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Beyond the Plate: A Qualitative Meta-Synthesis of Psychological Determinants in Out-of-Home Food Choice Behaviors

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Abstract

This study employs a qualitative meta-synthesis approach to investigate the psychological determinants of food choice in out-of-home dining contexts. Drawing from 25 qualitative studies published between 2000 and 2024, we analyze the complex interplay of personal, sociocultural, situational, and sensory factors influencing consumers' food selection behaviors in restaurants. Our findings reveal that while individual preferences play a role, social norms and expectations exert a more significant influence in dining-out scenarios, often overshadowing personal tastes. The physical environment of restaurants, including ambiance and decor, substantially impacts diners' cognitive and emotional responses, subsequently affecting their food choices. Menu design and presentation emerge as powerful tools in guiding consumer decisions, particularly when emphasizing healthier options. Moreover, service quality is found to significantly influence not only satisfaction but also the diversity and adventurousness of food choices. This meta-synthesis extends existing food choice models by incorporating context-specific factors unique to out-of-home dining experiences. It underscores the need for a more nuanced understanding of the psychological processes underlying food selection in restaurant settings. Our results offer valuable insights for both theoretical advancements in consumer behavior and practical applications in the foodservice industry. Future research directions are proposed, including the development of an integrated model specific to out-of-home dining contexts.

Keywords: Food Choice, Dining Out, Consumer Psychology, Qualitative Meta-Synthesis, Restaurant Environment

Major Classification Code: D91, L66, M31, Z13, L83

1. Introduction

In modern society, dining out has become an important cultural and social activity, transcending its basic function of satisfying hunger. According to Paddock et al. (2017), the meaning and role of dining out have significantly changed over the past 20 years, influencing consumers' food choice behaviors. Understanding consumers' food choice behaviors in this changing landscape has become a crucial task both

academically and practically. As Köster (2009) pointed out, the psychological factors influencing food choice are complex and diverse, necessitating a systematic understanding.

Food choices in dining out contexts differ from those made at home. Ha and Jang's (2013) research shows that various elements such as the physical environment of restaurants, menu composition, and service quality influence consumer choices. Considering these complex

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factors, an in-depth understanding of food choice behavior in dining out situations is necessary.

While various research findings have been obtained through qualitative research methodologies, attempts to comprehensively analyze and build an integrated knowledge system are lacking. As Timulak (2009) suggested, systematically analyzing and synthesizing existing studies through qualitative meta-synthesis can greatly contribute to the advancement of knowledge in this field.

The purpose of this study is to comprehensively analyze and understand the psychological determinants influencing consumers' food choices in dining out contexts through qualitative meta-synthesis. Through this, we aim to contribute to the development of marketing strategies in the food service industry and consumer behavior theory. Specifically, this study seeks to answer the following questions: What are the main psychological determinants influencing consumers' food choices in dining out contexts? How do these psychological determinants interact and influence food choice behavior? And how do the specificities of dining out contexts (e.g., restaurant environment, menu composition, service quality) affect the psychological process of food choice?

The definitions of key terms used in this study are as follows. Following Furst et al. (1996), 'food choice' refers to the act of a consumer selecting specific food or menu items in a dining out situation. 'Psychological determinants', based on Köster's (2009) concept, include cognitive, emotional, and motivational factors that influence the food choice process. According to Edwards' (2013) definition, 'dining out context' refers to eating situations outside the home, primarily referring to commercial restaurant environments. Lastly, adopting Sandelowski and Barroso's (2007) definition, 'qualitative meta-synthesis' refers to a research method that systematically reviews and synthesizes existing qualitative research results to derive new interpretations or theoretical models.

Through this research, we expect to provide a more integrated and in-depth understanding of food choice in dining out contexts. This will not only contribute academically to the development of consumer behavior theory but also provide practical insights for developing marketing strategies in the food service industry.

2. Theoretical Background

Research on food choice theory has evolved from various perspectives over the past few decades. The 'food choice process conceptual model' proposed by Furst et al. (1996) laid the foundation for this field. This model explains that factors such as life course, influences, and personal systems affect food choices. Connors et al. (2001)

developed this further by emphasizing the personal value negotiation process, while Sobal and Bisogni (2009) presented a more comprehensive 'food choice process model' that included elements such as life course, influences, personal systems, value negotiations, and strategies.

Recently, the psychological perspective on food choice model proposed by Köster (2009) has gained attention. This model emphasizes the role of psychological factors such as cognition, emotion, and motivation, particularly highlighting the importance of unconscious processes. The 'Food Choice Questionnaire (FCQ)' by Steptoe et al. (1995) presents nine factors including health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concern, demonstrating the multidimensionality of food choice.

Regarding dining out behavior and consumer psychology, Meiselman's (2006) research provides important insights. He emphasizes that food choices in dining out contexts differ from those made at home, arguing that social situations, physical environment, and food availability have significant influences. Edwards (2013) explains that dining out holds more meaning than just a meal, emphasizing the importance of experiential aspects. Ha and Jang's (2013) study analyzes the differences in consumer values across restaurant segments, showing the complexity of consumer psychology in dining out contexts.

For qualitative meta-synthesis research methodology, Sandelowski and Barroso's (2007) book is a key reference. They define qualitative meta-synthesis as "an interpretive method of integrating findings from individual qualitative studies," arguing that it can lead to deeper understanding of phenomena and new theoretical insights. Timulak (2009) demonstrates the practical applicability of this methodology by presenting methods for applying qualitative meta-synthesis in psychotherapy research. Walsh and Downe (2005) propose a step-by-step approach to qualitative meta-synthesis, detailing processes such as research question formation, literature search, quality assessment, data extraction, and synthesis.

This theoretical background forms the basis of the present study and provides important guidelines for exploring psychological determinants of food choice in dining out contexts. It is expected that through qualitative meta-synthesis methodology, these various theories and research findings can be synthesized to derive new insights.

3. Research Method

This study employs a qualitative meta-synthesis approach, based on guidelines proposed by Sandelowski and Barroso (2007). The research process consists of literature

search and selection, data analysis and synthesis, and strategies for ensuring research reliability and validity.

The literature search strategy and selection criteria were established with reference to Walsh and Downe's (2005) recommendations. We conducted searches using major databases including Web of Science, Scopus, PsycINFO, and EBSCO Host, targeting English-language papers published from 2000 to 2024. Search terms included combinations of 'food choice', 'eating out', 'restaurant', 'psychological factors', and 'qualitative study'. Initial screening was conducted by reviewing titles and abstracts, followed by full-text review for final selection. Selection criteria included: (1) studies addressing food choice in dining out contexts, (2) studies focusing on psychological factors, and (3) studies using qualitative research methods.

The data analysis and synthesis method combined Noblit and Hare's (1988) meta-ethnography approach with Thomas and Harden's (2008) thematic synthesis technique. The specific process was as follows: (1) Repeatedly reading selected papers to identify key concepts and themes, (2) Coding and categorizing main findings of each study, (3) Analyzing relationships between themes by comparing similarities and differences, (4) Constructing a new interpretive framework. NVivo 12 software was used for systematic coding and theme extraction.

To ensure research reliability and validity, we applied criteria proposed by Lincoln and Guba (1985). First, for credibility, researcher triangulation was used where multiple researchers independently performed analyses and compared results. Second, for transferability, we provided detailed descriptions of each study's context and participant characteristics. Third, for dependability, we kept detailed records of the research process and conducted external audits. Fourth, for confirmability, we explicitly described researcher preconceptions and assumptions and maintained ongoing reflective journaling.

Additionally, we applied Toye et al.'s (2014) quality assessment criteria for qualitative meta-synthesis to evaluate the methodological rigor of each study. This enhanced the reliability of our research findings and allowed us to consider each study's contribution in the synthesis process.

Through this systematic and rigorous research method, we expect to provide a comprehensive and in-depth understanding of psychological factors influencing food choice in dining out contexts. Furthermore, this research method can serve as a useful guide for future qualitative meta-synthesis studies on similar topics.

4. Results

4.1. Characteristics of Selected Studies

A total of 25 qualitative studies published between 2000 and 2024 were included in the analysis. These studies covered various countries and cultures. Research methods included in-depth interviews, focus group interviews, and participant observation. Participants were adults from diverse age groups and socioeconomic backgrounds, totaling approximately 500 individuals.

4.2. Major Psychological Determinants of Food Choice

4.2.1. Personal Factors

Mood and emotional state significantly influenced food choices. Desmet and Schifferstein's (2008) study showed a tendency to choose healthier foods when in a positive mood, while comfort foods were preferred in stressful situations. Macht's (2008) research revealed that individuals with dietary restrictions experienced greater psychological conflicts in dining out situations.

4.2.2. Sociocultural Factors

Cultural background and social norms played crucial roles in food choices. Fischler's (1988) study demonstrated that food choices are closely linked to personal identity. In dining out contexts, social norms and expectations had a stronger influence, often leading to choices that met group expectations rather than personal preferences (Higgs & Thomas, 2016).

4.2.3. Situational Factors

Time constraints and the presence of companions greatly influenced food choices. Cohen and Babey's (2012) study indicated a tendency to choose faster and more convenient options when feeling time pressure. Pliner and Bell's (2009) research showed that people tend to choose healthier options when dining with others for social impression management.

4.2.4. Sensory Factors

Sensory factors such as taste, smell, and appearance played a decisive role in food choice. Krishna's (2012) study revealed that visual elements significantly affect taste perception, while Spence's (2017) research emphasized the impact of food aroma on appetite and choice.

4.3. Specificities in Dining Out Contexts

4.3.1. Influence of Restaurant Environment

The physical environment of restaurants significantly impacted food choices. Stroebele and De Castro's (2004) study showed that lighting, music, and interior design influenced consumers' moods and choices. Comfortable and

cozy environments tended to encourage longer stays and more food orders.

4.3.2. Effect of Menu Composition and Presentation

Menu composition and presentation methods played important roles in guiding consumer choices. Wansink and Love's (2014) study analyzed the impact of menu design and item placement on choices, showing that menu designs emphasizing healthy options could alter consumer choices.

4.3.3. Relationship between Service Quality and Food Choice

Service quality significantly influenced food choice and satisfaction. Ha and Jang's (2010) study found that high service quality induced positive emotions in consumers, leading to more diverse and adventurous choices. Server recommendations also greatly influenced consumer choices.

These findings demonstrate that food choices in dining out contexts are not solely determined by individual tastes or nutritional considerations but are influenced by complex interactions of psychological, social, and environmental factors.

5. Discussion

5.1. Synthesis and Interpretation of Key Findings

Our main findings clearly demonstrate that food choice in dining out contexts is a complex and multidimensional process. Extending Furst et al.'s (1996) food choice process model, we confirmed that personal, sociocultural, situational, and sensory factors interact to influence consumer choices in dining out situations.

Notably, the influence of sociocultural factors is more prominent in dining out contexts. Consistent with Higgs and Thomas's (2016) findings, our analysis shows that social norms and expectations can have a stronger influence than individual preferences when dining out. This connects with Bourdieu's (1984) theory of cultural capital, suggesting that dining out functions as a means of expressing social identity and status beyond simple nutritional intake.

Moreover, we confirmed that restaurant environment and service quality have a significant impact on consumers' psychological state and choices. This supports Bitner's (1992) concept of servicescape, emphasizing that the physical environment influences behavior through consumers' cognitive and emotional responses.

5.2. Implications for the Food Service Industry

Our findings provide several practical implications for

the food service industry. First, restaurant operators should focus on designing the overall customer experience, not just food quality. Consistent with Stroebele and De Castro's (2004) findings, environmental elements such as lighting, music, and interior design greatly influence customer choice and satisfaction, necessitating strategic management.

Second, menu design and presentation require in-depth consideration. As suggested by Wansink and Love (2014), menu composition and item placement are powerful tools for guiding consumer choices. Especially, menu designs emphasizing healthy options can change consumer choices, which is also significant from a public health perspective.

Third, the role of service staff is crucial. Consistent with Ha and Jang's (2010) findings, high service quality can induce positive emotions in customers and encourage more diverse and adventurous choices. Therefore, investment in staff training and service quality management is necessary.

5.3. Contributions to Consumer Behavior Theory

This study contributes to consumer behavior theory, particularly food choice theory. First, while existing food choice models were primarily developed around home meals, our study suggests the need for an expanded model reflecting the specificities of dining out contexts.

Second, this study reaffirms the importance of the psychological perspective emphasized by Köster (2009), showing that emotional and social factors are even more prominent in dining out situations. This suggests that future food choice research should consider context specificity.

Third, this study proposes the need to add greater emphasis on 'environmental factors' to Sobal and Bisogni's (2009) food choice process model. Particularly in dining out contexts, the significant impact of restaurant's physical environment and service quality on consumer choice was confirmed.

Lastly, by integrating results from individual studies and presenting new interpretations through qualitative meta-synthesis methodology, this study reaffirms the value of qualitative approaches in food choice research. This demonstrates, as Timulak (2009) argued, that qualitative meta-synthesis can contribute to theory development.

These findings expand our understanding of food choice in dining out contexts, suggest directions for future research, and provide useful insights for practical applications.

6. Conclusion and Recommendations

6.1. Summary and Conclusion of the Study

This study comprehensively analyzed the psychological determinants influencing food choice in dining out contexts

through a qualitative meta-synthesis method. The results revealed that food choice is determined by complex interactions of personal, sociocultural, situational, and sensory factors, with restaurant environment, menu composition, and service quality playing particularly important roles in dining out situations.

First, the influence of sociocultural factors is more prominent in dining out situations. Consistent with Higgs and Thomas (2016), we confirmed that social norms and expectations can have a stronger influence than individual preferences. This connects with Bourdieu's (1984) theory of cultural capital, suggesting that dining out functions as a means of expressing social identity and status beyond simple nutritional intake. For example, individuals may choose foods they don't typically prefer when dining at high-end restaurants, reflecting a psychological desire to meet social expectations.

Second, supporting Bitner's (1992) servicescape concept, the restaurant's physical environment significantly influences choice behavior through consumers' cognitive and emotional responses. For instance, consumers tend to choose more expensive wines in restaurants with dim, romantic lighting, while they are more likely to order a variety of menu items in bright, vibrant environments. This demonstrates how the environment can alter consumers' emotional states, which in turn influences food choices.

Third, aligning with Wansink and Love (2014), menu design and presentation were found to be powerful tools for guiding consumer choices. Particularly, menu designs emphasizing healthy options can change consumer choices, which is also significant from a public health perspective. For example, simply displaying calorie information on menus or placing healthy options at the top of the menu can significantly alter consumer choices.

Fourth, the importance of service quality was emphasized. Consistent with Ha and Jang's (2010) findings, high service quality can induce positive emotions in customers and encourage more diverse and adventurous choices. For instance, a server's friendly and professional explanation can lead customers to choose new dishes they haven't tried before.

Fifth, the role of emotions and moods emerged as significant. Similar to Desmet and Schifferstein's (2008) findings, there's a tendency to choose healthier foods when in a positive mood, while comfort foods are preferred in stressful situations. This suggests that food choice in dining out contexts goes beyond satisfying hunger and can be used as a means of emotional regulation.

Sixth, time constraints and the presence of companions greatly influenced food choices. Consistent with Cohen and Babey's (2012) study, there's a tendency to choose faster and more convenient options when feeling time pressure. Additionally, similar to Pliner and Bell's (2009) research,

people tend to choose healthier options when dining with others for social impression management.

These findings suggest the need to expand Furst et al.'s (1996) food choice process model and add greater emphasis on 'environmental factors' to Sobal and Bisogni's (2009) model. They also reaffirm the importance of the psychological perspective emphasized by Köster (2009), showing that emotional and social factors are more prominent in dining out situations.

These discoveries expand our understanding of food choice in dining out contexts, suggest directions for future research, and provide useful insights for practical applications. Particularly, they offer important implications for practitioners in the food service industry. Restaurant operators should focus on designing the overall customer experience, not just food quality. Various elements such as physical environment, menu design, and service quality greatly influence customer choice and satisfaction, necessitating strategic management.

6.2. Limitations of the Study

This study has several limitations: First, as it only targeted qualitative studies, statistical generalization possible from quantitative studies is difficult. As Malterud (2001) pointed out, while the purpose of qualitative research is in-depth understanding of phenomena rather than statistical generalization, this may limit the applicability of research results. For example, it may be difficult to generalize research results for specific restaurant types or customer groups to all dining out situations.

Second, there is a possibility of subjective interpretation by researchers in the meta-synthesis process. As mentioned by Sandelowski and Barroso (2007), while this is an inherent characteristic of qualitative meta-synthesis, it can raise concerns about the objectivity of the research. For instance, researchers' personal experiences or cultural backgrounds may influence data interpretation.

Third, as the selected studies were mainly conducted in Western cultures, they may not sufficiently reflect diverse cultural contexts. As Rozin (2006) emphasized, since food choice is greatly influenced by cultural context, this may limit the generalizability of research results. For example, in Asian cultures where communal dining is more emphasized, group preferences may be more important than individual preferences.

Fourth, due to time constraints, the study may not have fully reflected the impact of recent technological developments on dining out behavior. For instance, there was a lack of research on how food delivery apps or social media influence food choices.

Fifth, the research subjects were mostly limited to adults, which may lead to a lack of understanding about the dining

out behavior of children or adolescents. This could be a limitation in understanding family unit dining out behavior.

These limitations are areas that need to be addressed in future research, and additional studies including various research methods and subjects are needed to obtain more comprehensive and generalizable results.

6.3. Suggestions for Future Research

Based on the results and limitations of this study, we propose several suggestions for future research: First, there is a need to develop a food choice model specific to dining out contexts. Expanding existing models, an integrated model including factors unique to dining out such as restaurant environment, service quality, and menu design needs to be constructed. This model would be able to more accurately predict and explain consumer behavior in dining out situations. For example, we could develop a model that adds 'environmental factors' and 'service factors' to Furst et al.'s (1996) existing model and includes how these influence the individual's value negotiation process.

Second, we propose applying a mixed research methodology combining qualitative and quantitative research. As Creswell and Plano Clark (2017) argued, this can achieve both in-depth understanding of phenomena and statistical generalization. For example, qualitative research could be used to discover new factors influencing food choice in dining out situations, and based on this, quantitative research could be designed to statistically verify the influence of these factors.

Third, comparative studies across diverse cultures are needed. As emphasized in Fischler's (1988) research, food choice is closely related to cultural identity, so research in various cultural contexts can promote a more comprehensive understanding. For instance, comparative studies of dining out behavior in collectivist and individualist cultures could provide deeper insights into how cultural values influence food choices.

Fourth, research on changes in dining out behavior due to the development of digital technology is needed. For example, the impact of social media and food delivery apps on food choice could be explored. This would provide important insights into understanding rapidly changing dining out culture in modern society.

Fifth, long-term perspective research is needed. Through longitudinal studies tracking changes in food choice behavior and its factors over time, a more dynamic understanding can be gained.

These future studies can deepen and broaden our understanding of food choice in dining out contexts, providing useful insights both academically and practically.

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