 Beyond the Plate: The Role of Environmental Standards in Shaping Parental Healthy Eating Practices when Eating Out

The findings highlight that Malay parents prioritise restaurant cleanliness and food safety as key factors in their healthy eating decisions when eating out. This aligns with the Social Cognitive Theory (SCT), where environmental factors (such as hygiene standards, perceived food safety, and cleanliness) influence the behavioural choices. Parents were not only concerned with the nutritional value of meals but also with hygienic food preparation and storage when selecting dining establishments. The preference for fast-food restaurants over street vendors, despite the perception that street food may offer healthier options, underscores the trade-off between food safety and nutritional quality.

While fast-food outlets are often associated with standardised hygiene practices and modern food handling protocols, recent findings by Azrol et al. (2023) suggested that street foods are not universally viewed as unsafe. In fact, consumers' purchase decisions in Cheras, Kuala Lumpur, were positively influenced by perceived cleanliness, food safety, environmental surroundings, and the hawker's physical appearance. This illustrated a growing

awareness and selectivity even within informal food settings. This challenges simplistic narratives that dichotomise fast food as ‘safe’ and street food as ‘risky’. This suggests that dynamic cultural, environmental cues, and social cues shape consumer perceptions. For Malay parents, particularly those navigating urban foodscapes, such choices may also reflect broader societal influences such as evolving norms, media portrayals of hygiene, and generational shifts in what constitutes “safe” or acceptable eating environments (Abidin et al., 2020; Ashari et al., 2022; Savelli & Murmura, 2023).

Concerns about foodborne illness and unhygienic food preparation were recurring themes throughout the participants’ narratives. In this context, parents described more inclined to choose eateries perceived to uphold food standards, particularly when dining with children. This aligns with previous findings by Cholis et al. (2022) and Gargiulo et al. (2022), which suggest that consumers, particularly parents, use visible cues such as the cleanliness of food displays, the use of gloves, or food being covered. These cues act as indicators of food safety and acceptability. Here, environmental cues play a symbolic yet powerful role in shaping behaviour, reinforcing Bandura’s (1971) notion that the environment provides models and signals that guide action.

Interestingly, some parents preferred fast-food chains over local street vendors, not because of the nutritional profile of the meals, but due to perceptions of consistency and hygiene. This points to a complex tension between nutritional ideals and environmental realities. While fast food is typically seen as unhealthy, it is perceived that adherence to hygiene protocols renders it a safer option in the minds of some parents. This illustrates an interplay between outcome expectations and perceived risk, where avoiding contamination outweighs the nutritional shortcomings of the meal (Chandrika et al., 2021). It also highlights the adaptive nature of parental decision-making, where choices are not simply driven by health knowledge but negotiated through trade-offs within a real-world context.

This finding echoes Liguori et al. (2022) study, which argued that perceptions of food safety often outweigh concerns about nutritional quality, particularly in cultures where informal food vendors are prevalent. In the Malaysian context, where diverse food options range from hawker stalls to international chains, such environmental evaluations become critical in daily parental practices. These decisions are further shaped by self-efficacy, as parents exercise agency in evaluating and responding to perceived risks. Their behavioural

responses, such as choosing safer eateries, avoiding visibly unhygienic premises, or carrying home-cooked alternatives, reflect an active process of managing their environment to align with health intentions.

Notably, the study also found that parental tolerance for environmental standards varied across contexts. In more casual or time-pressured situations, parents admitted compromising on hygiene expectations in favour of convenience or affordability. This suggests a fluid negotiation of values, highlighting the influence of situational factors on behaviours. According to SCT, behaviour is shaped not just by stable preferences but also by context-sensitive evaluations and decisions, reaffirming the theory's emphasis on reciprocal determinism. Research by Abidin (2007), adults are more likely to demand higher food safety standards in full-service restaurants where meal prices are higher, while they exhibited greater tolerance for lower hygiene standards in quick-service restaurants due to affordability and convenience. This implies that economic considerations intersect with hygiene concerns, influencing where parents choose to eat and what to eat. Furthermore, the study on the food healthiness perception suggests that healthier dining options increase customer satisfaction and revisit intentions, indicating that restaurants offering both high food safety standards and health-conscious meals may appeal more strongly to parents seeking balance in their food choices.

The quality and standards of restaurants play a crucial role in shaping parents' dining decisions when eating out with their families. The findings reveal that parents carefully evaluate multiple aspects of a restaurant's environment, including cleanliness, staff presentation, and the overall atmosphere, before making their choices. This aligns with existing literature, which highlights the significant impact of environmental factors on consumer perceptions of food safety, hygiene, and overall dining experiences (Martins et al., 2024; Miftari et al., 2024). Studies have shown that concerns about food handling, preparation practices, and restaurant ambience can influence both food selection and the ability to adhere to healthier eating habits. Such concerns are particularly relevant in Malaysia, where foodborne illnesses remain a public health issue. Gargiulo et al. (2022) reported that in Malaysia, between 2013 and 2018, an average of 21 foodborne outbreaks occurred annually, with *Bacillus cereus* and *Staphylococcus aureus* being the primary causal agents. While many of these outbreaks were linked to public schools and school canteens, the findings underscore broader issues of cross-contamination and inadequate temperature

control in food preparation. Malaysia's hot and humid climate further exacerbates microbial growth, making stringent hygiene and storage practices essential for food safety. In this context, parents' scrutiny of restaurant cleanliness and staff hygiene can be seen as a protective measure to mitigate these risks when eating out with their families.

Another key consideration for parents was the cost of healthy foods when eating out. Parents noticed that the high cost of healthy foods offered by the food establishments has hindered their efforts to practice healthy eating outside of home settings. This finding aligns with the studies by Seguin et al. (2014) and Musaiger et al. (2013) found that high cost served as a significant barrier in maintaining a healthy diet, which often leads individuals to stray from healthier eating habits. Apart from the financial burden, the diverse availability of food choices constantly made parents go back and forth in practising healthy eating when eating out. However, this constraint was not universal across all dining settings. Several parents highlighted the abundance of diverse and healthier food choices in Malay mixed rice restaurants (*kedai nasi campur*) as a facilitator of healthy eating. The availability of vegetables, grilled meats, and boiled dishes empowered them to make more mindful choices, suggesting that when provided with accessible and appealing healthy options, parents are more inclined to adhere to their dietary intentions. This aligns with the research that emphasises the impact of the food environment on eating behaviour, where the accessibility and variety of healthy foods influence eating behaviour decision-making (Bernsdorf et al., 2024; Francis-Granderson & McDonald, 2018; Tharrey et al., 2024; Thomas & Cankurt, 2024; Robinson & Higgs, 2013).

In sum, the findings suggest that for Malay parents, the act of eating out involves a continuous balancing act between nutritional ideals, environmental assessments, and practical constraints. Food hygiene and safety emerge not just as peripheral concerns, but as core components of what constitutes "healthy eating" in real-world practice. Within the SCT framework, these behaviours reflect an intricate interplay between environmental cues, self-regulatory actions, and outcome expectations. Recognising these dynamics underscores the need for public health efforts to go beyond nutritional education and consider the broader structural and perceptual factors that influence family food choices. Only by addressing the full ecology of eating out, including environmental standards, perceived risks, and socio-economic realities, can healthy eating be more effectively supported in everyday family life.

5.4.3 The Paradox of Adherence to Nutritional Recommendations in the Eating-Out Context

Findings show that nutritional guidelines, including health promotion and education, are important mechanisms that can either facilitate or impede the practice of healthy eating when eating out. Most of the parents stated that they are aware and know about the local nutritional guidelines, which is Food Pyramid or in Bahasa known as “*Piramid Makanan*” or Malaysian Healthy Plate. However, they questioned the practicality of the guidelines in the eating out context which does not reflect the inclusivity and exclusivity of Malay cultural values. Taste and preferences, cultural nuances, local cuisines, and food availability are always vital factors that impede adherence to the nutritional framework. This can be seen through the study of healthy eating and adherence to the Swiss dietary guidelines, in which taste influences adherence to the dietary guidelines (de Mestral et al., 2020). Similarly, awareness and adherence to health guidelines are influenced by demographic and socio-economic factors (Che Abdul Rahim et al., 2022; Stuber et al., 2023; Wilcox et al., 2020).

A study by Che Abdul Rahim et al. (2022) found that the level of awareness of the Malaysian Healthy Plate showed that 83.2% of rural adults in Malaysia were unaware of the Malaysian Healthy Plate concept, even after three years of its implementation, thus leading to the disengagement of adherence to healthy behaviour. There are scarce studies conducted on adherence to Malaysian Dietary Guidelines when eating out among Malay parents have raised concerns about the cultural and practical relevance of these guidelines. Without a clear understanding of how these parents perceive, interpret, and implement dietary recommendations in real-life settings, there is a risk of developing frameworks that fail to address their unique needs and challenges. Thus, this gap underlined the importance of health promotions and education tailored to the context of Malay food culture.

Our study found that parents are aware about the health promotion and education conducted and disseminated by the local health institution. However, parents mentioned that most of the promotions are nowhere to be seen in their locality thus, social media is always a returning point for parents to gain information about healthy eating or dietary pattern as in general. This indicates that while formal health promotion exists, their effectiveness is diminished by their limited reach, cultural adaptability, and individual capability, which further influencing the practical challenges parents face in adhering to healthy eating. Studies

mentioned that health education and promotion on any platform offer opportunities to modify healthy behaviour and adherence to it (Ghahramani et al., 2022; Seid et al., 2024).

5.5 LIMITATIONS AND STRENGTHS OF STUDY

A potential limitation of this study is social desirability bias, where participants may have provided responses they perceived as socially acceptable rather than fully disclosing their actual practices and perceptions regarding healthy eating when eating out. Given that healthy eating is often framed as positive and responsible behaviour, some parents might have emphasised their efforts to make healthier choices while minimising less health-conscious decisions. This could have influenced the depth and authenticity of the data collected. To mitigate this bias, the study employed a conversational, non-judgmental interview approach to encourage honest reflections.

However, despite this limitation, this study demonstrated significant strengths. The qualitative research design, grounded in an interpretative approach, provided a nuanced understanding of an unexplored phenomenon that could not be captured through quantitative methods. Additionally, the study's comprehensive methodological approach, starting from the careful development of the interview guide to rigorous data analysis and results interpretation, ensured depth, credibility, and richness in the findings.

More importantly, this study offers a distinctive contribution to the discourse on healthy eating behaviours in Malaysia by addressing two critical gaps in the existing literature. First, it extends current understandings by exploring how parental decisions are shaped not only by nutritional awareness but also by sociocultural dynamics, convenience, and family routines. While previous local studies have largely focused on individual dietary behaviours or school-based nutrition interventions, this research offers insight into family-oriented, everyday practices situated within public food environments. Thus, providing practical implications for public health campaigns and parental guidance strategies aimed at promoting healthier eating habits beyond the home.

Third, by exploring culturally embedded values and norms, such as the communal nature of eating and the perception of Malaysia as a “food heaven”, this study brings forth contextualised knowledge that is often underrepresented in health psychology literature. It highlights how Malay parents balance modern health discourses with traditional food

practices, convenience, and emotional connections to food. This offers a more grounded and culturally attuned understanding of eating behaviours.

Therefore, this study offers not only empirical insights but also a theoretical lens through the Social Cognitive Theory, demonstrating how environmental standards, personal beliefs, and behavioural regulations intersect in shaping parental perceptions, practices, and perceived barriers in eating-out contexts.

5.6 CONTRIBUTION OF THE STUDY TO THE KNOWLEDGE

Despite its limitations, this study offers meaningful contributions both methodologically and theoretically.

First, it demonstrates the value of an interpretative approach in exploring the complex, culturally embedded practices surrounding healthy eating when eating out. By prioritising participants' lived experiences, the study provided Malay parents in Kedah with the opportunity to share their perceptions, practices, and perceived barriers in their own voices. This approach uncovered the nuanced ways in which these parents navigate dietary choices in public food environments. This can be influenced by cultural values, religious principles, and everyday family routines. The interpretivist paradigm enabled the generation of context-specific insights that are often overlooked in quantitative research, offering a deeper understanding of how healthy eating is practised in real-life settings.

Second, this study contributes to the application of Social Cognitive Theory by mapping the emergent themes onto its three core constructs, personal, behavioural, and environmental factors. Rather than employing SCT as a rigid, predefined framework, the theory was used reflexively to interpret the data, allowing a more flexible and grounded analysis. This approach revealed how reciprocal determinism operates in culturally specific contexts, such as how Malay parents' health beliefs, family routines, and external dining environments interact to shape eating practices. The study thus extends SCT's utility in understanding real-world, external contexts like eating out, which have been relatively underexplored in SCT-based studies.

Furthermore, the study offers a deeper understanding of eating-out patterns among Malay families with children. The findings shed light on the realities of implementing

healthy eating practices in everyday life, especially when influenced by sociocultural and religious norms. The findings are deeply rooted in the experiences of Malay parents in Kedah and may not be directly generalisable to other ethnic or cultural groups. However, they offer culturally grounded insights that can inform comparative research and guide the development of tailored interventions for similarly contextualised populations.

By situating these findings within SCT, the study not only enhances theoretical understanding in health psychology but also offers practical guidance for the development and improvement of culturally sensitive public health interventions. These contributions enrich the academic discourse on SCT's applicability while providing actionable knowledge to inform future research, health promotion strategies, and policy initiatives aimed at improving dietary behaviours in family and community settings.

5.7 RECOMMENDATIONS FOR FUTURE RESEARCH STUDIES

These findings pave the way for further exploration into culturally nuanced interventions and policies that support the promotion of healthy eating in public spaces. Future research should build on this foundation by exploring similar behaviours in other cultural and demographic contexts. This will enrich the discourse on healthy behaviour adherence within diverse social environments. Future studies also should focus on the long-term psychological adaptations and behaviour changes among parents who attempt to adhere to healthy eating when eating out. This could uncover how cognitive, emotional, and social factors evolve and contribute to sustaining healthy eating practices. Rather than introducing entirely new interventions or guidelines, a more pragmatic approach would be to integrate cultural elements into existing national frameworks. For instance Malaysian Dietary Guidelines (MDG) developed by the Ministry of Health (MOH). This approach could help bridge the gap between formal health advice and the lived eating practices of Malay families.

This study also highlights the untapped potential of social media as a tool to promote healthy eating. As the concerns of the parents are that the physical promotion is barely visible in their locality and relies on social media as the main source, this underscores for leverage social media platforms to bridge the gap between public health messages and community accessibility. Health authorities and organisations such as the Ministry of Health can collaborate with local influencers, health psychologists, nutritionists, and community leaders

to create engaging and relatable content that resonates with the values of Malay communities. For example, creating short, visually appealing videos or infographics on portion control, healthier alternatives, and traditional food choices can help parents make informed choices. The public health campaigns should also ensure inclusivity by addressing the diverse socio-economic contexts of Malay parents. This includes providing content in multiple languages, incorporating regional cuisines, and highlighting affordable and accessible options for eating out healthily. These initiatives may empower parents to make healthier choices and further integrate culturally relevant health promotion into their everyday lives.

Importantly, future research could explore the direct dietary outcomes or nutritional status of children in relation to their parents' eating-out behaviours. This line of inquiry would provide valuable insight into the real impact of parental food choices on children's nutritional health. Researchers may also investigate the intergenerational transmission of eating habits, examining how values, preferences, and behaviours around food are passed from parents to children. These directions will deepen our understanding of family food dynamics and the sustainability of healthy eating behaviours over time. It is recommended that future research explore how cultural identity intersects with self-efficacy and perceptions of healthy eating. Exploring culturally specific barriers, such as cultural norms that normalise indulgent eating, social pressure, and the limited availability of healthy options in local eateries. Conversely, enablers such as religious institutions, family support, and the growing visibility of healthy eating campaigns in social media and policy spaces may facilitate more health-conscious choices. Understanding these dynamics will shape more culturally attuned interventions.

Researchers should also examine the long-term impact of culturally grounded strategies on healthy eating adherence, particularly in the context of evolving cultural norms and globalisation. Additionally, further refinement could involve incorporating a broader range of personal factors, such as emotional eating or intergenerational influences, to deepen understanding and improve interventions. Ultimately, the integration of cultural traditions, assimilation of natural food sources, and adaptation of modern dietary practices can create unique health solutions tailored to societal needs and preferences. This approach not only fosters healthier eating habits but also preserves the cultural heritage and identity of the Malay community, demonstrating that the path to better health does not need to come at the

expense of cultural authenticity (Kaur-Gill et al., 2020). By embracing the unison of assimilation and adaptation from the Malay culture, public health efforts can achieve a greater impact in shaping sustainable and culturally aligned dietary practices.

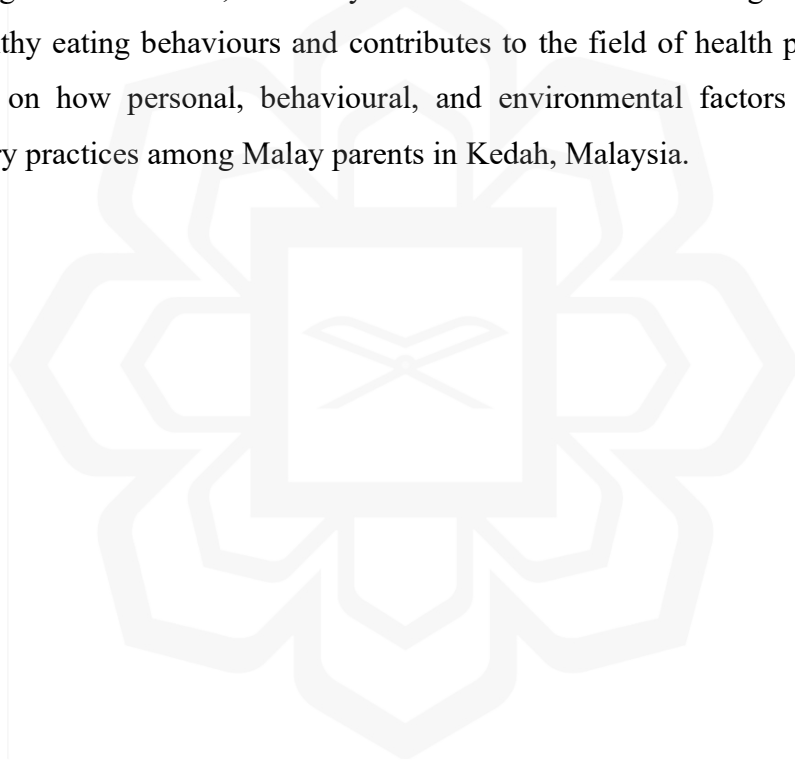
Lastly, this study also identifies a potential program focusing on adherence to healthy eating when eating out. This research proposed the program of “*Santapan Keluarga Sihat*”, the aim of the program is to provide Malay parents with affordable, culturally relevant, and nutritious food options at restaurants, addressing concerns and issues about healthy eating when eating out. Also, to address the insight of this study, which families in this study choose restaurants based on ambience, availability of child-friendly options, or specific family needs. Situational adaptability can also be built and empowered by collaborating with restaurants to create diverse options of Malay-based healthy meals and a children-friendly menu, and family-friendly environments. A special initiative, “healthy family night” menus, encourages parents to introduce healthy eating practices during family outings. To assess the program’s effectiveness, a qualitative approach, such as in-depth interviews, participant observation, and narrative collection, can be employed to assess individualised outcomes and context-sensitive impacts. The longer-term impacts such as sustained behavioural changes and the cultural acceptance of healthy eating, depend on the interactions between participants’ experiences and contextual factors that shape implementation over time. These impacts could be explored through longitudinal qualitative studies and feedback from restaurant stakeholders. Ultimately, the “*Santapan Keluarga Sihat*” program has the potential to foster a supportive ecosystem for healthy eating practices while respecting the cultural values and economic constraints of Malay families.

5.8 CONCLUSION

This study conceptualised healthy eating behaviours among Malay parents within the framework of Social Cognitive Theory, exploring how personal, behavioural, and environmental factors interact to influence their perceptions, practices, and perceived barriers when eating out. The findings highlighted how personal factors such as one’s perception, motivation, and cultural values shape parents’ food choices, while behavioural factors, including healthy food choices, portion control, and adaptation of home-based practices to the eating-out context, reflect a continuity of healthy eating behaviours. Environmental factors, particularly the role of restaurant attributes, food culture, social media, and local health

promotions, further influence these behaviours by either facilitating or hindering access to relevant health information.

From the health psychology perspective, this study underscores the importance of understanding how cognitive, emotional, and social factors contribute to behaviour changes and adherence to healthy behaviours. The psychological processes of decision making, self-regulation, and coping strategies play a crucial role in parents' ability to practice healthy eating in external contexts. This study also emphasises how health-related behaviours are not only influenced by individual knowledge or willpower but are deeply embedded in social contexts, cultural norms, and environmental factors that either support or challenge behaviour change. In conclusion, this study affirms the role of Social Cognitive Theory in explaining healthy eating behaviours and contributes to the field of health psychology by shedding light on how personal, behavioural, and environmental factors intertwine to influence dietary practices among Malay parents in Kedah, Malaysia.



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Appendix I

Interview Guide for Semi-Structured Interview (English)

Topic	Main questions	Follow-up questions	Probe questions
Perception	1. What is your opinion on healthy eating when eating out with children?	1. What else affects your view of healthy eating when eating out with children? 2. What do you think about the promotion of healthy eating when eating out in Kedah? 3. When you eat out, what kinds of food do you believe are healthy or unhealthy for you and your children?	Can you explain in further detail to me what you have said just now? What do you mean by [words or sentences]? Can you give me examples? Do you have any opinions?
Practice	1. Can you describe how you and your family practice healthy eating when eating out?	1. Why you choose that restaurant to eat out? 2. How do you promote a positive and balanced attitude towards food for your children during these eating out experiences?	

		<p>3. In the context of eating out with children, how do you incorporate variety into their meals to ensure they receive a well-rounded and nutritionally diverse diet?</p> <p>4. Children’s preferences can sometimes lean towards less nutritious options. How do you strike a balance between allowing them some flexibility in their food choices and ensuring they consume a healthy meal when eating out? Are there negotiation or communication tactics you find effective in encouraging better choices?</p> <p>5. Where do you typically choose to eat out with your children?</p> <p>6. How often do you typically choose to eat out with your children?</p> <p>7. As a parent, what do you look for when choosing what to eat when you’re out with your family?</p>	
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Perceived barriers	1. What makes it difficult for you to eat healthily when eating out with children?	1. What other factors influence you're eating habits when eating out with children? 2. What impedes you from making healthier food choices in the restaurant? 3. How often do you encounter the following situations that make it challenging for you to choose healthy foods (healthy food includes fruits and vegetables, whole grains, beans and legumes, low-fat dairy, and lean meats) when eating out with children?	
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Appendix II

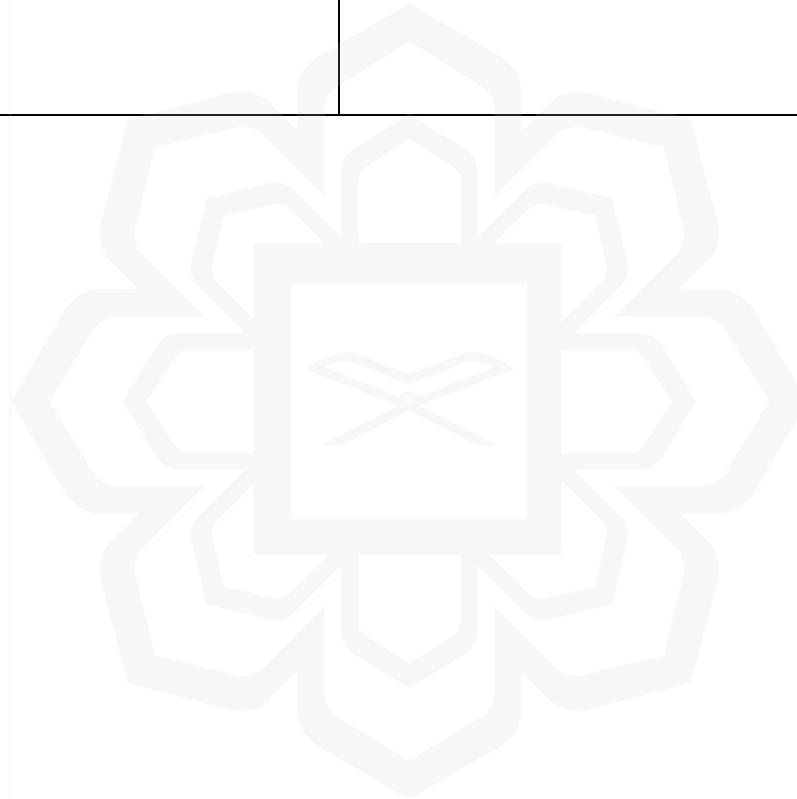
Interview Guide for Semi-Structured Interview (Bahasa Melayu)

Topik	Soalan utama	Soalan-soalan lanjutan	Probes
Persepsi	1. Apa pendapat anda tentang pemakanan sihat apabila makan di luar bersama anak-anak?	<p>1. Apakah perkara lain yang yang mempengaruhi pandangan anda tentang pemakanan sihat semasa makan di luar bersama anak-anak?</p> <p>2. Apakah pandangan anda tentang promosi pemakanan sihat ketika makan di luar di Kedah?</p> <p>3. Makanan apa dan bagaimana yang anda rasa sihat atau tidak untuk anda dan anak-anak ketika makan di luar?</p>	<p>Sila terangkan dengan lebih lanjut mengenai apa yang telah anda perkatakan sebentar tadi.</p> <p>Apakah yang anda maksudkan dengan [ayat atau perkataan]?</p> <p>Bolehkah anda memberikan contoh?</p>
Praktis	1. Bolehkah anda perincikan bagaimana anda dan keluarga mempraktikkan amalan pemakanan sihat ketika makan di luar?	1. Mengapa anda memilih restoran itu untuk makan di luar?	Anda ada sebarang pendapat?

		<p>2. Bagaimana anda menggalakkan sikap positif dan seimbang terhadap makanan untuk anak-anak anda semasa pengalaman makan di luar?</p> <p>3. Dalam konteks makan di luar bersama anak-anak, bagaimana anda menyertakan pelbagai jenis makanan dalam hidangan mereka untuk memastikan mereka menerima diet yang seimbang dan nutrisi yang beraneka?</p> <p>4. Keutamaan kanak-kanak kadang-kadang boleh cenderung kepada pilihan makanan yang kurang berkhasiat. Bagaimana anda menyeimbangkan antara memberi mereka kebebasan dalam memilih makanan dan memastikan mereka mendapat hidangan yang sihat semasa makan di luar? Adakah terdapat taktik perundingan atau komunikasi yang anda dapati berkesan dalam mendorong pilihan yang lebih baik?</p>	
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		<p>5. Biasanya di mana anda memilih tempat makan bersama anak-anak anda?</p> <p>6. Berapa kerapnya biasanya anda memilih untuk makan di luar bersama anak-anak anda?</p> <p>7. Sebagai ibu bapa, apa yang anda cari apabila memilih makanan ketika anda keluar bersama keluarga anda?</p>	
Halangan	<p>1. Apakah yang membuatkan anda untuk makan makanan yang sihat ketika makan di luar bersama anak-anak?</p>	<p>1. Apakah faktor-faktor lain yang mempengaruhi tabiat makan anda ketika makan di luar bersama anak-anak?</p> <p>2. Apa yang menghalang anda daripada membuat pilihan makanan yang lebih sihat di restoran?</p> <p>3. Seberapa kerap anda menghadapi situasi yang membuat anda sukar untuk memilih makanan yang sihat (makanan sihat termasuk buah-buahan dan sayuran, bijirin utuh, kacang-kacangan,</p>	

		produk tenusu rendah lemak, dan daging tanpa lemak) ketika makan di luar bersama anak-anak?	
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Appendix III

Approval from the Research Management Centre (RMC), IIUM Research Ethics Committee, International Islamic University Malaysia

 **INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA**
Garden of Knowledge and Virtues

LEADING THE WAY
KHALIFAH - AMANAH - IZZAH - RAHMATAN IL-LAHIMIN

SUSTAINABILITY INSTITUTION OF THE YEAR

RESEARCH MANAGEMENT CENTRE (RMC)

Our Ref. : IIUM/504/14/11/2/ IPEC2023-192
Date : 23 October 2023

Asst. Prof. Dr. Muhamad Ariff Bin Ibrahim (Principal Investigator)
Kulliyah of Allied Health Sciences
IIUM Kuantan Campus

Dear Asst. Prof. Dr.,

The IIUM Research Ethics Committee (IPEC) has reviewed your study protocol as mentioned below:-

ID NO. : IPEC2023-192
RESEARCH TITLE : Exploring The Perceptions, Practices, And Perceived Barriers To Healthy Eating When Eating Out Among Malay Parents With Children Between The Ages Of 5 To 12 Years Old In Kedah

REGISTRATION DATE : 11 Oct 2023
CO-INVESTIGATOR : Asst. Prof. Dr. Aliza Haslinda Binti Hamirudin
Asst. Prof. Dr. Nurul Hazrah Binti Jaefar
Asst. Prof. Dr. Nurulwahida Binti Saad

STUDENT : Siti Adibah Binti Walsulqarni (Postgraduate Student)
STUDY SITE : Sungai Petani, Kedah
SAMPLE SIZE : 20 Malay parents
ETHICAL EXPIRY DATE : 22 October 2024

The IIUM Research Ethics Committee (IPEC) operates in accordance to the Declaration of Helsinki, International Conference of Harmonization Good Clinical Practice Guidelines (ICH-GCP), Malaysia Good Clinical Practice Guidelines and Council for International Organizations of Medical Sciences (COMS) International Ethical Guidelines



The following documents have been received and reviewed to the above study:-

1. Study Proposal/Protocol: Version 2, dated 11 Oct 2023
2. Informed Consent Form (ICF) –
 - i. Information Sheet (English) – Version 1, dated 11 Oct 2023
 - ii. Consent Form (English) – Version 1, dated 11 Oct 2023
 - iii. Information Sheet (Malay) – Version 1, dated 11 Oct 2023
 - iv. Consent Form (Malay) – Version 1, dated 11 Oct 2023
3. Interview – Version 3, dated 11 Oct 2023
4. Approval Letter from Kulliyah of Allied Health Sciences, IIUM
5. Principal Investigator's CV



Appendix IV

Consent Form for Parents

 LEADING THE WAY <small>INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA</small> <small>Center of Knowledge and Change</small>		 LEADING THE WAY <small>INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA</small> <small>Center of Knowledge and Change</small>	
<p>Part II: Certificate of Consent</p> <p>I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.</p>		<p>I confirm that the participant was allowed to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.</p>	
<p>A copy of this ICF has been provided to the participant.</p>		<p>A copy of this ICF has been provided to the participant.</p>	
<p>Print Name of Participant : _____</p> <p>Signature of Participant : _____</p> <p>Date : _____</p> <p style="text-align: center;">Day/month/year</p>		<p>Print Name of Researcher/person taking the consent: _____</p> <p>Signature of the Researcher /person taking the consent: _____</p> <p>Date: _____</p> <p style="text-align: center;">Day/month/year</p>	
<p>If illiterate:</p> <p>I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.</p> <p>Print name of witness : _____</p> <p>Signature of witness : _____</p> <p>Date : _____</p> <p style="text-align: center;">Day/month/year</p>		<p>Statement by the researcher/person taking consent:</p> <p>I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:</p> <ol style="list-style-type: none"> 1. This study involved a study on the dietary pattern which involved an interview session of about 30 to 60 minutes. 2. There are no direct risks or benefits to joining this study. 3. They are voluntarily taking part in this project. They understand that they don't have to take part, and can stop the interview at any time or skip any questions. 	
			

Appendix V

Participant Information Sheet



Participant Information Sheet (English version)

Research title: Exploring the Perception, Practice, and Perceived Barriers of Malay Parents to Healthy Eating When Eating Out among 5 To 12 Years Old Children in Kedah.

Main researcher: Siti Adibah Binti Waisulqmai
Affiliation: Department of Biomedical Sciences, Kulliyah of Allied Health Sciences, IIUM.
Details: sitiadibahwaisul@gmail.com / +6019- 441 6796

Primary supervisor: Asst. Prof. Dr. Muhamad Ariff Bin Ibrahim.
Affiliation: Department of Nutrition Sciences, Kulliyah of Allied Health Sciences, IIUM.
Details: ariffib@iium.edu.my /+6013-981 8872

Purpose of the study:

I am Siti Adibah Binti Waisulqmai (G2228118), a postgraduate student from International Islamic University Malaysia (IIUM), who is currently pursuing a master's degree specializing in Health Psychology. My current research interest is based on dietary patterns among children. This form is designed to give you information about this study. The purpose of this study is to explore the perception, practice and perceived barriers of Malay parents to healthy eating when eating out among 5 To 12-year-old children in Kedah. By exploring the perceptions and practices of parents regarding healthy eating habits during dining-out experiences, we seek to identify potential barriers that may hinder or facilitate the adoption of healthier food choices for children in such settings. One of the main goals of this research is to promote healthy eating among parents, ensuring the best well-being for their growing children. Your valuable insights and participation will greatly contribute to enhancing our knowledge in this area and ultimately help create a positive impact on the dietary choices of families in Kedah.

Study procedure:

An interview session for parents will be conducted face-to-face or virtually by the main researcher at the designated place. The interview session will be conducted as a one-time event and recorded audibly and visually for research purposes. The session is estimated to last between 30 to 60 minutes. Participants' identities will be kept confidential.

Participation in the study:

Participation in the interview session is voluntary. The participant has the right to withdraw the consent or stop from participating at any time without penalty. The right to refuse to answer particular questions or to decline any procedure



is also implied to the participant. Participants may leave the interview session at any time. Notes about what will be said will be taken during the interview, but will not include participants' names or any information that could identify participants to others.

Benefits to participants:

Participants who join the interview session will receive a token of appreciation. It will be distributed after the end of each session, and no specific conditions will be applied.

Risks to participants:

The interview session and focus group discussion bring no direct or known risks to the participant's participation in this project. However, participation will help refine the research methods and procedures for the main study, which may benefit future participants and contribute to a better understanding of healthy eating practices. Should participants experience any distress from participating in this interview, please notify the contact persons as per details.

Confidentiality:

All information collected during the interview session will be strictly confidential. Audio and video recordings will be identified, anonymized, and reported in aggregate form, thus individual participants will not be identified in any reports or publications from this study. The findings of this research may be published or presented in a variety of forums. In any publication, information will be provided in a way so that you cannot be identified. We may anonymously quote some of the responses, but they will be deidentified so they cannot be linked back to you. The data will be stored securely on password-protected devices and online applications such as Google Drive and accessible only to authorized research team members. Recordings will be kept for 24 months and then erased.

Complaints:


Should the participants have any concerns or questions about the research project, that they do not wish to discuss with the researchers listed in the document, then they may contact:

Reviewing IREC	International Islamic University of Malaysia Institutional Review Committee
Email	irec@live.iium.edu.my
Mailing address	Research Management Centre (Kuantan), Level 1, Office of the Campus Director International Islamic University Malaysia, Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang




Appendix VI


Maklumat Penyelidikan Peserta (Bahasa Melayu)



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INSTITUTION FOR SUSTAINABILITY

Maklumat Penyelidikan Peserta (Versi Bahasa Melayu)

Tajuk Kajian: Meneroka Persepsi, Amalan, dan Halangan Ibu Bapa Berbangsa Melayu Tengah Pemakanan Sihat Ketika Makan Di Luar Dalam Kalangan Kanak-Kanak Berusia 5 Hingga 12 Tahun di Kedah.

Pengkaji utama: Siti Adibah Binti Waisulqmai
Jabatan: Jabatan Sains Bioperubatan, Fakulti Sains Kesihatan Bersekutu, IIUM.
Kontak maklumat: sitiadi@iium.edu.my / +6019-441 6796

Penyelia utama: Dr. Muhamad Ariff Bin Ibrahim.
Jabatan: Jabatan Sains Pemakanan, Fakulti Sains Kesihatan Bersekutu, IIUM.
Hubungi: ariffb@iium.edu.my / +6013-981 8872

Tujuan Kajian:
Saya Siti Adibah Binti Waisulqmai (G2228118), pelajar pascasiswazah dari Universiti Islam Antarabangsa Malaysia (UIAM), sedang mengikuti pengajian peringkat sarjana dalam bidang Psikologi Kesihatan. Bidang penyelidikan semasa saya adalah tertumpu kepada corak pemakanan dalam kalangan kanak-kanak. Borang ini bertujuan untuk memberi maklumat tentang kajian yang sedang dijalankan. Kajian ini bertujuan untuk meneroka persepsi, amalan, dan halangan yang dilalui oleh ibu bapa berbangsa Melayu dalam memilih makanan yang sihat apabila makan di luar bersama anak-anak berumur 5 hingga 12 tahun di Kedah. Dengan meneroka persepsi dan amalan ibu bapa berkaitan tabiat pemakanan yang sihat semasa makan di luar, kami ingin mengenal pasti halangan yang berpotensi menghalang atau membantu pengambilan pilihan makanan yang lebih sihat untuk anak-anak dalam situasi tersebut. Salah satu matlamat utama kajian ini adalah untuk menggalakkan pemakanan yang sihat dalam kalangan ibu bapa untuk memastikan perkembangan yang terbaik bagi pertumbuhan anak-anak.

Prosedur Kajian:
Temu bual akan dijalankan secara bersemuka dan akan dikendalikan oleh pengkaji utama. Sesi temu bual akan dijalankan secara fizikal atau maya mengikut kesesuaian anda. Sesi temu bual akan dijalankan secara sekali sahaja dan dirakam secara audio dan visual untuk tujuan kajian. Sebelum memulakan sesi temu bual, anda akan diberi taklimat tentang kajian tersebut dan persetujuan lisan akan dikumpul setelah anda dikenal pasti sebagai peserta yang layak. Terdapat kira-kira 12 soalan bagi setiap minit kajian. Contoh soalan ialah "Apakah dan berapa kali anda dan keluarga akan makan dalam sehari?". Selepas sesi temu bual, anda akan diberi taklimat tentang maklumat kajian, borang kebenaran, kerahsiaan, risiko, dan faedah serta yang berkaitan dengan kajian. Rakaman dan transkripsi akan disimpan dalam kata laluan

terkunci dan aplikasi dalam talian seperti Google Drive dengan hanya pasukan penyelidik mempunyai akses kepadanya.

Penyertaan dalam Kajian:
Penyertaan dalam kajian ini adalah secara sukarela. Peserta berhak untuk menarik diri atau berhenti daripada menyertai kajian pada bila-bila masa tanpa sebarang denda. Peserta juga berhak untuk menolak menjawab soalan tertentu. Peserta boleh keluar daripada sesi temu bual pada bila-bila masa. Catatan tentang apa yang dikatakan akan dibuat semasa sesi temu bual, tetapi tidak akan mengandungi nama peserta atau sebarang maklumat yang boleh membuatkan peserta dikenali oleh orang lain.

Manfaat kepada Peserta:
Peserta akan menerima sugu hati sebagai tanda penghargaan. Sugu hati akan diberikan selepas tamat sesi temu bual, dan tiada syarat khusus untuk penerimaan sugu hati ini.

Risiko kepada Peserta:
Tiada risiko teres atau yang diketahui kepada penyertaan peserta dalam projek ini. Walau bagaimanapun, penyertaan ini akan membantu mengemaskini kaedah penyelidikan dan prosedur untuk kajian utama, yang mungkin memberi manfaat kepada peserta di masa depan dan menyumbang kepada pemahaman yang lebih baik tentang amalan pemakanan yang sihat. Jika peserta mengalami sebarang ketidakselesaan daripada penyertaan dalam sesi temu bual ini, sila maklumakan kepada kontak maklumat yang disenaraikan.

Kerahsiaan:
Semua maklumat yang dikumpulkan semasa sesi temu bual akan dijaga dengan ketat kerahsiaannya. Rakaman audio dan video akan diambil dan maklum balas peserta akan diasingkan, dianonimkan, dan dilaporkan secara keseluruhan, bermaksud bahawa peserta individu tidak akan dikenal pasti dalam apa-apa laporan atau penerbitan hasil kajian ini. Hasil kajian ini mungkin akan diterbitkan atau dibentangkan dalam pelbagai forum. Dalam mana-mana penerbitan, maklumat akan diberikan untuk memastikan peserta tidak dapat dikenal pasti. Beberapa maklum balas mungkin akan dikutip secara tanpa nama, tetapi akan dipastikan bahawa maklum balas ini tidak dapat dihubungkan semula kepada peserta. Data akan disimpan dengan selamat di peranti yang dilindungi dengan kata laluan dan aplikasi dalam talian seperti Google Drive dan hanya dapat diakses oleh ahli pasukan penyelidikan yang berkaitan. Rakaman akan disimpan selama 24 bulan atau sehingga tamat kajian dan kemudiannya dipadam.

Aduan:
Jika peserta mempunyai sebarang soalan tentang projek penyelidikan ini yang tidak ingin dibincangkan dengan penyelidik yang tertera dalam dokumen ini, maka boleh menghubungi:

Penyemak IREC	International Islamic University of Malaysia Institutional Review Committee
Emel	irec@live.iium.edu.my
Alamat mel	Research Management Centre (Kuantan), Level 1, Office of the Campus Director, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang.

Dengan menanda "Saya bersetuju", anda merupakan individu berumur sekurang-kurangnya 18 tahun, telah membaca dan memahami borang persetujuan ini, dan bersetuju untuk menyertai kajian penyelidikan ini.

Saya bersetuju.
 Saya tidak bersetuju.

