

Exploring the Unseen: Understanding the Challenges Encountered by Chefs in North Cyprus' Hospitality Sector

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ABSTRACT

This study aims to provide a comprehensive exploration of the multifaceted challenges experienced by chefs working within the dynamic and demanding landscape of the hospitality industry. By delving into the intricacies of their work environment, the aim is to shed light on the day-to-day hurdles they encounter, offering a detailed understanding of the obstacles they face

In this study, employed a qualitative research framework to investigate the challenges faced by chefs in the hospitality sector, focusing on their unique experiences. During data collection involved in-depth interviews with chefs in North Cyprus. The findings reveal seven predominant challenges within the culinary industry, encompassing workload and stress, customer expectations, menu creativity and innovation, team dynamics, career advancements, ingredient sourcing, and technology and automation. These insights serve as a valuable resource for industry professionals and researchers alike who are committed to enhancing the culinary profession and elevating the dining experience for customers. The originality of this study lies in its unique focus on addressing the underrepresented area of research concerning the specific challenges faced by chefs in the tourism and hospitality industry. By exploring the day-to-day hurdles encountered by chefs, this research contributes to both academic knowledge and practical insights that can enhance industry practices and ultimately improve the quality of dining experiences for guests.

Keywords: Chefs, Hospitality, Restaurant, Leximancer

ÖZ

Bu çalışma, misafirperverlik sektörünün dinamik ve zorlu ortamında çalışan şeflerin karşılaştığı çok yönlü zorlukları kapsamlı bir şekilde incelemeyi amaçlamaktadır. Çalışma ortamlarının inceliklerine dalarak, şeflerin günlük karşılaştıkları engelleri aydınlatmayı ve karşılaştıkları zorlukların detaylı bir şekilde anlaşılması hedefleniyor. Çalışmada, misafirperverlik sektöründeki şeflerin karşılaştığı zorlukları araştırmak için nitel bir araştırma çerçevesi kullanılmıştır ve şeflerin benzersiz deneyimlerine odaklanılmıştır. Veri toplama süreci, Kuzey Kıbrıs'taki şeflerle yapılan derinlemesine röportajları içermektedir. Bulgular, mutfak endüstrisindeki yedi önemli zorluğu ortaya koymaktadır: iş yükü ve stres, müşteri beklentileri, menü yaratıcılığı ve yenilik, ekip dinamikleri, kariyer gelişimi, malzeme temini ve teknoloji ile otomasyon. Bu bulgular, mutfak mesleğini geliştirmeyi ve müşteri için yemek deneyimini iyileştirmeyi amaçlayan sektör profesyonelleri ve araştırmacılar için değerli bir kaynak oluşturmaktadır. Bu çalışmanın özgünlüğü, turizm ve misafirperverlik sektöründe şeflerin karşılaştığı belirli zorluklar konusunda yeterince araştırılmamış bir alanı ele almasıdır. Şeflerin günlük karşılaştıkları engelleri keşfederek, bu araştırma hem akademik bilgiye hem de sektördeki uygulamaları geliştirebilecek pratik içgörülere katkıda bulunmaktadır ve nihayetinde misafirlerin yemek deneyimlerinin kalitesini artırmayı hedeflemektedir.

Anahtar Kelimeler: Şefler, Misafirperverlik, Restoran, Leximance

DEDICATION

To my beloved wife, Emel, your unwavering love, strength, and endless support have carried me through every challenge. Your belief in me, even during the hardest moments, gave me the courage to keep going. This accomplishment is as much yours as it is mine. To my sons, Atay and Özgün, you are my greatest inspirations. Your laughter, curiosity, and boundless energy remind me every day why perseverance and passion matter. I hope this work becomes a part of the legacy I leave for you one of learning, growth, and dedication.

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Chapter 1

INTRODUCTION

The first chapter provides a comprehensive overview of the study, including its aim, significance, and problem statement. It sets the foundation for understanding the key issues addressed in the research and highlights the importance of exploring these challenges. Additionally, this chapter outlines the specific objectives of the study and discusses the potential contributions it offers to both the academic field and the practical aspects of the hospitality industry. By establishing the context and scope of the research, this chapter helps readers grasp the significance of the study's focus on the challenges faced by chefs in the dynamic and demanding environment of the hospitality sector.

1.1 Aim of the Study

The main purpose of this study is to examine in depth the professional challenges faced by chefs working in the Northern Cyprus hospitality sector in the aftermath of the COVID-19 pandemic and their reactions to these challenges. The pandemic has created a unique crisis environment in the hospitality industry, reshaping the work processes of sector employees with factors such as limiting face-to-face interactions with customers, supply chain disruptions, and new regulations on hygiene standards (Breier et al., 2021; Lai et al., 2020; Rodríguez-Antón & Alonso-Almeida, 2020; Sanabria-Díaz et al., 2021; Madeira et al., 2020; Ho et al., 2023; Shapoval et al., 2021). In this context, chefs working in the culinary environment have been at the forefront of such changes and have had to deal with new challenges in many areas, from

operational processes to their relationships with colleagues (Batat, 2021; Bucak & Yiğit, 2021; De Guzman et al., 2021; Wilkesmann & Wilkesmann, 2021; Lippert et al., 2021).

This research aims to understand these challenges and the personal and professional strategies chefs have developed to address them. The main objectives of the study are to investigate the effects of changing customer expectations, hygiene standards, and staff shortages on chefs' workloads, especially after the pandemic, and to examine the reflections of these effects on factors such as employee health, job satisfaction and job performance.

The study uses in-depth interviews to understand the process of adaptation of chiefs to this process. This qualitative research method allows chefs to share their experiences from their perspectives, enabling a more comprehensive understanding of professional transformations in the post-pandemic period. In this way, it is aimed to reveal in detail the obstacles chefs face in their professional lives, the methods they have developed to overcome these obstacles, and the effects of these processes on their personal and professional lives.

To this end, the study examines not only the daily challenges faced by chefs, but also the resources, support systems, and intrinsic motivators they need to overcome these challenges. In this context, the research aims to go beyond the individual experiences of chefs to shed light on broader structural changes in the sector.

1.2 Significance of Study

The importance of this study stems from the limited number of academic studies focusing on chefs and the need for an in-depth examination of the critical role of this

occupational group in the hospitality sector. In the hospitality industry, chefs play a vital role both in the management of operational processes and in ensuring product and service quality that directly affects customer satisfaction (Borchgrevink et al., 1998; Chuang et al., 2009; Graham et al., 2020; Seo et al., 2020; Tongchaiprasit & Ariyabuddhiphongs, 2016; Leung & Lin, 2022; Ko, 2012; Murray-Gibbons & Gibbons, 2007). However, there is a limited number of studies in the literature on the professional experiences of chefs, the challenges they face, and the strategies they develop against these challenges. This deficiency creates a knowledge gap in understanding how the workload and professional responsibilities of chefs have been shaped, especially with the changes in the sector in recent years.

This study aims to better understand the role of chefs in the hospitality sector by addressing the experiences of chefs, the challenges they face, and the coping strategies they have developed against them in Northern Cyprus. By providing a specific perspective on the professional lives of chefs, the research details the needs, challenges, and solutions of kitchen workers. In this context, by examining the challenges chefs face in fulfilling their professional obligations, it aims to contribute to the development of broader strategies for employee satisfaction, occupational health, and sustainable working conditions in the sector.

The contribution of the study to the literature is that it fills the knowledge gap on this occupational group by providing an in-depth analysis of chefs. By providing data that will help to better understand the unique position of chefs in the hospitality industry and the requirements of this position, the study will also guide future research. In this context, providing a detailed perspective on the work life of chefs is an important contribution both in the academic field and in sectoral practices.

Moreover, by understanding the experiences of chefs, this research provides meaningful insights for sector managers and employers. A better understanding of the problems faced by chefs is critical to developing more effective support systems for human resources departments and managers. The findings of the study can contribute to the development of policies and practices to improve chefs' working conditions, increase their job satisfaction, and raise professional standards in the sector.

1.3 Problem Statement

In recent times of the post-pandemic era, the reshaping hospitality industry is changing continuously due to customer expectations, operational reengineering, and a focus on resilience. Initially, COVID-19 struck with a shock so immense that the sector was brought to a specific point of closure leading to losses (McCartney et al., 2022). The long-term consequences of the disease, however, have created changes in otherwise how the hospitality business conducts itself. Health, safety, and convenience are what most customers are looking for; therefore, the demand for the following shall be increased: contactless menu, online reservation, takeaway, and so forth. Latest development in that regard resulted into excessive increased pressure for chefs and kitchen employees, hence have to find ways on which to maintain quality and creativity of their food in that new format of operation. Staffing issues have compounded with many experienced and learned people leaving the industry, because of the pandemic, therefore, leading to major skill gaps and increased workloads on remaining members of staff. Cost management has also gained importance as businesses strive to recover financially while wrestling with inflation and instability in the supply chain. So, the new concepts required a lot of innovation, flexibility, and collaborative working that bring together different functions in the industry context. This is particularly true for the chefs in reworking the dining experiences to bring the

guests to meet the expectations of the post-COVID consumer (Shapoval et al., 2022). The hospitality sector in Northern Cyprus has an important place in the tourism-based economic structure of the country. Chefs working in this sector play a critical role in ensuring customer satisfaction and maintaining the quality standards of food and beverage services offered by establishments. However, there are limited studies on the specific challenges faced by chefs in the hospitality sector. Chefs' daily workload is highly complex due to operational stressors, the need to quickly adapt to customer demands, and frequently changing hygiene and quality standards. This creates unique challenges in their work life (Albors Garrigos et al., 2020; Bressan et al., 2023; Grimmond et al., 2024; Marinakou & Giousmpasoglou, 2022; Vu et al., 2023; Yordanova & Strachan, 2022; Johansen, 2022).

Uncertainties and changes in the sector, especially in the post-pandemic period, have increased the workload of chefs and brought new job requirements specific to this period. However, this study aims to understand the professional challenges faced by chefs in general, rather than the effects of the post-pandemic period. The lack of information in the literature on the working lives of chefs causes the experiences of this professional group to be ignored and their needs to be poorly understood. This creates a knowledge gap that may negatively affect the job satisfaction, working conditions, and professional success of chefs working in the hospitality sector.

In this context, it is of great importance for the sustainability of the sector to reveal the main challenges faced by chefs in the sector and to examine the solution strategies for these challenges. Factors such as workload management, methods of coping with stress, supply chain disruptions, and staff shortages are among the problems that chefs face in their daily professional lives and directly affect their job performance (Cerasa

et al., 2020; Machado et al., 2021; Traynor et al., 2022; Meiser et al., 2024; Rashid, 2020). Moreover, a deeper understanding of the impact of these challenges on factors such as work-life balance, professional satisfaction, and career development can contribute to the development of more inclusive policies that address the professional needs of chefs.

Therefore, an in-depth examination of the problems faced by chefs in the Northern Cyprus hospitality sector will enable a better understanding of the experiences of this professional group and the creation of practices that will increase the job satisfaction of chefs working in the hospitality sector. This research is a guide for decision-makers and managers in the sector in terms of identifying the problems in the work life of chefs and understanding the strategies to overcome these problems.

Chapter 2

LITERATURE REVIEW

The literature review chapter provides a comprehensive snapshot of existing research and literature related to the role of chefs within the hospitality industry. It aims to offer an in-depth examination of previous studies, highlighting key findings, and trends in the literature. By reviewing the current body of knowledge, this chapter will provide a critical overview of the challenges, experiences, and dynamics that shape the profession of chefs. It will also serve to contextualize the research within the broader framework of hospitality studies, setting the stage for the study's unique contribution to the field.

2.1 Overview of the Hospitality Industry

The hospitality industry is an important subject of the international domain, showing a wide range of sectors, containing sub-sectors such as accommodation, food and beverage services, travel and tourism, and event planning (Jones et al., 2016). Its customer-centric nature often characterizes it, as it primarily revolves around providing services to meet the leisure, travel, and accommodation needs of individuals (Cassel et al., 2018). Over the years, this industry has evolved significantly, shaped by changing consumer preferences, technological advancements, and global economic trends. Understanding its complexity requires a multi-dimensional perspective that incorporates various facets, such as economic impact, employment generation, technological integration, sustainability practices, and the industry's response to crises

like the COVID-19 pandemic (Chen et al., 2023; Iskender et al., 2024; Pillai et al., 2021; Nikopoulou et al., 2023).

The global hospitality industry has been a key driver of economic improvement, with the World Travel and Tourism Council (WTTC) estimating that the sector contributed over 10.4% to the global GDP pre-pandemic (WTTC, 2020). Historically, the industry's success has been driven by factors such as globalization, increased disposable revenue, and the rising demand for international journey (Morrison et al., 2022). The accommodation sector, in particular, is a significant element, with hotels, resorts, and short-term rentals serving as primary income generators. Marriott International, Hilton Worldwide, and Airbnb are among the obvious players who have expanded their operations globally to exploit on the growing demand for both business and leisure travel (Ranasinghe et al., 2021).

Technological innovation has totally impacted the hospitality industry, mainly in the areas of customer service and operational productivity. Making digital has transformed how hotels, restaurants, and other service suppliers interact with customers through online booking platforms, social media, and mobile applications (Islam et al., 2021). Moreover, artificial intelligence (AI) and data analytics have improved personalization, qualifying businesses to offer tailored services that meet individual customer predilections (Bisoi et al., 2020; Astuti et al., 2024). Automation in areas like check-in processes, room service, and even food delivery has also improved service delivery, dropped human mistake and improved customer satisfaction.

The increase of sustainability and business social responsibility (BSR) creativities has become progressively significant in the hospitality business, ambitious by both buyer

demand and controlling compressions. Many hospitality companies have accepted sustainable performs, such as dropping energy consumption, minimizing waste, and obtaining local and sustainable food products (Camilleri et al., 2021). Environmental certifications like LEED (Leadership in Energy and Environmental Design) have increased distinction as customers and investors alike highlight the importance of green operations. Moreover, social sustainability, counting worker wellbeing and communal engagement, has emerged as a key focus area, mainly in reply to employment shortages and the rising demand for ethical business practices (Hasnat et al., 2021).

The COVID-19 pandemic noticeable an important disturbance to the hospitality industry, producing a theatrical decay in international travel, event dissolutions, and provisional closures of hotels and restaurants. According to the UN World Tourism Organization (UNWTO, 2020), the pandemic led to a 74% reduction in global influxes in 2020, meaningfully affecting incomes. However, the business's flexibility is obvious in its regular salvage, with industries accepting new strength and care procedures and services, and flexible reservation rules to familiarize with the 'new normal' (Joshi et al., 2021). The pandemic has also enhanced numerical conversion, with many organizations capitalizing on technology to keep effective endurance and improve client knowledge among limitations.

Employment subjects continue a serious contest in the hospitality business. The sector is recognized for high worker income taxes and work shortages, worsened by the pandemic (Gursoy et al., 2020). Employment and retaining of expert employment have developed precedence zones aimed at hospitality establishments, with an attention on refining working situations, contribution of inexpensive salaries, and providing

profession growth chances. Furthermore, variety and presence have increased care, by companies identifying the essential to generate more reasonable besides comprehensive work atmospheres (Akinwale et al., 2020; Johs-Artisensi et al., 2021).

The hospitality industry is a dynamic and multifaceted sector that encompasses a wide range of services, including accommodation, food and beverage, travel, and recreation. It plays a crucial role in global and local economies by contributing to employment, cultural exchange, and tourism development. At its core, the industry is centered around creating positive guest experiences, often relying on personalized service, attention to detail, and high operational standards. As a labor-intensive field, the hospitality industry is highly dependent on skilled professionals—particularly chefs, servers, and front-line workers—whose performance directly impacts customer satisfaction and business success. Despite its vibrant nature, the sector is also highly sensitive to external factors such as economic fluctuations, political conditions, and public health crises, as seen during the COVID-19 pandemic. In recent years, the industry has experienced a shift toward digitalization, sustainability, and innovation, reflecting changing consumer behaviors and the need for greater adaptability in a competitive global market (Akinwale et al., 2020; Johs-Artisensi et al., 2021).

In summary, the hospitality industry is an ever-evolving sector with important contributions to the international economy. It has observed several fluctuations owing to scientific developments, sustainability challenges, and worldwide crises similar to the COVID-19 pandemic. Despite these disturbances, the business has established flexibility, with industries frequently familiarized with original movements and crises. Further, the attention to sustainability, technological innovation, and labor force

organization will possibly form the upcoming route of the hospitality business, to stability and success with the moving difficulties of clients and investors.

2.2 Global Statistics on Chefs

According to the International Labor Organization (ILO), the cooking area employs over 12 million chefs worldwide, with the maximum attention in the hotel sector and cooking businesses, ambitious to growing need in hospitality involvements such as North America, Europe, and Asia-Pacific areas control the gastronomic background, with countries like the United States, France, and China commanding in chef cooking employment (ILO, 2021). In the USA were over 400,000 cooks and executive chefs in 2020, an amount ordinary to produce by 25% by 2030 due to the increasing request for particular and various foods (BLS, 2021). In difference, in Asia, mainly China and Japan, millions of cooks are hired in together old-fashioned and new lunching businesses, suggesting a convincing social prominence on culinary arts, (Hendler et al., 2023; López-Sánchez et al., 2021).

One of the most noticeable contests in the cooking career is the gender space. While women establish an important quantity of cooking school alumnae, less than 20% grip head chef positions internationally, representing the permanent gender difference within the career (García & Cuesta, 2021).

The financial report of cooks differs meaningfully by area. In North America, mainly in the United States, the topmost cooks in high-end catering businesses can make over \$80,000 yearly, while beginning-level or fast-food cooks receive between \$30,000 and \$50,000 (JR Walker, 2021). In contrast, European cooks in significant organizations, mainly Michelin-starred restaurants, can expertise wages well into six figures, while

the ordinary payment for most cooks is between €25,000 and €45,000 (Atanasiu, 2021). Far east countries these days a various scale in cooks' salaries, with cooks in indulgence hotels in Tokyo and Hong Kong receiving extreme incomes, but most cooks in country or undeveloped regions receiving below \$20,000 yearly, Internationally, the common wages for cooks down among \$35,000 and \$50,000, while this is inclined by the sort of restaurant, the cook's knowledge, and county economic situations. (Cash et al., 2022; Zarn et al., 2023)

The task of cooks has enlarged far outside the restaurant environment in recent days, with many becoming mass media characters, cooking tycoons, and sustainability supporters. In the United States and Europe, most cooks contribute to food magazines as well as TV agendas, social media and cookbooks, turning cooks into influencers these days. Cooks have progressively engaged on parts in support for maintainability and principled cooking performance.

In brief, worldwide figures on cooks expose a calling experiencing energetic changes driven by financial growth, social periods, and the growing reflectiveness of cooks as worldwide influencers. Whereas the cooking sector expresses important experiments, especially in terms of gender difference and salary inequity, the increasing request for culinary proficiency and the growing character of cooks in food sustainability and mass media ensure that they continue crucial facts in the worldwide food organization.

As the world of cooking remains to progress, the calling is balanced to encourage development and enhancement, making chefs key supporters of both social and financial advancement around the world (Martínez-González et al., 2021; Rani et al., 2021)

2.3 The Role of Chefs in the Hospitality Sector

Usually, cooks were limited to kitchen running and nourishment organization, but in modern hospitality, their characters have extended to contain management, modernization, sustainability encouragement, and consumer commitment. The present cooks work as an essential character usually client knowledge, affecting not only the culinary offerings but also the active and trademark uniqueness of hospitality sectors. Cooks today are essential to tariff expansion, nourishment fee organization, and employee implementation, all while sustaining the high values of quality and demonstration that are serious to a bistros or hotel's achievement.

Furthermore, to their practical skills, cooks' performance a critical guidance part within the kitchen and catering sector. The significance of cooks as directors who manage kitchen worker, make effective plans, and continue carefully hygiene specifications. This supervisory role is mainly important in up-level restaurants and extravagance hotels, where cooks often lead large, various lineups of chefs and kitchen porters. As supervisors, cooks must also direct the economic parts of successively kitchen and account resistor, cost analysis, and leftover reduction. Cooks are, therefore, seen as crucial managing director within the hospitality, harmonizing inspired appearance with the financial truths of catering service.

In brief, the character of cooks in the catering area has changed meaningfully, expanding past conventional kitchen obligations to include authority, supportability, social engagement, and brand representation. Cooks are now known as important actors in affecting both the effective achievement and the client knowledge within hospitality sector. Their encouragement gives across supervisory duties, sustainability

obligations, and the literary character of hospitality organizations. As the hospitality organizations remains to familiarize to world-wide tendencies, such as sustainability and the upward concentration in reliable cookery knowledge, cooks will continue vital to the development and effectiveness of catering companies for globally. (Leung et al., 2022; Wu et al., 2023).

2.3.1 Historical Context of the Chef Profession

The career of a cook has progressed meaningfully, with sparkly deviations in culture, technology integration, and philosophy. The historical background of the cooks' profession can be drawn back to primeval nations, where chefs were extremely respected in the culinary art sector and among the well-to-do. In Antique Rome, cooks played a main part in making extravagant banquets for the upper class, consuming components of the kingdom to establish prosperity and authority. Nevertheless, In the Middle Ages, the part of the cooks started to shape the European community, as societies for qualified chefs and breadmakers were recognized. Those societies established ideals for exercise, confirming that chefs educated their skills in an organized location, frequently in the cooking area of upright families (Toussaint & Samat, 2009).

Through the 17th and 18th periods, by the appearance of French cooking as a worldwide inspiration, the contemporary perception of the proficient cook acquired profile. The French court of law, by Louis XIV, was starting intricate cookery practices and skills. Cooks of this period were not only cooks; They were performers who design to shape of the flavor for the cream of society. cookery institutions started to grow in France, assist expertizing the area.

The 19th century saw an essential change in the cook's career by the increase of Auguste Escoffier, who is frequently alluded to as the father of advanced French cooking. Escoffier rebuilt kitchen administration by presenting the brigade de food framework, which organized kitchen staff into specialized parts and made strides effectiveness and efficiency. His work, counting 'Le Guide Culinary', remains foundational to proficient culinary preparing and is still utilized nowadays in culinary schools around the world. Escoffier's impact moreover amplified to the neighborliness industry, especially in fine feasting and lodging administration, where chefs got to be key figures in making extravagant feasting encounters. (Escoffier, 1903).

Furthermore, to organizational changes, the 20th century watched a revolution of cooks. When limited to the kitchens of royal family or the upper classes, cooks started to improvement community appreciation, exclusively with the growth of media for example TV and cookery books. The development of celebrity chefs within the late 20th century figures like Julia Child and Jacques Pepin or Marco Pierre White and Gordon Ramsay implied the move of the chef from a behind the scenes expert to a social symbol. Chefs got to be ministers of nourishment culture, advancing not as it were particular culinary styles but moreover the moral sourcing of fixings, maintainable hones, and nourishment as an art frame (Smith, 2007).

Nowadays, the cook's expert is an energetic and globalized ground that exposes wider social movements. Globalization has acceptable cooks to include various cooking backgrounds hooked on their effort. The rise of innovation has changed kitchen operations, making them more productive and adaptable. Moreover, cooks nowadays serve as supporters for wellbeing, sustainability, and nourishment law, illustrating the

professions extended part in tending to modern issues. The chronicled direction of the chef calling from mysterious kitchen laborers to loved culinary trailblazers outlines its profound association to social, financial, and mechanical advancements all through history (Santich, 2004).

2.3.2 The Media's Glamorization of Chefs

In the gastronomy world, the interaction of chefs with the media is increasing and the media plays an important role in the career development and reputation of chefs. By introducing chefs to a wider audience, the media enables them to gain a place in popular culture and contributes to chefs becoming celebrity figures (Hollows, 2022). However, there are various debates in the literature that this effect of the media on chefs has both positive and negative consequences. On the one hand, while the media allows chefs to showcase their creativity and inspire the audience, on the other hand, this visibility creates a constant pressure of expectation on chefs and makes their professional lives difficult (Elbasha & Baruch, 2022).

The fact that chefs have become icons in popular culture with the influence of the media has also changed the dynamics of the gastronomy sector. Popular platforms such as television programmers, social media and cooking competitions have transformed chefs into ‘star chefs’ and increased their recognition (Cernat, 2022). However, this situation leads chefs to be judged not only by their cooking skills in the kitchen, but also by their media skills and public relations strategies.

In studies examining the impact of media on chefs, the role of social media also stands out as an important topic. Social media platforms allow chefs to communicate directly with a wide audience and promote their own brand and style (Rowe & Grady, 2020). However, the need to be constantly updated and visible on social media creates

additional stress on chefs and puts them under pressure to protect their digital reputation.

In addition, the media accelerates chefs' careers but also creates the risk of short-term attrition and burnout. Chefs who come to the forefront in competition programmers or television shows experience negative consequences such as career decline and disengagement from work, although they rise rapidly in their media careers. The pressure of expectations created by the media on chefs also affects creativity and innovation. The obligation of chefs to conform to audience expectations and provide interesting content through the media can sometimes limit their traditional culinary skills and unique styles (Traynor et al., 2022). There are discussions in the literature that this pressure restricts the creative freedom of chefs and results in chefs who prefer traditional culinary techniques being less likely to be featured in the media.

The media's mesmerizing effect on chefs has positive and negative repercussions on chefs' careers. While the media increases the recognition of chefs and enables them to reach wider audiences, it also brings challenges such as high expectation pressure, burnout risk and creative constraints (Hadi et al., 2022). Expanding research in this area will contribute to a deeper understanding of media-supervisor relationships.

2.3.3 The Significance of Chefs in Dining Experiences

The character of cooks in eating knowledges has progressed significantly, becoming central to the general insight and excellence of eating. Usually, cooks were measured overdue the case statistics accountable for cooking food conferring to given formulas, with personal appreciation or straight collaboration with restaurants. Nevertheless, of late years, the emergence of celebrity cooks, media platforms, and a change in restaurant marketing strategies have all contributed to a significant increase in the

exposure of cooks and their impact on eating experiences. Today's chefs are not just accomplished culinary artists; they are also experience makers who are frequently seen as the public face of their restaurants, influencing the whole dining experience with their own vision, aesthetic, and philosophy (Matson & Demontrond, 2018).

The idea of "chef-driven" restaurants has been a major advancement in the contemporary eating experience. These restaurants are centered on the chef's personality and creative leadership, and their inventive, seasonally-driven, or ingredient-focused meals frequently showcase the chef's distinct culinary philosophies. In these establishments, the chef is no longer an unseen worker but rather a crucial component of the meal, impacting everything from the presentation and atmosphere to the selection of food. This change reflects a larger trend in the restaurant business toward narrative and personalizing, as chefs utilize their platforms to share their cultural background, values, and love of food (Bourdain, 2010). The chef's impact on customers goes beyond the cuisine itself to include the whole eating experience, adding to the feeling of exclusivity and authenticity that is so highly desired in today's dining culture.

Furthermore, the cook's part in determining eating knowledges has grown through the growing position of food as a form of art and social appearance. Superior cooking, mainly in Michelin-starred restaurants, frequently highlights the inspiration and practical ability of the cooks, with plates produced as arty masterworks. Chefs such as Ferran Adrià, Heston Blumenthal, and René Redzepi have leading molecular gastronomy and foraging-focused cuisine. Wherever the eating experience turns into a deep investigation of flavors, textures, and cooking creativity. The dinner turns into an immersive event where the limits of traditional food preparation are stretched and

the diner is encouraged to appreciate food on various sensory and intellectual levels in this kind of eating, where cooks are elevated to the rank of artists. (Cousins et al., 2010).

The implication of cooks in dining also spreads into the emotional facets of consumption. Study has exposed that a chef's character, individual story, and the consideration to aspect in their formations can improve the apparent worth of a dinner. Experiments have established that restaurants are more likely to appreciate a meal and observe it as higher quality when they know it was arranged by a famous or extremely skilled cooks (Lui & Jang, 2009). The success of many fine dining places now depends heavily on the chef's ability to create an unforgettable experience from the time the guest arrives until the last dessert course. This is especially true when it comes to tasting menus, as chefs lead guests through a well-planned culinary adventure where each course builds upon the one before it to form a cohesive story or theme (Lane, 2013).

Today's chefs not only improve the dining experience's sensory elements but also actively promote ethical sourcing, sustainability, and health-conscious eating. Chefs have become leaders in advocating sustainable practices, like using locally sourced products, eliminating food waste, and supporting small-scale farmers, as consumers grow more conscious of the environmental and social issues surrounding food production. This support enhances the eating experience by bringing it into line with moral principles that appeal to contemporary customers, in addition to enhancing the chef's standing as a cultural influence. For instance, chefs like Dan Barber have promoted "farm-to-table" dining and created a stronger bond between the customer, the food, and its source by using their restaurants as platforms (Barer, 2015).

In summary, chefs now have a variety of roles in dining experiences, including those of artists, storytellers, cultural ambassadors, and proponents of sustainable methods, in addition to their conventional function as food preparers. Chefs are now key players in the branding and character of restaurants, and their vision and inventiveness are rapidly influencing modern dining. Culinary professionals' impact on the caliber, significance, and sustainability of dining experiences will only grow as they become more visible in the media and on public forums. The development of the chef's job follows broader gastronomic trends, as eating is now a well-planned, immersive experience that appeals to a variety of sensations and ideals rather than only being a means of consumption (Johnston & Baumann, 2014).

2.4 Challenges Faced by Chefs

Working in a highly demanding atmosphere, chefs frequently face social, psychological, and physical demands. One of the most common problems is work-related stress, which is frequently caused by a combination of lengthy workdays, hectic work settings, and the pressure to perform well. According to research, chefs experience higher levels of stress than employees in other professions because of their demanding schedules, lack of work-life balance, and the demanding nature of kitchen operations (Fenyvesi et al., 2023). Another important task is job insecurity, particularly amongst cooks working in restaurants that function in explosive financial settings. The hospitality business is vulnerable to variations due to external factors for example financial recessions, well-being emergencies (e.g., COVID-19), and varying customer tendencies, which can principal to ends or shortened employ prospects. Furthermore, to the financial and physical demands, cooks' expression social challenges, counting directing the ranked construction of the kitchen. A top-down management approach has historically defined kitchens, with head chefs exercising

considerable influence. Conflicts and poor communication are frequently the result of this dynamic, especially between senior and younger employees (Muth, 2020). A culture of hostility is additionally promoted by the strong competitiveness in the culinary industry, which can lead to toxic work situations. Gender disparity contributes to this issue, as female cooks frequently encounter prejudice and other obstacles to career advancement in a male-dominated industry. Research has shown that women are underrepresented in senior chef roles and face a number of challenges, such as harassment, gender bias, and a lack of mentorship opportunities (Amerian, 2020). Additionally, gastronomic revolution offerings together an occasion and a contest. Cooks are frequently stressed to be progressive, cookery to developing customer perceptions and tendencies such as vegetable-based diets, sustainable funding, and globalized cookery predilections. The compression to remain related and familiar to food trends likewise transports tasks connected to ingredient finding and food expenses, mainly with the growth of sustainable and locally found ingredients, which can be exclusive and problematic to find dependably (Tugay & Pekerşen, 2022).

The psychological impact of these contests is additionally intensified by the community nature of their effort, where cooks are gradually showing to the examination of food critics, clients, and the newspapers. The growth of social media has enlarged this compression, as cooks are not only assessed by old-style criticizers but also by client feedback on platforms like TripAdvisor. These platforms often highlight instant customer fulfilment, forceful cooks to encounter high expectations while overseeing the eccentric nature of client input (Mandić et al., 2020)

To sum up, cooks deal with a wide range of difficulties that include social, psychological, physical, and financial components. The culinary industry requires

resilience and adaptation due to a variety of factors, including job insecurity, stress, and hierarchical conflicts as well as pushes for innovation. Comprehensive approaches are needed to address these issues, such as improved work-life balance programs, more mental health services, and measures to eliminate toxic workplace environments and gender biases.

2.4.1 Workload and Stress

The proficient kitchenette atmosphere is identified for its fast-paced, high-compression dynamic forces. The hard workload, which includes long hours, erratic shift patterns, and the physically demanding nature of the profession, is one of the main causes of stress for chefs. Studies have repeatedly demonstrated that cooks frequently put in over fifty hours a week, with many reporting shifts that extend into the early morning or late evening. (Axelsson et al., 2017). The concentration of kitchen operations, especially amid top hours, worsens push as chefs must juggle different errands at the same time, counting supper arrangements, overseeing kitchen staff, and keeping up nourishment quality guidelines. These components make an upsetting environment that's regularly rationally and physically depleting.

Job-related pressure on cooks is additionally deepened through the opportunities of excellence and constancy, which are energetic to sustaining the status of both the cooks and the institution. Cooks are under steady pressure to create high-quality dishes following to time limitations, which can lead to critical mental strain. The essential to stability inspiration with operative effectiveness enhances an extra layer of pressure, mostly for cooks working in fine dining restaurants where modernization and consumer fulfilment are top. As such, stretch within the culinary industry is frequently

compounded by the weight to persistently perform at a high level, with small room for blunder (Sırıklı & Seçim, 2024).

The physical demands of the work are related to quite hard physical efforts, often caused by the demands of standing for long periods, carrying out repetitive actions, and working in high temperatures. These factors contribute to chronic exhaustion, musculoskeletal pain, and other common health problems.

The extremely modest and classified nature of the kitchen worsen feelings of isolation and pressure, as cooks may sensation unconfirmed in looking for help or get permit to improve from burnout. The disgrace related with deliberating psychological health in the culinary industry additional worsens the issue, with many cooks' sensation stressed to remain working contempt feeling warning sign of stress and burnout (Fenyvesi et al., 2023).

Work-life balance is recognized as an important challenge, especially for chefs with long working hours and intense tempo. In the literature, it is emphasised that these challenges have negative effects on both individual well-being and professional success. In particular, chefs working in the gastronomy and culinary sector are often exposed to irregular working hours, physical and mental fatigue, which complicates their efforts to achieve work-life balance (Khanna & Bali, 2017). Research shows that chefs usually work 50-70 hours per week and these long working hours negatively affect both their family life and social relationships (Huynh, 2015). These long hours make it difficult for chefs to balance their work and personal lives, and consequently lead to problems such as burnout and stress.

Work-life imbalance also has a great impact on the job satisfaction of chefs. It is stated that irregular and intensive working hours are effective in chefs' job dissatisfaction, which increases employee turnover (Khanna & Bali, 2017). Nevertheless, some studies emphasize that flexible working models and support mechanisms provided by employers make important contributions in achieving this balance (O'Neill & Davis, 2011). For example, workplace support and flexible time practices both increase the productivity of chefs at work and allow them to spend more time on their family life (Johns & Menzel, 1999).

It is also emphasized in the literature that chefs who cannot establish this balance often tend to quit their jobs. It is stated that especially young chefs tend to leave the sector due to work-life imbalance. The turnover rate of chefs who cannot achieve work-life balance is quite high. This situation raises the issues of loss of labor force and sustainability in the sector (Allen & Kiburz, 2012).

However, solutions for chefs to achieve work-life balance remain limited in the literature. The development of various intervention and support programmes for achieving a good work-life balance is an important need, especially in large hotel and restaurant chains (Rivera et al., 2022). Employers' offering flexible working hours, reviewing overtime practices and adopting policies that increase employee welfare will contribute to a more sustainable career for chefs.

2.4.1.1 Impact on Mental Health

Chefs' intense working conditions and stressful work environments have significant effects on their mental health. In the literature, it is frequently emphasized that long working hours, high pressure, irregular sleep patterns and physical demands of kitchen workers lead to mental health problems. Chefs are a professional group expected to

perform both physically and mentally. However, these expectations, especially when combined with time pressure and high customer satisfaction demands, lead to burnout syndrome and increased stress levels (Hadi et al., 2022). This pressure paves the way for chefs to experience anxiety, depression and other psychological problems.

Burnout syndrome is seen as a common problem among chefs. Burnout is characterized by physical and emotional exhaustion caused by work stress and long working hours. The fact that chefs are usually in a high-paced and intense working environment causes this situation to deepen. Research shows that approximately 60% of professionals working in kitchens show signs of burnout (Cerasa et al., 2020). These symptoms include factors such as emotional burnout, a sense of professional failure, and alienation from one's work. In addition, such psychological difficulties lead to decreased job satisfaction and increased tendency to leave the job (Ampofo, 2021).

Another mental health problem faced by chefs is depression. High stress levels, working long hours at an intense work pace and work-life imbalance are the main factors that increase the risk of depression in chefs. It was stated that culinary professionals are twice as likely to be depressed compared to the general population. In the study, it was emphasized that chefs experience social isolation, lack emotional support because they cannot spend enough time with friends and family, and this situation triggers depressive symptoms (Cerasa et al., 2020). In this context, the lack of social support mechanisms deepens the negative effects on mental health.

Alcohol and substance abuse is also included in the literature as a common problem among chefs. It is stated that chefs, especially under intense stress, tend to turn to alcohol or drug use to cope with stress. Studies show that individuals working in the

gastronomy sector have a higher risk of substance abuse compared to other sectors. The long and irregular working hours, constant pressure and challenging physical conditions inherent in the profession increase the likelihood of resorting to such harmful coping methods (Owens et al., 2023).

Another factor that negatively affects the mental health of chefs is aggressive and sometimes bullying work environments. It has been reported that chefs may be exposed to aggressive behaviors in kitchens where the hierarchical structure is rigid and stress is high, which has negative effects on mental well-being (Bloisi, 2021). Especially young and inexperienced employees face the risk of being exposed to bullying while growing up under intense stress in kitchens. While this negatively affects mental health at the individual level, it can also make the general working environment in kitchens toxic.

As a result, the mental health problems faced by chefs are not only an important issue in terms of individual well-being, but also in terms of labor productivity and sustainability in the sector. Stress management, work-life balance policies and programmes that provide mental health support are critical to improve chefs' mental health and reduce problems such as burnout and depression (Rawat & Dani, 2024). In addition, developing social support networks in the workplace can play an important role in protecting the mental health of chefs.

2.4.1.2 Job Satisfaction Under Pressure

Job satisfaction under pressure for chefs is a topic that addresses challenges closely related to the gastronomy sector. Kitchen environments can negatively affect chefs' job satisfaction with high stress, intense workload and long working hours. Despite this, many chefs are able to achieve professional satisfaction and feel a deep

commitment to their profession even under pressure. In the literature, it is emphasized that factors such as sense of achievement, creativity, appreciation and personal development are important for chefs to achieve job satisfaction under pressure (Min et al., 2021).

Job satisfaction is largely related to the feeling of self-actualization and achieving professional success for chefs. Chefs experience more satisfaction when they can showcase their creative side and develop their own recipes (Kavanagh & Brown, 2016). In particular, contributing to the success of the restaurant or dish is a strong motivator for chefs. However, this sense of achievement is often balanced with intense pressure and stress. Chefs, who have to meet the expectations of customers on the one hand and manage the kitchen team on the other hand, have to exert a high physical and mental effort in their work (Laneyrie et al., 2023). Although this situation makes it difficult to achieve job satisfaction, chefs' desire to improve themselves and achieve success in their work can help them cope with these difficulties.

An important factor affecting job satisfaction under pressure for chefs is the support mechanisms in the work environment. The support provided by colleagues and senior management can help chefs cope with workload and stress more effectively (O'Neill & Davis, 2011). Studies show that when chefs receive adequate support from their colleagues or managers, their job satisfaction increases and they prefer to work longer in their jobs (Laneyrie et al., 2023). Especially workplace atmosphere and relationships with colleagues are among the factors that directly affect the job satisfaction of chefs. However, poor working conditions or insufficient support may increase the tendency of chefs to leave their jobs.

Another aspect of working under pressure is that chefs are constantly under time pressure. Especially during busy restaurant hours, the need to provide service quickly while maintaining quality can cause chefs to feel under constant stress. However, some chefs see this pressure as a motivating factor and experience a sense of satisfaction as a result of working fast and efficiently. Chefs who can cope with the stress caused by time pressure in achieving job satisfaction feel the professional pride of providing a successful service and this increases their professional satisfaction (Esterhuyse et al., 2022).

Another prominent factor in chefs' job satisfaction under pressure is the feeling of being appreciated and rewarded. Positive feedback from customers and management makes chefs feel valuable in their work and increases their motivation (Yeh, 2013). In the literature, it is emphasized that chefs' job satisfaction is largely directly proportional to the feedback they receive. In addition, career development opportunities and opportunities for professional advancement also enable chefs to experience satisfaction even under pressure (DiPietro et al., 2020).

In conclusion, job satisfaction under pressure for chefs is a complex process that is formed by the combination of various factors. While creativity and sense of achievement, supportive work environment, positive feedback and personal development opportunities enable chefs to be satisfied with their jobs even under pressure, long working hours, irregular shifts and stressful working conditions can negatively affect this satisfaction (Gordon, 2022). In order to increase the job satisfaction of chefs, it is important for employers to develop supportive mechanisms and implement policies that pay attention to work-life balance for long-term success in the sector.

2.4.2 Customer Expectations

Customer expectations have been an important research topic in the service sector and the restaurant industry has been extensively analyzed in this field. Understanding customer expectations is critical to the sustainable success of restaurants because customer satisfaction has a great impact on their return visits and positive references. In general, customer expectations consist of service quality, hygiene, price-performance balance, staff behavior, and the taste and variety of food offered (Yarmaci et al., 2023).

Service quality is one of the most important customer expectations. Parasuraman, Zeithaml, and Berry's (1988) SERVQUAL model has revealed five basic service dimensions that constitute customer satisfaction: reliability, responsiveness, assurance, empathy and tangibles. This model has been widely applied in restaurants and the strong relationship between service quality and customer satisfaction has been confirmed. In addition, it has been emphasized that service quality is directly related to the physical environment and atmosphere of the restaurant and that these elements are an important factor in customers' choice of restaurant (Abdullah et al., 2022). Restaurant atmosphere includes elements such as lighting, decor, seating arrangement and general aesthetics, and these elements directly affect customers' experiences and perceptions.

Hygiene also has a priority place among customer expectations. Especially the preparation and presentation of food under hygienic conditions greatly affects the reputation of restaurants in the eyes of customers (Berybe et al., 2023). In cases where hygiene is inadequate, customers are less likely to choose the restaurant again and negative comments spread. Hygiene is not only limited to the quality of the food, but

also the general cleanliness of the restaurant, the hygienic behavior of the staff and even the condition of the restaurant's toilets are considered as part of these expectations.

Price-performance balance is also a critical factor in customer expectations. Customers expect the quality of the service to be balanced in return for the price they pay. Especially in restaurants with high prices, customers expect a service standard that is appropriate for this price, otherwise they experience dissatisfaction. Price perception stands out as an important factor affecting customer loyalty (Wu et al., 2011).

Finally, the flavor and presentation of food also play a critical role in customer expectations. Flavor is one of the most important factors that directly affect the success of restaurants because the main product of the restaurant is food. Customers have high expectations about the flavor of the food and if these expectations are not met, customer satisfaction is negatively affected. In addition, the presentation of the food enhances the customer experience in terms of visual appeal and is recognized as an important factor in meeting expectations (Putra et al., 2020).

These factors show how multifaceted it is to fulfil customer expectations from restaurants. In order for restaurants to achieve customer satisfaction, factors such as service quality, hygiene, price-performance balance and food quality should be managed optimally.

2.4.2.1 Evolving Demands

In recent years, the demands for chefs in the gastronomy sector have undergone a significant transformation due to both the change in customer expectations and the dynamic structure of the sector. While chefs were traditionally focused only on food

preparation skills and kitchen management, today the responsibilities and competencies expected from them have expanded (Bressan et al., 2023). In addition, sustainability, health trends, social media impact and the prominence of customer experience have created changes in the roles and demands on chefs.

Today, the hospitality industry is experiencing a comprehensive transformation in service processes in order to adapt to changing customer demands. Studies reveal that technological advances, sustainability, and personalized service demands accelerate the transformation in the sector (Hussein et al., 2024).

Another important change in customer demands is the increasing expectation for personalized service. The concept of ‘experience economy’ customers want to have unique experiences that make them feel special, beyond just purchasing a product or service (Hwang et al., 2022). Hospitality businesses have started to offer more personalized services based on the information obtained from customers' past accommodation experiences. For example, personalized arrangements such as private rooms, specific dining options, or personal events have a positive impact on increasing customer satisfaction and loyalty (Campione, 2021).

With the increase in environmental awareness in recent years, sustainability has become a priority customer demand in the hospitality industry. The customers show more interest in hotels that adopt environmentally friendly practices and prefer to stay in such facilities (Sadiq et al., 2022). Accordingly, hotels have implemented environmentally friendly measures such as energy-saving systems, waste management, and practices that reduce carbon footprint. This situation reveals that

sustainability investments provide not only environmental but also commercial returns.

In the post-pandemic period, hygiene and health measures have become a priority in the accommodation sector. In line with health concerns, customers pay more attention to disinfection practices, contactless service options, and hygiene certificates (Rawal et al., 2020). Considering the effects of the pandemic, it is understood that compliance with hygiene standards has now become a permanent expectation in the sector. In particular, services such as contactless check-in, in-room disinfection systems, and online food orders ensure that customers have a safe experience.

Customer expectations shaped under headings such as digitalization, personalized service, sustainability and health-oriented measures play a decisive role in the transformation of the hospitality industry. In order to respond to the changing expectations of customers, businesses develop innovative solutions and focus on improving the customer experience by adapting to this transformation process.

2.4.2.2 Maintaining Innovation and Standards

In the gastronomy world, chefs are expected to both develop innovative approaches and maintain certain standards. While innovation enables restaurants to stand out in a competitive market, maintaining quality standards is critical for customer satisfaction and trust. In the literature, various studies have been conducted on the competences of chefs to overcome these two challenges. In particular, the focus is on how creative processes can be balanced with quality standards that lead to sustainable success (Vu et al., 2024). On the one hand, chefs have to create new flavors, presentations and techniques through gastronomic innovation; on the other hand, they have to meet customer expectations by maintaining the culinary quality of the restaurant.

Innovation can occur in different areas of chefs' work processes. Innovations in menus, the use of new cooking techniques or fusion dishes influenced by international cuisines are just some of the innovative approaches in gastronomy (Yıkımlı et al., 2024). Innovation is an important way of attracting customers and gaining their loyalty. However, maintaining standards in this process is also of great importance. Especially in businesses with high standards such as Michelin-starred restaurants, chefs should not compromise on quality, consistency and reliability while offering innovative menus (Chauhan, 2023).

Chefs' success in innovation requires competences such as creative thinking and innovation management. Research on this subject reveals that creative processes are shaped by individual and collective dynamics. Chefs' creative processes are influenced by their individual experiences, culinary culture and teamwork. The development of innovative ideas is sometimes supported by collective processes such as teamwork and brainstorming sessions. However, the competence of chefs to put innovative thinking into practice is directly related to how creative processes can be balanced with operational excellence (Mrusek et al., 2021).

Maintaining standards is critical for the long-term success of restaurants. Maintaining quality standards at the same level is a decisive factor in meeting customers' expectations (Filadelfia & Purnomo, 2023). In restaurants with high customer loyalty, quality standards are identified with the identity and brand value of the restaurant. Especially in restaurant chains, a certain quality control system is established to ensure consistency and chefs are expected to be a part of this system. This requires chefs to be not only creative but also disciplined and systematic in their approach.

Chefs' difficulties in balancing the demands for innovation and maintaining standards have a direct impact on organizational performance. In addition, the importance of the leadership skills of chefs in this process is emphasized. For the successful implementation of innovations, chefs need to be able to motivate the team, constantly control standards, and optimize operational processes (Srinivasan & Sherkar, 2024).

Another important factor in how to manage the balance between innovation and maintaining standards is customer expectations. Customers expect the same quality of service and flavor every time they visit a restaurant, but they also want new and exciting experiences (Dean, 2004). This bidirectional expectation requires chefs to constantly renew themselves and their menus. However, chefs should take care not to deviate from the main concept and quality of the business while introducing innovations.

As a result, chefs need to have both creative and managerial skills in order to achieve a balance between innovation and maintaining standards. This dual role is considered as a critical element for chefs to be successful in the gastronomy world (Dean, 2004).

2.4.3 Menu creativity and Innovation

The topic of menu innovation and creativity has gradually gained attention in hospitality research, although it remains relatively underexplored compared to innovation studies in sectors such as engineering and manufacturing (Mifli et al., 2017; Lee et al., 2019). This is somewhat surprising, given the fundamental role of food in everyday life and the importance of menus in shaping consumer experiences and business success within the foodservice industry. Unlike the longstanding and well-documented practices of product development in technical fields, the structured management of menu innovation in hospitality is a more recent development.

However, a growing body of literature suggests that menu innovation is not a random or informal process. Instead, it tends to follow a systematic and methodical approach that mirrors the product development cycles seen in engineering—often referred to as a sequential or staged process. This structured model, sometimes described as a disciplined or organized strategy, has become increasingly prevalent among foodservice professionals, enabling them to manage culinary creativity while aligning with operational and market needs. As such, menu innovation is emerging as a critical area of strategic management in hospitality, reflecting a shift toward more formalized and research-informed practices in the development and evolution of food offerings (Stierand et al., 2014; Mifli et al., 2014).

Moreover, menu innovation is often managed through structured processes that resemble product development models in other industries. These processes involve phases such as idea generation, market testing, refinement, and implementation. Such an approach ensures that new menu items align with customer preferences, kitchen capabilities, and profitability targets. Nevertheless, chefs frequently encounter constraints that hinder innovation, including limited access to high-quality or local ingredients, insufficient managerial support, rigid standard operating procedures, and tight production timelines.

In many hospitality settings, the pursuit of menu creativity is also influenced by external factors such as tourism trends, seasonal variations, and changing demographic profiles. In regions like North Cyprus, where the hospitality industry is closely tied to seasonal tourism and local culture, chefs must navigate a complex environment that demands both creativity and adaptability. They are often expected to deliver innovative

dishes that satisfy a diverse customer base while adhering to organizational policies and resource limitations.

2.4.3.1 Creative Approaches in Menu Development

In the gastronomy sector, the menu development process stands out as an area where chefs display their creative skills and bring together innovative ideas to attract customers and offer a unique experience. Menus are designed with creative approaches in accordance with customer expectations in order to reflect the identity of the businesses and to provide competitive advantage in the market (Yun et al., 2020).

One of the most important elements that encourage creativity in the menu creation process is the use of local and seasonal ingredients. The use of local ingredients in the menu increases authenticity and freshness, and also contributes to increasing customers' interest in natural and local flavors (Home et al., 2020). This approach reveals that sustainability has an important place in the creative menu development process. In addition, with the increasing interest of customers in healthy living and sustainable foods, the inclusion of healthy and environmentally friendly options in menus has become a determining factor in the creative menu development process.

Another important element in the creative menu development process is the use of new techniques such as molecular gastronomy. Molecular gastronomy is an innovative method that aims to obtain different flavors and textures by changing the physical and chemical properties of food (Varvara et al., 2021). The application of such techniques in menus makes the customer experience unique and increases the authenticity of restaurants. For example, plates prepared using liquid nitrogen or jellification techniques create both a visual and sensory impact on customers. The use of such

creative techniques allows chefs to showcase their artistic and scientific skills in menu development, taking the customer experience to a different dimension.

Digitalization is another important factor supporting creativity. Digital platforms and social media allow restaurants to receive instant feedback from customers and share menu innovations with a wide audience. Creative menu items shared on social media strengthen the brand image of businesses and enable them to reach a wider customer base.

Creative approaches to menu development include various strategies such as the use of local and seasonal ingredients, molecular gastronomy techniques and the utilization of digital tools. These creativity-centred approaches contribute to the development of innovative menus in the gastronomy sector, making it possible for restaurants to appeal to a wider audience.

2.4.3.2 Role of Innovation in Customer Experience and Engagement

In today's restaurant industry, innovation practices are becoming increasingly important to improve customer experience and increase customer loyalty.

One of the most important effects of innovation on customer experience is to improve customer interactions through the possibilities provided by digitalization. In particular, mobile applications and online reservation systems allow customers to make reservations and place orders quickly and easily (Al et al., 2021). Such technologies save customers time and enhance the customer experience. In addition, restaurants can collect customer feedback through digital platforms, enabling them to offer customized solutions to increase customer satisfaction.

Innovation practices in restaurants are not limited to digitalization; the customer experience is also enriched by the use of creative techniques in food presentation. These creative methods used to increase customer loyalty aim to leave an unforgettable mark on the customer experience. It is seen that personalized services stand out as an innovative strategy to increase customer loyalty (Rane et al., 2023). Personalization is easier to implement, especially through digital technologies that track customer preferences, and offers restaurants the opportunity to continuously increase customer satisfaction.

In addition, sustainability practices are also considered as an innovative area that affects customer experience in the restaurant sector. As customers' interest in environmentally friendly products and sustainable services increases, restaurants adopt innovative practices in this direction and include sustainability-oriented products in their menus (Chaturvedi et al., 2024). Sustainability practices such as environmentally friendly packaging, use of organic and local products, and waste management give restaurants a positive image in the eyes of customers (Chaturvedi et al., 2024). Studies show that customers are more connected with restaurants that support sustainability and brand loyalty towards such restaurants increases (Mahasuweerachai & Suttikun, 2022).

Innovation in the restaurant industry plays an indispensable role to enrich the customer experience and increase customer loyalty. These innovative approaches allow restaurants to maximize customer satisfaction and strengthen customer loyalty. While the importance of innovation in the gastronomy sector is increasing, these practices centered on customer experience will contribute to the sustainable success of restaurants in the future.

2.4.4 Team Dynamics

Kitchen teams have a unique dynamic in terms of co-operation and co-ordination between employees, especially in restaurant kitchens. These teams have to work quickly and effectively under high stress. It has been widely recognized that kitchen team dynamics have a significant impact on restaurant performance, customer satisfaction and employee loyalty (Bisui et al., 2021).

The concept of team dynamics covers the relationships, roles, and division of labor among the employees in the kitchen. One of the most important elements of these dynamics is the leadership role of the chef. A chef not only has technical skills but also has the responsibility of directing, motivating and cooperating the team, especially in kitchens with a high level of hierarchy, it is a critical factor for success that employees under the authority of the chef clearly understand their tasks and stick to the division of labor (Marinakou & Giousmpasoglou, 2022).

Communication is one of the cornerstones of kitchen team dynamics. Effective communication plays an important role in sharing information and coordination among team members. Many studies have shown that lack of communication in stressful and fast decision-making processes in kitchens negatively affects team performance (Deeb et al., 2020). For example, miscommunication in kitchen teams can result in misunderstandings and faulty food preparations, which can lead to both customer dissatisfaction and job losses (Goldmann et al., 2020). Ensuring clear, open, and fast communication between team members, especially during peak business hours, is recognized as one of the key elements of operational success (Rezaei et al., 2022).

Another important element of team dynamics is the division of labor according to the level of expertise of the kitchen staff. Restaurant kitchens are usually managed by teams of employees with different areas of expertise. These teams include various roles such as cooks, chef de partie (section chefs), sous chef (assistant chef) and apprentices. The specialization of each employee directly affects the workflow and division of tasks in the kitchen, clearly defining this division of labour and having everyone work by focusing on their own tasks ensures both efficiency and productivity in the kitchen (Farrell, 2021).

However, solidarity and trust within the team in the kitchen are essential for the healthy functioning of the dynamics. Team members' trust in each other, mutual assistance and support culture are among the factors that increase performance under challenging kitchen conditions (Renkert, 2022). Lack of solidarity and support can lead to conflicts, decreased productivity and increased turnover rates in high stress environments. Another important dimension of kitchen team dynamics is emotional resilience and stress management. The kitchen environment creates a great deal of pressure due to the intense work pace, short-term goals and high expectations of customers.

Finally, the interaction of kitchen team dynamics with global culinary cultures is a factor that enriches the working environment but also needs to be managed. International restaurants may employ kitchen staff from different cultural backgrounds, which means that cultural differences can have a marked impact on communication and co-operation within the team (Giousmpasoglou, 2019).

As a result, kitchen team dynamics are vital for a successful restaurant operation. Chefs' leadership skills, intra-team communication and division of labor are the main factors determining kitchen performance (Ratasuk, 2019). In stressful kitchen environments, team members working in solidarity and trust increases performance, and harmony within the team contributes significantly to the overall success of the restaurant (Genc & Akoglan, 2020).

2.4.4.1 Collaboration in the Kitchen

Cooperation in the kitchen is vital to the efficiency and success of restaurant operations. Kitchen staff working together to create an effective workflow makes it possible for both operational processes to proceed smoothly and customer satisfaction to be achieved. In the literature, cooperation in the kitchen environment is particularly focused on interaction, communication, leadership, and trust-based relationships between team members (Zanella, 2020). In fast-paced and high-stress environments such as restaurants, the ability to collaborate is recognized as a critical factor in maintaining the productivity and quality of the kitchen team (Wavinya et al., 2022).

Co-operation is shaped by the relationships between chefs, sous chefs, and other kitchen staff, especially within the kitchen hierarchy. The hierarchical structure is present in the kitchen and co-operation within this structure is of great importance in terms of sharing and co-ordination of tasks (Lortie et al., 2023). The job descriptions, open communication and mutual respect between team members are important for effective collaboration in kitchens. Collaboration is not only limited to division of labor and coordination, but also includes supporting each other during stressful and busy periods. Chefs and kitchen staff should understand each other's roles and show a

supportive attitude, when necessary, in order to strengthen co-operation (Ravina et al., 2023).

2.4.4.2 Communication Challenges

Communication is at the center of the concept of collaboration in the kitchen. Communication in the kitchen plays a critical role in terms of preparing meals correctly, coordinating service timings and preventing possible errors. In stressful kitchen environments, breakdowns in communication between team members can lead to operational failures by negatively affecting co-operation. Communication breakdowns within the team, especially during peak hours, can damage both productivity and team members' trust in each other (Murray-Gibbons & Gibbons, 2007). Therefore, kitchen leaders and chefs developing a strong communication culture within the team increases the sustainability of co-operation.

Leadership is another decisive factor in co-operation processes. Chefs are the most important actors that support and encourage co-operation within the kitchen. Effective leadership strengthens co-operation among team members and makes the workflow more efficient (Roosipõld, 2012). Leadership involves not only the distribution of tasks but also the creation of a positive working culture within the kitchen. The supportive and understanding attitude of leaders increases co-operation within the team (Posadzinska et al., 2020).

Trust is another fundamental element for the successful realisation of cooperation in the kitchen. The existence of mutual trust between team members increases the quality and sustainability of co-operation. In the literature, it is emphasized that trust in kitchen teams is directly related to the willingness of team members to fulfil their tasks by trusting each other and to help each other when necessary (Long et al., 2024). Kitchen

leaders should strengthen co-operation by building trust within the team. This enables team members to overcome challenges more effectively by trusting each other.

Furthermore, an important dimension of co-operation in kitchen teams is to combine the different skills and abilities of team members. Each kitchen worker may have a specific area of expertise, and these differences can enhance the success of the operation through collaboration within the team (Marinakou & Giousmpasoglou, 2022). For example, some employees may specialize in sauce making, while others may be competent in cooking meat. Combining these different skills effectively optimizes kitchen performance. Collaboration not only ensures that things are done correctly, but also allows kitchen workers to learn from each other's expertise (Escalante et al., 2024).

Co-operation in the kitchen is also important in terms of ensuring harmony within the team and preventing conflicts. Co-operation is an effective tool in conflict management and when co-operation processes are managed correctly, it increases harmony within the team. Especially in busy kitchen environments, conflicts may occur from time to time between team members working under stress. However, in kitchens where co-operation is at the forefront, such conflicts are resolved more easily and harmony between team members is maintained (Afifi et al., 2021).

As a result, co-operation in the kitchen is a critical factor for the operational success of restaurants and customer satisfaction. Collaboration is supported by key elements such as communication, leadership, trust and skill sharing (Tugay & Pekerşen, 2022). Effective collaboration not only makes things more efficient in the kitchen, but also increases the motivation of team members and provides job satisfaction in the long

term. When chefs and kitchen leaders create a strong culture of collaboration within the team, it positively affects both kitchen performance and customer experience (Yeh et al., 2022).

2.4.5 Career Advancement

The career development of chefs is a critical issue for the professional advancement of individuals in the gastronomy sector. Research shows that chefs' career journeys are often shaped by elements such as experience, education and mentorship (Gray&Farrell, 2021). Internships and hands-on training programs play an important role in chef candidates gaining practical skills. In addition to building a strong network, participation in professional organizations is also encouraged in career development; such interactions increase knowledge sharing and enhance chefs' visibility within the sector (Bressan et al., 2023). Moreover, chefs' development of leadership and management skills is an important factor for career advancement. In this context, studies on leadership styles and culinary management show that successful chefs are characterized not only by technical skills but also by people management and communication skills (Marinakou & Giousmpasoglou, 2022). Moreover, as the importance of issues such as sustainability and ethical food practices increases, career opportunities for chefs who specialize in these areas are also expanding (Batat, 2020). The career development of chefs is a multidimensional process that is shaped by both individual efforts and sectoral dynamics.

2.4.5.1 Mentorship and Development

Mentoring in the field of gastronomy has an important role in the career development of experienced chefs. In literature, mentoring is defined as a critical method for chefs to gain both skills and self-confidence (Curkovic et al., 2022). In this process,

mentoring offers a supportive structure for the development of creative and innovative skills in the kitchen.

While the mentoring process accelerates the professional development of chefs, it also allows mentoring chefs to develop their leadership skills. Students trained by chefs develop as more independent and creative individuals in the kitchen by ahead both the technical skills and creative thinking skills of their mentors (Bressan et al., 2023). This mentor-mentee relationship between chefs is usually based on a long-term interaction and offers mutual learning opportunities for both parties. The development of such skills supports the provision of high-quality service in the kitchen and the formation of a competent staff within the sector.

The chef-mentorship relationship stands out as a factor that directly affects professional success. Studies show that chefs who are trained in the mentoring process make faster career progress and experience higher levels of job satisfaction. It is observed that the mentoring process increases chefs' self-confidence and transforms them into individuals who can make more of a difference within the industry.

Especially in the fine-dining sector, mentoring relationships have a significant impact on restaurant success. With the skills they acquire during the mentoring process, chefs can develop quality-enhancing strategies when opening their own kitchens (Maclean, 2022). Such a development process ensures the sustainability of culinary culture and contributes to the gastronomy sector's progress in an innovative direction.

In conclusion, mentoring has an important role in the personal and professional development of chefs. Chefs can overcome the challenges they face in their career

journeys with the contribution of mentors who share their knowledge and experience with young chefs. Mentoring, which contributes to the development of chefs, supports not only individual achievements but also the holistic development of the gastronomy industry.

2.4.5.2 Barriers to Progression

Chefs' career progression is shaped by a combination of many factors in the gastronomy sector and they may face various obstacles in this process. Barriers that make career progression difficult for chefs include various factors such as high stress levels, intense working hours, creative constraints and lack of leadership skills. In the literature, it is emphasized that high workload, inability to maintain work-life balance and the hierarchical structure in the sector play a role among the main obstacles affecting the progression of chefs (Manshoor et al., 2021). Especially the high hierarchy and disciplined working order in restaurant kitchens stand out as a factor that makes it difficult for chefs to move up the career ladder (Lortie et al., 2023).

Long working hours and physical demands in the kitchen are one of the main challenges faced by chefs in their career development. In many studies, it is stated that the working hours of chefs are quite long compared to many other occupational groups and this situation has a negative effect on chefs' job satisfaction and job performance. Long hours spent in the kitchen, especially in the early years of a chef's career, increase physical and mental fatigue and cause chefs to leave the sector early or reduce the rate of career progression. These conditions prevent many talented chefs from continuing their careers with a long-term perspective and complicate their efforts to achieve work-life balance (Çanakçı & Birdir, 2020).

Another important barrier is creative limitations and constraints on menu development. While chefs need to be innovative in the world of gastronomy, their creative endeavors may be hindered by restaurant owners or managers due to cost, customer expectations and time constraints (Bourdain, 2000). In the literature, it is stated that the creative freedom of chefs working especially in chain restaurants is restricted due to strict menu standards and the obligation to adhere to certain recipes, and this situation negatively affects their career motivation (Yüzüncüyıl & Güldemir, 2021). These constraints may hinder chefs' potential to innovate, hinder their career progression and force them to focus on less creative and routine tasks.

Financial and resource limitations are also recognized as an important barrier to chefs' career progression. In particular, chefs working in independent restaurants or small businesses face financial barriers in sourcing quality ingredients. This situation reduces the motivation of chefs to improve themselves and progress professionally, thus negatively affecting their career development (Leggett et al., 2021).

Another barrier to chefs' career progression is the lack of leadership skills and difficulties in human relations. Many chefs start their careers with culinary skills, but over time they progress to managerial positions where skills such as culinary leadership, team management and conflict resolution are also required (Milwood, 2022).

In addition, job stress and high levels of competition are among the other factors that negatively affect the motivation of chefs and make it difficult for them to progress in their careers. Chefs who are constantly under pressure to perform at the highest level in the kitchen may experience lack of job satisfaction, burnout and demotivation

(Abbas, 2024). In particular, highly competitive environments reduce the chances of chefs to show their talents and advance in their careers.

As a result, the barriers to career progression of chefs include various factors. To overcome these difficulties, kitchen leaders and restaurant owners need to create a supportive working environment by taking into account the needs of chefs. Understanding the difficulties faced by chefs in their career progression and overcoming these difficulties will contribute to the expansion of more sustainable careers in the gastronomy sector (Elbasha & Baruch, 2022).

2.4.6 Ingredient Sourcing

For chefs to serve high-quality food in restaurant kitchens, it is of great importance to establish an effective ingredient supply chain. The ingredient procurement process is an important component that directly affects the chefs' creative work and the operational efficiency of the restaurant. The main challenges faced by chefs in ingredient sourcing are related to factors such as price fluctuations, seasonal constraints, supplier reliability and sustainability, as a result of access to quality and seasonal ingredients is critical for chefs to diversify their menus and provide customers with a highly satisfying experience (Warwick, 2024). Seasonal constraints are among the factors that directly affect chefs' ingredient supply. Most restaurants aim to offer fresh and seasonal products to meet customer expectations. However, seasonal fluctuations limit access to some ingredients and cause prices to fluctuate (Coskun et al., 2023). Chefs should consider ingredient availability and develop alternative sources of supply when planning their menus (Vishnikina et al., 2024). The ingredient procurement is a complex and multifaceted process for chefs and being successful in this process positively affects the operational success of restaurants and customer

satisfaction. Creating an effective ingredient supply chain supports chefs' creative work and increases the operational success of restaurants.

2.4.6.1 Sourcing Quality Ingredients

The influence of chefs in the food preparation process using high quality ingredients directly affects the overall performance of restaurants and customer satisfaction. Sourcing quality ingredients is a critical requirement for chefs to realize their creative visions and sustain their innovative culinary approaches.

Seasonal fluctuations play an important role in the supply of quality ingredients. Chefs tend to favor seasonal ingredients when determining their menus. Since these ingredients usually have fresher and natural flavors, they increase customer satisfaction. The literature emphasizes the importance of flexible supply chain management by considering seasonal changes in the supply of quality ingredients (Mastos & Gotzamani, 2022). Chefs should develop alternative sources by adapting to these conditions and make changes in the menu according to the season.

Access to reliable suppliers is another important factor in terms of quality material supply. Especially for high-end restaurants, quality and sustainable supply of ingredients is of critical importance. Reliable suppliers enable restaurants to maintain product quality by maintaining the quality of ingredients. Establishing sustainable relationships with reliable suppliers makes chefs' business processes more predictable. However, reaching reliable suppliers is a challenging process in terms of costs and maintaining quality standards, and it is recommended that chefs develop long-term partnerships with which they can cooperate in this process (Piprani et al., 2022).

Sustainable ingredient supply chains are another important obstacle that chefs face in the process of sourcing quality ingredients. Although sustainable agricultural practices and organic products allow for the sourcing of quality and reliable ingredients, such sources are often expensive and pose some logistical challenges in the supply chain (Sjah & Zainuri, 2020). Sustainable sourcing practices increase customer satisfaction and support the gastronomic vision of chefs.

Cost management is also an important factor for chefs in the process of sourcing quality ingredients. Quality ingredients are often costly and this directly affects the profit margin of restaurants (Salimian et al., 2021). It has become a necessity for chefs to balance their budgets, both to procure quality ingredients and to keep restaurant costs at a reasonable level. It is stated that cost management and supply chain efficiency is one of the main challenges faced by chefs in the process of providing quality ingredients. Developing alternative sources of supply and finding cost-effective sustainable solutions is an effective strategy for managing such cost pressures (Rasulov, 2024).

As a result, in the process of sourcing quality ingredients, chefs face a number of challenges such as seasonality, cost, supplier reliability and sustainability. To overcome these challenges, flexible supply chain strategies, alternative sources and local collaborations are of great importance. The ability of chefs to overcome the difficulties they face in the process of procuring quality ingredients will both support their creative work and increase the competitiveness of restaurants in the market (Vargas & López, 2022).

2.4.6.2 Sustainable Ingredient Sourcing

In recent years, sustainable ingredient sourcing has gained importance for chefs as a part of environmental and social responsibilities beyond gastronomic innovations and customer satisfaction. Sustainable ingredient sourcing can be defined as the process of preferring socially responsible suppliers from sources that do not harm nature and human health (Dani et al., 2021). Orienting towards sustainable material sourcing creates not only environmental, but also economic and social impacts and has a strategic importance for the long-term success of restaurants (Takacs & Borrión, 2020).

One of the key components of sustainable ingredient sourcing for chefs is prioritizing local and seasonal ingredients. Working with local producers is an effective way to reduce carbon footprint and access fresher produce (Hu et al., 2021). Local sourcing also enables chefs to add authenticity to their menus and support local communities. However, working with seasonal and local ingredients can lead to limitations such as the unavailability of some ingredients during the off-season (Coskun et al., 2023).

Organic and biodiversity-sensitive material sources also stand out as an important component of sustainable procurement. Organic products are produced without the use of chemical fertilizers and pesticides, which makes positive contributions to both the environment and human health (Ramakrishnan et al., 2021). However, the high cost of organic products and the increasing demand for these products may make budget management difficult for chefs. Therefore, it is suggested to develop alternative solutions to offset the cost of organic products in sustainable ingredient sourcing (Carpentieri et al., 2021).

One of the most important elements of sustainable ingredient sourcing is ensuring transparency and traceability in the supply chain. As consumers become more aware, chefs now have to consider not only the quality of ingredients, but also the ethical and environmental standards applied in the procurement process (Chevallier & Batt, 2021). Sustainable supply chain management allows chefs and restaurants to take a more credible and transparent stance towards customers by providing the ability to track where products come from and under what conditions they are produced (Paciarotti et al., 2022).

In addition, the preference for sustainable fisheries and livestock products is another issue that chefs emphasize in their sustainable procurement approaches. Overfishing and environmental pollution in the sea are among the important factors that threaten the sustainability of aquaculture and animal foods. Chefs must pay attention to the sustainable sourcing of products from the sea and land animal husbandry to preserve the natural balance and maintain an environmentally sensitive restaurant approach (Batat, 2020). Working with sustainable seafood and meat suppliers can reduce the environmental footprint of restaurants while responding to customers' eco-friendly preferences (Chaturvedi et al., 2024).

Cost management is one of the main challenges of sustainable ingredient sourcing. Sustainably sourced ingredients are generally more costly, which makes budget management difficult for chefs and can negatively affect the profit margin of restaurants (Ghadge et al., 2021). It is important to develop strategies that will provide long-term cost advantages in sourcing sustainable ingredients. This approach is important both to ensure cost-effectiveness and to provide chefs with more stable access to quality ingredients.

As a result, sustainable ingredient sourcing is a strategic element that contributes to the fulfilment of environmental and social responsibilities of restaurants beyond providing a creative culinary experience for chefs conscious choices towards sustainable ingredient sourcing not only increase their gastronomic success, but also significantly increase the competitiveness of restaurants in the market (Basle, 2023). The adoption of sustainable sourcing strategies not only contributes to chefs' culinary understanding, but also enables restaurants to fulfil their environmental and social responsibilities.

2.4.7 Technology and Automation

In recent years, technology and automation have rapidly gained importance in the food and beverage industry, and these developments have greatly affected kitchen operations. In particular, 'smart kitchen systems and robotic automation applications stand out with advantages such as reducing workload, reducing error rates and increasing production speed (Shimmura et al., 2021). Smart kitchens generally utilize IoT (Internet of Things) technologies to enable devices to communicate with each other. For example, smart ovens can automatically adjust cooking temperatures and times through sensors, which reduces the need for user intervention (Hassan et al., 2022).

The contributions of automation to kitchen management are not limited to efficiency; it also sets new standards in the fields of hygiene, quality control and sustainability (Okpala & Korzeniowska, 2023). According to many researchers, robotic arm and artificial intelligence-supported image processing systems have started to find a place in kitchens, especially to ensure food safety standards. These systems can perform functions such as automatically analyzing the freshness of foods and continuously

monitoring hygiene standards (Pereira et al., 2022). Thus, hygiene problems that may arise from human mistake are minimized.

Compared to traditional methods, kitchen automation systems also offer significant sustainability benefits. For example, in order to save energy, some smart appliances can be programmed to operate only when needed. Some restaurant chains are investing in fully automated kitchens to achieve 'zero waste' targets. This not only contributes to reducing environmental impacts, but also leaves a positive impression on consumers (Song & Kim, 2022).

The future of kitchen technology and automation continues to be shaped by the further integration of advanced technologies such as artificial intelligence and machine learning into kitchen processes. For example, some smart kitchen applications have reached a level where they can offer individual nutritional recommendations by analyzing users' eating habits. However, there are still some obstacles to this transformation. In particular, high costs and the resistance of some kitchen workers to technological change are among the factors that make it difficult to adopt automation systems on a wider scale (Huang et al., 2022). In conclusion, kitchen technology and automation offer revolutionary innovations in the food and beverage industry and show a strong trend towards further digitalization in the future. Accordingly, it is of great importance for kitchen businesses to adapt to new technologies rapidly in order to remain competitive.

2.4.7.1 Integration of Technology

In recent years, technology integration in the food and beverage industry has increased rapidly, resulting in significant gains in many areas such as efficiency, sustainability and customer satisfaction in kitchen operations. Today, many kitchens have become

more efficient thanks to IoT (Internet of Things) technologies and artificial intelligence-supported applications. This integration is especially prominent in the so-called ‘smart kitchens’ and minimizes manual interventions by enabling kitchen appliances to communicate with each other (Kuoppamäki et al., 2021). For example, smart ovens and refrigerators can automatically control the temperature and humidity levels inside them, therefore extending the freshness of foods.

One of the most important contributions of this technological integration is in the field of hygiene and food safety. In particular, sensor and robotic technologies make a great contribution to the protection of kitchen hygiene standards. Thanks to artificial intelligence-supported image processing systems, the freshness of products can be easily analysed, and food waste is reduced by early detection of products at risk of spoilage (Çolak, 2023). These systems also protect employee health and optimise hygiene standards by minimising the risk of cross-contamination in the kitchen (Baydan et al., 2024).

Another important dimension of technology integration in kitchens is the benefits it provides in terms of energy saving and sustainability. Compared to traditional kitchens, smart kitchen appliances can be programmed to provide energy efficiency, which contributes to energy savings (Bartolozzi et al., 2024). For example, smart dishwashers used in industrial kitchens are designed to use only as much water and energy as needed, which reduces operating costs and reduces negative impacts on the environment (Hischier et al., 2020). At the same time, thanks to waste management systems, waste in kitchens is managed more effectively and recycling rates are increased.

Artificial intelligence-based algorithms and machine learning models have the potential to increase efficiency in kitchens. These technologies have the capacity to automatically suggest preferred cooking times or ideal temperature settings by analysing user habits. In addition, some restaurants are now using data analytics to predict customer demands and adapt menus accordingly, which allows businesses to operate more efficiently (Kumar et al., 2021).

However, there are some obstacles to this kind of technological transformation. Especially, high costs and technology version procedures posture a contest for many small and medium-sized creativities. Furthermore, the resistance of kitchen staff to technological innovations and difficulties in the adaptation process slow down the pace of technology integration (Højlund & Villadsen, 2020). However, considering the advantages brought by the use of technology throughout the sector, it is predicted that this transformation will become increasingly widespread.

As a result, technology integration enables modern kitchens to achieve great gains in areas such as efficiency, hygiene, sustainability and user satisfaction. In this context, it is predicted that technology integration will play an increasingly critical role in the future of kitchens and will increase the competitiveness of the sector.

2.4.7.2 Advantages and Disadvantages of Automation

Kitchen automation systems have become increasingly widespread in recent years to optimise workflow, reduce costs and increase customer satisfaction, especially in the restaurant and food services sector. One of the important advantages of automation systems is that the orders are directly transmitted to the kitchen staff, saving time and orders can be prepared quickly. This significantly increases customer satisfaction by increasing the service speed of businesses (Rusmahafi & Wulandari, 2020).

In addition, automation systems provide great convenience in inventory management. In traditional methods, visual stock controls have been replaced by continuous and accurate monitoring of stocks thanks to automatic data entry and warning systems. For example, kitchen automation systems contribute to effective inventory management, waste reduction and cost reduction. In addition, the workload on employees is reduced, resulting in a more efficient work environment throughout the business (Kaur et al., 2023).

On the other hand, kitchen automation systems also have some disadvantages. One of the biggest disadvantages is the high initial costs. Such systems can often be financially challenging for small businesses (Arias, 2023). Installation, training and maintenance of systems also create extra costs and may cause disruptions in operations during system failures or software updates. It is also emphasized in the literature that some employees find it difficult to adapt to such technologies and need training to adapt to new systems. Particularly for workers who are used to manual systems before, this change progression can be stressful and may negatively affect their job satisfaction levels.

Finally, automation systems can reduce human interaction between customers and employees. The fact that customers place orders through digital platforms instead of contacting employees directly may cause dissatisfaction in some customers. For example, according to a study, customer loyalty has decreased in some cases as a result of the digitalisation of customer service (Shabani et al., 2022). In addition to the operational efficiency provided by kitchen automation, balanced management of the effects on customer and employee satisfaction is critical for a successful automation process.

In conclusion, kitchen automation systems are a powerful tool that increases operational efficiency, especially in restaurants and cafes with busy work schedules. However, some disadvantages such as high costs, employee adaptation difficulties and changes in human relations between customers and employees should also be taken into consideration. It is expected that these disadvantages will be minimised and the advantages will be used more effectively in the future as these systems become more widespread and technology advances (Priyadarshini et al., 2022).

2.5 Theoretical Framework

2.5.1 Job Demand-Resource (JD-R) s Model

In the hospitality industry, it is often observed that chefs experience high stress levels and low job satisfaction due to workload, job demands and resource shortages. The job demand-resource (JD-R) model provides an appropriate theoretical framework for understanding these factors that influence employees' job satisfaction and stress levels. This model argues that when job demands are high, insufficient job resources cause employees to experience burnout and reduce job satisfaction (Radic et al., 2020). The JD-R model is recognised as a critical tool in understanding the stress and job satisfaction levels of chefs in variable work environments such as the hospitality sector (Silva et al., 2021).

According to the JD-R model, job demands are the physical and mental challenges that chefs face in their jobs and high job demands increase job fatigue and stress (Ahmad et al., 2024). The job demands faced by chefs in the hospitality industry are usually intense customer demands, rapidly changing orders, long working hours and high-quality expectations. It was observed that high job demands cause an increase in employees' stress levels and have a negative impact on job satisfaction (Ramlawati et

al., 2021). At the same time, stress in the hospitality sector is constantly increasing due to the intense and dynamic nature of the work.

Job resources include the elements that help employees to manage their job demands and be successful in their jobs. The resources needed by chefs especially in the hospitality sector can be listed as adequate staff support, training opportunities, flexible working hours and social support at work. When there are sufficient job resources, employees feel more successful in their jobs and experience an increase in job satisfaction levels. The creating a favorable climate in the workplace and ensuring that employees have sufficient resources are effective in increasing job satisfaction and reduce burnout (Viseu et al., 2020).

The combination of high job demands and inadequate resources can increase employees' stress levels and negatively affect job satisfaction. Stress reduces employees' commitment and motivation to their jobs and thus reduces job satisfaction (Min & Hong, 2021). Frequent work demands and resource shortages faced by chefs in the hospitality sector can negatively affect job satisfaction by weakening their commitment to their jobs. Especially chefs working in a busy and stressful environment face the risk of losing job satisfaction when job resources are insufficient. The JD-R model explains this situation as the negative effect of stress on job satisfaction resulting from the imbalance between job demands and resources (Hadi et al., 2022).

The JD-R model is an effective model to explain how the balance between job demands and resources affects chefs' job satisfaction and stress levels in the hospitality industry. Practical applications of this model emphasise that managers should

moderate job demands and provide adequate resources to manage chefs' job satisfaction and stress levels. Especially in the hospitality sector, increasing job resources during the seasons when job demands are intense can play an important role in reducing chefs' stress levels and increasing their job satisfaction.

The balance between the job demands faced by chefs in the hospitality sector and the job resources they have plays a decisive role on their job satisfaction and stress levels. The JD-R model shows that maintaining this balance is critical for employee well-being and job satisfaction. Managers should develop strategies to manage job demands by providing the resources that supervisors need. Implementing strategies based on the JD-R model will be effective in increasing employee satisfaction and job performance in the sector.

2.5.2 Cognitive Stress Theory

Cognitive stress theory provides a framework that explains how individuals perceive and respond to stress, especially in high-pressure working conditions. This theory suggests that people make sense of stressful situations according to their own evaluations and that this process of making sense determines the way they manage stress (Schwarzer & Reuter, 2023). According to this theory, chiefs working under high pressure develop different coping strategies depending on how they perceive stress sources. Chefs' coping with stress in high-paced work environments is very important for both their performance at the workplace and their overall job satisfaction.

The cognitive stress theory, the emergence of stress is based on two main cognitive assessment procedures: first assessment and second assessment. In the first appraisal, the individual evaluates the situation as a threat, harm or challenge to his/her interests (Machado et al., 2021). For example, for a chef working in a busy restaurant, a sudden

burst of orders may be perceived as a threat, which may trigger stress responses. The chiefs' confidence in themselves and the support they have at work play a decisive role in this evaluation process.

The second assessment is the stage where the individual evaluates the resources and coping strategies, he/she has against the stressor. For chiefs, this evaluation is related to their ability to make quick decisions and problem-solving skills, especially in times of crisis. According to the cognitive stress theory, individuals can develop two types of strategies to cope with stress: problem-focused coping and emotion-focused coping (Oliveira et al., 2023). In problem-focused coping strategies, the individual tries to solve the source of stress by addressing it directly. For example, in a busy restaurant, the chef can speed things up by reorganising the division of labour in the kitchen. Emotion-focused coping is aimed at managing the emotional impact of the stressful situation. In such circumstances, cooks can seek to improve the consequence of pressure through on self-motivating.

In the food and beverage industry, chefs often face stress due to pressurised environments and high expectations. The processes of perceiving and managing stress are shaped by cognitive appraisal processes as suggested by cognitive stress theory. Most chefs perceive stressful situations as a threat or opportunity to their work. For example, individuals working under high pressure perform better when they evaluate stressful situations as opportunities (Cerasa et al., 2020). This situation allows chefs to develop creative solutions in their work and focus more on their work.

Cognitive stress theory provides an effective framework to explain why chiefs' reactions to stressful situations differ. By applying problem-focused coping strategies,

the chefs focus on the source of stress and try to produce solutions. This strategy helps chefs to fulfil their duties effectively even under workload. The problem-focused coping strategies are more suitable for individuals working in jobs that require high performance (Black, 2022).

However, in some cases problem-focused coping strategies may be insufficient and in such cases emotion-focused coping strategies come into play. When chefs feel that stress is affecting them under high pressure, they try to motivate themselves by using emotional management strategies. For example, emotion-focused strategies such as mindfulness or breathing exercises can alleviate the impact of stress and help chefs maintain their mental health (Oliveira et al., 2023).

In conclusion, cognitive stress theory plays a critical role in stress management and job performance of chefs in the hospitality industry. The cognitive appraisal processes suggested by this theory allow chefs to understand their sources of stress and identify appropriate coping strategies. Thus, chefs can both manage their stress levels and increase their job satisfaction in high-pressure work environments.

2.5.3 Innovation Diffusion Theory

The gastronomy sector has been experiencing a significant transformation with the innovations in the field of technology and science in recent years. These innovations, especially with the development of modern cooking techniques and kitchen equipment, have changed the cooking process, presentations and even food culture. Lately, techniques such as molecular gastronomy, sous-vide and robotic-assisted cooking have become increasingly overall in the sector (Wibowo et al., 2024). These techniques enhance the taste, texture and visuality of food, inspiring the dining

experience both beautifully and physical. The adoption of these innovative techniques causes businesses to face various obstacles.

Firstly, the adoption of innovative kitchen techniques requires financial investments. Advanced cooking equipment and new kitchen technologies come with high costs. Investing in these technologies can be quite challenging, especially for small-scale businesses (Leary et al., 2021). This cost item is not only limited to equipment, but also additional costs such as staff training and maintenance expenses. In order to apply new techniques, it is important for employees to be able to use this equipment correctly in order to increase potential productivity and quality. Especially with the widespread use of robotic kitchen assistants in kitchens, it is a very challenging process for staff to adapt to these devices, so comprehensive training programmers are needed (Barakazi, 2022).

Staff training is important not only for technological adaptation but also for maintaining quality standards in the sector. The high-quality standards provided by innovative culinary techniques can be lowered if these technologies are distorted.

Another factor limiting the adoption of innovative culinary techniques is cultural barriers and consumer perception. Especially in societies with strong traditional cuisine cultures, innovative cooking techniques and modern kitchen equipment may not be perceived favorably by consumers. Especially evident in societies with traditional cuisine and that consumers may be cautious about new flavors (Juanet et al., 2020). This resistance of consumers to innovations slows down the pace of adoption of modern techniques by businesses, and in some cases may even lead to a complete rejection of these techniques (Albertsen et al., 2020). For example, in some

regions, food safety regulations may limit the application of low-heat long-cooking techniques such as sous-vide.

Sustainability concerns are another determining factor for the adoption of innovations in the world of gastronomy. Although modern kitchen technologies offer potential advantages such as increasing energy efficiency and reducing food waste, their widespread adoption requires additional regulations and supportive legal frameworks on sustainability. In particular, the high energy consumption of advanced equipment can raise concerns about environmental impacts.

In conclusion, the benefits of new culinary techniques and technologies in the gastronomy sector are numerous. These innovations have the potential to contribute to environmental sustainability while improving productivity, quality and customer experience. However, for the widespread adoption of these techniques, businesses need to overcome various barriers such as cost, training, cultural adaptation and legal regulations. Overcoming these barriers in the long term will accelerate the modernization of the sector and benefit both businesses and consumers. Further studies on the integration of innovative technologies in the field of gastronomy will be effective in overcoming these barriers and contribute to shaping the future of the sector.

2.5.4 Team Dynamics and Role Theory

Efficiency and effective communication in the kitchen environment are among the basic conditions for providing quality service. Since the kitchen is a high-stress working environment, it requires the coordinated work of team members and it is accepted that an effective teamwork organisation plays an important role in increasing kitchen efficiency (Goeltom et al., 2024). At this point, it has been observed that clear role definitions and a well-structured team hierarchy ensure that the work in the

kitchen runs smoothly and efficiently. Especially in large and busy kitchens, the clear understanding of each employee's responsibilities prevents operational confusion and thus strengthens communication within the team (DiPrete et al., 2023). The employees can focus on their own tasks while maintaining a synchronized workflow with other team members.

The literature examining the effects of teamwork on kitchen efficiency shows that the relationship between kitchen team members directly reflects on kitchen performance. A high level of co-operation and supportive communication among team members in a professional kitchen environment improves time management and thus increases overall efficiency (Bowen,2020). In this context, it is emphasised that roles such as cook, sous chef and sous chef should be defined in such a way that each contributes to a separate stage of the kitchen operation. When roles are clearly defined, each employee fulfils his/her own task quickly and effectively, which prevents disruption of kitchen operations, especially during peak hours, at the same time, in times of crisis that may occur in the kitchen, coordination and responsibility sharing within the team contribute to customer satisfaction by increasing the ability to solve problems quickly (Ganesh et al., 2024).

Successful teamwork and clear role definitions in the kitchen environment not only increase productivity but also strengthen communication within the team. Therefore, improving communication within the team and making a clear role distribution is also of great importance in terms of creating a safe working environment in the kitchen.

The clear role of definitions and a strong communication culture reinforce the sense of trust among employees and thus team members show a more understanding and

supportive attitude towards each other (Afifi et al., 2021). Especially in times of crisis, fast and effective communication enables employees to act quickly in line with their duties and thus ensures that the service provided to the customer is not interrupted.

Teamwork and effective implementation of role definitions also increase the motivation levels and job satisfaction of individuals working in the kitchen. In particular, the fact that the distribution of tasks of each team is clear and understandable increases the confidence of individuals in their roles and thus enables employees to perform their work more selflessly. With the increase in individual trust, team harmony is strengthened and as a result, high productivity is achieved throughout the kitchen.

Finally, it is seen that teamwork and effective structuring of role definitions in the kitchen help employees to manage their workload better. Especially in kitchens with intense working tempo, a good division of labour balances the workload on the employees. This keeps kitchen staff physically and mentally healthier, which reduces staff turnover in the long term (Min & Hong, 2021).

In general, teamwork and role definitions in the kitchen have a significant impact on productivity, communication and job satisfaction. Providing a clear role distribution within the team and creating a well-structured co-operation environment contributes to accelerating kitchen operations, reducing errors and increasing customer satisfaction. In this context, kitchen managers and chefs can maximize kitchen efficiency by creating a work environment that encourages teamwork as well as clearly defining the duties and responsibilities of each individual.

2.5.5 Conservation of Resources (COR) Theory

The Conservation of Resources (COR) theory considers individuals' motivation to protect and increase their resources as the main determinant of stress (Hobfoll, 1989). According to this theory, resources are the elements that individuals use to secure their welfare on environmental, social and cultural bases and to protect themselves from stressful threats. The stress experienced by chefs in the kitchen environment and the methods of managing this stress are directly related to the processes of resource acquisition, protection and perception of the threat of loss, which are at the centre of COR theory (Hobfoll, 2001). Especially for chefs working in intense and pressurised work environments, the protection of these resources is critical in terms of job satisfaction, emotional resilience and general well-being. According to COR theory, situations that are seen as sources of stress are associated with situations in which individuals' resources are threatened or at risk of losing their existing resources. Chefs develop strategies to protect their resources and acquire new ones against these threats. Chefs, for example, may seek social support to cope with stressful situations. Support from colleagues or managers can help chefs to protect their resources and increase their well-being (Karatepe, 2013).

In conclusion, COR theory provides a comprehensive framework for understanding the ways in which chefs cope with the stress they face in the culinary environment. This theory emphasises the critical effects of resource acquisition and conservation on the well-being of individuals. Strategies such as strengthening social support mechanisms in the workplace, increasing training opportunities and balancing workload can be adopted to facilitate chefs' coping with stress. In addition, developing

policies that help managers to strengthen the personal and environmental resources of chefs will be effective in improving employee well-being.

2.6 Implications for Management

Kitchen management is of great importance for businesses to maintain service quality, ensure operational efficiency and increase profitability. In this process, factors such as planning, personnel management, cost control and resource management play a key role in ensuring effective management (Alzoubi et al., 2022). One of the most important recommendations for kitchen managers is to create a detailed business plan. In particular, conducting processes such as menu planning and order tracking in a clear systematic way reduces kitchen costs by reducing material waste and supply delays.

Another important issue for kitchen management is staff training. A trained kitchen team increases operational efficiency and improves service quality (Sachani et al., 2021). Especially in large kitchens, clear role distribution strengthens cooperation within the team and minimizes misunderstandings. Training programmes support occupational safety standards as well as improving employees' skills. In addition, the literature also emphasises the importance of flexible working arrangements to increase the efficiency of kitchen management. For example, having more staff on duty during peak hours and reducing the workload of staff during off-peak hours allows the work to be carried out more efficiently (Aoun & Thaku, 2024).

Resource management and cost control are also critical for kitchen management. Effective management of resources increases sustainability in kitchens and keeps costs under control. One of the most basic practices to minimise food waste is careful inventory management and order planning. The regular inventory tracking should be

carried out to prevent excess or insufficient stock, thus reducing unnecessary expenditures (Gładysz, 2020). Furthermore, recycle of surplus materials and the use of leftover food in different ways also prevent waste.

2.6.1 Workload and Stress Management Strategies

The chef profession is known as a physically and mentally exhausting job as well as a creative one. Intense work tempo, long working hours and instant pressures increase the stress levels of chefs and make workload management difficult. Stress management plays a critical role for chefs to work efficiently and establish a healthy work-life balance. The difficulty of chefs in managing their workloads negatively affects not only individual health but also work quality (Razzak et al., 2022). Therefore, balancing workload and effective stress management are vital for sustainable success in professional kitchens.

One of the strategies recommended in the literature on workload management is the clear distribution of tasks and delegation. In kitchens, it is an effective method to reduce stress for chefs to lighten their burden by sharing work with team members instead of taking all the responsibility alone (Laneyrie & Landry, 2023). In particular, sous chefs and other assistant staff taking responsibility for specific tasks relieves the daily workload that chefs have to undertake and allows them to spend more time on creative and strategic tasks.

In addition, regular rest breaks and establishing a work-life balance are among the strategies recommended for chefs to balance their workload. Long-term working conditions can lead to not only physical but also mental exhaustion. In addition, rest breaks not only provide physical relaxation, but also contribute to mental recovery.

Rest breaks help chefs to work more creatively and efficiently by relieving themselves of stress (Ovias & Rao, 2020).

Another strategy that stands out in the literature in terms of stress management is physical activities and healthy living habits. Physical activities increase chefs' energy and endurance by reducing stress hormones. It is also stated that a healthy diet helps to maintain mental balance while improving physical health. Such habits have positive effects on both physical and mental health in the long term and enable chefs to cope more easily with the challenges in business life (Halling et al., 2023).

Social support and psychological resilience skills are also important for stress management in the kitchen. In busy working environments such as kitchens, social support helps employees to relax and gain psychological resilience by sharing the difficulties they experience. In addition, it is among the recommended strategies for chefs to gain awareness about coping with stress and to receive training in this direction. The use of relaxation techniques such as meditation and breathing exercises in the workplace enables chefs to cope with stress, while at the same time increasing their work efficiency (Knol et al., 2021).

In brief, workload and stress management are of great importance for both the physical health and work productivity of chefs. In the literature, recommended strategies for chefs include job sharing, rest breaks, healthy living habits and social support. Effective implementation of these strategies allows chefs to balance their workload and create a healthier work environment under high stress. These strategies offer important individual and organisational contributions to long-term success in kitchen management.

2.6.1.1 Creating Supportive Work Environments

Creating supportive working environments to increase the productivity and job satisfaction of chefs in professional kitchens is among the prominent issues in today's management approach. Since kitchens are known as a busy, fast-paced and stressful environment, it is of great importance to develop supportive practices in the work environment to alleviate the difficulties faced by chefs (Traynor et al., 2022). Especially long working hours and irregular shifts can lead to burnout. Consequently, revising working hours and increasing rest periods have a positive impact on employee health (Shifrin & Michel, 2022).

It is emphasized that communication is also an important factor in providing a supportive work environment. Especially, open, two-way communication between executive chefs and employees contributes to solving the problems encountered in the kitchen quickly and efficiently. In this way, employees can easily voice their concerns and feel valued (DiPrete et al., 2023). It has been observed that a good communication culture increases employee loyalty and job satisfaction. In addition, it is frequently emphasised in the literature that colleague support and team cooperation are effective in reducing job stress. It has been observed that in kitchen environments where team members support each other, employees manage work stress more easily and feel more confidence (Kang et al., 2020).

Training and development opportunities also play an important role in creating a supportive kitchen environment. Training opportunities allow employees to develop the technical and managerial skills they will need in the kitchen and thus increase their self-confidence. Training provided in professional kitchens is effective in increasing

employee motivation and commitment (Ko & Lu, 2021). Such supportive opportunities help chefs to make long-term career plans and be happier in their jobs.

Taking occupational health and safety measures in the kitchen is one of the basic components of a supportive working environment. The prevention of occupational accidents and the creation of an ergonomic workplace are shown as factors that directly affect the performance of employees. For example, regular maintenance of equipment and ergonomic designs reduce the physical strain on chefs and create a healthier work environment (Kamala et al., 2024). When a safe and comfortable working environment is provided, the job satisfaction of the supervisors increases as well as their productivity.

In general, creating a supportive working environment for supervisors is possible by combining factors such as flexible working arrangements, open communication, training opportunities, safe working conditions. It is widely supported in the literature that these elements increase employee satisfaction, reduce work stress and ensure long-term success. A supportive kitchen environment not only increases the happiness of chefs, but also contributes positively to the productivity of the organisation.

2.6.1.2 Strategies to Alleviate Stress

The chef profession is known as a high-stress profession with intense work tempo, creative expectations and long working hours. The intense pressure encountered in the kitchen, time constraints and high-quality standards offered to customers make it difficult for chefs to cope with stress. In particular, measures to protect physical and mental health are of great importance in terms of stress management. The stress decreases work performance and negatively affects the health status of employees, and this situation reduces employee motivation and business productivity in the long term

(Pandey, 2020). For this reason, various methods that chefs can apply to reduce stress arising from their profession are suggested.

One of the most effective strategies to reduce stress is regular physical activities and exercise. Chefs' regular participation in physical activities, even after a busy work schedule, led to a significant reduction in stress levels (Ovias & Rao, 2020). In particular, activities such as yoga, walking and breathing exercises are known to reduce hormones that cause stress in the body and provide peace of mind. Such activities help chefs to relax outside of work, while at the same time making them more resilient to work stress.

Another important strategy is the creation of social support systems to cope with stress. Establishing social relationships with colleagues, family members or friends helps individuals to share the stress they experience and relax (Dagsland et al., 2024). In particular, colleague support is an important factor that facilitates chefs to overcome the difficulties they experience in the work environment. It has been observed that social support has a significant effect not only in coping with job stress but also in increasing job satisfaction.

Mindfulness and meditation techniques are among the effective stress management strategies recommended for chefs. Mindfulness-based stress reduction techniques allow individuals to better manage their thoughts and emotions and thus take stress under control (Parsons et al., 2024). Conducting short meditation sessions on a daily basis helps chefs to reduce their stress levels, especially during busy working periods. Such practices contribute positively to general mental health by allowing individuals to get away from instant stress factors.

Long working hours and excessive workload can negatively affect both the physical and psychological health of chefs. Organizing flexible working hours for chefs to achieve work-life balance is an effective method to reduce stress (Sun et al., 2023). Rest and time for oneself help individuals to gather energy outside of work and return to work in a more motivated way.

It is also recommended that chefs adopt healthy eating habits and regular sleep are among the other methods recommended for stress management. Strengthening their immune systems by following a healthy diet and adopting regular sleep habits contribute to chefs to be more resilient against stress factors in the workplace.

In conclusion, strategies for chefs to reduce stress in professional kitchens include physical activities, social support, mindfulness techniques, work-life balance and healthy living habits. Effective implementation of these strategies allows chefs to increase job satisfaction and improve their long-term job performance by reducing stress levels. These strategies are important not only for individual well-being, but also for improving the overall efficiency of the kitchen environment.

2.6.2 Training and Development

The role of chefs in kitchen management is becoming increasingly important. Especially as the gastronomy sector globalizes and customer expectations increase, it is seen that kitchen leaders need to continuously improve their skills (Mrusek et al., 2021). Training and development are considered as a critical element that positively affects chefs' motivation and job satisfaction as well as increasing their professional competencies (Marinakou & Giousmpasoglou, 2022).

In terms of technical skills, chefs working in professional kitchens need to have a wide range of knowledge from modern cooking techniques to hygiene standards. In particular, topics that require technical knowledge such as innovative cooking techniques and the use of equipment in the kitchen are one of the principal points of chefs' training programmes (Batat, 2020).

The training and development are also important in terms of following the innovations in the sector. Since today's gastronomy trends and customer expectations change rapidly, it is argued that chefs need to renew themselves (Marinakou & Giousmpasoglou, 2022). In this context, flexible training opportunities such as workshops, seminars and online courses have become important tools in the development processes of chefs.

Studies on the training of chefs show that their professional progression ensures the sustainability of not only their skills but also their motivation within the sector. Chefs not only support their own development through training, but also take responsibility for developing their employees (Gray & Farrel, 2021).

As a result, the literature reveals that the training and development processes of chefs play a critical role in their success in the sector. In this context, leadership development of chefs, as well as their technical skills training, stands out as an important area that should not be neglected.

2.6.2.1 Ongoing Skill Development

In the gastronomy world, the continuous skill development processes of chefs directly affect their professional success as well as the efficiency of kitchen teams and customer satisfaction (Duarte et al., 2022). Continuous skill development is necessary to keep

up with changing culinary trends, new cooking techniques and current hygiene standards. It is also stated that chefs need to blend traditional culinary knowledge with innovative approaches to meet evolving customer expectations (Vu et al., 2024).

In terms of personal and managerial competencies, the literature frequently emphasises the importance of chefs developing skills such as communication, crisis management and team leadership. These skills are considered critical for them to fulfil their duties effectively, especially in stressful kitchen environments (Min & Hong, 2021). The development of leadership skills contributes to chefs' ability to direct team members more effectively and to make quick and correct decisions in times of crisis (Firth, 2022). Research shows that chefs who receive leadership training establish healthier communication with kitchen staff, increase kitchen efficiency and strengthen loyalty to the business (Traynor et al., 2022).

It is also stated that continuous skills development programmes do not only provide technical knowledge for chefs, but also increase their creativity and innovation capacities. In addition, digital education tools provide flexibility to the training processes of chefs, enabling them to continue their development without time and space limitations (Woodhouse & Rodgers, 2024).

Finally, the importance of continuing education in the professional development of chefs in terms of creating a permanent workforce, ensuring harmony within the kitchen and improving the customer experience is often emphasised. Continuing education programmes enable chefs to gain a stronger position within the business and build a long-term career (Stofkova & Sukalova, 2020). In this situation, increasing not only the technical knowledge and skills of chefs, but also their capacity to follow and

implement changing standards in the sector facilitates their sustainable success in the field of gastronomy (Bressan et al., 2023).

2.6.2.2 Enhancing Resilience

The gastronomy sector has an intense, stressful and physically demanding working environment. Chefs need to develop resilience as they work under both physical fatigue and high pressure. Increasing resilience is considered in the literature as an important factor that supports chefs' long-term professional success and reduces the risk of emotional exhaustion (Vu et al., 2023).

Stress management is recognised as one of the key elements of increasing resilience. Intense kitchen tempo, fast decision-making under pressure and the necessity to ensure customer satisfaction increase the stress levels of chefs. The stress management strategies such as mindfulness techniques and breathing exercises are seen as an effective tool to increase chefs' mental and emotional resilience (Lavendol, 2024). It is also stated that such techniques reduce the risk of anxiety and depression.

Mental resilience, on the other hand, enables chefs to remain positive and develop problem-solving skills in difficult situations they face in the kitchen. Chefs' becoming more resilient in the face of challenging situations enables them to establish healthy communication with their colleagues and team members (Burrow et al., 2024). In particular, mental resilience training programmes that help chefs maintain their composure in stressful situations increase their motivation and work performance (Esterhuyse & Theron, 2022).

Physical resilience is also important for chefs to withstand long working hours and intense physical demands. Challenges such as long standing, carrying heavy

equipment and the need to move quickly are factors that test the physical endurance of chefs (Nadai & Gonon, 2021). Regular exercise, stretching and a healthy diet are recommended to increase physical endurance.

Motivation is another critical factor in increasing resilience. Chefs' feeling dedicated to their profession and working with a sense of purpose increase their resilience (Hilton, 2020). In particular, motivation for personal development and achieving professional goals enables chefs to cope with the challenges they face more easily, for example, reward systems. Such motivational strategies also increase job satisfaction and reduce the feeling of burnout.

As a result, that increasing resilience is an important factor that supports both the work productivity and long-term professional success of chefs. In addition to psychological and physical support strategies to increase resilience, strengthening chefs' motivational resources contributes to their sustainable career in the sector.

2.7 Sustainability in the Culinary Profession

Sustainability has become an increasingly important issue in the gastronomy sector. Sustainability in the culinary profession includes practices such as reducing food waste, minimising environmental impact and using local, seasonal ingredients (Filimonau et al., 2023). Sustainable cookery practices are addressed especially in terms of protecting natural resources and developing environmentally friendly culinary habits (Didinger & Thompson, 2020).

The first important dimension of sustainability practices is optimising resource use and reducing kitchen waste. Strategies to reduce food waste in kitchens are based on a 'nose-to-tail' approach (using all ingredients) and 'zero waste' targets (Amundson &

Kleijnen, 2020). Chefs should be aware of waste reduction and produce new recipes by utilising waste materials with innovative techniques (Rios et al., 2020). In addition, kitchen planning and portion control are also important practices to minimise food waste (Hennchen, 2021).

The use of local and seasonal ingredients is another important dimension of sustainability practices in the cookery profession. The preference for local products contributes to environmental sustainability and also helps restaurants to create a sustainable structure in the supply chain (Sarkis, 2020). Such approaches are recognised as important steps towards creating a sustainable culinary culture in the culinary profession.

Another important area in sustainable kitchen practices is energy and water saving. The high use of energy and water, especially in restaurant kitchens, makes savings in these areas even more important (Subramanian et al., 2021). To increase energy efficiency, strategies such as replacing kitchen appliances with energy-efficient ones and preventing unnecessary energy use are recommended. Regular maintenance of restaurant kitchens to optimise energy consumption increases efficiency and reduces operating costs (Iqbal & Kim, 2022). Similarly, appropriate to reduce water, performs such as selecting utilizations that decrease water use and recycling water are optional.

Education and awareness activities also play a critical role for sustainability in the cookery profession. In particular, trainings on sustainable menu planning, waste management and reducing environmental impacts contribute to cooks to implement environmentally friendly practices more effectively. It emphasises that the inclusion of sustainable cuisine trainings in cookery schools and vocational trainings is an

important step to spread the culture of sustainability to the whole sector (Kapelari et al., 2020).

In conclusion, the literature reveals that sustainability practices in the culinary profession not only provide environmental benefits but also offer economic advantages. Practices such as the use of sustainable materials, waste minimization, energy and water conservation both increase efficiency and reduce negative impacts on the environment in kitchens. In this context, ensuring sustainability in the culinary profession is seen as a critical step in terms of long-term success and environmental responsibility in the sector.

2.7.1 The Role of Chefs in Promoting Sustainability

Beyond the kitchens, chefs have the potential to raise awareness in the wider society in promoting sustainability practices. The role of chefs in promoting sustainability in terms of developing environmentally friendly culinary practices, bringing sustainable eating habits to society, and positioning them as leaders who create change in the industry (Bertoldo et al., 2022).

One of the strategies used by chefs to promote sustainability is to use local and seasonal products in menus. Ensuring sustainability in the supply chain by collaborating with local producers allows chefs to reduce their carbon footprint and support the regional economy (Stein & Santini, 2022). The use of local products also helps chefs to renew their menus in accordance with the seasons and offer customers a dining experience that reflects the cycle of nature, while meals prepared with local ingredients increase customer satisfaction, they also reinforce a sense of responsibility towards nature (Derek, 2021).

Chefs also lead the way in promoting sustainability by reducing food waste in kitchens. Minimizing food waste involves active planning in the kitchen and to this end. Chefs develop new recipes using the whole ingredients, thus significantly reducing food waste. Such anti-waste strategies not only increase environmental sustainability but also reduce the costs of restaurants (Dyen et al., 2021).

Another role of chefs in promoting sustainability is to lead in education and awareness raising. Chefs are in a position to communicate directly with their customers, introduce environmentally friendly culinary habits to the society and raise awareness (Cifelliet et al., 2020). In particular, chefs working in environmentally sensitive restaurants underline the concept of sustainable cuisine by explaining the processes they follow while preparing meals and their choice of ingredients (Şahin & Demir, 2023).

In addition, it is seen that chefs spread sustainability awareness to large masses by using social media platforms. Through social media, chefs reach a wide audience by sharing the sustainability strategies they implement in their kitchens, their collaborations with local producers, and environmentally friendly recipes (Roy et al., 2024). In particular, chefs' messages supporting sustainability increase environmental awareness in society and create a wider social impact.

In conclusion, the chefs play an important role in promoting sustainability and spreading environmentally friendly culinary culture. Chefs create a positive impact in the kitchen and society through sustainability strategies such as using local and seasonal ingredients, reducing food waste and raising social awareness. In this sense, the leadership roles of chefs in sustainability contribute to the gastronomy industry to achieve a more environmentally friendly structure in the future.

2.7.2 Case Studies of Sustainability Initiatives

The gastronomy sector is at the centre of environmental sustainability efforts, and chefs play a key role in this transformation. Sustainability includes principles such as using resources efficiently, reducing food waste and preferring local products, and it means a transition to a more sustainable structure in operational terms for restaurant businesses (Principato et al., 2021). For example, Michelin-starred chefs are increasingly collaborating with local farmers, emphasising waste management and reducing the use of plastics to increase their sustainability efforts (Huang & Hall, 2023).

According to the case studies, restaurants adopt many different approaches to reduce their carbon footprint. For example, Denmark's world-renowned restaurant Noma has developed a sustainability model that takes care at every stage to minimise waste in the kitchen (Huang et al., 2023). These efforts specifically focus on the problem of food waste and encourage the implementation of initiatives such as 'zero waste' by chefs (Yap et al., 2024).

Chefs' sustainability initiatives are not only limited to the environmental dimension, but are also related to social responsibility. The opportunity of social sustainability, subjects for example co-operating with resident people, attainment out to economically disadvantaged groups and improving the working situations of employees come to the front. For example, some restaurants, which are considered sustainability leaders, organize training programmers for employees and thus raise awareness of sustainability in the sector (Wellton & Lainpelto, 2021).

As a result, sustainability has become a paradigm that is gaining more and more importance in the gastronomy sector and is put into practice by chefs. It is seen that chefs' initiatives that promote environmental responsibility also support consumers to make more sustainable choices and thus a more environmentally friendly transformation is achieved throughout the gastronomy sector (Babayev & Balajayeva, 2023).

Chapter 3

METHODOLOGY

The methodology chapter outlines the research design and approach used to investigate the challenges faced by chefs in the hospitality industry. It provides a detailed description of the qualitative research framework employed, including the data collection methods, sampling techniques, and analysis process.

3.1 Research Design

This research is designed as a qualitative study that aims to understand the challenges faced by chefs working in the hospitality sector post-COVID-19 period and the sustainable solutions they have developed. The qualitative method focuses on individuals' experiences and provides an in-depth understanding of these experiences. Semi-structured interviews were used in the data collection process, and in-depth information was obtained from the participants. This method provided an ideal tool to explore chefs' experiences, perspectives, and the impact of the pandemic on their professional lives (Farmaki, et al., 2019).

Qualitative research, it involves more flexibility and exposition in the understanding of individuals' meanings of a phenomenon and the implications concerning their contexts (Davies, 2003). In this case, the flexibility of data collection and analysis adopted was to unveil various dimensions of the lived experience of the chefs and gain an even more comprehensive understanding of their perspective (Decrop, 2004). Qualitative methods can be said to be the most useful tool for understanding the

behaviors, perceptions, and interactions of individuals within the many-faceted social and professional contexts (Farmaki, 2012). The rich qualitative sources made it possible to flesh out the challenges the chefs faced during the pandemic and how they were dealing with them.

Qualitative research usually provides very flexible frameworks through which one can either qualitatively study individuals' meanings about certain phenomena and how such meanings play out in context (Altinay & Paraskevas, 2009). Data collection and analysis then became flexible enough to view some of the dimensions of lived experience among the chefs and understand further perspective. Such a quality would be a very effective type of qualitative method in understanding individuals' behaviors as well as their perceptions and interactions within complex social and professional contexts (Kelle, 2006). Then there were quite rich qualitative sources available for fleshing out the chefs' challenges during the pandemic and their responses to those challenges.

Instead of testing a hypothesis based on a specific theory, this study adopted an exploratory approach that aims to reach themes based on the experiences of the chefs. The exploratory nature allowed the researcher to obtain comprehensive and in-depth data (Etikan et al., 2016). In addition, this research was supported by semi-structured interviews that enabled the chefs' experiences in the post-pandemic period to be examined from different perspectives. These interviews provided both flexibility and focus, allowing chefs to elaborate on their individual experiences (Altinay & Paraskevas, 2009).

3.2 Sampling Method

The sample for this study was selected using the purposive sampling method, which is widely used in qualitative research when the goal is to obtain rich, relevant, and diverse insights from individuals who have in-depth knowledge of the subject matter. A total of 26 professional chefs were carefully chosen based on two key criteria: (1) having at least five years of professional experience, and (2) working in diverse types of hospitality establishments (e.g., fine-dining restaurants, hotel kitchens, boutique restaurants) across North Cyprus. The inclusion of experienced chefs ensured that participants possessed sufficient contextual knowledge to reflect on industry practices over time, including comparisons between the pre- and post-pandemic periods, which was central to the research objectives. This deliberate selection process aimed to gather data from information-rich cases, which could offer nuanced perspectives on the unseen challenges within the culinary profession. Therefore, purposive sampling was not only appropriate but essential for capturing the depth and complexity required by the study. The sample included chefs from different types of accommodation establishments such as hotels, restaurants and boutique businesses. In addition, the selection of participants from different regions of Turkey allowed regional differences to be included in the research. The data collection process was completed with a total of 26 interviews and data saturation was reached at this point. Data saturation means the termination of the data collection process when no new information or themes emerge (Vaismoradi et al., 2016; Tran et al., 2017). To identify and recruit participants for the study, a combination of email and phone communication was used. Chefs working in various hospitality establishments were initially contacted via email where possible, and follow-up phone calls were made to explain the purpose of the study in more detail and to confirm their willingness to participate. Once consent was obtained,

interview appointments were scheduled based on the participants' availability and preferences. Interviews were conducted either at their workplaces or at locations of their choice, such as personal offices or neutral settings, to ensure their comfort and convenience during the data collection process.

Data collection took place between February 18 and March 30, 2024. Interviews were conducted in the chefs' workplaces or quiet locations agreed upon by the parties. Each interview lasted approximately 30-40 minutes and used a semi-structured format designed to meet the objectives of the study. The interview questions focused on understanding the professional challenges chefs faced in the post-pandemic period and the solutions they developed to address these challenges. Specifically, the questions addressed chefs' working conditions, changes in operational processes, and sustainability practices. Some key questions included: "Can you describe your role and daily responsibilities as a chef in North Cyprus?" "What are some common challenges you face in your work environment?" "How do management practices and communication affect your job?" and "Are there any external factors (such as economic, social, or seasonal) that influence your work?" Additional questions included inquiries about professional development opportunities and recommendations for improving working conditions. When participants' responses needed to be deepened, the researcher flexibly asked additional questions. These interview questions were developed based on previous studies to ensure relevance and alignment with the study's objectives (Hallin & Danielson, 2007; Basnyat & Lao, 2020; Bryant, 2006; Dasgupta et al., 2014; Kordsmeyer et al., 2022).

The collected data were evaluated by thematic analysis method. Thematic analysis is often regarded as a method with unclear branding, as it does not hold the same distinct

identity as a named analytical method like content analysis. Described by Braun and Clarke (2006, p. 79) as "a method for identifying, analyzing, and reporting patterns (themes) within data," thematic analysis stands out as an independent qualitative descriptive approach. Additionally, it is recognized as a qualitative method that equips researchers with fundamental skills for performing various other types of qualitative analysis. Consequently, qualitative researchers are encouraged to familiarize themselves with thematic analysis as a standalone and dependable approach for data analysis (Vaismoradi et al., 2013). In this process, the relationships between themes and concepts were analyzed using Leximancer software. Before starting the data analysis, the audio recordings obtained from the interviews were transcribed. Then, the transcripts were uploaded to Leximancer software and the software identified key themes and concepts in the text. The emerging themes were grouped into chefs' challenges during the pandemic, sustainability-oriented solutions, and changes in their professional roles.

The data analysis process was conducted in a phased approach to gain an in-depth understanding of the chefs' experiences. First, the themes and conceptual maps identified by the Leximancer software were analyzed in detail by the researchers. These themes cover the impacts of the pandemic, as well as chefs' strategies for sustainability practices and their views on the future of the sector.

3.3 Data Analysis

Leximancer is a quite popular software designed specially for text and text data analysis, mainly for thematic analysis purposes. Identifying key concepts in texts, Leximancer will also identify relationships between these concepts and then produce visualized thematic maps for user display. All of this makes it perfect for both

qualitative and quantitative research as it can systematically capture large amounts of data. Leximancer is mostly favored in social sciences, health research and communication as it helps understand complex data and gives more objective analysis (Arasli et al., 2020; Olorunsola et al., 2022; Saydam & Altun, 2023).

One of the main features of Leximancer is that it automates thematic analysis. By analyzing the words in the text and their contexts, the software identifies the most frequently used concepts and groups them under main themes. These themes are placed on conceptual maps visualized by the software (Arasli et al., 2021). The maps visually express the relationships between themes and their importance. The size of the themes and their proximity to each other on the map represent the strength and intensity of the relationships. This visualization process enables researchers to more easily understand and analyze complex relationships in the data (Tseng et al., 2015).

Leximancer also offers an objective approach to the thematic analysis process. The software uses its algorithms to analyze the text and minimizes errors that may arise from the researcher's biases (Arasli et al., 2021; Goh & Wilk, 2024). This both increases the reliability of the analysis results and ensures that the analysis process is repeatable. In repeated analyses on the same data set, the software provides consistent results, which supports the validity and reliability of the research. However, in cases where an in-depth understanding of the context is required, the themes and concepts provided by the software need to be carefully interpreted by the researcher (Lemon & Hayes, 2020).

Leximancer played an important role at every stage of the research. During the data preparation process, the transcripts from the interview recordings were uploaded to the

software and the software analyzed the important concepts in the text (Saydam et al., 2022). The analysis process continued with the identification of themes and their visualization in conceptual maps (Engstrom et al., 2022). By examining the thematic maps provided by the software, the researchers elaborated on the contextual meanings of the data and developed a deeper understanding of the chefs' experiences. Furthermore, the visualization tools provided by Leximancer were a critical tool to present the findings of the research more understandably and effectively (Lemon & Hayes, 2020).

A total of 26 semi-structured interviews were conducted and analyzed using Leximancer software, which automatically identified key concepts and themes through co-occurrence patterns. To ensure the reliability and consistency of the thematic coding, Krippendorff's alpha was used as a statistical measure of inter-coder agreement. Two independent coders were trained using a codebook derived from the Leximancer-generated themes. They manually coded a randomly selected subset of 6 interviews (approximately 23% of the data), applying the same coding framework. The coded data were compared using Krippendorff's alpha. The resulting Krippendorff's alpha score was 0.78, indicating a substantial level of agreement between the coders. This process was undertaken to strengthen the trustworthiness of the qualitative findings and to validate that the automated analysis produced thematically consistent and replicable results (Krippendorff, 2011).

Chapter 4

FINDINGS

4.1 Data Analysis and Respondents' Demographic Profile

The sample of participants in this study comprises 26 chefs with a wide range of profiles in terms of age, gender, position, and the type of hospitality sector they work in. The ages of the participants span from 27 to 60, with the majority falling between 30 and 50 years old, indicating a mix of both relatively younger professionals and more seasoned, experienced chefs. Gender distribution is fairly balanced, with 15 male chefs and 11 female chefs, offering a diverse perspective on the challenges faced by chefs from both genders. In terms of position, the sample includes chefs at various hierarchical levels: 6 executive chefs, 14 executive sous chefs, 5 sous chefs, and 2 pastry chefs.

Table 1: Demographic characteristics of the participants

Pseudonym of participant				
Augustus	Age	Gender	Position	Sector type
Theodora	51	M	Executive chef	5-star hotel
Leonidas	32	F	Sous chef	4- star hotel
Cicero	41	M	Executive sous chef	5-star hotel
Pericles	34	M	Sous chef	Restaurant
Ptolemy	29	M	Sous chef	4- star hotel
Isolde	32	M	Executive sous chef	Restaurant
Semiramis	40	F	Executive sous chef	Restaurant
Hermes	45	F	Pastry chef	Cafe
Xenia	51	M	Executive chef	5-star hotel
Pythagoras	44	F	Executive sous chef	5-star hotel

Socrates	33	M	Executive sous chef	5-star hotel
Demeter	45	M	Executive sous chef	4- star hotel
Calliope	27	F	Sous chef	5-star hotel
Galen	30	F	Sous chef	5-star hotel
Aristotle	34	M	Executive sous chef	Restaurant
Seneca	38	M	Executive sous chef	5- star hotel
Herodotus	40	M	Sous chef	5-star hotel
Athena	38	M	Executive sous chef	5- star hotel
Cleopatra	35	F	Executive sous chef	4- star hotel
Hades	41	F	Executive sous chef	Restaurant
Poseidon	60	M	Executive chef	5- star hotel
Aphrodite	43	M	Executive sous chef	5- star hotel
Eros	31	F	Pastry chef	Restaurant
Ares	56	M	Executive chef	5- star hotel
Persephone	49	M	Executive sous chef	4- star hotel
				5- star hotel

This variation reflects the different ranks within the culinary team. Sector type is another distinguishing feature, with the majority (16 participants) working in 5-star hotels, followed by 4-star hotels (4 participants) and restaurants (6 participants). Additionally, a few participants are working in cafes, further enhancing the diversity of the sample. This distribution across different types of establishments ensures that the study captures a wide spectrum of experiences from chefs working in high-end hotels, restaurants, and more casual dining environments, providing a comprehensive understanding of the challenges chefs face in the hospitality industry (Table 1).

4.2 General Findings of Interviews

The interviews were transcribed and then subjected to analysis by Leximancer software (Version 5.0). The dominant themes so identified were: seven principal

themes that reflect the most potent challenges that chefs confront in the management of the hotel industry. The first theme is, was the workload and stress, with almost every chef mentioning the challenge of the very long working hours coupled with enormous expectations that take their toll at times in terms of physical and mental abilities. Another big theme is customer expectations. Chefs noted different challenges such as satisfying remarkable demands coming from various types of dietary restrictions and varying highly difficult preferences.

Table 2: Themes and their degrees of connectivity

Themes	Connectivity
Workload and stress	88
Customer expectations	61
Menu creativity and innovation	31
Team dynamics	31
Career advancements	21
Ingredient sourcing	12
Technology and automation	12

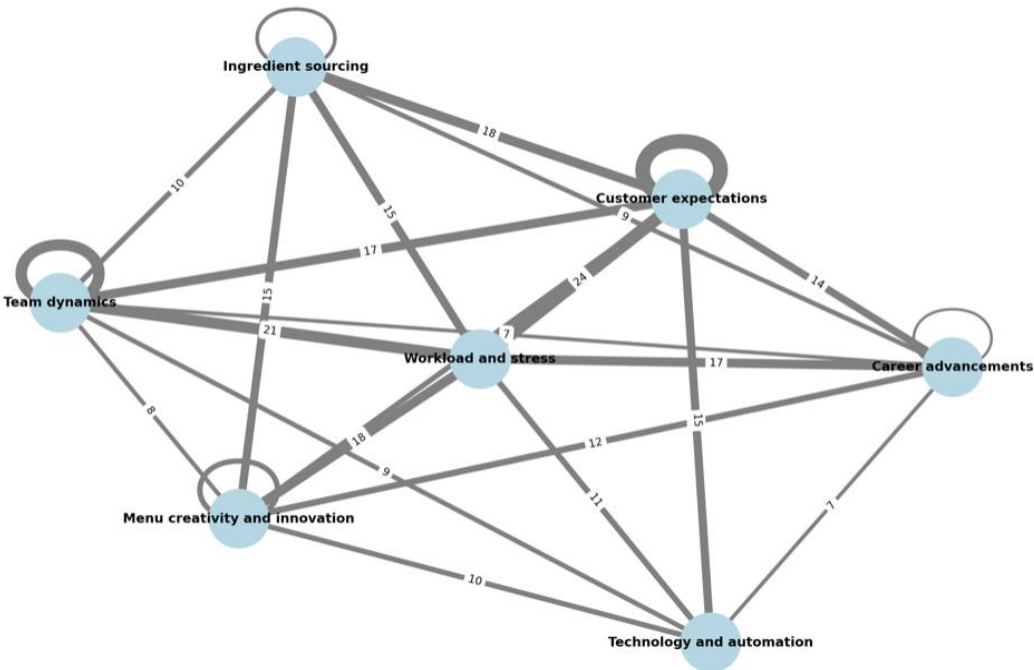


Figure 1: A neural network of themes

Theme number three most talked about is Menu creativity and innovation, as chefs also keep balancing between the envy of creativity and operational constraints at times while trying to catch up with the changing food trends. Lastly, it emphasizes the theme of collaborations that were often found within the reality of the Team dynamic; tensions and conflicts occur yet during high-pressure situations, but the noted strong leadership often helped address these potentials. Table 2 demonstrate the themes and degrees of connectivity. The themes in Leximancer which represented grand, general ideas or topics arising from achieving text-analyzed clusters of related concepts that mostly co-occur within such themes-relating to the helpfulness of these themes to interpret the most important subjects revealed in the data. The degrees of connectivity depict how strongly related concepts within a theme as well as across different themes are (Thomas, 2018; Saydam et al., 2022). To explore the relationships between key thematic concepts, we conducted a neural network analysis using frequency co-occurrence data. This approach allowed us to visualize the strength and nature of connections among the themes identified in the interviews. The network was developed using Python, and the visualization was created with the Matplotlib library (Pajankar & Joshi, 2022). Workload and stress emerge as a central theme, strongly linked to customer expectations, team dynamics, and menu creativity and innovation, indicating that high demands and creative pressures significantly contribute to stress. Customer expectations also show high connectivity with technology and automation and ingredient sourcing, suggesting that customer satisfaction is influenced by both modern kitchen tools and the availability of quality ingredients. The relatively moderate links of career advancements and ingredient sourcing with other themes highlight that while these are important, they are more peripheral. This network

underscores how operational, managerial, and external factors collectively shape the professional challenges chefs face (Logan et al., 2016).

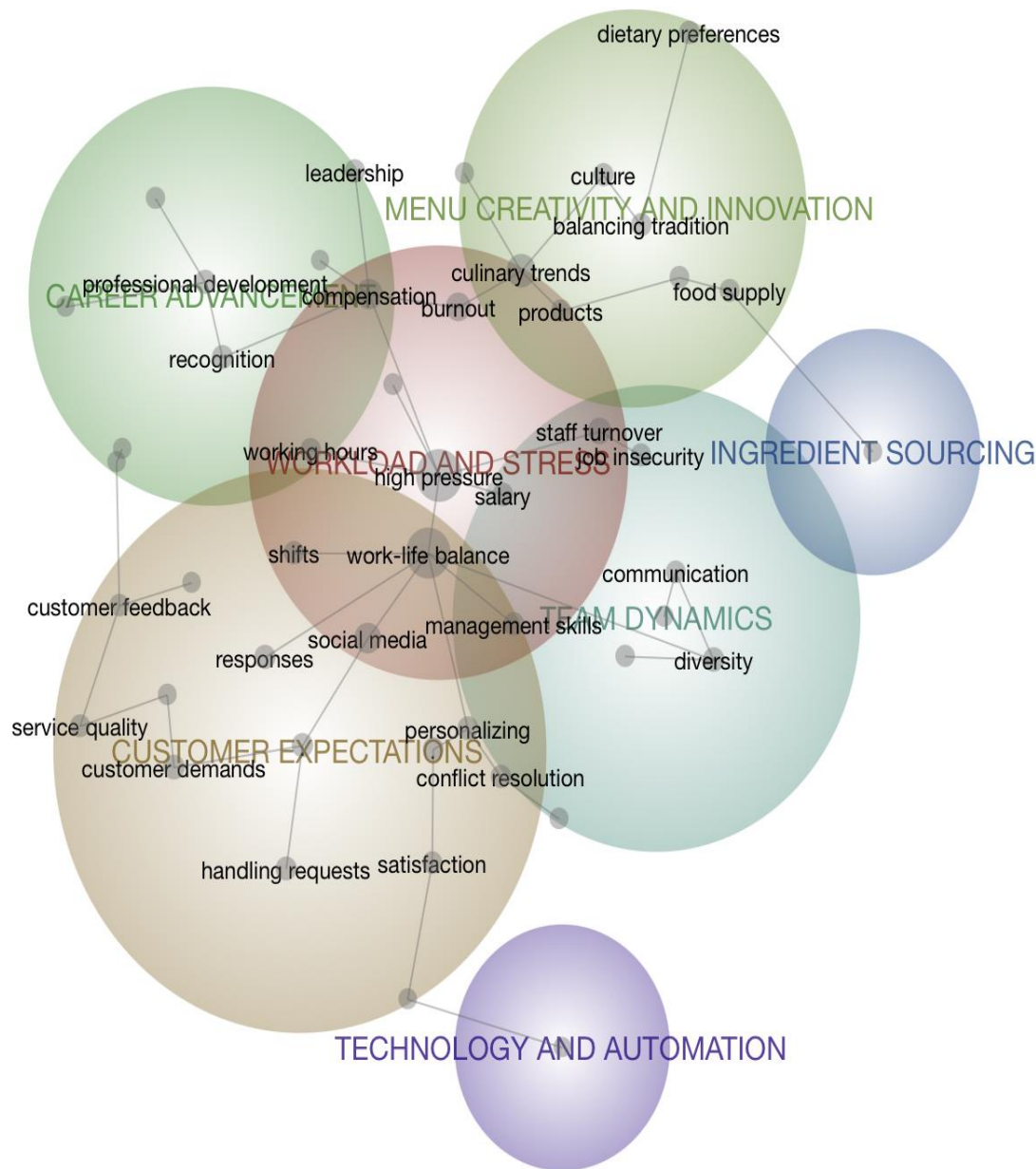


Figure 2: Concept map

Career advancements were also a common concern, with some chefs reporting limited opportunities for growth and the struggle to balance career development with the demanding nature of the job. Ingredient sourcing emerged as a practical challenge, with chefs citing difficulties in obtaining high-quality, fresh ingredients and rising

costs, particularly during certain seasons. Finally, the theme of technology and automation highlighted the increasing role of technological advancements in the kitchen, with some chefs embracing these innovations for improved efficiency, while others expressed concerns about the potential loss of traditional cooking skills. These seven themes—workload and stress, customer expectations, menu creativity, team dynamics, career advancements, ingredient sourcing, and technology—offer a comprehensive understanding of the complex and evolving challenges chefs face in today’s hospitality industry (Figure 1).

Workload and Stress

Workload and stress are some major concerns in the culinary field. Make any chef must deal with innumerable diverse pressures that ultimately take a toll on their physical and mental health. Chefs carry out the most arduous part of being prime movers in the creation of dining experiences, yet they, too, have to grapple with the various stressors associated with their profession (Wilkesman & Wilkesmann, 2021). Kitchen work is so demanding that it requires long hours, usually longer than a regular working day of 9-to-5. As evidenced mostly during busy dining hours, it mandates intense attention and effort in meal preparation and serving (Tongchaiprasit & Ariyabuddhiphongs, 2016). Shifts tend to be irregular, coupled with inadequate time for rest and rejuvenation. Workload and Stress weight heavy in this study as a common theme among participants (Matsuzuki et al., 2013). It is well illustrated in Figure 1, wherein this theme becomes associated with frequently used keyword concepts such as high pressure (21 mentions), salary (17 mentions), working hours (15 mentions), work-life balance (15 mentions), shifts (13 mentions), and burnout (11 mentions). Here are some responses;

“The workload in this job is intense. It's not just about cooking; it's about managing everything that happens in the kitchen. We’re constantly under

pressure, especially during peak hours when the restaurant is full. There's no time to breathe, and it doesn't stop at 5 p.m. — we're working well past dinner service, sometimes until midnight, just to make sure everything is perfect for the next day" (Leonidas, 41-M).

"The stress is real, no question about it. In a small restaurant, you're expected to do so much more than just cook. There's always a sense of urgency, and sometimes it feels like there's no way to keep up" (Calliope, 30 -F).

Customer expectations

In this regard, customer expectations form the basis of the entire guest experience and are, therefore, paramount in the hospitality industry. An understanding of guest expectations as well as their fulfillment is critical to guest satisfaction and loyalty (Malik et al., 2020). In this study, customer expectations were also mainly referred to. Respondents used several terms under customer expectations themes such as customer demands (15 times), service quality (14 times), satisfaction (12 times), and social media (10 times). Here are some views about customer expectation's theme from the chefs' lens;

"The customer expectations keep on rising and seem to increase annually. It's not just about providing a great meal these days; there's an overall experience: how good the service is, what the atmosphere is like, even how the food is plated. It's constant pressure to meet those expectations. I hear a lot about customer demands, especially when it comes to special requests or dietary preferences. It can be quite a juggling act, trying to maintain the same standard of high quality across every dish while keeping all those diverse diets in mind. And social media has made the experience even more daunting, as one can share his or her 'happy' or 'unhappy' opinions about a product very quickly online, which means they could even make or break businesses. It is frustrating because you have to make an effort to sow into satisfying the people but no matter how much you can give, some will expect it to be more" (Ares, 49-M).

Another chef stated that,

"Over the years, customer expectations have changed a lot. Now, they are not just looking for a beautiful meal — the full meal experience is practically expected. Service quality is also a huge part of that, and

satisfaction is very much emphasized. And we are expected to follow every food trend with speed, being highly individualized in consideration of everything from allergies to tastes. Some days, it is really challenging to keep the standard of demands because of too many coming in simultaneously. Social media takes it a notch higher. People post their meals, and if something is not up to expectation, it can be on the internet in minutes. It has now become more about managing their perception of the experience rather than just focusing on the food alone” (Xenia, 44-F).

Menu creativity and innovation

Creativity is very important in cooking, as in other arts. In cooking, creativity is nothing else but artistic and innovative presentation of food that will put across the vision of each chef as an artist and would allow the creative chef to build an originality into the product. But in their raw and real meanings, innovation in food is to introduce something new and better into cooking - whether manifest as a shape, form, or meaning (Ekincek & Günay, 2023). This innovation then normally comes from seasoned chefs. Their theme seemed to iterate many times during the interview with the respondent's concerning creativity and innovation in menus. Here are some views about customer expectation's theme from the chefs' lens;

“There are many aspects of my job that one can say are difficult, but probably one of the biggest factors is definitely menu innovation and creativity. It really sounds exciting, but there sure has to be pressure with all this expectation of creating new dishes to challenge flavor and even presentation, but still have to be operationally feasible for the kitchen. So, at times, I find it difficult to reconcile how best to be creative with the types of time and resource factors we've got. Not forgetting that there should be consideration of our guests – new needs always seem to come up; of course, with next to always the "we want things we recognize and enjoy" factor. This in itself becomes quite a challenge. Think of all the exhaustion it would take just trying to come up with fresh ideas, all of which would involve a lot of mental energy. And then most of the time spent testing, trying them out, and adjusting becomes so tedious all the while” (Leonidas,41-M).

Another chef stated that,

“Menu innovation is definitely one of the hardest parts of the job. There's a lot of pressure to keep things fresh and exciting, but it's not just about being creative — it has to work in the kitchen, too. You can't just throw

together a new dish; it needs to be practical, consistent, and something the team can execute under pressure” (Poseidon, 43-M).

Team dynamics

Teaming is indeed the fulcrum for any restaurant operation indeed in the hospitality industry at large. A restaurant kitchen is a place where a team becomes the backbone to ensure very high quality for every dish. All chefs, sous and higher cooks, and servers are to be in full coordination during these busy hours to ensure that dishes are thoroughly cooked and served without delay (Lee et al., 2016). Even in the light of this, clear communications between the team members are most suitable for task identification, as well as for addressing problems related to service (Kim et al., 2022). This comes out well with the respondents in our study, where teams are popularly cited with common themes like diversity (7), communication (6), management skills (5), and insecurity (5). Here are some responses regarding team dynamics,

“Kitchen staff management is one of the major issues which comes across, especially when an inexperienced or slow worker finds himself in a large team. Assigning the best job to each son or daughter, without compromising quality and speed, has continued to be a juggling act” (Cicero, 34-M).

Another respondent shared his views,

“Cultural differences can influence how tasks are approached. Some team members prefer direct instructions, while others value more collaborative decision-making. Balancing these preferences can be tricky, especially under time pressure” (Cleopatra, 41-F).

Career advancements

Career advancement is a critical aspect of the culinary profession, serving as both a motivator and a challenge for those in the industry (Balazs, 2002). For many chefs, the kitchen is not just a workplace but a stepping stone toward achieving long-term goals, such as becoming an executive chef, opening their own restaurant, or gaining recognition in the form of awards and accolades (Bartholomew & Garey, 1996).

Building on the points discussed earlier, respondents often highlighted the theme of career advancement, frequently referencing concepts like recognition (mentioned 10 times), professional development (5 times), leadership (4 times), and compensation (4 times). For example, one chef stated that,

“Clearly, I am looking for any opportunity available in terms of learning new techniques or new cooking styles. Unfortunately, available courses are not always affordable, so I tend to depend on self-learning or on-the-job learning in food training” (Theodora, 32-F).

Another respondent stated,

“The greatest hindrance to my career advancement is the fact that an upward grade does not mean better compensation. More responsibilities come with a higher position, but pay does not always match the number of responsibilities” (Aphrodite, 31-F).

Ingredient sourcing

A major concern chefs highlight is the challenge of consistently sourcing high-quality ingredients. Striving for culinary excellence requires chefs to seek out the freshest and finest ingredients to enhance their dishes. However, they often face obstacles such as seasonal limitations, unreliable suppliers, and the scarcity of certain specialty items. These issues can compromise the consistency and quality of their dishes, ultimately affecting customer satisfaction (Murphy & Smith, 2009). Here are some views about the ingredient sourcing theme:

“It's a continuous effort to get things right, especially when it comes to seasonal ingredients. Some weeks, the tomatoes are ideal, and on others, they may hardly be useable. It's a tough one keeping me on my toes” (Athena, 35-F).

Another chef shared his view,

“Specialty items are even worse. I usually require some of these spices or rare ingredients for a menu; that is where the availability and cost can create a challenge” (Seneca, 40-M).

Technology and automation

The hospitality industry is often referred to as the "people's business" because it revolves around human interactions, with people serving others. However, this dynamic has been significantly influenced by advancements in technology and its integration into hospitality services, particularly within the restaurant sector. The rapid progression of automated technology is reshaping how service interactions occur between consumers and businesses. Among the various innovations—such as self-service kiosks, digital menus, chatbots, kitchen automation, virtual and augmented reality, and blockchain—robots have emerged as one of the newest additions (Yoon, 2023). These include front desk robots, servers, hosts, chefs, and baristas, all of which are now utilized by hospitality service providers, including restaurants. The adoption of robotic technologies in restaurants offers several advantages, including cost reduction, improved service quality and competitiveness, and streamlined operations (Seyitoğlu et al., 2024). Here are some voices about technology from chefs, “I worry that relying too much on technology might limit our ability to train the next generation of chefs in the hands-on skills that define our craft” (Ptolemy, 32-M). Another view is, “It may disturb the entire workflow when such malfunction due to breakdown has occurred, and many times, we cannot fix up those machines, and it might take a great deal of time to wait for repair” (Athena, 35-F).

Chapter 5

DISCUSSION AND CONCLUSION

5.1 Discussion

The current research study indicates some valuable findings regarding major challenges and dynamics in the restaurant industry. It is based on the qualitative analysis using Leximancer software. From twenty-six interview transcripts, the following seven relevant themes were highlighted: workload and stress, customer expectations, creativity and innovation in the menu, team dynamics, career advancement, ingredient sourcing, technology, and automation. These themes thus reflect the unique handling of the culinary profession and operational complexities.

Workload and Stress emerged as prominent themes that define the demanding nature of this industry. Chefs reported long working hours, high-pressure environments, and the physical and mental toll of meeting fast-paced operational demands. These findings are consistent with the literature, which highlighted the need to improve work-life balance and mental health support in the hospitality sector (Chiang et al., 2010; Costa et al., 2023; Sun et al., 2020).

Customer Expectations exposed the pressure chefs feel to meet increasingly diverse and sophisticated diner tastes. Chefs talked about how they had to tailor dishes to different tastes while trying to maintain consistency, which demonstrates the

importance of advanced customer feedback systems and adapted menu strategies (Malik et 2020; Soriano, 2002).

Menu Creativity and Innovation showed that the industry was dependent on chefs to balance risk and ability through creative practicality. Keeping the participants innovative while considering cost, ingredient availability, and feasibility, is a challenge that most frequently comes up with them. This finding emphasizes the need for an encouraging environment for experimentation and exchange (Lee et al., 2016; Mifli et al., 2017; Jin et al., 2016; Leong et al., 2020).

Team Dynamics became of essence in the experiences of the chefs and played a major role in communications, diversity, and leadership in kitchen teams. Good team work was also viewed as a precondition for operational efficacy and high standard service, echoing the wider discussions regarding the importance of soft skills in hospitality (Orlowski, 2016; Wellton & Lainpelto, 2021).

Career Advancement was, in fact, showing the aspirations of chefs and barriers against which these aspiring leaders stand, including little or no room for growth and recognition. It requires deliberate structuring of career development programs and proper compensation plans for retention and motivation of workforce across the industry (Wang et al., 2011).

Ingredient Sourcing was a recurring pain area, particularly with regard to the consistency, quality, and availability of ingredients. Issues to do with seasonality and supplier reliability were the ones most frequently mentioned, reflecting the apparent

tensions in managing supply chains for restaurants in an increasingly competitive environment (Lillywhite & Simonsen, 2014; Murphy & Smith, 2008).

Ultimately, Technology and Automation highlighted the dynamic of operations in restaurants. While chefs appreciated the potential benefits of such elements like cost reduction and better efficiency, the concerns regarding loss of traditional skills; high implementation cost; and impersonal nature of automated services were also articulated. Thus, this finds that there is a need for balanced integration of technology that enhances, rather than replaces human element in culinary arts (Fusté-Forné, 2021; Seyitoğlu et al., 2024; Sochacki et al., 2024).

5.2 Theoretical Implications

This study offers several theoretical implications. First, the use of Leximancer for carrying out qualitative analysis in the hospitality industry is step forward as it enables one to reap a lot of benefits that other traditional analytical tools do not have (Tseng et al., 2015; Sotiriadou et al., 2014). Moreover, that helps in distinguishing the high-level themes and their interconnections algorithmically. This method provides a deeper understanding of the data while increasing the rigor of thematic analysis, making it appropriate for researchers wishing to unravel complex relationships that qualitative data sets often constitute (Brochado et al., 2019; Saydam & Altun, 2023). Second, presenting an investigation that derives, not being active-dependent on survey data, from a direct experience of the subjects it interviews-chefs-in presenting their stories and subjecting them to the predictive engine of Leximancer to find the really-life challenges that these conceptualize within their professional environments. This explicitness is that it provides insight into the chefs' perspective and therefore presents it really clearly and finely in an honest, thorough account of their struggles and needs,

which marks out qualitative more strongly against the survey because it speaks much to subjectivity - this is subjective knowledge in objectifying such personal human experiences in an industry such as hospitality. Lastly, practical consequences for culinary and hospitality sectors have this research. The study defines key issues including workload, sourcing, and technology and, hence, provides actionable nuggets for industry players in improving working conditions for chefs and thus enhancing operational efficiencies. The nuggets will be, therefore, useful in designing tailor-made interventions like training programs, resource allocation schemes, and policies that care for innovation-focused milieu while addressing the well-being and professional development of the chefs.

5.3 Practical Implications

Kitchen management is of great importance for businesses to maintain service quality, ensure operational efficiency, and increase profitability. In this process, factors such as planning, personnel management, cost control, and resource management play a key role in ensuring effective management (Alzoubi et al., 2022). One of the most important recommendations for kitchen managers is to create a detailed business plan. In particular, conducting processes such as menu planning and order tracking in a clear systematic way reduces kitchen costs by reducing material waste and supply delays.

Another important issue for kitchen management is staff training. A trained kitchen team increases operational efficiency and improves service quality (Sachani et al., 2021). Especially in large kitchens, clear role distribution strengthens cooperation within the team and minimizes misunderstandings. Training programs support occupational safety standards as well as improve employees' skills. In addition, the literature also emphasizes the importance of flexible working arrangements to increase

the efficiency of kitchen management. For example, having more staff on duty during peak hours and reducing the workload of staff during off-peak hours allows the work to be carried out more efficiently (Aoun & Thaku, 2024).

Resource management and cost control are also critical for kitchen management. Effective management of resources increases sustainability in kitchens and keeps costs under control. One of the most basic practices to minimise food waste is careful inventory management and order planning. The regular inventory tracking should be carried out to prevent excess or insufficient stock, thus reducing unnecessary expenditures (Gładysz, 2020). Furthermore, recycle of surplus materials and the use of leftover food in different ways also prevent waste.

The chef profession is known as a physically and mentally exhausting job as well as a creative one. Intense work tempo, long working hours and instant pressures increase the stress levels of chefs and make workload management difficult. Stress management plays a critical role for chefs to work efficiently and establish a healthy work-life balance. The difficulty of chefs in managing their workloads negatively affects not only individual health but also work quality (Razzak et al., 2022). Therefore, balancing workload and effective stress management are vital for sustainable success in professional kitchens.

One of the strategies recommended in the literature on workload management is the clear distribution of tasks and delegation. In kitchens, it is an effective method to reduce stress for chefs to lighten their burden by sharing work with team members instead of taking all the responsibility alone (Laneyrie & Landry, 2023). In particular, sous chefs and other assistant staff taking responsibility for specific tasks relieves the

daily workload that chefs have to undertake and allows them to spend more time on creative and strategic tasks.

In addition, regular rest breaks and establishing a work-life balance are among the strategies recommended for chiefs to balance their workload. Long-term working conditions can lead to not only physical but also mental exhaustion. In addition, rest breaks not only provide physical relaxation, but also contribute to mental recovery. Rest breaks help chefs to work more creatively and efficiently by relieving themselves of stress (Ovias & Rao, 2020).

Another strategy that stands out in the literature in terms of stress management is physical activities and healthy living habits. Physical activities increase chefs' energy and endurance by reducing stress hormones. It is also stated that a healthy diet helps to maintain mental balance while improving physical health. Such habits have positive effects on both physical and mental health in the long term and enable chefs to cope more easily with the challenges in business life (O Halling et al., 2023).

Social support and psychological resilience skills are also important for stress management in the kitchen. In busy working environments such as kitchens, social support helps employees to relax and gain psychological resilience by sharing the difficulties they experience. In addition, it is among the recommended strategies for chefs to gain awareness about coping with stress and to receive training in this direction. The use of relaxation techniques such as meditation and breathing exercises in the workplace enables chefs to cope with stress, while at the same time increasing their work efficiency (Knol et al., 2021).

In brief, workload and stress management are of great importance for both the physical health and work productivity of chefs. In the literature, recommended strategies for chefs include job sharing, rest breaks, healthy living habits and social support. Effective implementation of these strategies allows chefs to balance their workload and create a healthier work environment under high stress. These strategies offer important individual and organisational contributions to long-term success in kitchen management.

Creating supportive working environments to increase the productivity and job satisfaction of chefs in professional kitchens is among the prominent issues in today's management approach. Since kitchens are known as a busy, fast-paced and stressful environment, it is of great importance to develop supportive practices in the work environment to alleviate the difficulties faced by chefs (Traynor et al., 2022). Especially long working hours and irregular shifts can lead to burnout. Consequently, revising working hours and increasing rest periods have a positive impact on employee health (Shifrin & Michel, 2022).

It is emphasized that communication is also an important factor in providing a supportive work environment. Especially, open, two-way communication between executive chefs and employees contributes to solving the problems encountered in the kitchen quickly and efficiently. In this way, employees can easily voice their concerns and feel valued (DiPrete et al., 2023). It has been observed that a good communication culture increases employee loyalty and job satisfaction. In addition, it is frequently emphasised in the literature that colleague support and team cooperation are effective in reducing job stress. It has been observed that in kitchen environments where team

members support each other, employees manage work stress more easily and feel more confidence (Kang et al., 2020).

Training and development opportunities also play an important role in creating a supportive kitchen environment. Training opportunities allow employees to develop the technical and managerial skills they will need in the kitchen and thus increase their self-confidence. Training provided in professional kitchens is effective in increasing employee motivation and commitment (Ko & Lu, 2021). Such supportive opportunities help chefs to make long-term career plans and be happier in their jobs.

Taking occupational health and safety measures in the kitchen is one of the basic components of a supportive working environment. The prevention of occupational accidents and the creation of an ergonomic workplace are shown as factors that directly affect the performance of employees. For example, regular maintenance of equipment and ergonomic designs reduce the physical strain on chefs and create a healthier work environment (Kamala et al., 2024). When a safe and comfortable working environment is provided, the job satisfaction of the supervisors increases as well as their productivity.

In general, creating a supportive working environment for supervisors is possible by combining factors such as flexible working arrangements, open communication, training opportunities, safe working conditions. It is widely supported in the literature that these elements increase employee satisfaction, reduce work stress and ensure long-term success. A supportive kitchen environment not only increases the happiness of chefs, but also contributes positively to the productivity of the organisation.

The chef profession is known as a high-stress profession with intense work tempo, creative expectations and long working hours. The intense pressure encountered in the kitchen, time constraints and high-quality standards offered to customers make it difficult for chefs to cope with stress. In particular, measures to protect physical and mental health are of great importance in terms of stress management. The stress decreases work performance and negatively affects the health status of employees, and this situation reduces employee motivation and business productivity in the long term (Pandey, 2020). For this reason, various methods that chefs can apply to reduce stress arising from their profession are suggested.

One of the most effective strategies to reduce stress is regular physical activities and exercise. Chefs' regular participation in physical activities, even after a busy work schedule, led to a significant reduction in stress levels (Ovias & Rao, 2020). In particular, activities such as yoga, walking and breathing exercises are known to reduce hormones that cause stress in the body and provide peace of mind. Such activities help chefs to relax outside of work, while at the same time making them more resilient to work stress.

Another important strategy is the creation of social support systems to cope with stress. Establishing social relationships with colleagues, family members or friends helps individuals to share the stress they experience and relax (Dagsland et al., 2024). In particular, colleague support is an important factor that facilitates chiefs to overcome the difficulties they experience in the work environment. It has been observed that social support has a significant effect not only in coping with job stress but also in increasing job satisfaction.

Mindfulness and meditation techniques are among the effective stress management strategies recommended for chefs. Mindfulness-based stress reduction techniques allow individuals to better manage their thoughts and emotions and thus take stress under control (Parsons et al., 2024). Conducting short meditation sessions on a daily basis helps chefs to reduce their stress levels, especially during busy working periods. Such practices contribute positively to general mental health by allowing individuals to get away from instant stress factors.

Long working hours and excessive workload can negatively affect both the physical and psychological health of chefs. Organizing flexible working hours for chefs to achieve work-life balance is an effective method to reduce stress (Sun et al., 2023). Rest and time for oneself help individuals to gather energy outside of work and return to work in a more motivated way.

It is also recommended that chefs adopt healthy eating habits and regular sleep are among the other methods recommended for stress management. Strengthening their immune systems by following a healthy diet and adopting regular sleep habits contribute to chefs to be more resilient against stress factors in the workplace.

In conclusion, strategies for chefs to reduce stress in professional kitchens include physical activities, social support, mindfulness techniques, work-life balance and healthy living habits. Effective implementation of these strategies allows chefs to increase job satisfaction and improve their long-term job performance by reducing stress levels. These strategies are important not only for individual well-being, but also for improving the overall efficiency of the kitchen environment.

The role of chefs in kitchen management is becoming increasingly important. Especially as the gastronomy sector globalizes and customer expectations increase, it is seen that kitchen leaders need to continuously improve their skills (Mrusek et al., 2021). Training and development are considered as a critical element that positively affects chefs' motivation and job satisfaction as well as increasing their professional competencies (Marinakou & Giousmpasoglou, 2022).

In terms of technical skills, chefs working in professional kitchens need to have a wide range of knowledge from modern cooking techniques to hygiene standards. In particular, topics that require technical knowledge such as innovative cooking techniques and the use of equipment in the kitchen are one of the principal points of chefs' training programmes (Batat, 2020).

The training and development are also important in terms of following the innovations in the sector. Since today's gastronomy trends and customer expectations change rapidly, it is argued that chefs need to renew themselves (Marinakou & Giousmpasoglou, 2022). In this context, flexible training opportunities such as workshops, seminars and online courses have become important tools in the development processes of chefs.

Studies on the training of chefs show that their professional progression ensures the sustainability of not only their skills but also their motivation within the sector. Chefs not only support their own development through training, but also take responsibility for developing their employees (Gray & Farrel, 2021).

As a result, the literature reveals that the training and development processes of chefs play a critical role in their success in the sector. In this context, leadership development of chefs, as well as their technical skills training, stands out as an important area that should not be neglected.

In the gastronomy world, the continuous skill development processes of chefs directly affect their professional success as well as the efficiency of kitchen teams and customer satisfaction (Duarte et al., 2022). Continuous skill development is necessary to keep up with changing culinary trends, new cooking techniques and current hygiene standards. It is also stated that chefs need to blend traditional culinary knowledge with innovative approaches to meet evolving customer expectations (Vu et al., 2024).

In terms of personal and managerial competencies, the literature frequently emphasises the importance of chefs developing skills such as communication, crisis management and team leadership. These skills are considered critical for them to fulfil their duties effectively, especially in stressful kitchen environments (Min & Hong, 2021). The development of leadership skills contributes to chefs' ability to direct team members more effectively and to make quick and correct decisions in times of crisis (Firth, 2022). Research shows that chefs who receive leadership training establish healthier communication with kitchen staff, increase kitchen efficiency and strengthen loyalty to the business (Traynor et al., 2022).

It is also stated that continuous skills development programmes do not only provide technical knowledge for chefs, but also increase their creativity and innovation capacities. In addition, digital education tools provide flexibility to the training

processes of chefs, enabling them to continue their development without time and space limitations (Woodhouse & Rodgers, 2024).

Finally, the importance of continuing education in the professional development of chefs in terms of creating a permanent workforce, ensuring harmony within the kitchen and improving the customer experience is often emphasised. Continuing education programmes enable chefs to gain a stronger position within the business and build a long-term career (Stofkova & Sukalova, 2020). In this situation, increasing not only the technical knowledge and skills of chefs, but also their capacity to follow and implement changing standards in the sector facilitates their sustainable success in the field of gastronomy (Bressan e al., 2023).

The gastronomy sector has an intense, stressful and physically demanding working environment. Chefs need to develop resilience as they work under both physical fatigue and high pressure. Increasing resilience is considered in the literature as an important factor that supports chefs' long-term professional success and reduces the risk of emotional exhaustion (Vu et al., 2023).

Stress management is recognised as one of the key elements of increasing resilience. Intense kitchen tempo, fast decision-making under pressure and the necessity to ensure customer satisfaction increase the stress levels of chefs. The stress management strategies such as mindfulness techniques and breathing exercises are seen as an effective tool to increase chefs' mental and emotional resilience (Lavendol, 2024). It is also stated that such techniques reduce the risk of anxiety and depression.

Mental resilience, on the other hand, enables chefs to remain positive and develop problem-solving skills in difficult situations they face in the kitchen. Chefs' becoming more resilient in the face of challenging situations enables them to establish healthy communication with their colleagues and team members (Burrow et al., 2024). In particular, mental resilience training programmes that help chefs maintain their composure in stressful situations increase their motivation and work performance (Esterhuyse & Theron, 2022).

Physical resilience is also important for chefs to withstand long working hours and intense physical demands. Challenges such as long standing, carrying heavy equipment and the need to move quickly are factors that test the physical endurance of chefs (Nadai & Gonon, 2021). Regular exercise, stretching and a healthy diet are recommended to increase physical endurance.

Motivation is another critical factor in increasing resilience. Chefs' feeling dedicated to their profession and working with a sense of purpose increase their resilience (Hilton, 2020). In particular, motivation for personal development and achieving professional goals enables chefs to cope with the challenges they face more easily, for example, reward systems. Such motivational strategies also increase job satisfaction and reduce the feeling of burnout.

As a result, that increasing resilience is an important factor that supports both the work productivity and long-term professional success of chefs. In addition to psychological and physical support strategies to increase resilience, strengthening chefs' motivational resources contributes to their sustainable career in the sector.

Sustainability has become an increasingly important issue in the gastronomy sector. Sustainability in the culinary profession includes practices such as reducing food waste, minimising environmental impact and using local, seasonal ingredients (Filimonau et al., 2023). Sustainable cookery practices are addressed especially in terms of protecting natural resources and developing environmentally friendly culinary habits (Didinger & Thompson, 2020).

The first important dimension of sustainability practices is optimising resource use and reducing kitchen waste. Strategies to reduce food waste in kitchens are based on a 'nose-to-tail' approach (using all ingredients) and 'zero waste' targets (Amundson & Kleijnen, 2020). Chefs should be aware of waste reduction and produce new recipes by utilising waste materials with innovative techniques (Rios et al., 2020). In addition, kitchen planning and portion control are also important practices to minimise food waste (Hennchen, 2021).

The use of local and seasonal ingredients is another important dimension of sustainability practices in the cookery profession. The preference for local products contributes to environmental sustainability and also helps restaurants create a sustainable structure in the supply chain (Sarkis, 2020). Such approaches are recognised as important steps towards creating a sustainable culinary culture in the culinary profession.

Another important area in sustainable kitchen practices is energy and water saving. The high use of energy and water, especially in restaurant kitchens, makes savings in these areas even more important (Subramanian et al., 2021). To increase energy efficiency, strategies such as replacing kitchen appliances with energy-efficient ones

and preventing unnecessary energy use are recommended. Regular maintenance of restaurant kitchens to optimise energy consumption increases efficiency and reduces operating costs (Iqbal & Kim, 2022). Similarly, appropriate to reduce water, performs such as selecting utilizations that decrease water use and recycling water are optional.

Education and awareness activities also play a critical role for sustainability in the cookery profession. In particular, trainings on sustainable menu planning, waste management and reducing environmental impacts contribute to cooks to implement environmentally friendly practices more effectively. It emphasises that the inclusion of sustainable cuisine trainings in cookery schools and vocational trainings is an important step to spread the culture of sustainability to the whole sector (Kapelari et al., 2020).

In conclusion, the literature reveals that sustainability practices in the culinary profession not only provide environmental benefits but also offer economic advantages. Practices such as the use of sustainable materials, waste minimization, energy and water conservation both increase efficiency and reduce negative impacts on the environment in kitchens. In this context, ensuring sustainability in the culinary profession is seen as a critical step in terms of long-term success and environmental responsibility in the sector.

Beyond the kitchens, chefs have the potential to raise awareness in the wider society in promoting sustainability practices. The role of chefs in promoting sustainability in terms of developing environmentally friendly culinary practices, bringing sustainable eating habits to society, and positioning them as leaders who create change in the industry (Bertoldo et al., 2022).

One of the strategies used by chefs to promote sustainability is to use local and seasonal products in menus. Ensuring sustainability in the supply chain by collaborating with local producers allows chefs to reduce their carbon footprint and support the regional economy (Stein & Santini, 2022). The use of local products also helps chefs to renew their menus in accordance with the seasons and offer customers a dining experience that reflects the cycle of nature, while meals prepared with local ingredients increase customer satisfaction, they also reinforce a sense of responsibility towards nature (Derek, 2021).

Chefs also lead the way in promoting sustainability by reducing food waste in kitchens. Minimizing food waste involves active planning in the kitchen and to this end. Chefs develop new recipes using the whole ingredients, thus significantly reducing food waste. Such anti-waste strategies not only increase environmental sustainability but also reduce the costs of restaurants (Dyen et al., 2021).

Another role of chefs in promoting sustainability is to lead in education and awareness raising. Chefs are in a position to communicate directly with their customers, introduce environmentally friendly culinary habits to the society and raise awareness (Cifelli et al., 2020). In particular, chefs working in environmentally sensitive restaurants underline the concept of sustainable cuisine by explaining the processes they follow while preparing meals and their choice of ingredients (Şahin & Demir, 2023).

In addition, it is seen that chefs spread sustainability awareness to large masses by using social media platforms. Through social media, chefs reach a wide audience by sharing the sustainability strategies they implement in their kitchens, their collaborations with local producers, and environmentally friendly recipes (Roy et al.,

2024). In particular, chefs' messages supporting sustainability increase environmental awareness in society and create a wider social impact.

In conclusion, the chefs play an important role in promoting sustainability and spreading environmentally friendly culinary culture. Chefs create a positive impact in the kitchen and society through sustainability strategies such as using local and seasonal ingredients, reducing food waste and raising social awareness. In this sense, the leadership roles of chefs in sustainability contribute to the gastronomy industry to achieve a more environmentally friendly structure in the future.

5.4 Gaps in Existing Literature

Literature reviews on the challenges faced by chefs in the tourism and hospitality sector reveal that the dynamic nature of the sector brings multifaceted pressures to this occupational group. Firstly, the need for chefs to meet ever-changing customer expectations is one of the biggest challenges inherent in the job. The cultural diversity and increasing gastronomic awareness of customers creates the necessity to prepare menus that are innovative and adaptable to regional differences (Park et al., 2023). At the same time, the need to use sustainable ingredients and utilise local resources forces chefs to develop greater supply chain management knowledge and environmental awareness (Gössling & Hall, 2021). These dynamics require a balanced development of both creative and technical skills, as chefs are expected to walk the fine line between their increasingly complex managerial responsibilities and the culinary arts (Madeira et al., 2022).

On the other hand, the fast pace of the tourism sector and changes in demand require chefs to adapt to long working hours and irregular shifts. This becomes more

pronounced especially during the high season and negatively affects work-life balance and increases stress levels (Magrizos et al., 2023). Furthermore, one of the challenges chefs' faces is that people management skills are becoming increasingly important. The fact that kitchen teams come from various ethnic and cultural backgrounds makes it necessary to prioritise social competences such as cultural sensitivities and communication skills in team management (Situmorang & Japutra, 2024). Especially the changing expectations of the younger generation of employees require differences in leadership styles; motivation and increasing team loyalty are at the centre of leadership skills (Neves, 2024).

Technological innovations and digitalisation process also affect the daily operations of chefs. In particular, the increase in kitchen management software enables chefs to be more effective in financial and operational processes, while receiving customer feedback more instantly through digital platforms improves quality control processes (Nebaba et al., 2024). However, this integration of technology also requires chefs to develop digital literacy skills. In this context, chefs should have the competence to use both traditional culinary knowledge and modern management tools (Bressan et al., 2023). Finally, with the COVID-19 pandemic, chefs also face new challenges in terms of hygiene standards, safety protocols and flexible business models (Mandal et al., 2024). The pandemic process has brought with it both the need to protect staff health and the responsibility to restore customer trust.

It is clear that chefs working in the tourism and hospitality sector should have not only technical knowledge but also management, leadership, customer relations and digital skills. The literature reveals that chefs have to undertake multifaceted responsibilities and that these pressures challenge them physically, mentally and emotionally (Ashton

et al., 2024). Considering the complex structure of the tourism sector, it is understood that chefs need a multifaceted professional development process in order to sustain their success.

Although there is an extensive literature on the professional challenges faced by chefs in the gastronomy world, some aspects of these challenges are still under-explored. In particular, research on stress management, mental health and work-life balance remains limited. Chefs are often at risk of burnout due to long working hours, intense work environments and high expectations; however, mental health problems and their impact on professional life have not been adequately addressed (Lippert & Rosing, 2020).

Another unexplored area among professional challenges is the challenges in the creative processes of chefs. Although creativity is an important skill in the chef profession, keeping creativity at a constant level and being innovative puts intense pressure on chefs. This deficiency suggests that the difficulties experienced by chefs in their creative processes and their methods of coping with these difficulties should be addressed more comprehensively.

In addition, there is insufficient research in the literature on the professional challenges and gender discrimination faced by female chefs in the gastronomy sector. Although existing studies reveal that female chefs face more gender discrimination and prejudice in the sector than their male counterparts, it is seen that more case studies and in-depth analyses are needed in this regard (Temizkan & Uslu, 2023). Research on these gender-based challenges can shed light on the experiences of female chefs in the sector and contribute to a more egalitarian structure of the sector.

In addition, the challenges faced by chefs in social media and digital platforms draw attention as a relatively new field in the literature. Especially in recent years, as social media has become an important tool for chefs to develop their careers, chefs face new professional challenges such as protecting their digital reputation, responding to online criticism, and maintaining their presence on social media (Dossena et al., 2021). However, studies in this area are limited and chefs' strategies for coping with their professional challenges on digital platforms need to be further investigated.

Finally, the limitations of chefs' professional development and career progression opportunities also stand out as an unexplored area in the literature. Since chefs generally lead a busy working life, they do not have enough access to professional training, seminars and personal development opportunities. In the literature, not enough studies have been conducted on the impact of this situation on the professional progress and career goals of chefs (Elbasha & Baruch, 2022). Research in this area may reveal the necessity of structural supports for the career development of chefs.

In general, although some topics related to the professional challenges of chefs have been examined in detail in the existing literature, there are gaps in the literature on topics such as mental health, creativity, gender discrimination, digital platforms and career development opportunities (Tokbaeva & Achtenhagen, 2023). Addressing unexplored issues in these areas can contribute to a better understanding and support of chefs' professional lives.

Although studies on the hospitality sector provide important information, especially in the fields of tourism and customer satisfaction, research deficiencies in some critical issues in the sector draw attention. Firstly, in line with the changes that emerged after

the pandemic, research on the psychological resilience and job satisfaction of employees in the hospitality sector is quite limited. With the pandemic radically changing the employment conditions in the sector, the difficulties experienced by employees in issues such as work motivation, burnout and professional commitment need to be addressed (Panisoara et al., 2020). The neglect of this area in the existing literature makes it difficult to develop effective strategies on how to ensure employee well-being.

In addition, there is a need for more comprehensive studies on the impact of digitalization on the hospitality industry. While digitalization has the potential to enhance the customer experience and optimise operational processes, it also brings new challenges to the industry. Studies on the use and impact of digital services can enable the industry to make more informed decisions toward digitalisation in the modernization process.

There are also serious gaps in studies on sustainability practices in the hospitality sector. Existing studies on sustainability mostly focus on large-scale hotel chains and restaurants; however, little is known about the sustainability efforts and barriers faced by small businesses (Barbosa & Ayarza, 2020). Since small businesses often have limited financial and human resources for sustainability practices, comprehensive research on these businesses can contribute to improving the overall sustainability performance of the sector. At the same time, cultural and regional differences in the sustainability approaches of businesses in different regions are also one of the areas that have not yet been sufficiently researched (Canestrino et al., 2020).

More research is needed on the impact of cultural differences on customer expectations in order to gain a deeper understanding of customer experience in the hospitality industry. While customer experience is often examined through general consumer behaviour, there are limited studies that address the impact of cultural factors on customer satisfaction and expectations (Ali et al., 2021). Research on the impact of cultural differences on hospitality services can help the industry to improve service quality globally and develop more effective marketing strategies.

Finally, more research is needed on crisis management and resilience strategies in the hospitality industry. The pandemic process has revealed the importance of skills to cope with unexpected crises in the sector. The lack of research on crisis management and resilience is insufficient to provide strategic guidance to better prepare the sector for possible future crisis situations.

In general, while research on the hospitality industry focuses on some key issues, there are significant gaps in the literature in areas such as employee resilience, digitalisation, sustainability, cultural differences and crisis management (Sharma et al., 2024). New studies in these areas will contribute to the development of more effective solutions to the rapidly changing needs of the hospitality industry.

5.5 Limitations and Further Research Directions

This piece does not fail to provide important insights into the challenges that chefs face in the hospitality industry, but limitation must also be hypersensitive. First, it showed that it was conducted in a particular geographical and cultural context, so this could affect efforts to generalize findings to other areas or other culinary environments. Furthermore, it opens room for future studies to cover more ground through which

diverse cultural as well as geographical contexts are included, thus providing a more comprehensive understanding-of-how chefs struggle with their profession globally.

Secondly, the study primarily used qualitative data, i.e., it was based on personalized semi-structured interviews as a qualitative research tool, thus rich in details. Yet the findings studied fail to encompass the broadest range of experiences in industry: Other quantitative approaches like large-scale surveys may complement the findings by validating identified themes and assessing their reach and prevalence across a wider sample of chefs.

Third, because it is a snapshot of what is taking place at this point in time, without considering variations over time as major trends affect an industry or technological developments. A study that is longitudinal could provide the longitudinal insights into the changing nature of the culinary profession, with an eye on how challenges and priorities develop and change over time.

Fourth, while Leximancer software has permitted very sophisticated thematic analyses, the results are thus biased from the input data set and predetermined parameters. Future studies could consider comparing Leximancer with other qualitative analysis tools to test the robustness and consistency of the thematic findings. Emerging issues such as sustainability and changing consumer preferences will further illuminate the growing complexity within both the culinary and hospitality communities.

Fifth, one of the limitations of this study is the gender imbalance among the participants. The majority of the chefs interviewed were male, which may have

influenced the findings and limited the diversity of perspectives, particularly regarding gender-specific challenges in the hospitality sector. Female chefs were either underrepresented or not included due to accessibility constraints during data collection. As gender dynamics can play a significant role in workplace experiences, future research should aim to include female chefs to gain a more comprehensive understanding of the challenges faced by all professionals in the culinary industry. Including female voices would not only enrich the current findings but also help highlight any gender-specific issues that may require targeted interventions.

Future research could explore the ripple effects of the challenges faced by chefs on other key stakeholders within the hospitality ecosystem, such as restaurant managers, customers, and policymakers. Understanding how issues like workload, ingredient sourcing, and team dynamics influence managerial decisions, customer satisfaction, and policy development could provide a more holistic view of the sector. A multi-perspective approach involving interviews or focus groups with various stakeholders would enrich the findings and help design more effective strategies for improving working conditions and service quality in the hospitality industry.

The perspectives from chefs were the only consideration in this kind of research. Future research should also include inputs from other important members of the hospitality ecosystem, such as restaurant owners, managers, and diners. This would bring about a multi-stakeholder understanding of the actions of operational challenges against customer satisfaction. Last but not least, with the evolution of technology uptake in the restaurant industry, future case studies on one specific technology adoption in technology in restaurants for example robotics or AI-based inventory

systems could deep-dive into bring better insights to understand the impacts-positive or negative-on chefs with kitchen dynamics.

REFERENCES

- Abbas, F. (2024). Impact of job stress on employees' performance and motivation in fast-food restaurants.
- Abdullah, H., Julai, C. S., & Idris, A. K. M. (2022). Service quality as predictors to customer satisfaction at Korean restaurants in Kuching Sarawak. *Asian Journal of Research in Business and Management*, 4(4), 56-66.
- Ah, A., Uza, U. F., & Mn, N. (2022). The influence of role conflict, supervisor support and physical work environment on job burnout among hotel chefs in Malaysia. *Advances in Business Research International Journal*, 8(3), 45-55.
- Ahmad Nizam, S. N. E. S., Mohamad Saber, J., Salim, A., Zaidi, N. A., & Bahari, K. A. (2024). Examining the impact of job demand resource theory variables on burnout among hotel employees in Kuala Lumpur. *Journal of Tourism, Hospitality and Culinary Arts*, 16(1), 489-513.
- Akinwale, O. E., & George, O. J. (2020). Work environment and job satisfaction among nurses in government tertiary hospitals in Nigeria. *Rajagiri Management Journal*, 14(1), 71-92.
- AL, Z. S. A. H. S., Agarwal, A., Naidu, V. R., & Reales, L. (2021). Reserve your table: A mobile application for reservations in a restaurant. *Journal of Student Research*.

Alastair, M. M. (2022). *Hospitality And Travel Marketing*. Routledge.

Albertsen, L., Wiedmann, K. P., & Schmidt, S. (2020). The impact of innovation-related perception on consumer acceptance of food innovations—Development of an integrated framework of the consumer acceptance process. *Food Quality and Preference*, 84, 103958.

Albors Garrigos, J., Haddaji, M., Garcia Segovia, P., & Peiro Signes, A. (2020). Gender differences in the evolution of haute cuisine chef' s career. *Journal of Culinary Science & Technology*, 18(6), 439-468.

Ali, B. J., Gardi, B., Othman, B. J., Ahmed, S. A., Ismael, N. B., Hamza, P. A., ... & Anwar, G. (2021). Hotel service quality: The impact of service quality on customer satisfaction in hospitality. *International Journal of Engineering, Business and Management*, 5(3), 14-28.

Altarriba Bertran, F., Duval, J., Márquez Segura, E., Turmo Vidal, L., Chisik, Y., Juanet Casulleras, M., ... & Wilde, D. (2020, July). Chasing play potentials in food culture: Learning from traditions to inspire future human-food interaction design. In *Proceedings of the 2020 ACM Designing Interactive Systems Conference* (pp. 979-991).

Altinay, L., & Paraskevas, A. (2009). *Planning research in hospitality & tourism*. Routledge.

- Alzoubi, H. M., Ghazal, T. M., Sahawneh, N., & Al-kassem, A. H. (2022). Fuzzy assisted human resource management for supply chain management issues. *Annals of Operations Research*.
- Amerian, S. (2020). Taking the Heat: Women Chefs and Gender Inequality in the Professional Kitchen by Deborah A. Harris and Patti Giuffre. *Enterprise & Society*, 21(1), 309-311.
- Ampofo, E. T. (2021). Do job satisfaction and work engagement mediate the effects of psychological contract breach and abusive supervision on hotel employees' life satisfaction?. *Journal of Hospitality Marketing & Management*, 30(3), 282-304.
- Aoun, K., & Thakur, N. (2024). Seasonal Shifts: Leadership Decisions and Their Consequences on Kalmar's Hospitality Workforce.
- Arasli, H., Furunes, T., Jafari, K., Saydam, M. B., & Degirmencioglu, Z. (2020). Hearing the voices of wingless angels: A critical content analysis of nurses' COVID-19 experiences. *International Journal of Environmental Research and Public Health*, 17(22), 8484.
- Arasli, H., Saydam, M. B., Gunay, T., & Jafari, K. (2021). Key attributes of Muslim-friendly hotels' service quality: voices from booking. com. *Journal of Islamic Marketing*, 14(1), 106-127.

- Arias, L. (2023). Automation for All? A Historical Analysis of the Automation of the Food Service Industry. *Undergraduate History Journal at Illinois*, 2(2), 5-37.
- Ariza-Montes, A., Arjona-Fuentes, J. M., Han, H., & Law, R. (2018). The price of success: A study on chefs' subjective well-being, job satisfaction, and human values. *International Journal of Hospitality Management*, 69, 84-93.
- Ashton, M., Sezerel, H., Filimonau, V., & Gunay, S. (2024). Gender dynamics and sustainable practices: exploring food waste management among female chefs in the hospitality industry. *Journal of Sustainable Tourism*, 1-26.
- Astuti, E., Harsono, I., Uhai, S., Muthmainah, H. N., & Vandika, A. Y. (2024). Application of artificial intelligence technology in customer service in the hospitality industry in Indonesia: A literature review on improving efficiency and user experience. *Sciences Du Nord Nature Science and Technology*, 1(01), 28-36.
- Atanasiu, R. (2021). *Critical Thinking for Managers*. Cham: Springer International Publishing.
- Babayev, F., & Balajayeva, T. (2023). Ways of increasing the competitiveness of food industry enterprises. *International Journal of Innovative Technologies in Economy*, (4 (44)).
- Balazs, K. (2002). Take one entrepreneur: the recipe for success of France's great chefs. *European Management Journal*, 20(3), 247-259.

- Barakazi, M. (2022). The use of Robotics in the Kitchens of the Future: The example of Moley Robotics'. *Journal of Tourism & Gastronomy Studies*, 10(2), 895-905.
- Barbosa, M., Castañeda-Ayarza, J. A., & Ferreira, D. H. L. (2020). Sustainable strategic management (GES): Sustainability in small business. *Journal of cleaner production*, 258, 120880.
- Bartholomew, P. S., & Garey, J. G. (1996). An analysis of determinants of career success for elite female executive chefs. *Hospitality Research Journal*, 20(2), 125-135.
- Bartolozzi, G., Palma, G., & Rizzo, A. (2024). Energy saving starts in the kitchen. *Energy and Buildings*, 322, 114726.
- Basle, N. (2023). Evaluating gastronomic destination competitiveness through upscale gastronomy. *Sustainability*, 15(14), 11157.
- Batat, W. (2020). Pillars of sustainable food experiences in the luxury gastronomy sector: A qualitative exploration of Michelin-starred chefs' motivations. *Journal of Retailing and Consumer Services*, 57, 102255.
- Batat, W. (2021). How Michelin-starred chefs are being transformed into social bricoleurs? An online qualitative study of luxury foodservice during the pandemic crisis. *Journal of Service Management*, 32(1), 87-99.

- Baydan, D., Garipova, L., Savkina, R., & Rodionova, S. (2024). Maksim Rebezov, Mars Khayrullin, Bahytkul Assenova, Smolnikova Farida. *Potravinarstvo Slovak Journal of Food Sciences*, 18, 523-546.
- Bertoldo, J., Hsu, R., Reid, T., Righter, A., & Wolfson, J. A. (2022). Attitudes and beliefs about how chefs can promote nutrition and sustainable food systems among students at a US culinary school. *Public health nutrition*, 25(2), 498-510.
- Berybe, G. A., Umul, D. S., & Dae, Y. E. I. (2023). Food Safety Assurance: Effect of Hygiene Sanitation practices on Quality Service and Tourist Satisfaction in Culinary Tourism Area of Kampung Ujung, Labuan Bajo. *MSJ: Majority Science Journal*, 1(3), 140-153.
- Bisoi, S., Roy, M., & Samal, A. (2020). Impact of artificial intelligence in the hospitality industry. *International Journal of Advanced Science and Technology*, 29(5), 4265-4276.
- Bisui, R., Uniyal, M., & Sharma, N. (2021). A study on the association between customer satisfaction and customer loyalty in the Inhouse restaurant in selected hotels of Ludhiana City. *Revista Geintec-Gestao Inovacao E Tecnologias*, 11(3), 518-537.
- Black, L. (2022). *Culinary Employees' Lived Experiences of Abusive Leadership and Perspectives of Its Impact on Individual and Organizational Performance* (Doctoral dissertation, Walden University).

- Bloisi, W. (2021). Workplace bullying and negative behaviour in the hospitality industry. *Special Topics and Particular Occupations, Professions and Sectors*, 501-528.
- Borchgrevink, C. P., Nelson, R. H., & Ruf, J. L. (1998). It is a Chef's Life. *Journal of Hospitality & Tourism Education*, 10(2), 13-18.
- Bourdain, A. (2010). *Medium raw: A bloody valentine to the world of food and the people who cook*. A&C Black.
- Bowen, T. (2020). Work-integrated learning placements and remote working: Experiential learning online. *International Journal of Work-Integrated Learning*, 21(4), 377-386.
- Bryant, M. (2006). Talking about change: Understanding employee responses through qualitative research. *Management Decision*, 44(2), 246-258.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S., & Tiberius, V. (2021). The role of business model innovation in the hospitality industry during the COVID-19 crisis. *International Journal of Hospitality Management*, 92, 102723.
- Bressan, A., Duarte Alonso, A., Kim Vu, O. T., Tran, L. N., & Tran, T. D. (2023). The importance of knowledge management in gastronomy: a chef's future career, the

next generations of chefs and trends. *International Journal of Contemporary Hospitality Management*, 35(3), 1087-1108.

Bucak, T., & Yiğit, S. (2021). The future of the chef occupation and the food and beverage sector after the COVID-19 outbreak: Opinions of Turkish chefs. *International Journal of Hospitality Management*, 92, 102682.

Burrow, R., Scott, R., & Courpasson, D. (2024). Bloody suffering and durability: How chefs forge embodied identities in elite kitchens. *human relations*, 77(1), 111-139.

Camilleri, M. A. (2021). Sustainable production and consumption of food. Mise-en-place circular economy policies and waste management practices in tourism cities. *Sustainability*, 13(17), 9986.

Campione, R. (2021). How digitalization is revolutionizing relationships between customers and service providers in the hospitality industry: Personalization and gamification. *International Journal of Information, Business and Management*, 13(1), 35-52.

Çanakçı, T., & Birdir, S. S. (2020). Dört ve beş yıldızlı otel mutfak şeflerinin işten ayrılma nedenleri. *İşletme Araştırmaları Dergisi*, 12(2), 1176-1191.81-1101.

Canestrino, R., Ćwiklicki, M., Magliocca, P., & Pawełek, B. (2020). Understanding social entrepreneurship: A cultural perspective in business research. *Journal of Business Research*, 110, 132-143.

- Caporaso, N. (2021). The impact of molecular gastronomy within the food science community. In *Gastronomy and Food Science* (pp. 1-18). Academic Press.
- Carpentieri, S., Soltanipour, F., Ferrari, G., Pataro, G., & Donsì, F. (2021). Emerging green techniques for the extraction of antioxidants from agri-food by-products as promising ingredients for the food industry. *Antioxidants*, 10(9), 1417.
- Cash, S. B., Alhabash, S., Fretes, G., & Ma, M. (2022). Food, beverages and social media: trends and tools for economic research. In *A Modern Guide to Food Economics* (pp. 297-326). Edward Elgar Publishing.
- Cassel, S. H., Thulemark, M., & Duncan, T. (2018). Career paths and mobility in the Swedish hospitality sector. *Tourism Geographies*, 20(1), 29-48.
- Cerasa, A., Fabbriatore, C., Ferraro, G., Pozzulo, R., Martino, I., & Liuzza, M. T. (2020). Work-related stress among chefs: a predictive model of health complaints. *Frontiers in Public Health*, 8, 68.
- Cernat, D. (2022). How social media influences our food consumption.
- Chaturvedi, P., Kulshreshtha, K., Tripathi, V., & Agnihotri, D. (2024). Investigating the impact of restaurants' sustainable practices on consumers' satisfaction and revisit intentions: a study on leading green restaurants. *Asia-Pacific Journal of Business Administration*, 16(1), 41-62.

- Chauhan, Y. (2023). Culinary Creativity Unleashed: A Review of Innovative Techniques in Food Gastronomy. *International Journal for Multidimensional Research Perspectives*, 1(2), 37-46.
- Chen, Y., Hu, Y., Zhou, S., & Yang, S. (2023). Investigating the determinants of performance of artificial intelligence adoption in hospitality industry during COVID-19. *International Journal of Contemporary Hospitality Management*, 35(8), 2868-2889.
- Chevallier-Chantepie, A., & Batt, P. J. (2021). Sustainable purchasing of fresh food by restaurants and cafes in France. *Agronomy*, 11(11), 2357.
- Chuang, N. K., Yin, D., & Dellmann-Jenkins, M. (2009). Intrinsic and extrinsic factors impacting casino hotel chefs' job satisfaction. *International Journal of Contemporary Hospitality Management*, 21(3), 323-340.
- Cifelli, B., Kurp, J., Clarke, T. B., & Clarke III, I. (2020). A comparative exploration of celebrity chef influence on millennials. *Journal of Foodservice Business Research*, 23(5), 442-470.
- Çolak, O. (2023). The role of technology companies in reducing and disposing food waste. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 10(4), 288-307.
- Coskun, A., Genç, H. U., & Coskun, A. (2023, August). How sustainable is your menu? Designing and assessing an interactive artefact to support chefs' sustainable

recipe-planning practices. In *Proceedings of the 6th ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies* (pp. 90-98).

Cousins, J., O'Gorman, K., & Stierand, M. (2010). Molecular gastronomy: cuisine innovation or modern-day alchemy? *International Journal of Contemporary Hospitality Management*, 22(3), 399-415.

Curkovic, M. D., Hodko, I. L., & Grabovac, N. (2022). Mentorship support and competencies from hotels'and restaurants'managers viewpoint-the adult education programs. *Economic and Social Development: Book of Proceedings*, 2

Dagsland, Å. H., Robinson, R. N. S., & Brenner, M. L. (2024). Stemming (chef's) occupational attrition: Navigating and surviving the socialisation process. *International Journal of Hospitality Management*, 122, 103847.

Dani, R., Juyal, D., & Rawal, Y. S. (2021). A critical analysis of the restaurant industry's effect on environment sustainability. *Science Progress and Research*, 1(4), 435-442.

Dasgupta, S., Suar, D., & Singh, S. (2014). Managerial communication practices and employees' attitudes and behaviours: A qualitative study. *Corporate Communications: An International Journal*, 19(3), 287-302.

Davahli, M. R., Karwowski, W., Sonmez, S., & Apostolopoulos, Y. (2020). The hospitality industry in the face of the COVID-19 pandemic: Current topics and

research methods. *International Journal of Environmental Research and Public Health*, 17(20), 7366.

Davies, B. (2003). The role of quantitative and qualitative research in industrial studies of tourism. *International Journal of Tourism Research*, 5(2), 97-111.

De Guzman, A. B., Mesana, J. C. B., & Roman, J. A. M. (2022). Examining Chefs' Social Responsibility (CSR) during the COVID-19 pandemic. *Anatolia*, 33(3), 404-414.

de Oliveira, B. S., Lisboa Sohn, A. P., Pontes, N., & Glavas, C. (2023). Emotional intelligence and stress coping style in the foodservice industry in Brazil. *Journal of Human Resources in Hospitality & Tourism*, 22(2), 212-238.

de Visser-Amundson, A., & Kleijnen, M. (2020). Nudging in food waste management: Where sustainability meets cost-effectiveness. *Food waste management: Solving the wicked problem*, 57-87.

Decrop, A. (2004). Trustworthiness in qualitative tourism research. In *Qualitative Research in Tourism* (pp. 174-176). Routledge.

Deeb, A., Alananzeh, O. A., Tarhini, A., & Masa'deh, R. E. (2020). Factors affecting job performance: the case of Jordanian hotels' kitchen staff. *International Journal of Public Sector Performance Management*, 6(3), 340-360.

- Derek, M. (2021). Nature on a plate: Linking food and tourism within the ecosystem services framework. *Sustainability*, 13(4), 1687.
- DeZarn, N., Ilic-Godfrey, S., & Krutsch, E. (2023). Occupational projections overview, 2021–31. *Monthly Labor Review*.
- Didinger, C., & Thompson, H. (2020). Motivating pulse-centric eating patterns to benefit human and environmental well-being. *Nutrients*, 12(11), 3500.
- DiPietro, R. B., Moreo, A., & Cain, L. (2020). Well-being, affective commitment and job satisfaction: influences on turnover intentions in casual dining employees. *Journal of Hospitality Marketing & Management*, 29(2), 139-163.
- DiPrete, L., Garza, T., & Spinrad, M. (2023). Focus groups among retail food establishment staff and management reveal obstacles and promoters of good food safety culture. *Food and Humanity*, 1, 880-886.
- DiPrete, L., Garza, T., & Spinrad, M. (2023). Focus groups among retail food establishment staff and management reveal obstacles and promoters of good food safety culture. *Food and Humanity*, 1, 880-886.
- Dossena, C., Mochi, F., Bissola, R., & Imperatori, B. (2021). Restaurants and social media: rethinking organizational capabilities and individual competencies. *Journal of tourism Futures*, 7(1), 20-39.

- Duarte Alonso, A., O'Shea, M., & Kok, S. K. (2022). Managing knowledge in the context of gastronomy and culinary tourism: A knowledge-based view. *Tourism Recreation Research*, 47(2), 145-159.
- Dyen, M., Sirieix, L., & Costa, S. (2021). Fostering food waste reduction through food practice temporalities. *Appetite*, 161, 105131.
- Ekincek, S., & Günay, S. (2023). A recipe for culinary creativity: Defining characteristics of creative chefs and their process. *International Journal of Gastronomy and Food Science*, 31, 100633.
- Elbasha, T., & Baruch, Y. (2022). Becoming top global chef: what does it take to become a highly successful entrepreneurial careerist?. *International Journal of Contemporary Hospitality Management*, 34(7), 2559-2578.
- Engstrom, T., Strong, J., Sullivan, C., & Pole, J. D. (2022). A comparison of Leximancer semi-automated content analysis to manual content analysis: A healthcare exemplar using emotive transcripts of COVID-19 hospital staff interactive webcasts. *International Journal of Qualitative Methods*, 21, 16094069221118993.
- Erem, E., Icyer, N. C., Tatlisu, N. B., Kilicli, M., Kaderoglu, G. H., & Toker, Ö. S. (2023). A new trend among plant-based food ingredients in food processing technology: Aquafaba. *Critical Reviews in Food Science and Nutrition*, 63(20), 4467-4484.

Escoffier, A. (1903). *Le Guide culinaire*. (Ed) Flammarion.

Esterhuyse, N., Wakelin-Theron, N., & Geyser, I. (2022). The optimal shift length for the resilient millennial chef. *Studia Periegetica*, 38(2), 63-79.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.

Farmaki, A., Christou, P., Saveriades, A., & Spanou-Tripinioti, E. (2019). Perceptions of Pafos as European Capital of Culture: Tourism stakeholder and resident perspectives. *International Journal of Tourism Research*, 21(2), 234-244.

Fenyvesi, É., Kondár, F., Sólyom, A., & Székely, I. K. (2023). Work Stress In Hospitality. *Acta Turistica*, 35(2), 137.

Filadelfia, P., & Purnomo, D. J. (2023, August). The Role Of The Chef De Partie In Support Operations In The Pastry Section Of Hotel Novotel Semarang. In *The International Conference on Education, Social Sciences and Technology (ICESST)* (Vol. 2, No. 2, pp. 54-64).

Filimonau, V., Chiang, C. C., Wang, L. E., Muhialdin, B. J., & Ermolaev, V. A. (2023). Resourcefulness of chefs and food waste prevention in fine dining restaurants. *International Journal of Hospitality Management*, 108, 103368.

- Firth, J. K. (2022). Crisis caring: chef foundations, branding, and responsibility in foodscapes. *Food, culture & society*, 1-16.
- Fusté-Forné, F., & Noguer-Juncà, E. (2024). Designing Michelin-starred menus from the perspective of chefs: Is the presence of local food worth a trip?. *International Journal of Food Design*, 9(1), 9-25.
- Ganesh, M., Roy, D., & Abraham, D. (2024). The Need for Speed: Decoding Linkages between Fulfillment Time and Customer Satisfaction to Improve Online Food Delivery Performance. *Available at SSRN 4935357*.
- García-Henche, B., & Cuesta-Valiño, P. (2022). The increasing visibility of women in gastronomy. *International Journal of Gastronomy and Food Science*, 30, 100589.
- Gazdecki, M., Rejman, K., Kobus-Cisowska, J., Łaba, S., & Łaba, R. (2020). *How to Prevent Bread Losses in the Baking and Confectionery Industry?—Measurement, Causes, Management and P*
- Genc, V., & Akoglan Kozak, M. (2020). Emotional and social competence in the aestheticization of labor in the restaurant industry. *International Journal of Contemporary Hospitality Management*, 32(3), 1201-1225.
- Ghadge, A., Er Kara, M., Mogale, D. G., Choudhary, S., & Dani, S. (2021). Sustainability implementation challenges in food supply chains: A case of UK artisan cheese producers. *Production Planning & Control*, 32(14), 1191-1206.

- Giousmpasoglou, C. (2019). Factors affecting and shaping the general managers' work in small-and medium-sized luxury hotels: The case of Greece. *Hospitality & Society*, 9(3), 397-422.
- Gładysz, B., Buczacki, A., & Haskins, C. (2020). Lean management approach to reduce waste in HoReCa food services. *Resources*, 9(12), 144.
- Goeltom, V. A. H., Juliana, J., Kristabella, C., & Florency, G. (2024). The Influence Of Job Training, Work Experience, And Competency on The Performance of Italian Restaurant Kitchen Employees in South Jakarta. *Jurnal Ekonomi*, 13(02), 1466-1479.
- Goh, E., & Wilk, V. (2024). Showcasing Leximancer in tourism and hospitality research: a review of Leximancer-based research published in tourism and hospitality journals during 2014–2020. *Tourism Recreation Research*, 49(5), 1005-1018.
- Gordon, R. (2022). *Restaurant management as an extreme job: How restaurant managers are motivated to work in a job characterized by long hours and high intensity* (Doctoral dissertation, University of Guelph).
- Gössling, S., & Hall, C. M. (2021). *The sustainable chef: The environment in culinary arts, restaurants, and hospitality*. Routledge.

- Graham, D., Ali, A., & Tajeddini, K. (2020). Open kitchens: Customers' influence on chefs' working practices. *Journal of Hospitality and Tourism Management*, 45, 27-36.
- Gray, E., & Farrell, K. G. (2021). Perceptions of culinary education and chef apprenticeships in Ireland. *Higher Education, Skills and Work-Based Learning*, 11(1), 228-240.
- Grimmond, T., King, T., LaMontagne, A. D., Oostermeijer, S., Harrap, B., Newberry-Dupé, J., & Reavley, N. (2024). Workplace-related determinants of mental health in food and bar workers in Western, high-income countries: A systematic review. *American Journal of Industrial Medicine*.
- Gursoy, D., & Chi, C. G. (2020). Effects of COVID-19 pandemic on hospitality industry: review of the current situations and a research agenda. *Journal of Hospitality Marketing & Management*, 29(5), 527-529.
- Hadi, A. A., UZA, U. F., Norfezah, M. N., & Hazrina, G. (2022). The Influence of Role Conflict, Supervisor Support and Physical Work Environment on Job Burnout Among Hotel Chefs in Malaysia. *Advances in Business Research International Journal*, 8(3), 45-55.
- Hallin, K., & Danielson, E. (2007). Registered nurses' experiences of daily work, a balance between strain and stimulation: A qualitative study. *International Journal of Nursing Studies*, 44(7), 1221-1230.

- Halling Ullberg, O., Toivanen, S., Tillander, A., & Bälter, K. (2023). Workplace health promotion to facilitate physical activity among office workers in Sweden. *Frontiers in Public Health*, 11, 1175977.
- Hasnat, Q. (2021). *An exploration of employee engagement and employee commitment in the London hotel sector: the perspectives of migrant housekeeping workers and their managers* (Doctoral dissertation, University of Brighton).
- Hendler, B. E. (2023). *Attracting People for an Industry-The Case of the Austrian Culinary Arts Branch* (Doctoral dissertation, Leopold-Franzens-Universität Innsbruck).
- Hennchen, B. (2021). What is enough on a plate? Professionals' practices of providing an "adequate portion" in the food service sector. *Food and Foodways*, 29(4), 355-377.
- Hilton, M. (2020). Personal resilience in the hospitality experience. *Managing hospitality experiences*, 67-84.
- Hischier, R., Reale, F., Castellani, V., & Sala, S. (2020). Environmental impacts of household appliances in Europe and scenarios for their impact reduction. *Journal of cleaner production*, 267, 121952.
- Ho, G. K., Lam, C., & Law, R. (2023). Conceptual framework of strategic leadership and organizational resilience for the hospitality and tourism industry for coping

- with environmental uncertainty. *Journal of Hospitality and Tourism Insights*, 6(2), 835-852.
- Hobfoll, S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337-421.
- Højlund, H., & Villadsen, K. (2020). Technologies in caregiving: professionals' strategies for engaging with new technology. *New Technology, Work and Employment*, 35(2), 178-194.
- Hollows, J. (2022). Celebrity chefs, food media and the politics of eating.
- Home, R., Oehen, B., Käsmayr, A., Wiesel, J., & Van der Meulen, N. (2020). The importance of being local: the role of authenticity in the concepts offered by non-themed domestic restaurants in Switzerland. *Sustainability*, 12(9), 3907.
- Hu, Y., Sun, J., & Zheng, J. (2021). Comparative analysis of carbon footprint between conventional smallholder operation and innovative largescale farming of urban agriculture in Beijing, China. *PeerJ*, 9, e11632.
- Huang, Y., & Hall, C. M. (2023). Locality in the promoted sustainability practices of Michelin-Starred restaurants. *Sustainability*, 15(4), 3672.

- Huang, Y., Hall, C. M., & Chen, N. (2023). The sustainability characteristics of Michelin green star restaurants. *Journal of Foodservice Business Research*, 1-26.
- Huang, Z., Mao, C., Wang, J., & Sadick, A. M. (2022). Understanding the key takeaway of construction robots towards construction automation. *Engineering, Construction and Architectural Management*, 29(9), 3664-3688.
- Hussein, H., Albadry, O. M., Mathew, V., Al-Romeedy, B. S., Alsetoohy, O., Abou Kamar, M., & Khairy, H. A. (2024). Digital leadership and sustainable competitive advantage: Leveraging green absorptive capability and eco-innovation in tourism and hospitality businesses. *Sustainability*, 16(13), 5371.
- Huynh, T. (2015). Health risks of being a chef and its effects on chefs and the restaurant business.
- Hwang, J., Abbas, J., Joo, K., Choo, S. W., & Hyun, S. S. (2022). The effects of types of service providers on experience economy, brand attitude, and brand loyalty in the restaurant industry. *International Journal of Environmental Research and Public Health*, 19(6), 3430.
- Iqbal, N., & Kim, D. H. (2022). Iot task management mechanism based on predictive optimization for efficient energy consumption in smart residential buildings. *Energy and Buildings*, 257, 111762.

- Iskender, A., Sirakaya-Turk, E., Cardenas, D., & Harrill, R. (2024). COVID or VOID: A systematic literature review of technology adoption and acceptance in hospitality and tourism since the breakout of COVID-19. *Tourism and Hospitality Research*, 24(1), 95-114.
- Islam, M. T. (2021). Applications of social media in the tourism industry: A review. *SEISENSE Journal of Management*, 4(1), 59-68.
- Jin, N., Line, N. D., & Merkebu, J. (2016). Examining the impact of consumer innovativeness and innovative restaurant image in upscale restaurants. *Cornell Hospitality Quarterly*, 57(3), 268-281.
- Johansen, S. M. (2022). *Retaining Qualified Chefs: A Qualitative Study of Restaurant Manager's Strategies* (Master's thesis, uis).
- Johns, N., & Menzel, P. J. (1999). " If you can't stand the heat!"... Kitchen violence and culinary art. *International Journal of Hospitality Management*.
- Johnston, J., & Baumann, S. (2014). *Foodies: Democracy and distinction in the gourmet foodscape*. Routledge.
- Johs-Artisensi, J. L., Hansen, K. E., Olson, D. M., & Creapeau, L. J. (2021). Leadership perceptions and practices of hospitality in senior care. *Journal of Applied Gerontology*, 40(6), 598-608.

- Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the hospitality industry: Some personal reflections on corporate challenges and research agendas. *International Journal of Contemporary Hospitality Management*, 28(1), 36-67.
- Joshi, V. A., & Gupta, I. (2021). Assessing the impact of the Covid-19 pandemic on hospitality and tourism education in India and preparing for the new normal. *Worldwide Hospitality and Tourism Themes*, 13(5), 622-635.
- Kang, J. H., Ji, Y. H., Baek, W. Y., & Byon, K. K. (2020). Structural relationship among physical self-efficacy, psychological well-being, and organizational citizenship behavior among hotel employees: Moderating effects of leisure-time physical activity. *International Journal of Environmental Research and Public Health*, 17(23), 8856.
- Kapelari, S., Alexopoulos, G., Moussouri, T., Sagmeister, K. J., & Stampfer, F. (2020). Food heritage makes a difference: The importance of cultural knowledge for improving education for sustainable food choices. *Sustainability*, 12(4), 1509.
- Karatepe, O. M. (2013). High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management*, 32, 132-140.
- Kaur, H. J., Shiv, T., Chopra, R., Dutta, R., kaur, D. P., & Malhotra, P. (2023, December). Smart Bakery: Technology and Automation. In *International*

Conference on Advanced Network Technologies and Intelligent Computing (pp. 225-239). Cham: Springer Nature Switzerland.

Kelle, U. (2006). Combining qualitative and quantitative methods in research practice: purposes and advantages. *Qualitative Research in Psychology*, 3(4), 293-311.

Khanna, K., & Bali, P. (2017). Empirical study on the work-life balance issues of chef at supervisory level in hotels of Delhi. *International Research Journal of Management, IT and Social Sciences*, 4(2), 58-73.

Knol, L. L., Appel, S. J., Crowe-White, K. M., Brantley, C., Adewumi, O. E., & Senkus, K. E. (2021). Development, feasibility, and initial results of a mindful eating intervention: project mindful eating and exercise (MEE): feeding the mind, body, and Soul. *American Journal of Health Education*, 52(4), 171-184.

Ko, W. H. (2012). The relationships among professional competence, job satisfaction and career development confidence for chefs in Taiwan. *International Journal of Hospitality Management*, 31(3), 1004-1011.

Ko, W. H., & Lu, M. Y. (2021). Developing a professional competence scale for kitchen staff: Food value and availability for surplus food. *International Journal of Hospitality Management*, 95, 102926.

Kordsmeyer, A. C., Efimov, I., Lengen, J. C., Flothow, A., Nienhaus, A., Harth, V., & Mache, S. (2022). Balancing social and economic factors-explorative qualitative

analysis of working conditions of supervisors in German social firms. *Journal of Occupational Medicine and Toxicology*, 17(1), 4.

Krippendorff, K. (2011, January). *Computing Krippendorff's alpha-reliability*.

Kumar, I., Rawat, J., Mohd, N., & Husain, S. (2021). Opportunities of artificial intelligence and machine learning in the food industry. *Journal of Food Quality*, 2021(1), 4535567.

Kuoppamäki, S., Tuncer, S., Eriksson, S., & McMillan, D. (2021). Designing Kitchen Technologies for Ageing in Place: A Video Study of Older Adults' Cooking at Home. *Proceedings of the ACM on interactive, mobile, wearable and ubiquitous technologies*, 5(2), 1-19.

Lai, I. K. W., & Wong, J. W. C. (2020). Comparing crisis management practices in the hotel industry between initial and pandemic stages of COVID-19. *International Journal of Contemporary Hospitality Management*, 32(10), 3135-3156.

Lane, C. (2013). Taste makers in the “fine-dining” restaurant industry: The attribution of aesthetic and economic value by gastronomic guides. *Poetics*, 41(4), 342-365.

Laneyrie, E., & Landry, A. (2023). Identifying Management Styles of Chefs: How Staff Well-Being and Work Performance Are Linked to and Depend on the Way Chefs View Their Managerial Role.

Lavendol, V. (2024). Introducing Mindful Micro-Practices to Reduce Job Stress and Turnover Intention in High-Volume Restaurants.

Leary, J., Menyeh, B., Chapungu, V., & Troncoso, K. (2021). ECooking: Challenges and opportunities from a consumer behaviour perspective. *Energies*, 14(14), 4345.

Lee, C. L., Strong, R., & Dooley, K. E. (2021). Analyzing precision agriculture adoption across the globe: A systematic review of scholarship from 1999–2020. *Sustainability*, 13(18), 10295.

Lee, C., Hallak, R., & Sardeshmukh, S. R. (2019). Creativity and innovation in the restaurant sector: Supply-side processes and barriers to implementation. *Tourism Management Perspectives*, 31, 54-62.

Leggett, K., McCann, R., Brunson, M., Miller, B. A., & MacAdam, J. (2021). “From a chef’s perspective or what I can sell on the menu?” Exploring culinary professionals’ attitudes toward specialty beef production and barriers to adoption. *Agroecology and Sustainable Food Systems*, 45(8), 1246-1266.

Lemon, L. L., & Hayes, J. (2020). Enhancing trustworthiness of qualitative findings: Using Leximancer for qualitative data analysis triangulation. *The Qualitative Report*, 25(3), 604-614.

- Leong, M. W. A., Yeh, S. S., Fan, Y. L., & Huan, T. C. (2020). The effect of cuisine creativity on customer emotions. *International Journal of Hospitality Management*, 85, 102346.
- Leung, V. T., & Lin, P. M. (2022). The roles of multiple foci of employee commitments and job satisfaction on creative performance: a study of hotel chefs. *International Journal of Hospitality Management*, 101, 103107.
- Leung, V. T., & Lin, P. M. (2022). The roles of multiple foci of employee commitments and job satisfaction on creative performance: a study of hotel chefs. *International Journal of Hospitality Management*, 101, 103107.
- Lillywhite, J. M., & Simonsen, J. E. (2014). Consumer preferences for locally produced food ingredient sourcing in restaurants. *Journal of Food Products Marketing*, 20(3), 308-324.
- Lippert, J. F., Furnari, M. B., & Kriebel, C. W. (2021). The impact of the COVID-19 pandemic on occupational stress in restaurant work: a qualitative study. *International Journal of Environmental Research and Public Health*, 18(19), 10378.
- Lippert, J., Rosing, H., & Tendick-Matesanz, F. (2020). The health of restaurant work: A historical and social context to the occupational health of food service. *American journal of industrial medicine*, 63(7), 563-576.

- Liu, Y., & Jang, S. S. (2009). The effects of dining atmospherics: An extended Mehrabian–Russell model. *International journal of hospitality management*, 28(4), 494-503.
- Long, R. J., Ariyo, A. G., Iwu, Z. I., Azari, D. P., Madison, A. M., Aroca-Ouellette, S., ... & Ries, A. J. (2024, May). Towards an Adaptive System for Investigating Human-Agent Teaming: Let's get Cooking! In *2024 Systems and Information Engineering Design Symposium (SIEDS)* (pp. 1-6). IEEE.
- López-Sánchez, Y., & Pulido-Fernández, J. I. From Sustainable Tourism to Tourism for Sustainable Development: Challenges to Tourism's contribution to Sustainable Development Goals. *International Case Studies for Hospitality, Tourism and Event Management Students and Trainees*, 37.
- Lortie, J., Cabantous, L., & Sardais, C. (2023). How leadership moments are enacted within a strict hierarchy: The case of kitchen brigades in Haute Cuisine restaurants. *Organization Studies*, 44(7), 1081-1101.
- Lortie, J., Cabantous, L., & Sardais, C. (2023). How leadership moments are enacted within a strict hierarchy: The case of kitchen brigades in Haute Cuisine restaurants. *Organization Studies*, 44(7), 10
- Lukander, A. (2021). Enhancing Customer Experience Through Sensory Perception: Case Restaurant Más.

- Mac Con Iomaire, M., Afifi, M. F., & Healy, J. J. (2021). Chefs' perspectives of failures in foodservice kitchens, part 1: A phenomenological exploration of the concepts, types, and causes of food production failure. *Journal of Foodservice Business Research*, 24(2), 177-214.
- Machado, I. C. K., Bernardes, J. W., Monteiro, J. K., & Marin, A. H. (2021). Stress, anxiety and depression among gastronomes: association with workplace mobbing and work–family interaction. *International Archives of Occupational and Environmental Health*, 94, 1797-1807.
- Machado, I. C. K., Bernardes, J. W., Monteiro, J. K., & Marin, A. H. (2021). Stress, anxiety and depression among gastronomes: association with workplace mobbing and work–family interaction. *International Archives of Occupational and Environmental Health*, 94, 1797-1807.
- Maclean, G. (2022). A Life in The Kitchen: Teaching Hospitality in A Further Education College. *Great FE Teaching: Sharing Good Practice*, 1.
- Madeira, A., Palrão, T., & Mendes, A. S. (2020). The impact of pandemic crisis on the restaurant business. *Sustainability*, 13(1), 40.
- Madeira, A., Palrão, T., Mendes, A. S., & Ottenbacher, M. C. (2022). The culinary creative process of Michelin Star chefs. *Tourism Recreation Research*, 47(3), 258-276.

- Magrizos, S., Roumpi, D., & Rizomyliotis, I. (2023). Talent orchestration and boomerang talent: seasonally employed chefs' evaluation of talent management practices. *International Journal of Contemporary Hospitality Management*, 35(8), 2755-2772.
- Mahasuweerachai, P., & Suttikun, C. (2022). The effect of green self-identity on perceived image, warm glow and willingness to purchase: A new generation's perspective towards eco-friendly restaurants. *Sustainability*, 14(17), 10539.
- Mandal, S., Dubey, R. K., Basu, B., & Raman, R. (2024). Modelling enablers of business continuity for casual dining restaurants in post-COVID-19 era: an ISM and MICMAC perspective. *International Journal of Quality and Service Sciences*.
- Mandić, A., Pivčević, S., & Petrić, L. (2020). Restaurant online reputation and destination competitiveness: Insight into TripAdvisor data. In *Gastronomy for Tourism Development* (pp. 155-184). Emerald Publishing Limited.
- Manshoor, A., Mohamad, N. H., & Idris, N. A. (2021, September). TO BE OR NOT TO BE A CHEF. In *CONFERENCE ON HOSPITALITY AND TOURISM 2021* (p. 245).
- Marinakou, E., & Giousmpasoglou, C. (2022). Chefs' competencies: a stakeholder's perspective. *Journal of Hospitality and Tourism Insights*, 5(1), 205-229.

Marinakou, E., & Giousmpasoglou, C. (2022). Chefs' competencies: a stakeholder's perspective. *Journal of Culinary Science & Technology*, 22(5), 870-891.

Escalante, R., Bernardo, M., & Arbussa, A. (2024). Knowledge transfer in haute cuisine: the relationship between chefs as an enabler factor. *Journal of Hospitality and Tourism Insights*, 5(1), 205-229.

Marinakou, E., & Giousmpasoglou, C. (2022). Chefs' competencies: a stakeholder's perspective. *Journal of Hospitality and Tourism Insights*, 5(1), 205-229.

Martin-Rios, C., Hofmann, A., & Mackenzie, N. (2020). Sustainability-oriented innovations in food waste management technology. *Sustainability*, 13(1), 210.

Mastos, T., & Gotzamani, K. (2022). Sustainable supply chain management in the food industry: A conceptual model from a literature review and a case study. *Foods*, 11(15), 2295.

Matson-Barkat, S., & Robert-Demontrond, P. (2018). Who's on the tourists' menu? Exploring the social significance of restaurant experiences for tourists. *Tourism Management*, 69, 566-578.

Mifli, M., Hashim, R., & Zainal, A. (2017). Managing menu innovation in a saturated market: Empirical evidence from the Chain restaurants in Malaysia. *Tourism and Hospitality Research*, 17(4), 339-357.

- Milwood, P., Hartman-Caverly, S., & Murray, S. (2022). *A Pop-up Restaurant Business Guide for Capstone Hospitality Entrepreneurship Education*. Pennsylvania State University.
- Min, K., & Hong, W. (2021). The effect of food sustainability and the food safety climate on the job stress, job satisfaction and job commitment of kitchen staff. *Sustainability*, 13(12), 6813.
- Mrusek, N., Ottenbacher, M. C., & Harrington, R. J. (2021). The impact of sustainability and leadership on the innovation management of Michelin-starred chefs. *Sustainability*, 14(1), 330.
- Mrusek, N., Ottenbacher, M. C., & Harrington, R. J. (2021). The impact of sustainability and leadership on the innovation management of Michelin-starred chefs. *Sustainability*, 14(1), 330.
- Murphy, J., & Smith, S. (2009). Chefs and suppliers: An exploratory look at supply chain issues in an upscale restaurant alliance. *International Journal of Hospitality Management*, 28(2), 212-220.
- Murray-Gibbons, R., & Gibbons, C. (2007). Occupational stress in the chef profession. *International Journal of Contemporary Hospitality Management*, 19(1), 32-42.

- Murray-Gibbons, R., & Gibbons, C. (2007). Occupational stress in the chef profession. *International Journal of Contemporary Hospitality Management*, 19(1), 32-42.
- Muth, A. (2020). *Understanding the Mental Health Needs of Restaurant Employees*. Purdue University.
- Nadai, E., & Gonon, A. (2021). 'Simple jobs' for disqualified workers. Employability at the bottom of the labour market.
- Nebaba, N. O., Kucher, M. M., Yazina, V. A., Saihak, Y. L., & Golovko, N. O. (2024). Theoretical aspects of information provision of restaurant enterprise management processes.
- Neves, R. (2024). Collaboration and Team Dynamics. In *The Engineering Leadership Playbook: Strategies for Team Success and Business Growth* (pp. 113-179). Berkeley, CA: Apress.
- Nikopoulou, M., Kourouthanassis, P., Chasapi, G., Pateli, A., & Mylonas, N. (2023). Determinants of digital transformation in the hospitality industry: technological, organizational, and environmental drivers. *Sustainability*, 15(3), 2736.
- O'Neill, J. W., & Davis, K. (2011). Work stress and well-being in the hotel industry. *International journal of hospitality management*, 30(2), 385-390.

- Olorunsola, V. O., Saydam, M. B., Arasli, H., & Sulu, D. (2022). Guest service experience in eco-centric hotels: a content analysis. *International Hospitality Review*, 38(1), 81-100.
- Orlowski, M. (2016). Team Cohesion in the Restaurant Industry: The Influence of Core Evaluations.
- Ovias, Z., & Rao, R. (2020). An Ergonomic Study to Evaluate Specific Work-Related Tasks of Chefs in Commercial Kitchens. *International Journal of Innovative Science, Engineering & Technology (IJSET)*, 7, 195-203.
- Owens, A., Holmes, M. R., & Cooper, C. (2023). How Do Restaurants Grapple with Stress when Attempting to Achieve and Keep the Michelin Star? A Qualitative Investigation in the Canadian Market.
- Paciarotti, C., Mazzuto, G., Torregiani, F., & Fikar, C. (2022). Locally produced food for restaurants: a theoretical approach for the supply chain network design. *International Journal of Retail & Distribution Management*, 50(13), 164-183.
- Pandey, D. L. (2020). Work stress and employee performance: an assessment of impact of work stress. *International Research Journal of Human Resource and Social Sciences*, 7(05), 124-135.
- Panisoara, I. O., Lazar, I., Panisoara, G., Chirca, R., & Ursu, A. S. (2020). Motivation and continuance intention towards online instruction among teachers during the

COVID-19 pandemic: The mediating effect of burnout and technostress. *International Journal of Environmental Research and Public Health*, 17(21), 8002.

Pajankar, A., & Joshi, A. (2022). *Hands-on Machine Learning with Python: Implement Neural Network Solutions with Scikit-learn and PyTorch*. Berkeley: apress.

Park, E., Muangasame, K., & Kim, S. (2023). ‘We and our stories’: constructing food experiences in a UNESCO gastronomy city. *Tourism Geographies*, 25(2-3), 572-593.

Parsons, K., Strout, K., Winn, C., Therrien-Genest, M., Yerxa, K., & McNamara, J. (2024). Development of Master Chef: A Curriculum to Promote Nutrition and Mindful Eating among College Students. *International Journal of Environmental Research and Public Health*, 21(4), 487.

Pereira, D., Bozzato, A., Dario, P., & Ciuti, G. (2022). Towards Foodservice Robotics: a taxonomy of actions of foodservice workers and a critical review of supportive technology. *IEEE Transactions on Automation Science and Engineering*, 19(3), 1820-1858.

Pillai, S. G., Haldorai, K., Seo, W. S., & Kim, W. G. (2021). COVID-19 and hospitality 5.0: Redefining hospitality operations. *International Journal of Hospitality Management*, 94, 102869.

- Piprani, A. Z., Jaafar, N. I., Ali, S. M., Mubarik, M. S., & Shahbaz, M. (2022). Multi-dimensional supply chain flexibility and supply chain resilience: the role of supply chain risks exposure. *Operations Management Research*, 15(1), 307-325.
- Posadzinska, I., Slupska, U., & Karaszewski, R. (2020). The attitudes and actions of the superior and the participative management style.
- Principato, L., Di Leo, A., Mattia, G., & Pratesi, C. A. (2021). The next step in sustainable dining: the restaurant food waste map for the management of food waste. *Italian Journal of Marketing*, 2021, 189-207.
- Priyadarshini, M., Das, I., Ghangrekar, M. M., & Blaney, L. (2022). Advanced oxidation processes: Performance, advantages, and scale-up of emerging technologies. *Journal of environmental management*, 316, 115295.
- Putra, A. N., Anantadjaya, S. P., & Nawangwulan, I. M. (2020). Customer satisfaction as A result of combination of food display & quality. *Manajemen dan Bisnis*, 19(2).
- Radic, A., Arjona-Fuentes, J. M., Ariza-Montes, A., Han, H., & Law, R. (2020). Job demands–job resources (JD-R) model, work engagement, and well-being of cruise ship employees. *International Journal of Hospitality Management*, 88, 102518.

- Ramakrishnan, B., Maddela, N. R., Venkateswarlu, K., & Megharaj, M. (2021). Organic farming: Does it contribute to contaminant-free produce and ensure food safety?. *Science of The Total Environment*, 769, 145079.
- Ramlawati, R., Trisnawati, E., Yasin, N., & Kurniawaty, K. (2021). External alternatives, job stress on job satisfaction and employee turnover intention. *Management Science Letters*, 11(2), 511-518.
- Ranasinghe, R., Gangananda, N., Bandara, A., & Perera, P. (2021). Role of tourism in the global economy: The past, present and future. *Journal of Management and Tourism Research*, 4(1).
- Rane, N. L., Achari, A., & Choudhary, S. P. (2023). Enhancing customer loyalty through quality of service: Effective strategies to improve customer satisfaction, experience, relationship, and engagement. *International Research Journal of Modernization in Engineering Technology and Science*, 5(5), 427-452.
- Rani, U., Kumar Dhir, R., Furrer, M., Göbel, N., Moraiti, A., & Cooney, S. (2021). World employment and social outlook: the role of digital labour platforms in transforming the world of work. *Geneva: International Labour Organisation*.
- Rashid, B. N. M. (2020). Turn-Taking in Conversation between a Chef and Boss and among Chefs. *Talent Development & Excellence*, 12.

- Rasulov, R. (2024). Economic Substantiation of Innovative Solutions for Direct Cooperation between Manufacturers and Restaurants. *Futurity Economics&Law*, 4(4), 121-136.
- Ratasuk, A. (2019). The contribution of cultural intelligence to team processes and innovation in multicultural teams: the case of restaurant business in Thailand.
- Ravina-Ripoll, R., Balderas-Cejudo, A., Núñez-Barriopedro, E., & Galván-Vela, E. (2023). Are chefs' happiness providers? Exploring the impact of organisational support, intrapreneurship and interactional justice from the perspective of happiness management. *International Journal of Gastronomy and Food Science*, 34, 100818.
- Rawal, Y. S., Pal, S., Bagchi, P., & Dani, R. (2020). Hygiene and safety: A review of the hotel industry in the era of COVID-19 pandemic. *Bioscience Biotechnology Research Communications*, 13(10), 79-83.
- Rawat, A., & Dani, R. (2024, January). Job management and work-life balance minimize hotel and catering staff stress. In *AIP Conference Proceedings* (Vol. 2978, No. 1). AIP Publishing.
- Razzak, B. M., Blackburn, R., & Saridakis, G. (2022). Employees' working life and performance of UK ethnic minority restaurants: a qualitative approach. *Benchmarking: An International Journal*, 29(1), 47-67.

Renkert, S. R. (2022). *Food Aid and Kitchen Controversies: Cooking Together in the City of Hope* (Doctoral dissertation, The University of Arizona).

Rezaei, M., Giovando, G., Rezaei, S., & Sadraei, R. (2022). What is the fundamental knowledge-sharing drivers of small family businesses in the restaurant and fast-food industry? *British Food Journal*, 124(7), 2149-2178.

Rivera Aguilar, J. E., Zang, L., & Fushimi, S. (2022). Towards sustainability in hospitality operations: how is quality of life and work–life balance related? *Worldwide Hospitality and Tourism Themes*, 14(3), 274-285.

Rodríguez-Antón, J. M., & Alonso-Almeida, M. D. M. (2020). COVID-19 impacts and recovery strategies: The case of the hospitality industry in Spain. *Sustainability*, 12(20), 8599.

Roosipõld, A. (2012). Changes in Work and Organizational Structure, by Means of a ‘Supportive Learning Network’. *International Journal of Learning*, 18(11), 229-251.

Rowe, P., & Grady, E. (2020). I see your expertise and raise you mine: Social media foodscapes and the rise of the celebrity chef. In *Digital food cultures* (pp. 114-128). Routledge.

Roy, R., Alsaie, A., Malloy, J., & Kemper, J. A. (2024). Sustainable Culinary Skills: Fostering Vegetable-Centric Cooking Practices among Young Adults for Health and Environmental Benefits—A Qualitative Study. *Sustainability*, 16(2), 928.

- Rusmahafi, F. A., & Wulandari, R. (2020). The effect of brand image, service quality, and customer value on customer satisfaction. *International Review of Management and Marketing*, 10(4), 68.
- Sachani, D. K., Dhameliya, N., Mullangi, K., Anumandla, S. K. R., & Vennapusa, S. C. R. (2021). Enhancing food service sales through AI and automation in convenience store kitchens. *Global Disclosure of Economics and Business*, 10(2), 105-116.
- Sadiq, M., Adil, M., & Paul, J. (2022). Eco-friendly hotel stays and environmental attitude: A value-attitude-behaviour perspective. *International Journal of Hospitality Management*, 100, 103094.
- Şahin, E., & Gök Demir, Z. (2023). Decision tree analysis of sustainable and ethical food preferences of undergraduate students of gastronomy and culinary arts. *Sustainability*, 15(4), 3266.
- Salimian, H., Rashidirad, M., & Soltani, E. (2021). Supplier quality management and performance: the effect of supply chain-oriented culture. *Production Planning & Control*, 32(11), 942-958.
- Sanabria-Díaz, J. M., Aguiar-Quintana, T., & Araujo-Cabrera, Y. (2021). Public strategies to rescue the hospitality industry following the impact of COVID-19: A case study of the European Union. *International Journal of Hospitality Management*, 97, 102988.

- Santich, B. (2004). The study of gastronomy and its relevance to hospitality education and training. *International journal of hospitality management*, 23(1), 15-24.
- Sarkis, J. (2020). Supply chain sustainability: learning from the COVID-19 pandemic. *International Journal of Operations & Production Management*, 41(1), 63-73.
- Saydam, M. B., & Altun, Ö. (2023). An analysis of British Michelin-starred restaurants: guests' online reviews. *British Food Journal*, 125(11), 4214-4228.
- Saydam, M. B., Ozturen, A., & Kilic, C. (2022). Cultural heritage tourism in North Cyprus: findings from in-depth interviews with experts. *Worldwide Hospitality and Tourism Themes*, 14(4), 349-364.
- Schwarzer, R., & Reuter, T. (2023). Manage stress at work through preventive and proactive coping. *Principles of Organizational Behavior: The Handbook of Evidence-Based Management 3rd Edition*, 463-482.
- Seo, S. W., Kim, H. C., Zhu, Z. Y., & Lee, J. T. (2020). What makes hotel chefs in Korea interact with sns community at work? Modeling the interplay between social capital and job satisfaction by the level of customer orientation. *International Journal of Environmental Research and Public Health*, 17(19), 7129.
- Seyitoğlu, F., Fusté-Forné, F., Yiğit, S., & Engin, S. (2024). Robot chefs: the impacts, compatibility and suitability. *British Food Journal*.

- Shabani, L., Behluli, A., Qerimi, F., Pula, F., & Dallosi, P. (2022). The Effect of Digitalization on the Quality of Service and Customer Loyalty. *Emerging Science Journal*, 6(6), 1274-1289.
- Shapoval, V., Häggglund, P., Pizam, A., Abraham, V., Carlbäck, M., Nygren, T., & Smith, R. M. (2021). The COVID-19 pandemic effects on the hospitality industry using social systems theory: A multi-country comparison. *International Journal of Hospitality Management*, 94, 102813.
- Sharma, G. D., Taheri, B., Cichon, D., Parihar, J. S., & Kharbanda, A. (2024). Using innovation and entrepreneurship for creating edge in service firms: Review research of tourism and hospitality industry. *Journal of Innovation & Knowledge*, 9(4), 100572.
- Shifrin, N. V., & Michel, J. S. (2022). Flexible work arrangements and employee health: A meta-analytic review. *Work & Stress*, 36(1), 60-85.
- Shimmura, T., Ichikari, R., Okuma, T., Ito, H., Okada, K., & Nonaka, T. (2020). Service robot introduction to a restaurant enhances both labor productivity and service quality. *Procedia CIRP*, 88, 589-594.
- Silva, C. T., Hakim, M. P., Zanetta, L. D. A., Pinheiro, G. S. D. D., Gemma, S. F. B., & da Cunha, D. T. (2021). Burnout and food safety: Understanding the role of job satisfaction and menu complexity in foodservice. *International Journal of Hospitality Management*, 92, 102705.

- Situmorang, R., & Japutra, A. (2024). Knowledge transfer within MNC hotel subsidiaries: An absorptive capacity perspective. *Tourism Management*, 100, 104794.
- Sırıklı, İ. K., & Seçim, Y. (2024). Reviewing open kitchen concept regarding its effect on motivation of chefs. *Anais Brasileiros de Estudos Turísticos*.
- Sjah, T., & Zainuri, Z. (2020). Agricultural supply chain and food security. In *Zero Hunger* (pp. 79-88). Cham: Springer International Publishing.
- Smith, A. F. (Ed.). (2007). *The Oxford companion to American food and drink*. Oxford University Press.
- Sochacki, G., Zhang, X., Abdulali, A., & Iida, F. (2024). Towards practical robotic chef: Review of relevant work and future challenges. *Journal of Field Robotics*.
- Song, C. S., & Kim, Y. K. (2022). The role of the human-robot interaction in consumers' acceptance of humanoid retail service robots. *Journal of Business Research*, 146, 489-503.
- Sotiriadou, P., Brouwers, J., & Le, T. A. (2014). Choosing a qualitative data analysis tool: A comparison of NVivo and Leximancer. *Annals of leisure research*, 17(2), 218-234.
- Srinivasan, S., & Sherkar, A. (2024). Trends and Innovations in Convenience Food Usage in Fine Dining. *ATITHYA: A Journal of Hospitality*, 10(1).

- Stein, A. J., & Santini, F. (2022). The sustainability of “local” food: A review for policy-makers. *Review of Agricultural, Food and Environmental Studies*, 103(1), 77-89.
- Stofkova, Z., & Sukalova, V. (2020). Sustainable development of human resources in globalization period. *Sustainability*, 12(18), 7681.
- Subramanian, K., Chopra, S. S., Wharton, C. M., Yonge, W., Allen, J., Stevens, R., ... & Milindi, P. S. (2021). Mapping the food waste-energy-water-emissions nexus at commercial kitchens: A systems approach for a more sustainable food service sector. *Journal of Cleaner Production*, 301, 126856.
- Sun, N., Liang, S., Li, H., & Song, H. (2023). Ex post i-deals, work-life balance, and work well-being in the hospitality industry: the moderating role of gender. *International Journal of Contemporary Hospitality Management*, 35(9), 3077-3094.
- Sun, X., Xu, H., Köseoglu, M. A., & Okumus, F. (2020). How do lifestyle hospitality and tourism entrepreneurs manage their work-life balance? *International Journal of Hospitality Management*, 85, 102359.
- Takacs, B., & Borrión, A. (2020). The use of life cycle-based approaches in the food service sector to improve sustainability: a systematic review. *Sustainability*, 12(9), 3504.

- Temizkan, R., & Uslu, A. N. (2023). The number of women in the cooking profession is low: is it just because of gender discrimination? *International Journal of Gastronomy and Food Science*, 32, 100711.
- Thomas, D. (2018). Technology in mathematics and science distance education: Automated textual analysis of articles and proceedings papers using Leximancer. *The Eurasia Proceedings of Educational and Social Sciences*, 9, 28-35.
- Tokbaeva, D., & Achtenhagen, L. (2023). Career resilience of female professionals in the male-dominated IT industry in Sweden: Toward a process perspective. *Gender, Work & Organization*, 30(1), 223-262.
- Tongchaiprasit, P., & Ariyabuddhiphongs, V. (2016). Creativity and turnover intention among hotel chefs: The mediating effects of job satisfaction and job stress. *International Journal of Hospitality Management*, 55, 33-40.
- Toussaint-Samat, M. (2009). *A history of food*. John Wiley & Sons.
- Tran, V. T., Porcher, R., Tran, V. C., & Ravaud, P. (2017). Predicting data saturation in qualitative surveys with mathematical models from ecological research. *Journal of Clinical Epidemiology*, 82, 71-78.
- Traynor, M., Cain, L., & Moreo, A. (2022). Shooting for the stars: the case of an elite chef. *Journal of Foodservice Business Research*, 25(1), 107-125.

- Traynor, M., Cain, L., & Moreo, A. (2022). Shooting for the stars: the case of an elite chef. *Journal of Foodservice Business Research*, 25(1), 107-125.
- Tseng, C., Wu, B., Morrison, A. M., Zhang, J., & Chen, Y. C. (2015). Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. *Tourism management*, 46, 347-358.
- Tugay, O., & Pekerşen, Y. (2022). Impact to culinary chefs' individual innovativeness levels on service innovation performance. *International Journal of Gastronomy and Food Science*, 27, 100472.
- Tugay, O., & Pekerşen, Y. (2022). Impact to culinary chefs' individual innovativeness levels on service innovation performance. *International Journal of Gastronomy and Food Science*, 27, 10
- Yeh, S. S., Lin, K. H., Chiang, T. Y., Lin, C. F., & Huan, T. C. (2022). Exploring the impact of restaurants' physical environment on kitchen employees' creativity. *Tourism Management Perspectives*, 44, 101023.0472.
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis.
- Vargas-Sanchez, A., & López-Guzmán, T. (2022). Creative process and culinary experiences in Michelin-starred restaurants. *Journal of Culinary Science & Technology*, 20(2), 97-116.

- Varvara, R. A., Szabo, K., & Vodnar, D. C. (2021). 3D food printing: Principles of obtaining digitally-designed nourishment. *Nutrients*, 13(10), 3617.
- Viseu, J., Pinto, P., Borralha, S., & de Jesus, S. N. (2020). Role of individual and organizational variables as predictors of job satisfaction among hotel employees. *Tourism and Hospitality Research*, 20(4), 466-480.
- Vishnikina, O., Sabirov, A., & Chepiha, M. (2024). Modern technological methods of menu development in restaurants.
- Vu, O. T. K., Alonso, A. D., Bressan, A., Tran, L. N., & Nguyen, T. T. (2024). The development of “chefs’ innovative cooktop”: A creative self-efficacy and open innovation perspective. *International Journal of Hospitality Management*, 118, 103664.
- Walker, J. R. (2021). *The restaurant: from concept to operation*. John Wiley & Sons.
- Warwick, I. (2024). Customer Satisfaction and Supplier Collaboration in Italian Restaurant Operations.
- Wavinya, M. F., Macharia, J., & Ngugi, L. (2022). Kitchen layout and space as determinants of cooks’ productivity in hotels in machakos county—kenya. *African Journal of Educational Management*, 23(1), 1-26.

- Wellton, L., & Lainpelto, J. (2021). The intertwinement of professional knowledge culture, leadership practices and sustainability in the restaurant industry. *Scandinavian Journal of Hospitality and Tourism*, 21(5), 550-566.
- Wibowo, V., Gautama, I., Kuncoro, E. A., & Bandur, A. (2024). Improving sustainability in the small-medium culinary industry: Analyzing the role of open innovation and competitive advantage. *Journal of System and Management Sciences*, 14(2), 172-187.
- Wilkesmann, U., & Wilkesmann, M. (2021). Which factors are associated with the chefs' perception of stress at the beginning of COVID-19 lockdown? *International Journal of Hospitality Management*, 96, 102945.
- Woodhouse, A., & Rodgers, L. (2024). Culinary arts education: Unpacking and disrupting its master-apprentice pedagogy. *International Journal of Gastronomy and Food Science*, 35, 100898.
- World Health Organization (WHO). (2022). International Labour Organization (ILO). (2021). *Preventing and Mitigating Clusters of COVID-19 at Work: Policy Brief*. WHO reference number: WHO/2019-nCoV/Workplace_actions/Policy_brief/2021.1. di akses tanggal, 22.
- Wu, C. C., Liao, S. H., Chen, Y. J., & Hsu, W. L. (2011, December). Service quality, brand image and price fairness impact on the customer satisfaction and loyalty. In *2011 IEEE international conference on industrial engineering and engineering management* (pp. 1160-1164). IEEE.

- Wu, S. H., Ku, E. C., & Wu, T. P. (2023). Increasing restaurants' sales performance: linking suppliers and chefs' culinary knowledge. *British Food Journal*, 125(1), 345-360.
- Yano, H., & Fu, W. (2022). Effective use of plant proteins for the development of “new” foods. *Foods*, 11(9), 1185.
- Yap, C. C., Wu, S. L., Soon, P. V., Berezina, E., Aroua, M. K., & Gew, L. T. (2024). Culinary waste management for a healthier planet: a qualitative study. *Cogent Social Sciences*, 10(1), 2388178.
- Yarmaci, N., Köz, E. N., & Evren, S. (2023). Analysis of customer reviews on Korean restaurant experience: the case of Zomato Istanbul.
- Yıkılmış, S., Türkol, M., Abdi, G., Imre, M., Alkan, G., Aslan, S. T., ... & Aadil, R. M. (2024). Culinary trends in future gastronomy: A review. *Journal of Agriculture and Food Research*, 101363.
- Yoon, C. (2023). Technology adoption and jobs: The effects of self-service kiosks in restaurants on labor outcomes. *Technology in Society*, 74, 102336.
- Yordanova, S. D., & Strachan, H. (2022). Workplace harassment of restaurant workers. In *Handbook of Research on Urban Tourism, Viral Society, and the Impact of the COVID-19 Pandemic* (pp. 329-340). IGI Global.

Yun, J. J., Park, K., Gaudio, G. D., & Corte, V. D. (2020). Open innovation ecosystems of restaurants: Geographical economics of successful restaurants from three cities. *European Planning Studies*, 28(12), 2348-2367.

Yüzüncüyıl, K. S., & Güldemir, O. (2021). Exploring Culinary Creativity: Clean Plate Example. *Anadolu Akademi Sosyal Bilimler Dergisi*, 3(2), 207-219.

Zanella, M. A. (2020). On the challenges of making a sustainable kitchen: experimenting with sustainable food principles for restaurants. *Research in Hospitality Management*, 10(1), 29-41.

URL 1: <https://www.bls.gov/oes/2020/may/oes351011.htm>