Touch or Talk: What Motivates Consumers to Choose Self-Service Kiosks or Interpersonal Services when Ordering Fast-Food?

A Customer and Manager Perspective

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Abstract

Purpose – The first purpose of this study is to identify and categorize the motivational factors, from a customer and managerial perspective, that restaurant patrons have when choosing between the self-service kiosk (SSK) or the human service counter during their fast-food order. The second purpose is to identify potential gaps between the customer and manager perspectives.

Methodology – This study is based on a relativistic ontology and a social constructivist epistemology. In order to collect the data needed, the authors of this study used a qualitative research approach by conducting 17 in-depth semi-structured customer interviews and 2 in-depth semi-structured manager interviews that were complemented by in-store observations that took place in a McDonald's restaurant.

Findings – This research study revealed decision control, customization, display of product information, performance expectancy, interpersonal decision pressure, and interpersonal avoidance as overarching motivators for using SSKs. Whereas, products and categories, human clues and skills as well as employee support act as overarching motivators for using the counter. Empathy and awareness, the influence of important others, waiting times, and IT affinity operate as overarching motivators that can result in a tendency to use either SSK or the counter, depending on the individual aspects that lie in the fast-food restaurant guests themselves.

Theoretical Contributions – This study contributes to the existing restaurant and customer service experience research in numerous ways. Firstly, this paper systematically summarizes the existing research findings of the self-service technology and SSK literature. Secondly, the study shows consistencies and inconsistencies between its findings and existing findings from the general self-service and interpersonal service literature. Last but not least, the study also presents new findings that extend the existing literature.

Practical Contributions – The results of this paper equip managers with the essential knowledge of restaurant guests' motivators and implications how to successfully address them. Managerial implications are made for both SSK and counter. In addition, customer insights and manager insights were collected, providing potential improvement suggestions for fast-food restaurants regarding the implementation of digital and human touchpoints.

Keywords – Self-service technologies; self-service kiosks; interpersonal services; human touchpoints; digital touchpoints; fast-food restaurants; McDonald's

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Table of Contents

List of Tables

List of Figures

1. Introduction

1.1 Self-Service Technology and Personal Service in the Restaurant Industry

In recent years, the use of information technology has enabled hospitality companies to provide more effective, efficient and higher quality services to their customers (Law, Leung & Chan, 2019). One of these increasing uses of IT is reflected in the trend for more and more hospitality companies to use self-service technologies (SSTs) that can replace human service options (Liu & Hung, 2022). This trend is particularly evident in the restaurant industry where self-service kiosks (SSKs) allow restaurant guests to view menus, customize their meals, and place their own orders (Park, Lehto & Lehto, 2021). This trend has also been followed by the major international fast-food restaurant chains such as McDonald's (Kelso, 2019).

Generally, SSKs are unmanned self-standing devices that are usually based on touch-screen technology (Kasavana, 2008). Furthermore, they provide customers with the opportunity to fulfill their buying process independently (Chang, Fu, Fang & Cheng, 2016) by offering electronic payment options, a variety of digitally displayed capabilities, customization options as well as all-encompassing product information (Kasavana, 2008). According to current findings, this is also appreciated by restaurant guests. Accordingly, 65 % of guests would visit a restaurant more often if SSKs were offered. In addition, 30 % of all restaurant visitors would prefer SSKs to personal service by an employee if the wait times were the same for both service options (Kelso, 2019). However, it is not only customers who appreciate SSKs, as they are also profitable for the restaurants that use them. As sales data show, customers spend up to 20 % more money when they use SSKs to place their orders, compared to interpersonal service options, especially since the kiosks are programmed to upsell automatically (Writer, 2021). Nevertheless, Rayport and Jaworski (2007) suggest that companies need to find the best balance between self-service and interpersonal service options in order to build a competitive advantage. The best balance, however, varies depending on the industry where SSTs or SSKs are implemented, in addition to employees, as customers' motivations and intentions to either use digital or human touchpoints might differ as well (Vannucci & Pantano, 2020).

With regards to the restaurant industry, existing studies showed that the external appearance of restaurant staff as well as their ability to communicate and explain the menu have an influence on the perceived service quality of guests and thus also influence their intention to use human service offers (Ko & Su, 2014). Generally, human clues such as a smiling face and a sympathetic impression of the counter staff are viewed as more important by customers than

functional clues when it comes to evaluating an interpersonal service encounter in a restaurant (Wall & Berry, 2007). Park, Lehto and Lehto (2021) postulate that employees are considered the most important technical feature of SSKs in the sense of being able to offer restaurant guests communication support if needed.

In contrast, studies on customers' motivations and intentions to use SSKs when ordering food in restaurants is influenced by their level of innovativeness (Jeon, Sung & Kim, 2020) or their general level of optimism (Na, Lee & Yang, 2021). Moreover, Jeon, Sung and Kim (2020) find that performance expectancy is the most influential factor that determines restaurant guest's motivation to use SSKs. In other words, the speed and correctness of ordering as well as customization options have a positive impact on restaurant patron's intention to use SSKs.

1.2 Knowledge Gap

As a matter of fact, SSTs are increasingly implemented into restaurant landscapes and work as replacement or supplement of interpersonal service encounters (Kasavana, 2008). However, the academic literature on self-service options and human service options is dominant in the areas of retailing (Hennig-Thurau, 2004; Lim, Lee & Foo, 2017; Lee, Jeong Cho, Xu & Fairhurst, 2010; Weijters, Rangarajan, Falk & Schillewaert, 2007), banking (Curran, Meuter & Surprenant, 2003; Simon & Usunier, 2007; Lin & Chang, 2011), and tourism (Gelderman, Ghijsen & van Diemen, 2011). Marketing research on SSTs has only sparsely focused on the restaurant context. There is only a small number of studies that investigated the underlying reasons why restaurant guests are intended to use SSTs (Ahn & Seo, 2018; Xu, Jeong, Baiomy & Shao, 2020) or how interpersonal services differ from SSTs in the restaurant context (Leung, Torres & Fan, 2021).

To the best knowledge of the authors, there is no study to date that examines how the joint presence or offering of SSTs and more accurate SSKs, as well as the interpersonal service offerings at the counter in a quick-service restaurant, affect the motivations and intentions of restaurant patrons and influence them in their choice of service options. Yet, academics emphasize in their works that it is essential to consider factors why customers adopt technology but also the joint offering of service options and their potential impact on the consumer. For example, Meuter, Ostrom, Roundtree and Bitner (2000) note that "it is important to understand factors that influence adoption of technology-based service" (p.62). Continuing, Scherer, Wünderlich and Wangenheim (2015) argue that "the unique context in which the technology is applied" (p.178) can be crucial for research. According to the understanding of the authors of this thesis, a fast-food restaurant can be such a unique context where technology is provided.

2

More precisely, a fast-food restaurant is a place in which a service context exists in the sense of the combination of staffed order counters and SSKs, in which a social context exists in the sense of other guests, employees, friends or family members, or in which a situational context exists in the sense of varying waiting times or overcrowding.

A recent study by Vannucci and Pantano (2020) also considers the context and combination of human and digital service options, customers can choose from in offline retailing. For example, they show that consumers prefer digital services as they are faster in delivering the respective service without being influenced by the number of store visitors. Furthermore, consumers believe that recommendations and advice made by staff are biased due to their need to drive sales which automatically hinders the usage of human services. However, digital touchpoints are seen as trustworthy as consumers believe in their objectivity when it comes to suggesting something to them. Nevertheless, Vannucci and Pantano (2020) also emphasize that studies of this kind are still very new and that industry and brand-specific research are relevant in terms of fully understanding consumer choice of digital or human touchpoints.

For this reason, this thesis aims to make an industry-specific contribution in the field of hospitality research and more specifically restaurant research as well as customer service experience research. Furthermore, the work is intended to close the knowledge gap about the extent to which restaurant patrons justify their intention or motivation to choose SSKs or the cashier behind the counter when ordering at a fast-food restaurant. Filling this gap is considered important because more and more fast-food restaurants and casual dining restaurants are integrating SSKs into their scenery and operations. In 2019, sales of SSKs in the U.S. quick-service restaurant sector increased nearly 18 % to almost $12 billion. Sales figures were also forecast to grow exponentially in the future (Tillster, 2020).

However, at the same time academic research has not yet investigated scientific bases for guest's motivational use of both available service options. Accordingly, the qualitative nature of this work is helpful to find new theoretical and managerial knowledge that can be further tested quantitatively, if necessary (Shah & Corley, 2006). A holistic understanding can enable service providers to optimize the customer service experience at a high level of both service options. This is especially achieved because this thesis also considers the managerial view and not only the customer view in its data collection. Possible gaps between managers and customers can thus be revealed and optionally approached or even closed.

1.3 Purpose of the Study

To extract the maximum benefit and profit from both service options, i.e., SSKs and interpersonal service offerings, restaurant companies should be aware of all possible motivational factors that restaurant guests use in choosing their service option. Overall, the general SST research shows that factors such as demographics (Simon & Usunier, 2007; Wang, Harris & Patterson, 2012), perceived convenience, ease-of-use and fast-service (Kincaid & Baloglu, 2005), but also crowdedness, waiting times, and task complexity (Gelderman, Ghijsen & van Diemen, 2011) influence customers motivation to choose SSTs. In part, these factors could also be found explicitly for SSKs. Thus, it can be seen that demographic variables (Na, Lee & Yang, 2021), convenience, design (Park, Lehto & Lehto, 2021) or, for example, performance expectancy (Jeon, Sung & Kim, 2020) also have an influence on the intention of restaurant guests to use SSKs. On the side of general research on interpersonal service options it could be shown that affective characteristics (Sundaram & Webster, 2000) influence the intention of consumers to use this service option. Specifically for the restaurant industry, human clues (Wall & Berry, 2007) and menu knowledge and communication skills (Ko & Su, 2014) are considered as motivators for guests to choose human ordering services.

Nonetheless, the general research on SST and interpersonal service options finds far more factors that influence consumers in their choice of service option than that found specifically for the restaurant sector. The implication is that it is essential for researchers, as well as restaurant managers and operators, to further investigate the motivations of restaurant patrons to choose SSKs or human-service counters to potentially rediscover or refute the general SST and interpersonal service findings or to even find new factors that may be unique to the fast-food restaurant sector. This study addresses this implication and integrates a customer as well as a managerial perspective to uncover potential discrepancies that can then be used as practical implications for managers to optimize their customer service experience in a profit-maximizing manner. Accordingly, the following purposes are pursued by this study:

(1) Identify and categorize the motivational factors, from a customer and managerial perspective, that restaurant patrons have when choosing between the SSK or human-service counter during their fast-food order.
(2) Identify potential gaps between the customer and managerial perspective.

Based on these two formulated purposes, the following research question arises for this thesis:

What motivates restaurant guests to choose self-service kiosks or interpersonal service options at the counter when ordering in a fast-food restaurant and is there a discrepancy between the guests' and managers' perspectives?

1.4 Intended Contributions

1.4.1 Intended Theoretical Contributions

The authors of this paper aim to provide new insights into motivational factors, fast-food restaurant guests use in their touchpoint decision and thus contribute to the existing body of restaurant research and customer service experience research. Furthermore, these factors may be the basis for future qualitative research or quantitative testing. In addition, the authors intend to systematically aggregate the key findings of relevant existing research and summarize them clearly to make the state of knowledge readily available to other researchers.

1.4.2 Intended Practical Contributions

From a managerial perspective, it is strategically and operationally important to understand these motivators. The potential findings of this work can equip managers with this knowledge. More generally, this can help to conceptualize and execute optimal communication campaigns for the corresponding service option. On the one hand, knowledge about the motivators of the SSK usage can help to improve them in exactly those factors or to emphasize certain features. On the other hand, factors emerging from the findings that make guests use or not use the staffed counter can help to develop improved or adapted staff training or awareness training to, in turn, increase customer satisfaction. In addition, the authors of this study are also intended to understand the manager's perspective on the respective motivational factors of the different service options. By comparing the customer and manager view, potential gaps can be identified that may then be closed, which in turn may increase service quality for customers and company success.

1.5 Thesis Outline

The above introductory section including the discussion of the knowledge gap, the purpose of this thesis, and the related intended theoretical and practical contributions set the reader up for the topic and knowledge horizon. Also, the relevance of the research effort is crystallized here. In the second chapter, the literature and theory review are conducted. Chapter three then describes the scientific philosophy position taken for the thesis and provides an overview and

justification of the methodology and research design used. The fourth chapter details and describes the findings of this thesis with a corresponding analysis. These findings then serve as the basis for the fifth chapter, in which they are discussed in relation to the formulated research question, the research objectives set out in chapter one as well as the existing theoretical findings. The final chapter then explains the theoretical and practical contributions of this thesis. In addition, possible limitations of the work are pointed out and an outlook on future research potentials is given.

2. Literature and Theory Review

The subsequent chapter presents the relevant theories and academic literature aiming to compressively discuss the current state of research using various studies and publications. In doing so, the literature and theory review is grounded in the research streams of personal service experiences and customer experiences with SSTs and especially SSKs. The authors of this paper are aware that SSKs are part of SSTs, however, the focus of this paper is to explore what motivates customers to use SSKs or interpersonal service options in fast-food restaurants, thus the highlighting is deemed necessary. Furthermore, the incorporation of other forms of SSTs examined in the discussed studies was deemed relevant, as it can highlight factors that have not yet been found or examined in SSK research. Thus, a holistic picture of all potentially influencing factors can be presented, which can also help to close gaps in SST research, especially concerning the restaurant industry, and at the same time identify further research gaps or needs.

2.1 Positioning of Research Study

To obtain an overview of the research areas that need to be considered and the depth of the topics selected, a mind map (see *Figure 1*) was created for the reader. Looking at the mind map, all relevant topics and research fields are listed, whereas, the research streams this paper focuses on, are highlighted in grey. First, from a broader perspective it must be understood that the research study emerges from two major research domains, the hospitality industry research and the customer experience research. Next to service options in hotels and tourism agencies, focus was led on exploring digital and human touchpoints in the restaurant sector, and more specifically the fast-food sector. The reason for this is that fast-food restaurants offer both, SSKs and interpersonal service options to their customers. Also, most fast-food chains follow the principle of standardization. Consequently, the potential findings of this thesis can also serve the whole fast-food sector and create a greater added value in terms of managerial

implications. When considering the customer experience, the focus was laid on the pre-purchase process in comparison to the consumption and post-purchase process. The reason for this is that the work cannot cover all processes of the customer experience and the aim was to concentrate on the customer service experience during the ordering process. This also means that the concept of customer service quality, which has been widely researched in the existing literature, is only dealt with indirectly and not primarily based on the theoretical frameworks of SERVQUAL and DINESERV. The reasons for this were that SERVQUAL and DINESERV are two frameworks that are too far-reaching and could not be used for a limited consideration of the research gap aimed at. Furthermore, the focus was only placed on the in-store customer service experience, as the online area with online orders and home delivery service would have stretched the bows. Accordingly, these factors led to the positioning of this work to consider both the service organizations and the customers in terms of service encounters. Therefore, research was conducted on interrelated technologies by analyzing self-service and SSK on the one hand, and on human actors by analyzing interpersonal service and counter staff on the other hand.

Figure 1. Mind Map of the Different Research Streams
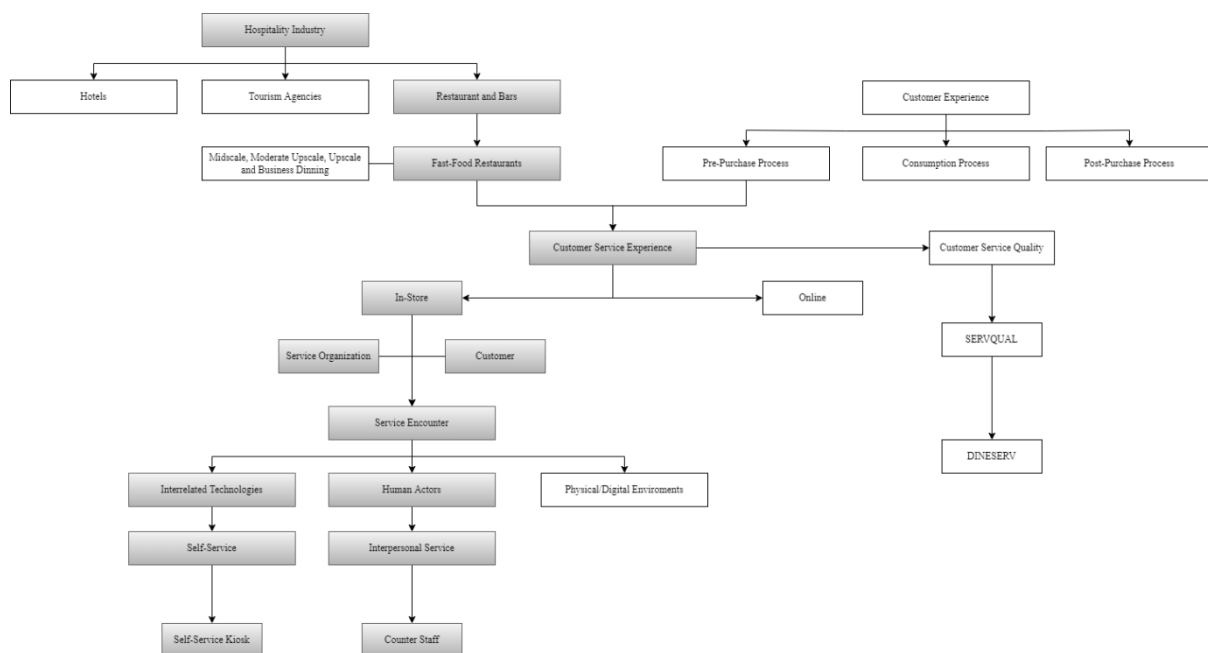
2.2 Service Encounter

Traditionally, a service encounter is defined as "the dyadic interaction between a customer and a service provider" (Surprenant & Solomon, 1987, p. 87) meaning that every single service encounter that took place encompassed at least one customer and one employee (Meuter et al.,

2000). This conceptualization is often referred to as "low-tech, high-touch paradigm" (Bitner, Brown & Meuter, 2000, pp. 146–147). However, the concept of service encounter was widened throughout the time as customers now interact with precise service interfaces that encompass not only the customer-employee-relationship but also the physical environment and all involving processes and technologies (Patrício, Fisk, Falcão e Cunha & Constantine, 2011). The continuous integration of technology in services shifts the aforementioned paradigm to a "high-tech and low-touch [one]" (Wang, Harris & Patterson, 2012, p. 54), making services and their encounters a complex system (Maglio, Vargo, Caswell & Spohrer, 2009). This complexity is still increasing since all future service innovations will inevitably be technology-driven (Huang & Rust, 2017). Therefore, Larivière, Bowen, Andreassen, Kunz, Sirianni, Voss, Wünderlich and Keyer (2017) define a service encounter as "any customer-company interaction that results from a service system that is comprised of interrelated technologies (either company- or customer-owned), human actors (employees and customers), physical/digital environments and company/customer processes" (p. 239). This means that today's service encounters are multi-channel encounters, namely encounters with digital, self-service touchpoints and also interpersonal touchpoints (Wang, Harris & Patterson, 2012). Hence, consumers are regarded as co-creators who contribute to the overall service generation process (Bitner, Zeithaml & Gremler, 2010). During this process they will ultimately develop their personal service experience which will be further discussed in the next section.

2.3 Customer Service Experience

Generally speaking, Sandström, Edvardsson, Kristensson and Magnusson (2008) define customer service experience as the entire emotional and functional value of a service consumed. The emotional value can be defined as the appearance and behavior of the service provider and the functional value as the technical performance of the service itself (Berry, Wall & Carbone, 2006; Sandström et al., 2008). To achieve those values Bitner (1992) introduced the term physical/technical enablers as the required starting point for the service experience. Hence, physical/technical enablers chosen by the service organization set the tone of how the emotional and functional values are being perceived. Here, satisfactory and high qualitative experiences must be generated by firms to create a positive customer service experience (Ranjan, Sugathan & Rossmann, 2015; Vogus & McClelland, 2016). On the consumer side, the individual and situational components also need to be considered. Prahalad and Ramaswamy (2000) describe the emotional and functional outcome as a co-creation process that is based on the situation in which the customer operates and therefore is unique to every

individual customer. The different elements of the customer service experience can be seen summarized in figure 2 below.

Figure 2. Customer Service Experience Structure (Sandström et al., 2008)
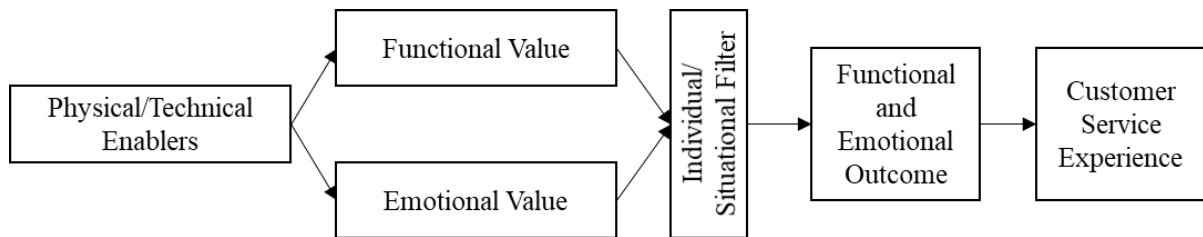
Yet, literature shows that the customer service experience changes over time (DiJulius, 2015). As Kanyan, Ngana and Voon (2016) point out, the fast-food industry is increasingly shifting from traditional interpersonal services to SSTs to overcome the problem of slow customer service in-store. The differentiation between interpersonal service and self-service will now be explained separately in the next sections to better understand these two kinds of touchpoints.

2.3.1 Customer Service Experience with Interpersonal Service

Traditionally, a service is viewed as an interplay between the customer and the service provider (Parasuraman, Zeithaml & Berry, 1985; Sundaram & Webster, 2000). More specifically, interpersonal service encounters encompass "the presence of a service provider representative and entail a direct interaction and communication between customer and service employee" (Scherer, Wünderlich & Wangenheim, 2015, p. 180). Consequently, employees play the decisive role in the customer service experience and thus influence service quality, customer satisfaction, and eventually the success of the company (Harris, 2007; Kandampully, Zhang & Jaakkola, 2018).

In general, research stated that "employees' display of affective characteristics, such as friendliness, responsiveness, and enthusiasm, positively influences customers' overall evaluation of service consumption experiences and perceptions of service quality" (Sundaram & Webster, 2000, p. 378). Hennig-Thurau (2004) emphasizes that customer interpersonal service experience is enhanced through employees' comfort bringing and personal attention. Hence, Lim, Lee and Foo (2017) describe the interpersonal service as a crucial part in the service evaluation process of the customer, since the shopping experience as well as the purchase behavior can be directly influenced. Another finding demonstrated by Reynolds and Arnold (2000) shows that through interpersonal service, loyalty towards store personnel can be generated which also relates to customer loyalty for a company. Gremler and Gwinner (2008)

go further and additionally show that a successful relationship between employee and customer must be formed in order for the interpersonal service experience to be positive and lead to long-lasting beneficial rewards. Besides, Vannucci and Pantano (2020) find out that recommendations and advices given through interpersonal service experiences can also be considered untrustworthy and perceived as biased by consumers. One of the reasons that prevents the use of human services is the distrust of customers that the sellers only want to increase their sales and do not make truthful recommendations (Vannucci & Pantano, 2020).

The way in which the interpersonal service offer is structured and which factors are most relevant depends entirely on the particular industry in which they are provided (Hanks, Line & Kim, 2017). For example, Bujisic, Hutchinson and Parsa (2014) state that the restaurant industry can be classified in multiple different segments and that each one holds different characteristics to differentiate itself from others in terms of its interpersonal service experience. Muller and Woods (1994), for example, defined the different restaurant segments into five major groups as quick service (fast-food restaurants), midscale, moderate upscale, upscale and business dining. Whereas the restaurant operating characteristics for quick service is designed for a habit forming purchase decision by offering narrow menus for rather price-sensitive customers compared to upscale restaurant striving to create a memorable experience with singular menus and emphasis on a higher service level as well as personalization (Muller & Woods, 1994).

Moreover, in the restaurant context, Becker, Murrmann, Murrmann and Cheung (1999) found out that factors like employee's hygiene, personnel's menu knowledge as well as their linguistic and communication skills are relevant in the evaluation of the interpersonal service quality. This is in line with Ko and Su (2014) who find several dimensions that customers use to evaluate their perceived service quality. Their findings indicate that staff apparel and appearance, linguistic skills, menu explanations skills as well as communication and responsiveness abilities impact restaurant guests' service evaluation. Generally, Wall and Berry (2007) argue that human clues are more important than functional clues to determine customers perception of their service experience. Human clues encompass the behavior of staff members towards the customers such as a smiling face of the employee behind the counter. Functional clues refer to the technical service quality such as the food per se or the order accuracy (Wall & Berry, 2007; Berry, Carbone & Haeckel, 2002). This is consistent with the description of Stevens, Knutson and Patton (1995), who define intangible aspects that are desired by consumers towards staff for good service quality. Here, customers want service

employees to behave professionally, which translates into appropriate interpersonal attention, responsiveness, and courtesy (Stevens, Knutson & Patton, 1995).

To analyze how human services can be conceptualized, Bitner, Booms and Tetreault (1990) defined three categories of employee behavior for evaluating the level of satisfaction or dissatisfaction with service experiences. They define the first category as the "[e]mployee response to service delivery system failures" (Bitner, Booms & Tetreault, 1990, p. 74). This category describes how employees deal with situations where customers are disappointed or complain because the service delivery system is not performing as desired. The way an employee handles such complaints and how the employee adapts and responds to the situation subsequently affects whether the customer is perceived to be satisfied or dissatisfied. The second category is defined as the "[e]mployee response to customer needs and requests" (Bitner, Booms & Tetreault, 1990, p. 75). This category includes how employees deal with special requests and how adaptable needs can be addressed. The level of satisfaction or dissatisfaction of the consumer in terms of service accordingly depends on how good and whether customized service is available or delivered at all. The third and last category is called the "[u]npromted and unsolicited employee actions" (Bitner, Booms & Tetreault, 1990, p. 76). This category describes occurrences involving unexpected and unrequested employee behaviors that either detract or enhance the core service delivery. Satisfaction can be achieved, for instance, by providing positive surprises, such as special attention as an employee to the customer. Dissatisfaction on the other hand is generated by negative and intolerable employee behavior, such as ignoring the customers or even treating them rudely.

2.3.2 Customer Service Experience with Self-Service

With self-service, the employee is left out and the consumer serves himself by co-creating value with the service organization (Hsu, Nguyen & Huang, 2021). Meuter et al. (2000) justify the integration of and the trend to self-service as an attempt to create a better alternative, while Lin and Hsieh (2011) add that employees and machines can in principle provide the same basic services. However, the question should always be asked as to whether or not a transition to or integration of self-service will improve the existing interpersonal service experience (Nam, Dutt, Chathoth, Daghfous & Khan, 2021). Earlier research has indicated that service organizations should aim at offering both self-service and interpersonal service to increase customer satisfaction (Schultze, 2003).

In order to assess and analyze the interaction between customers and options of self-service, Lin and Hsieh (2011) have defined seven dimensions to evaluate the quality of self-service.

The first dimension concerns the functionality of self-service and analyzes how well, quickly, and easily the service is provided. Enjoyment is the second dimension and reflects the feeling one gets during self-service and whether interest is aroused or not. The third dimension is security, which plays an important role. How safe one feels when using self-service and whether personal data is treated confidentially are important points that are considered here. The fourth dimension is about assurance and whether one is biased or not and comes down to the reputation and competencies of the self-service option to be used. Self-service options are free to create and can take different forms, which is why design, as the fifth dimension, is also included. As the second last dimension, convenience addresses the question of how available self-service is and whether it can be accessed. Customization, as the last dimension, poses the question of whether the self-service offering can meet individual needs and leave room for individual preferences.

2.4 Self-Service Technology

In this notion, the service encounter for customers has changed due to the extensive introduction of SSTs (Wang, Harris & Patterson, 2012). SSTs are defined as "technological interfaces that enable customers to produce a service independent of direct service employee involvement" (Meuter et al., 2000, p. 50). On the one hand, companies using these self-service enablers profit from reduced costs, potentially higher customer satisfaction, the possibility to build new channels through which novel consumer segments can be reached (Bitner, Ostrom & Meuter, 2002) but also from higher service accuracy, service customization, improved competitiveness and productivity as well as an improved brand image (Meuter et al., 2000). On the other hand, customers using SSTs benefit from cost and time savings, greater feeling of service control, customization options (Meuter & Bitner, 1998) and technology excitement (Dabholkar, 1996).

Self-service technologies are utilized intensively in today's service industries (Park, Lehto & Lehto, 2021). For example, airline passengers are easily able to check in their luggage by using self-check-in-machines. Grocery shoppers can use self-scanners to accelerate the shopping and paying process in supermarkets, and fast-food customers can use SSKs to place and pay for their food orders. Meuter et al. (2000) developed a typology and categorized the SSTs by the two dimensions interface and purpose. Accordingly, they distinguish between "telephone-based technologies and various interactive voice response systems, direct online connections and Internet-based interfaces, interactive free-standing kiosks, and video or compact disc … technologies" (Meuter et al., 2000, p. 52). These technologies pursue either the goal of

customer service, transaction or self-help (Meuter et al., 2000). Ho, Lee and Sung (2013) added app and mobile as another interface to the typology of SST in order to pay tribute to the mobile-first approach.

In general, existing research has especially focused on industries such as banking (Curran, Meuter & Surprenant, 2003; Nilsson, 2007), retailing (Dean, 2008; Weijters et al., 2007), airlines (Gures, Inan & Arslan, 2018; Gelderman, Ghijsen & van Diemen, 2011), and restaurants (Ahn & Seo, 2018; Xu et al., 2020; Na, Lee & Yang, 2021; Park, Lehto & Lehto, 2021). The following part will shed light on the findings of existing research. In addition, table 1 summarizes the main findings discussed in the upcoming section. The table also includes the exact SSTs used in each study to provide a clear means of comparison.

The Influence of Demographics on Customer's Attitude Towards Using SSTs

Prior research suggests that demographics have an impact on customer's attitude towards using SSTs (Simon & Usunier, 2007; Dean, 2008; Weijters et al., 2007; Venkatesh & Morris, 2000; Elliott & Hall, 2005). Simon and Usunier (2007) find a negative effect of age on SST preference meaning that the older customers become the higher is their preference for engaging with employees. This is in line with Dean (2008) who postulates that older customers avoid SSTs because of their limited experience in dealing with them. Dean (2008) also shows that older consumers have a preference for human interactions with personnel. Furthermore, older customers tend to have a negative attitude that SSTs represent a service degradation and are intended to benefit the company rather than the customer. This also leads to older customer not being willing to pay a price premium for SST options such as express check-outs (Dean, 2008). However, Wang, Harris and Patterson (2012) illustrate that older customers increasingly use SSTs when going shopping with their children. Therefore, the companion of children can attenuate the negative effect of age on SST attitude and usage. In contrast to that, Weijters et al. (2007) argue that age is not a factor that influences customers' attitude of using a SST.

In addition to age, previous research also indicates that gender has an impact on SST use. For instance, Venkatesh and Morris (2000) illustrate in consistence with Elliott and Hall (2005), that men are more likely to use SSTs compared to women. More specifically, Elliott and Hall (2005) find out that men exhibit a higher willingness to explore new technologies such as SSTs. In contrast, women are often less confident in using new technologies and demand assurances that novel technologies will work correctly and reliably. Moreover, Dean (2008) shows that women are more reflecting about the implementation of SSTs as they elicited a negative

attitude towards SSTs as they assumed them to be the cause of former employees losing their jobs.

Besides gender, education also has an impact on SST use. Accordingly, Weijters et al. (2007) demonstrate that customers who score high on education also exhibit a higher appreciation of innovation which in turn increases their likelihood to use SSTs. Customers who score low on education, however, showed a negative attitude toward SST usage.

Also, Nilsson (2007) finds that socio-cultural differences determine consumer's intention to use SSTs. In western countries, such as Sweden, consumers were intended to use SSTs regardless of demographic variables. In emerging countries, such as Estonia, demographic variables do play a role as determinators of SST usage behavior. Accordingly, better educated men with a higher income used SSTs more often than the rest of the population.

Although previous research has been able to identify a variety of demographic variables influencing SST use, Meuter, Ostrom, Bitner and Roundtree (2003) argue that technology anxiety is a stronger determinant of SST use than demographic variables. Hence, customers who have a high technology anxiety are less keen to use SSTs. This is consistent with Lee et al. (2010) who postulate that demographic variables only have an indirect impact on consumer's intention to utilize SSTs. This means that demographic variables determine consumer traits which are in turn influential factors on SST usage intentions.

The Influence of Satisfying and Dissatisfying Factors on Consumer's Intention to Use SSTs
Another research stream investigated factors of satisfaction or dissatisfaction that have an impact on customers' intention to use SSTs (Kincaid & Baloglu, 2005; Lin & Chang, 2011; Collier & Kimes, 2013; Meuter et al., 2000; Curran, Meuter & Surprenant, 2003; Weijters et al., 2007). Meuter et al. (2000) find several factors of satisfaction and dissatisfaction with SSTs. On the one hand, factors of satisfaction are constituted by SST's capability to free customers from unpleasant situations, by their advantages for customers of saving time, being easy to use and accessible as well as doing what they are supposed to do. On the other hand, factors of dissatisfaction with SSTs consist of processes not working as they are intended and customers suddenly having to switch to a different touchpoint during SST use, such as interaction with staff. Another dissatisfaction factor lies within a badly designed interface and a general user-unfriendly service (Meuter et al., 2000). Furthermore, Kincaid and Baloglu (2005) show that customers especially appreciate convenience, ease of use and a fast service when engaging with SSTs. However, the level of appreciation is again influenced by demographic variables. For

14

example, customers at the age of 25 or below indicated a higher importance of fast service compared to other age groups (Kincaid & Baloglu, 2005). This is in consistency with Lin and Chang (2011) and with Weijters et al. (2007) who argue that the more customers perceive SSTs as being useful and easy to use the more positive is their attitude towards the usage of SSTs. In turn, a more positive attitude leads customers to a faster and more willing behavioral adoption of SSTs. The perception of usefulness and ease of usage is positively influenced by customer's level of technology readiness (Lin & Chang, 2011) as well as gender. Weijters et al. (2007) indicate that the connection between perceived usefulness and a positive attitude towards using SSTs is stronger for men. However, Gelderman, Ghijsen and van Diemen (2011) could not find a statistical evidence that technology readiness impacts consumers' attitude toward using SSTs.

Beyond convenience, ease of use and fast service, Lee and Allaway (2002) posit that the control over SSTs is considered to be a satisfactory factor. Accordingly, customers who have the feeling to be in control of using the SST elicit a lower risk perception, an increased value perception and consequently a higher intention to adopt to the SST. In addition, Collier and Kimes (2013) distinguish between users and non-users of SSTs. For users, convenience in dealing with SSTs has a positive impact on user's perception of speed, accuracy and their motivation to experiment with the devices. Moreover, the authors could show that the speed of transaction positively influenced user's overall satisfaction with SSTs as well as their perception of technology trust. For non-users, however, technology trust plays the most important role for their adoption decision and reduction of human interaction in their service encounter. Collier and Kimes (2013) argue that non-users can build technology trust when customers can easily explore SST functions and when their orders are accurately placed. This can be reached by offering order review options before the order is actually placed.

Besides that, Dabholkar and Bagozzi (2002) and Weijters et al. (2007) suggest that fun also has a direct impact on consumer's attitude toward utilizing SSTs which then has a direct effect on the actual SST use. Dabholkar and Bagozzi (2002) theorize that the aspect of fun is particularly important for consumers who rank high in novelty seeking, self-consciousness, self-efficacy, and need for having interaction with service employees. The aspect of fun should therefore be incorporated not only into advertising claims but also into an entertaining SST design. Similarly, Collier and Barnes (2015) investigated SSTs in a retail setting and show that fun experiences help to drive favorable emotions among consumers, such as delight. However, Ahn and Seo (2018) look at the restaurant context and posit that utilitarian SST features such as functionality and customization options have a stronger influence on consumer's value

perception compared to hedonic features such as design and enjoyment. Xu et al. (2020) further argue that utilitarian values are particularly important in fast-food restaurants. In the fine-dining sector, on the other hand, hedonic characteristics are more important.

The Influence of Situational Factors on Consumer's Willingness to Use SSTs

In addition, existing research engagements investigated situational factors that influence consumers' willingness to accept and use SSTs. One of these situational factors are waiting times. Gelderman, Ghijsen and van Diemen (2011) investigate passengers at airports and find that the perception of the departure area being too overcrowded leads passengers to increasingly use self-service check-in options. However, when self-service options were equally occupied as interpersonal options, passengers showed preference for interpersonal check-in options. In contrast, Wang, Harris and Patterson (2012) show that in a retail context, consumers generally tend to use the service with the lower perceived waiting time. Also, Weijters et al. (2007) suggest that waiting time advantages, that are elicited when using SSTs compared to personal services in retail settings, are only valid when many products are purchased. Vannucci and Pantano (2020) find that consumers prefer digital service options as they are faster in delivering services without being influenced by the number of store visitors, which would make waiting times obsolete.

Besides waiting times, task complexity is another situational factor influencing SST usage. Wang, Harris and Patterson (2012) posit that consumers prefer SST options for simple tasks only. When tasks become more difficult, such as registering non-scannable items at self-check-outs, the preference shifts toward using personal services. Similarly, Collier, Moore, Horky and Moore (2015) show that customers' perception of being under time pressure is increased and their shopping effectiveness is decreased when the number of products to be checked out by the customer increases. Therefore, they suggest that SSTs are more suitable for smaller order sizes.

Moreover, a general preference for human interaction is also considered to be a situational factor that impacts consumer's SST decision. Gelderman, Ghijsen and van Diemen (2011) as well as Curran, Meuter and Surprenant (2003) postulate that a general preference for human interaction decreases the tendency to use SSTs at all. Beyond that, Dabholkar, Bobbitt and Lee (2003) find in their study with self-scanners that locating employees close to SST areas provides customers with a feeling of support and security. In contrast, Collier et al. (2015) investigate situational influences on consumers' decision to use SSTs with the help of self-

checkout options and come to the conclusion that locating staff members close to SST areas decreases customers' shopping effectiveness and increases their feeling of time pressure.

Besides, consumer's experiences with SSTs is an additional factor that needs to be taken into account. Wang, Harris and Patterson (2012) indicate that consumers who use SSTs for the first time have the expectation to fail using it properly. However, if consumers continue to fail using SSTs properly, the likelihood of future SST usage is strongly reduced (Curran, Meuter & Surprenant, 2003; Wang, Harris & Patterson, 2012). Also, consumers making mistakes when using SSTs or failing to use them at all tend not to blame themselves but the device (Meuter et al., 2000). Nevertheless, Curran, Meuter and Surprenant (2003) suggest that the brand or company is less relevant as a situational influence on consumer's SST decision.

Consequences of SST Usage

Another research stream looks beyond the SST usage and examines the consequences of consumers using more SST options and less interpersonal options (Vesel & Žabkar, 2010; Selnes & Hansen, 2001). Vesel and Žabkar (2010) find that interpersonal interaction of customers and service personnel is central in retail service offerings as human interaction builds trust, increases customer satisfaction, emotional commitment as well as it creates loyal customers. In this notion, Selnes and Hansen (2001) argue that SSTs that do not require customer-employee relationships at all have a negative impact on creating customer loyalty as mechanisms of social bonding are lacking. However, this negative impact can be attenuated when loyalty programs are built-in to the SSTs.

Table 1. Summary of Main Findings of Previous Research on SSTs

SST type	Authors	Year	Main findings
table touch-screen	Anh & Seo	2018	▪ utilitarian features are more important than hedonic features for consumers' value perception importance of functionality and customization is found ▪ consumer's gadget-loving inclination moderates their SST adoption
	Kincaid & Baloglu	2005	▪ features such as convenience, ease of use, and fast service are valued ▪ demographics such as age are influential on value perception
	Dabholkar & Bagozzi	2002	▪ fun is a situational factor influencing adoption decision especially for consumers who have a high level of novelty seeking, self-efficacy,

			self-consciousness, need for employee interaction ▪ perceived waiting time is moderating SST attitude
self-service airport check-in	Gelderma n, Ghijsen & van Diemen	2011	▪ perception of crowdedness increases SST usage ▪ when queues at SST and check-in counter are perceived to be equally long, interpersonal check-in counter is preferred ▪ general preference for interpersonal contact hinders SST usage ▪ technology readiness is not found to influence the decision for SST or interpersonal service
online and mobile phone food ordering	Collier & Kimes	2012	users: ▪ convenience is the most important factor for using the SST ▪ transaction speed strongly impacts consumers' overall satisfaction and trust perception non-users: ▪ trust is crucial for non-users to start adopting SSTs ▪ trust can be achieved by letting consumers easily browse and explore SST and by securing accuracy in terms of letting consumers review and prove their order before submitting it
ATMs, bank by phone, internet banking	Curran, Meuter & Surprenant	2003	▪ negative experiences with SST lead to reduction of future usage ▪ generally positive attitude toward staff members is likely to reduce SST usage ▪ attitude toward brand/company has only a minimal impact on SST usage intention
	Selnes & Hansen	2001	▪ SSTs that do not allow interpersonal interaction at all, negatively affect consumer loyalty ▪ this effect can be diminished when loyalty programs are built-in to the SST
	Simon & Usunier	2007	▪ age is found to negatively affect consumer's intention to use SST
	Nilsson	2007	▪ impact of demographics on SST usage varies across cultures and markets
	Lee, Jeong Cho, Xu & Fairhurst	2010	▪ demographics only indirectly affect consumers' decision to use self-service checkouts ▪ consumer traits are responsible for decision making

retail self-service checkout, self-scanner	Weijters, Rangarajan, Falk & Schillewaert	2007	▪ the strongest effect on consumers' attitude toward utilizing SST are factors such as perceived usefulness, ease of use, reliability, and fun (especially true for men) ▪ demographic variable age has no effect on consumer's attitude to use SST ▪ there is a positive effect of consumers' level of education on likelihood of adopting SSTs
	Collier, Moore, Horky & Moore	2015	▪ consumers experience a decreased shopping effectiveness and an increased feeling of time pressure when an employee is located close to the SST area ▪ consumers who are willing to wait have a more positive perceived shopping effectiveness; consumers who are willing to wait for a SST therefore assume the SST for the best option to increase their shopping effectiveness ▪ the more items consumers purchase the higher is their perceived time pressure and the lower the shopping effectiveness; this indicates that SSTs are more suitable for smaller order sizes
	Dabholkar, Bobbitt & Lee	2003	▪ employees located close to SST area provide the feeling of support for consumers
	Wang, Harris & Petterson	2010	▪ perceived waiting time influences decision for SST or interpersonal service ▪ SSTs are preferred for easy tasks; the more complex the task becomes the more preferred are interpersonal services ▪ older customers tend to use interpersonal services when shopping alone; when they are accompanied by their children, they tend to choose SSTs
cross-section SSTs (including among others: automated airline ticketing machines, automated hotel checkout, automated car	Meuter, Ostrom, Bitner & Roundtree	2003	▪ the higher consumers score on technology anxiety the less likely becomes their SST usage ▪ technology anxiety is more suitable to determine SST use compared to consumer demographics
	Dean	2008	▪ older consumers use SSTs less often because of their reduced confidence in engaging with it, their general preference for interpersonal services, and their perception that SSTs were only beneficial for the company and a service reduction ▪ older consumers are less motivated to pay more for express checkouts

rental machines, package tracking, ATMs, self-service kiosks)			▪ female consumers are more likely to perceive SSTs as the reason why employees lose jobs
	Meuter, Ostrom, Roundtree & Bitner	2000	▪ factors such as timesaving, ease of use, ease of access are perceived as satisfying ▪ factors such as defect functions and processes as well as poor design are perceived as dissatisfying ▪ consumers tend to not blame themselves when something goes wrong
	Lin & Chang	2011	▪ perceived usefulness and ease of use positively influence consumer's SST attitude which leads to a favorable SST adoption decision ▪ consumers' technology readiness positively impacts their perceived usefulness and ease of use
online self-service	Venkatesh & Morris	2000	▪ women are less probable to emphasize the advantages of using SSTs compared to men
	Lee & Allaway	2002	▪ consumers who have the feeling of being in control of the SST have lower risk perceptions, higher value perceptions, and show a higher SST adoption intention
self-service customization	Collier & Barnes	2015	▪ fun experiences help to drive favorable emotions among consumers
not specified	Elliot & Hall	2005	▪ gender influences SST usage ▪ men are more likely to engage with new technologies and SSTs than women
	Vanucci & Pantano	2020	▪ quality of service, interaction and trust perceptions are influencing customers in their decision to use interpersonal or self-service options

To conclude, existing research efforts mainly put their focus on the factors influencing customers decision to use SSTs. These factors are considered to be affected by customers' demographic variables (e.g., age or gender), the SSTs' satisfaction or dissatisfaction level (e.g., convenience or ease of use) as well as situational influences (e.g., waiting times or task complexity). Furthermore, previous research also investigated potential consequences of consumers using self-service instead of personal service options.

2.5 Self-Service Kiosks

As a matter of fact, most fast-food restaurants offer their customers SSKs in addition to their interpersonal ordering options. For this reason, the following section will be used explicitly to define what SSKs are and to review the existing research on SSKs in the restaurant context. The main findings of the reviewed literature are summarized in table 2.

SSKs represent a high reference to daily life, as they can be observed in almost all areas of use (Slack & Rowley, 2002). Generally, SSKs can be defined as unmanned self-standing devices that are usually based on touch-screen technology (Kasavana, 2008) and are "mostly implemented and promoted to substitute traditional service encounter" (Rashid, Ketimin & Shami, 2021, p. 13). SSKs provide customers with the opportunity to fulfill their buying process independently (Chang et al., 2016) by offering electronic payment options, a variety of digitally displayed capabilities, customization options as well as all-encompassing product information (Kasavana, 2008). But also, companies that implement SSKs profit from it. For example, SSKs help companies to enhance their service quality (Ottenbacher & Harrington, 2009), lower their operational costs, grow sales (Kim, Christodoulidou & Choo, 2013), and to provide differentiated service offers (Fishman, 2004). Moreover, customers spend up to 20 % more money when they use SSKs to place their orders, especially since the kiosks are programmed to upsell automatically (Writer, 2021).

With regard to the restaurant context, Xu et al. (2020) define SSKs as an exclusive "[o]nsite restaurant interactive self-service technology" (p. 3335). More specifically, SSKs help consumers to communicate through technology interfaces within restaurants to plan, perform, and finalize services without the assistance of restaurant staff as the kiosks function as the mediator between guests and the restaurant operator. Many restaurant chains, such as McDonald's, have integrated these mediators into their restaurant landscape in order to enhance customer's service experience (Xu et al., 2020) and satisfaction through technological innovation (Kim, Christodoulidou & Choo, 2013).

Table 2. Summary of Main Findings of Previous Research on SSKs

SST type	Authors	Year	Main findings
	Xu, Jeong, Baiomy & Shao	2020	▪ onsite restaurant interactive self-service technology is appreciated by consumers as it generates entertaining and emotional value ▪ impact of value perception via hedonic expectations is stronger for fine-dining restaurants compared to quick-service restaurants

21

self-service kiosk	Jeon, Sung & Kim	2020	▪ most influential adoption factor is performance expectancy ▪ it is crucial for adoption that kiosk is functional, easy to use and offers customization options ▪ innovativeness is a moderating variable: consumers with low level of innovativeness can be convinced to use kiosks by consumers with high level of innovativeness
	Na, Lee & Yang	2021	▪ innovativeness and optimism influence consumers' willingness to use kiosks ▪ feeling of discomfort hinders kiosk usage ▪ technology readiness is not found to be influencing kiosk usage ▪ innovative men are more probable to use kiosks
	Lee & Oh	2022	▪ consumers' intention to use self-service kiosks is positively impacted by their need for interaction and their self-efficacy ▪ positive experiences with the interactive functions of self-service kiosks lead to the fact that the customers use the kiosks again if they are recommended to use them by the staff members
	Park, Lehto & Lehto	2021	▪ convenience and design are the most important attributes of self-service kiosk for restaurant customers; customization scored lowest on the importance scale of customers ▪ additional communication support is the most important technical attribute for customers as it also increases customer's perception of functionality, security, assurance, convenience and customization ▪ easy to go back, continue, and quit is second most important technical attribute for customers ▪ multi-language support increases functionality, enjoyment, assurance, convenience, customization ▪ screen protector from other people scored lowest on customer's importance scale
	Kim, Christo doulido u & Choo	2018	▪ In contrast to those who have not previously used SSTs, customers with previous experiences are more probable to trust in their capabilities and are extrinsically motivated to use SSKs in quick-service restaurants ▪ customers who have a clear perception of their role have a higher likelihood to utilize SSKs in quick-service restaurants ▪ no evidence for differences among genders were found
	Leung, Torres & Fan	2021	▪ quick-service restaurant guests who use SSKs have a more positive experience compared to guest who order at the counter with the help of an employee ▪ more revenue is made at the counter compared to the SSK especially when restaurant crowdedness is high

			▪ when crowdedness in restaurant is low, customers take more time to place their orders at the counter then they do at the SSK

In recent years, some researchers have set this particular form of SST as their research focus (Na, Lee & Yang, 2021; Jeon, Sung & Kim, 2020; Xu et al., 2020; Lee & Oh, 2022). In general, Leung, Torres and Fan (2021) discover that quick-service restaurant guests who use SSKs have a more positive experience compared to guest who order at the counter with the help of an employee. Nevertheless, the study also finds that more revenue is made at the counter compared to the SSK especially when the restaurant crowdedness is high. Also, when the restaurant crowdedness is low, guests take more time to place their orders at the counter compared to placing it at the SSK.

Despite this, Xu et al. (2020) show that SSKs are able to generate both entertainment and emotional value. Park, Lehto and Lehto (2021) suggest convenience and design as the most essential attributes of SSKs. However, the authors also find that customization options are the least relevant SSK attributes for restaurant guests. Moreover, Jeon, Sung and Kim (2020) find that the greatest influencing factor affecting consumers' intentions to adopt SSKs is performance expectancy. Therefore, practical functions such as a quick and correct ordering process and options of customization are beneficial for a fast adoption by customers. Furthermore, the study indicates that a rapid understanding of the kiosk's functionalities has also a positive effect on consumer's adoption decision.

Additionally, customers scoring high on innovativeness are more likely to use SSKs. Customers scoring low on innovativeness may still use kiosks as they may be inspired by highly innovative people using them (Jeon, Sung & Kim, 2020). This is in line with Na, Lee and Yang (2021) who also suggest that innovativeness and optimism determine guests' motivation to use SSKs. This is especially true for males. Moreover, when consumers have a feeling of discomfort, this will prevent them from continuing using kiosks. However, technology readiness among restaurant patrons is not found to be an influential factor. Lee and Oh (2022) find in their study that customers' intention to use SSKs in quick-service restaurants is positively impacted by their need for interaction and their self-efficacy. Furthermore, the authors posit that a positive experiences with the interactive functions of SSKs lead to the fact that the customers use the kiosks again if they are recommended to do so by the staff members. Also, a study by Kim, Christodoulidou and Choo (2013) revealed that in contrast to those who have not previously used SSTs in general, customers with previous experiences are more

23

probable to trust in their capabilities and are extrinsically motivated to use SSKs in quick-service restaurants regardless of customer's gender. In addition, customers who have a clear perception of their role, have a higher likelihood to utilize SSKs.

From a more technical perspective, Park, Lehto and Lehto (2021) discover that additional communication support is the most crucial technical attribute of SSKs as it also increases customers' perception of the kiosk's "functionality, security, assurance, convenience, and customization attributes" (p. 8). Therefore, the researchers suggest managers to have employees within sight of restaurant guests, as they may wish to ask for help from a staff member in case of doubt. Besides, SSK functions such as easy-to-go-back, continue and quit as well as multi-language support are considered to be valued by customers. In contrast, screen protection from other restaurant guests is found to be the least important technical attribute of SSKs for customers.

In conclusion, researcher who focused on SSKs, emphasized the SSKs' attributes that are valued by customers (e.g., additional communication support or design) as well as the influence of demographics or characteristics on customers on SSK usage behavior (e.g., level of innovativeness or gender). In addition, the comparison of SSKs and personal service options is also part of previous studies. Another finding of the literature review of SSKs in restaurants is that all studies found were conducted between 2018 and 2022. This indicates a high theoretical but also practical relevance in terms of comprehending a successful implementation of SSKs as a service extension to personal services in the restaurant landscape. However, the more general literature on SSTs in different industries elicited more knowledge on the motivational, attitudinal or situational factors customers are influenced by in their decision to use self-service options than the literature on SSKs provides. Therefore, the knowledge on customer intentions to either use SSKs or interpersonal services in the restaurant, and especially fast-food context, can still be considered limited and extendable. Consequently, this study aims to understand these underlying factors more extensively.

2.6 Framework of the Current State of Knowledge

Building on the discussed literature and research findings above, figure 3 presents the framework of the current state of knowledge for this study. In general, the framework combines the two relevant research areas that are considered as the basis for this research study, namely *SST* and *personal service*. These areas constitute potential *influences* for the customer who is put in the central position and referred to as *restaurant guest* to highlight the focus of this study. Moreover, the two service blocks contain a summary of factors that are found to have an

influence on customer's motivation or intention to use self-service or personal service options. Within the more general findings of each service block, more specific areas are integrated into the model, i.e., *SSK in restaurants* and *personal service in restaurants* to emphasize the industry-specific findings that are most relevant for the research focus of this study. As stated earlier in this work, the decision to include general findings on SST and personal services was made in order to create a broader picture of all potential influential factors of customer's decision for a certain service option within the fast-food context that were not yet elicited. This becomes especially crucial for factors that determine the tendency towards using personal service options in the restaurant context as only a few studies were found during the process of reviewing the relevant literature.

With regards to the SST block, previous research findings suggest that for example age, gender or education influences customer's intention to use SSTs (e.g., Simon & Usunier, 2007; Wang, Harris & Patterson, 2012; Weijters et al., 2007). Therefore, *demographics* was included in the framework. Additionally, the literature shows that elements such as convenience, ease-of-use and fast-service (Kincaid & Baloglu, 2005) or usefulness (Lin & Chang, 2011) also impact customer's decision to use SSTs or not. Hence, the component *factors of dis-/satisfaction* was incorporated into the model. Lastly, the literature review revealed that elements such as crowdedness, waiting time or task complexity are considered to have an influence on the SST usage decision made by customers (Gelderman, Ghijsen & van Diemen, 2011; Wang, Harris & Patterson, 2012). Accordingly, the component *situational factors* was also added to the framework.

Figure 3. Framework of the Current State of Knowledge

SST

- **Demographics** (age, gender, education, culture)
- **Factors of dis-/satisfaction** (convenience, ease-of-use, fast-service, control, speed, fun)
- **Situational factors** (crowdedness, waiting time, task complexity, human preference, experience)

SST in Restaurants
- **Demographics** (gender, innovativeness)
- **Factors of dis-/satisfaction** (convenience, design, technical features)
- **Situational factors** (performance expectancy, understanding, experience)

Personal Service

- **Affective characteristics** (friendliness, responsiveness, enthusiasm)
- **Customer-employee-relationship** (loyalty, mistrust, comfort, personal attention)

Personal Service in Restaurants
- **Human/Functional Clues** (e.g., smiling face, hygiene, apparel and appearance, order accuracy)
- **Skills** (e.g., linguistic and communication skills, menu knowledge)

Restaurant Guest

As mentioned before, within the literature and research of SST, one research stream focused on SSKs in restaurants and why customers would be intended to use them or not. Here, the literature also suggests that elements such as gender (Na, Lee & Yang, 2021) or someone's

level of innovativeness (Jeon, Sung & Kim, 2020) influence the intention of restaurant guests to use SSKs. Therefore, *demographics* was also integrated in this part of the framework. In addition, restaurant patrons are also influenced by the level of convenience or design when they make their decision to use SSKs (Park, Lehto & Lehto, 2021). Thus, the element *factors of dis-/satisfaction* was also integrated here. Moreover, factors such as performance expectancy or experience (Jeon, Sung & Kim, 2020) are shown to be influential as well which is why the component *situational factors* was incorporated in the framework again.

In the field of research that examines the personal services and much more the factors that influence the customers in their decision to use this type of service, two elements could be found to be included in the framework. One element is that of *affective characteristics*, which includes variables such as friendliness and enthusiasm (Sundaram & Webster, 2000). The other element is the *customer-employee relationship* which includes, among others, the variable mistrust (Vannucci & Pantano, 2020). Research that has focused on indicators for personal service evaluations in the restaurant context has found that *human* and *functional clues* (Wall & Berry, 2007) as well as general *skills* such as menu knowledge or communication abilities (Ko & Su, 2014) influence restaurant guests in their service perceptions and decision. Therefore, these indicators were also incorporated into the framework.

We conclude that previous studies in the area of SST are already extensive. However, studies that focus on SSK and personal services in the restaurant context and especially the combination of both service options are minimal. Therefore, this study could help to shed light on the restaurant industry and increase the knowledge and insights.

Nevertheless, as already mentioned before, the created framework is only of preliminary nature. Thus, there might be more findings and factors that are missing in the framework or factors that will develop throughout the future. Accordingly, the created framework functions as an orientation and simplification that guides this study's data collection and comprehension and offers other researchers the possibility to use it as a starting point for further investigation and theory development. In addition, the framework might help the researchers of this study to integrate novel insights into the existing ones in a structured and comprehensive way.

3. Methodology

3.1 Research Philosophy

In general, research philosophy consists of two main ideas, namely ontology and epistemology. Both of them impact researcher's thinking about the research process (Saunders, Lewis & Thornhill, 2009). The following section will explore them in more detail and apply them for this research study.

3.1.1 Ontology

The ontological point of view focuses on "the nature of reality and existence" (Easterby-Smith, Thorpe & Jackson, 2015, p. 46). In other words, ontological positions are concerned with "the way in which the world works" (Saunders, Lewis & Thornhill, 2009, p. 110). This study aims to understand why restaurant guests either use SSKs or interpersonal service options, such as ordering their fast-food at the counter with the help of a cashier. Thus, the authors believe that the best way to achieve this research goal is to understand the motivational drivers, experiences, and feelings guests have or use to make their service option decisions. The authors further assume that there are many different motivators and subjective influences underlying the behavioral decision and that there is not only one determinant in customer's service option decision. Additionally, it is assumed that customer's motivators might differ due to different social norms, demographic variables, and other situational factors. This is particularly true for fast-food restaurants since its respective customer segments are heterogenous in terms of their needs and wants (Singireddy, 2020). Hence, this study uses relativism as its ontological position. According to Easterby-Smith, Thorpe and Jackson (2015), a relativist ontological view is characterized by many different truths and perspectives on reality depending on the observer's point of view but also his or her social and cultural background.

3.1.2 Epistemology

An epistemological position emphasizes "the nature of knowledge and ways of enquiring into the physical and social worlds" (Easterby-Smith, Thorpe & Jackson, 2015, p. 51) and "how we conceive our surroundings" (Wilson, 2014, p. 32). In general, epistemology distinguishes between two research approaches: positivism and social constructivism (Easterby-Smith, Thorpe & Jackson, 2015). The former approach attempts to minimize interaction with participants to maintain the objectivity of the findings and ultimately apply them to the population as a whole. Positivists usually use a deductive approach and work their way from theory to observation (Saunders, Lewis & Thornhill, 2009). The latter approach intends to

comprehend the social realities of the research subjects, which also necessitates some interaction with them. Accordingly, the constructivist approach is to be considered as subjective and inductive research as researcher start with observations and end up with theory (Saunders, Lewis & Thornhill, 2009). Correspondingly, this study is based on a social constructivist position since this research is intended to understand why customers are motivated to use SSKs or interpersonal service options in their fast-food-ordering process. As stated before, the authors of this study assume that consumers have different reasons and motivators why they would prefer a certain service touchpoint. Hence, the constructivist point of view helps to investigate these multiple and diverse perspectives of different individuals through their eyes and to extensively understand "what people, individually and collectively, are thinking and feeling" (Easterby-Smith, Thorpe & Jackson, 2015, p. 52). Eventually, this will help to elicit more insights into customer's decision-making process and factors which influence them when making a service touchpoint decision at a fast-food restaurant.

3.2 Research Strategy

To understand the underlying factors that lead customers in their decision to either use SSKs or interpersonal services when ordering at a fast-food restaurant, the researchers of this work conducted a qualitative study. Qualitative data is "all non-numeric data or data that have not been quantified" (Saunders, Lewis & Thornhill, 2009, p. 480) and is also characterized by an "interactive and interpretive process in which they are created" (Easterby-Smith, Thorpe & Jackson, 2015, p. 129). On the one hand, a qualitative research strategy does justice to the chosen research philosophy. On the other hand, qualitative data allows to "discover new variables and relationships, to reveal and understand complex processes, and to illustrate the influence of the social context" (Shah & Corley, 2006, p. 1824) which will help the authors to develop a solid understanding of restaurant guests' motivations and feelings, especially since fast-food restaurants can be regarded as a social setting. As stated earlier, customer's motivation or intention to choose a self-service or interpersonal service options at a fast-food restaurant is only sparsely examined in the academic research. Hence, qualitative data is more suitable as under-researched topics require theory to be generated and not to be tested (Branthwaite & Patterson, 2011; Bryman, 1984).

Besides the decision to conduct a qualitative study, the authors of this study were also reflecting on whether to apply an inductive or deductive approach to reasoning. The former describes an approach that utilizes "detailed readings of raw data to derive concepts, themes, or a model through interpretations made from the raw data by an evaluator" (Thomas, 2006, p. 238).

Accordingly, inductively based research follows the process of conducting data in the first step and creating theoretical ideas from it in the second step (Saunders, Lewis & Thornhill, 2009). As a matter of fact, this study is intended to collect raw data from conducting semi-structured customer and manager interviews as well as in-store participant observations. The collected information will then be enriched with meaning through a process of summarizing the data in categories and themes (Thomas, 2006). This process will eventually generate novel theoretical ideas by making general assumptions about the investigated phenomenon (Hyde, 2000). Hence, this study can be considered to be following an inductive approach as the study's intention is to understand why customers either use SSKs or interpersonal services when ordering at a fast-food restaurant.

Nevertheless, the researchers of this study reflected on applying a deductive approach as well. According to Thomas (2006), a deductively based research "test[s] whether data are consistent with prior assumptions, theories, or hypotheses identified or constructed by an investigator" (p. 238). In other words, a deductive approach equals a process of theory testing that starts from an established theory and attempts to test whether the theory applies to specific cases or not (Hyde, 2000). The authors believe that this study also incorporates some aspects of a deductive approach since existing theories and empirical findings are used in order to understand the phenomenon of interest better and to create a framework that is used as a guiding model not only for the study per se but also for the formulation of the questions asked during our data collection phase. More specifically, the study's deductive focus laid within the theories and findings of interpersonal and self-service options with additional emphasis on the restaurant context.

In the consequence, this study uses a combination of an inductive and a deductive approach to reasoning which is called an abductive approach. Timmermans and Tavory (2012) describe an abductive approach to reasoning as a qualitative approach that is intended to generate new theoretical ideas. These ideas can be found in everyday activities (Ong, 2012). Generally, the approach "rests on the cultivation of anomalous and surprising empirical findings against a background of multiple existing […] theories and through systematic methodological analysis" (Timmermans & Tavory, 2012, p. 169). Bryman and Bell (2015) credit the abductive approach with compensating for the drawbacks of the inductive and deductive approaches by mediating between existing knowledge and new ideas. This is in line with the authors of this study as the decision was made to use existing knowledge that relates to the research focus of this study as a guide that eventually helps to find new insights. This is also noted by Dubois and Gadde

(2002) who consider an abductive approach as being "fruitful if the researcher's objective is to discover new things" (p. 559).

3.3 McDonald's as Case in Point

To answer this study's research question, an appropriate case in point was needed as a research basis. Consequently, this study defined the following criteria to find a suitable case in point. The appropriate fast-food chain should offer both service options, i.e., SSKs and counter orders. In addition, this service offering should be established over a longer period of time in order to guarantee the experience of the guests in dealing with them. In addition, the company's international operations were a prerequisite for being able to interview a culturally diverse group of participants. The low product involvement of the fast-food chain's offering was also crucial in order to enable the interviewees to reflect more easily on their motivations.

Accordingly, McDonald's as an international fast-food chain, was selected as a suitable company. This is due to the following facts. McDonald's customers can use both digital, such as SSKs, and human touchpoints, such as cashiers, when placing their order (Akcam, 2020). Also, at McDonald's, human and digital touchpoints are symbiotic, as people can order at a SSK and still pay at the counter or have their food served to their table. Apart from this, McDonald's can be seen as a pioneer of SSTs in the fast-food sector, having started testing and introducing SSKs as early as 2003 (Bhatnagar, 2003). In addition, McDonald's has announced that it will build its future growth strategy heavily on these technologies and continue to improve its offerings (McDonald's, 2017). Accordingly, it can be said that McDonald's customers are more familiar with the use of SSKs and can better serve as subjects for the research purpose of this study to differentiate the motivation towards digital and human touchpoints. Furthermore, McDonald's is the largest fast-food chain in the world (Statista, 2021). By being the fast-food industry's market leader, it is appropriate to use McDonald's as an example to develop benchmarking and industry-wide managerial implications for future studies. Last but not least, the authors of this study assume the products available at McDonald's to have a low level of involvement for customers, which makes it easier to understand the factors that determine their motivation to use a particular touchpoint.

3.4 Sampling Approach

Given the fact, that this study is based on a qualitative research approach, the authors decided to use a purposive sampling technique, that is typically used in qualitative studies (Bryman & Bell, 2015). Etikan, Musa and Alkassim (2016) define the purposive sampling technique as a

"deliberate choice of a participant due to the qualities the participant possesses. It is a nonrandom technique that does not need underlying theories or a set number of participants" (p. 2). In other words, the researchers determine what characteristics and information are relevant to answering the research question and then find out who is qualified and willing to provide that information based on their experience and knowledge (Bernard, 2006). The overall goal of the purposive sampling process is saturation. Therefore, researchers using this sampling method are aiming to obtain as much in-depth understanding as possible by simply taking samples until no significant new information has been gained (Miles & Huberman, 1994).

According to the nature of purposive sampling explained in the lines above, the authors of this study used different purposive sampling methods (depending on the data collection method) and criteria to ensure a selection of participants that is relevant in order to understand the phenomenon under investigation. These methods and criteria will now be explained in more detail. Also, there will be a distinction between the different data collection methods used in this study which are explained further in the next subchapter (see *Chapter 3.5*).

For the semi-structured customer interviews and the participant in-store observations, a maximum variation sampling technique was applied. This sampling form enables researchers to build a more extensive understanding as the subject of interest is looked at from multiple perspectives. Simply put, the researchers can choose participants on a broader scale in terms of age, cultures and working experiences for example (Etikan, Musa & Alkassim, 2016) in order to "construct an holistic understanding of the phenomenon" (Suri, 2011, p. 68). Therefore, the authors of this study applied several criteria in order to achieve a maximum variation or heterogeneity within the sample. Firstly, as existing research has indicated, age is considered to be one of the influential factors on customer's decision to either use self-service or interpersonal service options (Dean, 2008; Simon & Usunier, 2007). In the consequence, the authors of this study reflected that it was essential for this research to interview and observe people from different age groups in order to be able to draw more accurate conclusions from this study's research findings. Secondly, cultural and gender diversity was taken into account when this study's samples were recruited. Again, prior research findings have suggested that gender and nationality are additional demographic variables that could impact customer's service touchpoint decision (Elliott & Hall, 2005; Nilsson, 2007). Moreover, the consideration of cultural and gender differences will also help to prevent the data from being biased. Thirdly, the researchers of this study aimed at interviewing people who are familiar with the usage of both service options, i.e., SSKs and interpersonal service options, when ordering their fast-food

to ensure that they were able to reflect profoundly on their motivations to use either of them. In addition, participants were recruited on the basis of their regularity of visiting a McDonald's restaurant. On the one hand, this was considered important since McDonald's is the case in point of this study. On the other hand, the criterion of regularity of restaurant visits was intended to ensure that participants were familiar with the relevant service options and could again reflect thoroughly on their experiences.

As a matter of fact, this study does not only look at the customers' perspective of motivational factors that underlie in their decision for a certain service touchpoint but also at the managerial perspective to determine the motivations, marketing managers see or capture in restaurant guests that moves them to one of the service touchpoints offered. Therefore, the authors applied an expert sampling technique for the semi-structured interviews with marketing managers. The idea behind expert sampling is to collect knowledge and insights from subjects who possess the relevant expertise (Rai & Thapa, 2015). Etikan, Musa and Alkassim (2016) regard this type of purposive sampling as useful when under-researched areas are being tackled and when "there is currently a lack of observational evidence" (p. 3). As indicated by Xu et al. (2020) as well as by Vannucci and Pantano (2020), this is also the case for the research areas this thesis is contributing to, which is why expert sampling can be considered as well-suited for the purpose of this study.

Accordingly, the authors of this study also formulated criteria to recruit suitable participants for the expert panel. First, it was important that the experts work in the field of marketing or market research at McDonald's. Second, it was essential for the purpose of this study that the experts work on the topic of service options at McDonald's in order to provide a holistic picture and their in-depth assessment of restaurant guests' choice to use interpersonal service options or SSKs. Third, the eligible experts should also have at least a seniority level in their job description to ensure a certain level of responsibility and expertise in the area of digital and human service options. This was considered important because research shows that senior managers in particular are willing to share knowledge and also encourage knowledge sharing (Lin & Lee, 2004).

For this study, saturation was achieved after 17 customer and 2 manager interviews were conducted. Most of the participants had a European cultural background and practiced different job occupations that are related to higher education. The age distribution for the customer interviews was divided into the range of 22 to 29 years to represent young professionals and the range of 50 to 58 years to represent older professionals to achieve a solid diversity. Care

was taken to achieve gender balance. For this purpose, nine female and eight male consumers were recruited. Before the interviews started, all interviewees confirmed that they regularly visit a McDonald's restaurant and are familiar with the different ordering options. In order to obtain the managers' perspective, two female McDonald's managers were interviewed who work as "Team Manager" and "Department Head" within the marketing department of Germany. Table 3 provides an overview of the interviewees. For reasons of anonymity, the participants are only referred by the term 'participant' and a number.

Table 3. Demographical Overview of Interviewees

Interviewees	Sex	Cultural background	Current occupation
Participant 1	Female	Swedish and Chinese	Master's Degree Student
Participant 2	Female	Spanish	Master's Degree Student
Participant 3	Female	French, Finnish, and German	Master's Degree Student
Participant 4	Female	Swedish and German	Master's Degree Student
Participant 5	Female	German	Traineeship in Communication
Participant 6	Female	Swiss and Kosovar	Growth Product Manager
Participant 7	Female	Icelandic	Master's Degree Student
Participant 8	Male	Austrian	Hairstylist
Participant 9	Male	Lithuanian	Master's Degree Student
Participant 10	Male	Swiss and Spanish	Master's Degree Student
Participant 11	Male	Swedish and German	Junior Analyst
Participant 12	Male	Swiss	Master's Degree Student
Participant 13	Male	German	Master's Degree Student
Interviewees	**Sex**	**Cultural background**	**Current occupation**
Participant 14	Female	Swiss and Italian	Distribution Account Manager
Participant 15	Female	Kosovar	Nurse
Participant 16	Male	Hungarian and Swiss	Sr. Technical Solutions Architect Global Accounts
Participant 17	Male	Swiss	Client Technologist
Interviewees	**Sex**	**Cultural background**	**Current occupation**
Participant 18	Female	German	Team Manager Marketing McDonald's Germany
Participant 19	Female	German	Department Head Marketing McDonald's Germany

3.5 Data Collection

For the data collection of this study, the authors conducted participant in-store observation at one McDonald's restaurant in Lund, Sweden as well as semi-structured interviews with McDonald's eaters. As already stated, to not only have the customer perspective but also a manager perspective, the authors conducted semi-structured interviews with McDonald's marketing managers. The decision to use multiple data collection methods was made in order to ensure cross validation across them. Amine and Lazzaoui (2011) note that combining multiple data sources and methods can offset potential weaknesses of the individual methods and also help to close the gaps that are potentially present between what the interviews reveal and what the in-store observations uncover. The following figure 4 illustrates the sequence of data collection methods used in this work. In the course of fully mapping the entire research engagement, the pilot study conducted prior to this study is also mapped here. This was conducted as part of the qualitative research course at the Lund School of Economics and Management and has a guiding function for this master thesis.

Figure 4. Sequence of Data Collection Methods
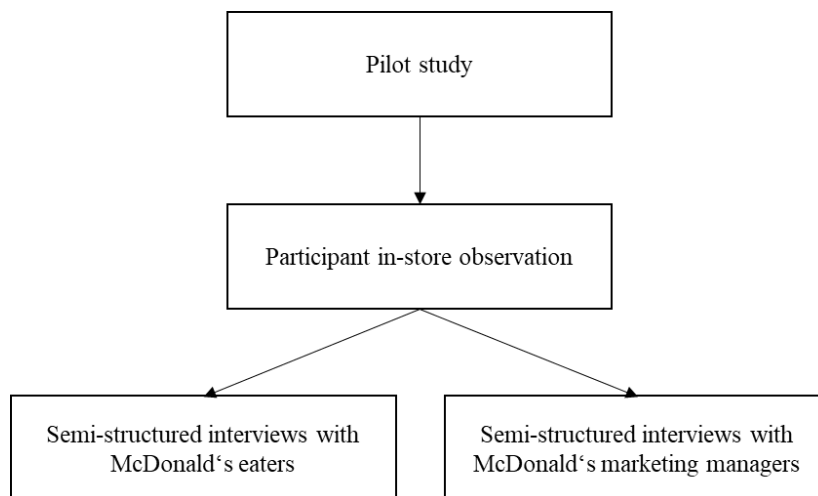
3.5.1 Participant In-Store Observation

First of all, in order to initially understand why restaurant guests, choose either SSKs or interpersonal service options at the counter, the authors of this study observed restaurant patrons as they placed their orders at the McDonald's on Skarpskyttevägen 1 in Lund (see *Appendix D*). Generally, observations can be defined as "the systematic recording of observable phenomena or behaviour in a natural setting" (Gorman & Clayton, 2005, p. 40). More specifically, Becker and Geer (1957) define participant observation as the "method in which the observer participates in the daily life of the people under study, either openly in the

role of researcher or covertly in some disguised role" (p. 28). This participation may include, for example, simply observing situations or listening to the dialogues of others (Becker & Geer, 1957) and "access what people actually do rather than what they say they do" (Elliott & Jankel-Elliott, 2003, p. 220). Thus, researchers are able to gain a deeper understanding of the research context as the perspective of the people under investigation is adopted (Baker, 2006; Lopez-Dicastillo & Belintxon, 2014) while the researchers can "minimise the effect of the researcher on the researched and maximises the depth of information that is obtained" (Elliott & Jankel-Elliott, 2003, p. 217).

The authors of this study adopted a more covert role and used the so-called observer-as-participant approach throughout the field work. This approach enables the researchers to undertake the observation in a more passive manner that prevents the observational context to be too influenced (Easterby-Smith, Thorpe & Jackson, 2015; Paul, 1996). Gold (1958) describes this approach as a "relatively formal observation … [that] entails less risk of 'going native'" (p. 221) which means that the researchers do not establish any interpersonal relationship with the observed persons (Hong & Duff, 2002).

By conducting observations and thus participating in people's actual everyday situations, and more concretely in the ordering and interaction processes in a McDonald's restaurant, interpretation biases can be reduced and avoided (Bositis, 1988). Paul (1996) argues that the observer-as-participant approach helps to increase the usefulness and meaning of data that is collected through other methods. Moreover, the chosen kind of observation is well-suited to reach data triangulation for three reasons. Firstly, data from observation can provide information on certain occurrences raised during interviews. Secondly, they can help to interpret data from other methods in a coherent way which in its consequence reduces the likelihood of biases (Paul, 1996). Additionally, the combination of different data collection methods, i.e., semi-structured interviews and participant in-store observations ensures that information is also brought to light that would have remained hidden through interviews and personal statements by the interviewees only (Zhao & Ji, 2014; Paul, 1996).

In order to be more systematic and structured when engaging in the participant observation at the McDonald's restaurant, the researchers of this study used the nine guiding dimensions for participant observation of social situations that were proposed by Spradley (1980). Goffman (1964) describes that a social situation arises whenever two or more people are in close proximity to each other, regardless of whether the participants in the gathering appear to be separate, silent and distant, or present only briefly. Therefore, the authors of this paper consider

visiting a McDonald's restaurant as a social situation, as restaurant patrons usually appear in the presence of other patrons or family members or friends and complete their ordering and eating tasks and may exhibit varying degrees of interaction. Accordingly, the nine dimensions by Spradley (1980) were considered legitimate and included the following:

> "1. Space: the physical place or places
> 2. Actor: the people involved
> 3. Activity: a set of related acts people do
> 4. Object: the physical things that are present
> 5. Act: single actions that people do
> 6. Event: a set of related activities that people carry out
> 7. Time: the sequencing that takes place over time
> 8. Goal: the things people are trying to accomplish
> 9. Feeling: the emotions felt and expressed" (p. 78).

The first aspect, space, is considered to be important in order to make the data collected more dependable (as described later in chapter 3.6) and holistically understandable in case other researchers are trying to extend on this study. The aspect of actors is regarded to be useful as well considering what Wang, Harris and Patterson (2012) discovered in their study. According to them, older people tend to use SSKs only when they are accompanied by their children. Therefore, it is crucial to observe whether older people tend to order at the counter with the help of an employee when they are eating alone or whether this behavior is different when they are visiting the restaurant with their children or other younger companions. Moreover, the authors of this study expect to observe other decision-making behaviors for other actors such as individuals, group of friends or families with their children. Here, it is also interesting to see which actor purposefully, hesitantly or uncertainly selects his or her service option.

Furthermore, the aspects of acts, activities and events are perceived to be interrelated. These observational dimensions are also considered as being relevant in order to answer the research question of this study and to better understand what people shared in the interviews. For example, existing studies in other industries have found that high crowdedness (Gelderman, Ghijsen & van Diemen, 2011) and the perception of low waiting times (Wang, Harries & Patterson, 2012) lead consumers to prefer self-service options. Accordingly, the observation could elicit similar findings and show how restaurant guests' acts and actions will change when the variables of crowdedness and waiting times change. This also relates to the observational dimension of time as it can be essential to see whether preferences and ordering sequences are affected by daytime which again include different levels of crowdedness or waiting time especially for peak times such as lunch or dinner.

Under the dimension of objects, it is interesting to see if the number of available SSKs and employees at the counter changes the preferences of the guests. Gelderman, Ghijsen and van Diemen (2012) discovered that travelers at the airport showed preference for interpersonal service when self-service options and interpersonal service options were equally occupied. Building on this, the observations at McDonald's could elicit the same preference of restaurant guests for ordering at the human operated counter in case SSKs and counters are equally occupied or vice versa.

The dimension of goal is used to observe whether different intention to eat at McDonald's lead to different preferences for the observed. Indeed, peoples' intentions are hardly observable but guests appearing in suits may be holding a meeting in the restaurant, a group of peers probably intend to spend time together and order and share their meals, and adults appearing with children most probably want to please them. The intentions and goals of people going to McDonald's probably also influences how many products are ordered. A business man or women may be more likely to order a coffee and a family with children Happy Meals. Wang, Harris and Patterson (2012) posit that consumers prefer SST options for simple tasks only. Accordingly, it could be possible to observe that large orders, that might present a more complicated task for restaurant guests, are more likely to be placed at the counter.

Finally, the dimension of feelings is included in this study's observation guide. This is portrayed as being crucial as research indicates a more positive experience for restaurant guests who use a SSK when ordering compared to the ones who ordered at the counter (Leung, Torres & Fan, 2021). Therefore, it is interesting to see whether restaurant guest exhibit a more positive attitude and impression when they order at the SSK. It may also be possible to observe emotions such as anxiety, anger, stress, or happiness independently from the service option used.

3.5.2 In-Depth Semi-Structured Interviews

In order to collect the qualitative data and to answer the research question of this study, the authors conducted in-depth semi-structured interviews with customers and marketing managers from McDonald's. Semi-structured interviews are characterized by "a combination of set questions and flexibility" (Wilson, 2014, p. 177). This combination helps to structure the interviewing process but also gives the researcher and interviewee enough space to ask additional questions or to elaborate on interesting statements (Wilson, 2014). Moreover, since the goal of this study is to understand why consumers are motivated to either use SSKs or interpersonal service options for ordering food in a fast-food restaurant, semi-structured interviews, and open-ended questions offer the possibility to let participants freely explain their

thoughts and motivations (Easterby-Smith, Jaspersen, Thorpe & Valizade, 2021). This will provide the data collection with more detailed, profound insights, and "an understanding of the respondent's 'world'" (Easterby-Smith, Thorpe & Jackson, 2015, p. 135), and will add more value to the research findings as it enables to thoroughly explore participants' responses.

At the same time, this type of conducting interviews can also be used to apply the principle of laddering up and laddering down. This serves to discover further factors motivating the choice of service option, which could be used to expand the proposed framework after analyzing the interviews (Easterby-Smith et al., 2021). Accordingly, when laddering up, follow-up questions such as *"Why do you say that...?"* or *"Why is it bad/good that...?"* were asked. On the other hand, when the laddering down approach was applied, follow-up questions were asked that refer to examples or illustrations such as *"Could you give me an example of that?"*. Correspondingly, this is also in line with the chosen epistemological position of understanding extensively what people think and feel (Saunders, Lewis & Thornhill, 2009). By conducting in-depth semi-structured interviews, it is also possible to explore the research topic deeper and discover new insights and dimensions (Easterby-Smith et al., 2021). For this reason, caution must be taken when conducting the in-depth interviews to ensure that adequate open-ended questions are asked and that there is no pressure on time (Guion, Diehl & McDonald, 2001). This paper has used the seven phases by Kvale (1996) for conducting the in-depth semi-structured interviews, which consist of thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting, and are described in more detail in the next subsections in relation to the interviewees.

Interviews with Customers and Managers

In order to explore what drives consumers to choose SSKs or interpersonal services when ordering fast-food, they need to be interviewed. To better understand and interpret the customer's perspective, it is accordingly important to also interview the other side, namely the service organization itself, in order to see what their perceptions are. Hence, starting with the first phase, thematizing, McDonald's customers and managers have been chosen to be interviewed with the purpose to analyze the consumers' and service organizations' point of view towards the motivation to choose self-service or interpersonal service options.

After setting the thematizing phase, the designing phase took place. Guion, Diehl and McDonald (2001) propose a three parted interview design guide (see full guides in *Appendix A & B*) which consists of the facesheet, the interview questions, and the post-interview

comment sheet. In the facesheet, situational information such as the time, date, and place of the interview, as well as the respondent's demographic information, are obtained before the interview questions begin. As a second part, the interview questions are listed, with space provided on the right to capture written notes made during the interview. Finally, the post-interview comment sheet is used so that, immediately after the interview has finished, the interviewer can note down any facts and thoughts that came up during the interview. Hence, this interview guide is intended to provide structure for conducting the semi-structured interviews, but also to guide interviewees through pre-determined areas of interest. In addition, the guide helps to maintain coherence between the different interviews and to keep track of the interview schedule during the process.

Stage three, the interviewing phase, is about the interview itself and covers the execution of the customer and manager interviews, ranging between 25 to 45 minutes each. Before conducting the interviews, the respondents were informed that the interview was being recorded and used for the study's analysis. Interviewees' permission was obtained by signing the Lund University interview consent form (see full form in *Appendix C*). In this phase, the aim was to follow the interview guide and develop a conversation up until all the major themes of the interview guide have been explored (see interview guide in *Appendix A & B*). Important to note is that the questions for the managers are linked but adapted to the customer questions, so that a better comparison between the two perspective was able to achieve.

The following sections will now explain the reasons why the authors have chosen the questions as seen in the interview guide by also including existing findings that are already discussed in the literature review and part of the proposed framework. However, not all questions will be extensively explained but an illustrative selection. Also, in order to give substance to the inductive strategy of this work, only open-ended questions were asked which, due to the semi-structured nature of the interviews, could be supplemented with new questions or interviewees could be asked to elaborate on their statements. However, when asking interviewees to expand on what they had said, care was taken not to suggest concepts from the analyzed studies to the interviewees, so that they could present their unbiased, individual ideas. In this way, the authors of this work wanted to ensure that new motivators could also be uncovered that had not yet received attention in the previous literature. At the beginning of the interview, demographic related questions concerning interviewees' age, gender, education, job title, and culture were asked before continuing with the research related open-ended questions. The inclusion of these

questions was based on a study conducted by Nilsson (2007) who explained that socio-cultural differences can determine consumers intention to use SSTs.

After socio-demographic questions were answered, customers and managers were asked opening questions to introduce them to the topic, get them in the right mode, and make them feel comfortable and at ease. Hence, asking the interviewees to describe and compare their last McDonald's fast-food restaurant visit with one they had five years ago helped to set the tone and see whether a possible change was recognized by the respondents themselves. Followed up with the questions "*Do you remember any interaction with employees and/or self-service kiosks in your past McDonald's ordering process? Can you share this interaction?*" answers were sought on the characteristics and distinction between human and digital touchpoints, as well as testing whether utilitarian values, as mentioned by Xu et al. (2020), are particularly important in fast-food restaurants or not.

Then, an approach was used to find out which overall factors lead to satisfaction and dissatisfaction at McDonald's, without distinguishing between interpersonal and SSK service options. The decision to include questions such as "*Can you tell me an example of a McDonald's ordering experience which you felt very satisfied?*" was based on studies that were also eliciting factors of satisfaction or dissatisfaction (Meuter et al., 2000; Weijters et al., 2007; Kincaid & Baloglu, 2005). For example, Kincaid and Baloglu (2005) as well as Weijters et al. (2007) show that customers especially appreciate convenience, ease of use and a fast service when engaging with SSTs. Here, attention was paid to whether factors presented in the existing studies and therefore in the proposed framework were mentioned or if perhaps new factors emerge.

Next, before diving deeper into the differentiation between interpersonal and SSK service with the respondents, participants were asked two questions about their general attitude towards new technologies such as "*How fast do you usually adapt to new technologies like self-service kiosks for example? Why?*". On the one hand, the authors intended to let the interviewees reflect on their technology use - and adoption. On the other hand, the intention was to see a potential connection between technology affinity and the possibly preferred use of SSKs and vice versa. The decision to ask these questions was based upon the findings of Meuter et al. (2003) who postulates that higher anxiety towards technology from a consumer perspective leads to a less likely usage of SSTs.

Subsequently, service specific questions were asked to further attune interviewees to the different service options McDonald's offers. Based on this, respondents were asked various

questions about their experiences and motivations with both the human touchpoints, i.e., the cashiers at the counter, and the digital touchpoints, i.e., the SSKs in the foyer. As earlier research has indicated, customers motivations to choose a certain touchpoint depends, among other things, on situational factors such as crowding in the store (Gelderman, Ghijsen & van Diemen, 2011) or waiting times (Weijters et al., 2007; Wang, Harris & Patterson, 2012). In order to assess the existing situational factors but also to potentially elicit new situational factors which again does justice to the inductive approach of this work, the authors of this study included questions like *"Are there certain situations when you use self-service kiosks at McDonald's? Why?"*. In addition, as shown in the literature review, there are certain features such as convenience and design that are considered to be highly valued by restaurant guests (Park, Lehto & Lehto, 2021). Therefore, the researchers of this study included questions like *"What do you like about using self-service kiosks?"* in their guide in order to potentially extend the list of valued features.

Furthermore, in order to assess the motivations why restaurant guest would choose interpersonal services when placing their orders, respondents were confronted with the following call: *"Use five words to describe the perfect interpersonal ordering experience at the McDonald's counter. Describe and explain each word."*. These prompts were used to find out which affective characteristics would lead a customer to choose the interpersonal service and whether human clues as argued by Wall and Berry (2007) are important behavioral determinants rather than functional ones. Plus, attention was paid to whether the same affective characteristics such as friendliness and enthusiasm found by Sundaram and Webster (2000) were mentioned, or even completely new ones. Additionally, research has shown that factors like the employees' hygiene, the personnel's' menu knowledge as well as their linguistic and communication skills have an impact on why customers would or would not choose interpersonal service options (Becker et al., 1999). Therefore, the authors let the interviewees think about the following question *"What are factors that would hinder you from ordering with the help of an employee?"* in order to see the same or different factors.

After this question section, additional focus was placed on the possible influence of significant others. For example, Wang, Harris and Patterson (2012) posit that older customers would be more willing to use SSTs when they are accompanied by their children. Accordingly, the respondents were asked to explain *"What influence do other guests/friends/employees have on the choice of your order option and decision making?"* when ordering food at a McDonald's

restaurant. Finally, a wrap-up question was asked to give respondents the space to also share any information they felt was important and not yet presented.

After all interviews were conducted, the transcription and analysis phases followed. These two phases involved the creation of a word-for-word text document for every single interview so that the answers could be analyzed, which will be explained in more detail in the data analysis chapter (see *Chapter 4*).

For the verifying phase, both authors individually went through all the answers and recordings of the interview to achieve higher credibility. Therefore, notes were compared and when both authors agreed, the resulted information were considered as relevant in order to answer the research question of this study.

In the last stage, the reporting phase, the results gathered from the in-depth semi-structured interviews were shared with the interview partners. This was accomplished by means of a follow-up-emails in which it was also pointed out that, if interested, the entire thesis can also be shared after publication.

The initial plan was to conduct the semi-structured interviews in front of an actual McDonald's restaurant with the customers and in person at an actual McDonald's office in Germany with the managers to benefit not only from the verbal communication but also from the "immediate contextualization, depth and non-verbal communication of face-to-face interviews" (Easterby-Smith, Thorpe & Jackson, 2015, p. 135). However, the authors of this study decided to conduct the semi-structured interviews remotely via Microsoft Teams, Zoom or partially in person at a quiet meeting place at the LUSEM learning hub. This decision was made upon two reasons. First, for the managers there was limited time available as well as a geographical distance between them and the researchers. Also, a general time constraint on the data collection during the research period was apparent. Second, for customers it was assumed that people who just ate or were hungry at a McDonald's restaurant would be less willing to be interviewed for 25 to 45 minutes and would be uncomfortable sharing sensitive and confidential information if other people could be listening in. Moreover, people's feeling and right of privacy would have been injured as it could not have been guaranteed that the personal thoughts shared would in fact be heard only by the researcher of this work (Bryman & Bell, 2015). The location could also be seen as not neutral enough, which could have inhibited participants in their response (Easterby-Smith, Thorpe & Jackson, 2015).

3.6 Data Analysis

The following part describes the procedure the authors applied in order to analyze the data sets derived from the interviews and observations. In a first step, all the interview recordings and field notes were transcribed with the help of the transcription function of Microsoft Word 365. The authors of this study employed the four fundamental operators proposed by Spiggle (1994) in order to "organize data, extract meaning, arrive at conclusions, and generate or confirm conceptual schemes or theories that describe the data" (p. 493). The employment of the four operators, i.e., categorization, comparison, abstraction, and integration, will now be explained in more detail by using two exemplary quotes from the data set.

Spiggle (1994) suggests categorization as the first basic operator for analyzing qualitative data. More precisely, this operator includes the so-called coding process, in which the data are classified and labeled. The goal is to identify different parts of the data "as belonging to, representing, or being an example of some more general phenomenon" (Spiggle, 1994, p. 493). To accomplish this identification process, the transcribed data sets were examined using the ATLAS.ti software. This software is specially developed for qualitative data analysis that supports systematic evaluation and coding, especially of text data, and enables teamwork. In addition, ATLAS.ti helps to systematically aggregate the labeled data, as all quotes from the text data that carry the same code are grouped together in the so-called code manager, which significantly increases clarity. Accordingly, all the data transcripts were uploaded and the authors started to code the data independently and in a staggered manner so that all transcripts could undergo the coding process twice.

Generally, categorization can be done in a deductive or inductive way. Deductive means that previously acquired ideas and concepts from existing scientific work are used to code the data collection. Inductive means that new ideas and concepts are extracted from the data set (Spiggle, 1994). The authors of this study utilized both categorization methods, again reflecting the abductive research approach of this work. With regard to the deductive approach, labels were chosen that have their origin in the initially proposed framework. For example, the finding of Park, Lehto and Lehto (2021) that certain technical features are motivators for restaurant patrons to use SSKs was included in the framework under the label *technical feature*. Similarly, this label was used, for example, to code the following quote:

"While choosing it from the from the kiosk, you can basically just switch the language and still get the products you really want." (Participant 13)

43

In this case, the phrase *switch the language* was decisive to apply the code *technical feature*. However, the previous findings and associated categories of the proposed framework were not considered solely authoritative. Accordingly, new labels could also be found with respect to the inductive categorization method. For example, the code *people ethics* was used as soon as the study participants talked about the working conditions or wage payments of the employees at McDonald's, for example. The following quotes, for instance, were tagged with this label:

"So, if I would interact with them, it would make me think about their condition you know"
(Participant 3)
"I want the employees to keep their work, otherwise, someday the people won't have any work anymore" (Participant 14)

In the first case, the phrase *think about their condition* served to apply the code *people ethics*. In the second case, the phrase *employees to keep their work* was the decisive factor to apply the code *people ethics* here as well.

The entire categorization process resulted in a total of 297 statements (see *Appendix E*) being labeled with a total number of 54 codes, which were then reviewed again by both authors to merge similar codes and avoid duplication. This review process of the two authors was also followed by the comparison process, which according to Spiggle (1994) involves the more systematic and methodical comparison of the individual codes in order to merge codes with the same content or to separate codes with different content.

Subsequently, Spiggle (1994) suggests the use of the abstraction operator. Accordingly, this step is about transforming "previously identified categories into more general, conceptual classes … that share common features" (p. 493). Accordingly, for example, the above code *technical features* was included in the theme *interpersonal avoidance*. The code *people ethics*, on the other hand, has been added to the theme *empathy and awareness*. Through this abstraction, a variety of themes and patterns could be found. The selected statements assigned to the different themes were then color-coded (see *Appendix F*) to each of the motivational factors for the SSK or the interpersonal service option to illustrate why participants argued to use the SSK or the cashier to place orders and to eventually be able to answer this study's research question.

In the last step, Spiggle (1994) emphasizes the importance of creating theories from the identified codes and categories. This step is the integration. The authors of this study used the abstracted themes found to present and discuss them in the context of existing academic findings. In doing so, integration means not only finding possible existing findings also for the

scope of this study, which are listed in the initially proposed framework, but also finding new findings that complement the framework. The themes found are presented in chapter four with the help of illustrative quotes taken from the interviews. The authors of this study selected the quotes presented on the basis of their accuracy, in which they summarize the respective themes and the interpretations derived from them. The quotes were only edited in terms of removing repetitions of words.

3.7 Reflection on Method

3.7.1 Reliability and Validity

Reliability and validity are typically used when the quality of quantitative data is assessed. However, as stated earlier, this study is based on qualitative data. Accordingly, for the assessment of the quality of the collected data the concept of trustworthiness is being used (Farrelly, 2013). The trustworthiness of this study will be evaluated by assessing four criteria, namely credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985). These criteria will be explained in more detail taking into account the data collection of this study. Firstly, the credibility of a study "ensures that readers will believe the presented findings" (Kyngäs, Kääriäinen & Elo, 2020, p. 42). To address this criterion, the achievement of triangulation is recommended which means that at minimum two data collection methods should be used in order to cross-check the obtained results (Bryman & Bell, 2015). In order to do justice to this, three data collection methods were used in this study, namely participant in-store observation, in-depth semi-structured customer interviews, and in-depth semi-structured manager interviews. Furthermore, all interviews were recorded, transcribed and secured which will enable readers to verify the findings. Moreover, the fact that two self-reflecting interviewers and observers were involved in this study, higher credibility could be achieved (Baker, 2006). In addition, Kyngäs, Kääriäinen and Elo (2020) suggest that having adequate respondents will increase a study's credibility. This adequacy was achieved by observing real guests in a McDonald's restaurant, recruiting and interviewing regular McDonald's eaters as well as interviewing marketing managers of McDonald's.

Secondly, dependability describes "the stability of data over time" (Kyngäs, Kääriäinen & Elo, 2020, p. 44) To ensure this stability, the authors of this study explicitly described every step of this research and integrated the used interview and observation guides, pictures, and consent forms in the appendices to make the study clear and understandable for other researchers. Moreover, all filled out guides, the written field notes and recordings were securely stored in

case other researchers would want to audit the correct research process that was undertaken or if there is interest in the data collected for use as secondary data (Bryman & Bell, 2015).

The next criterion, confirmability, refers to "the connection between the data and the results" (Kyngäs, Kääriäinen & Elo, 2020, p. 46). Bryman and Bell (2015) admit that complete objectivity in qualitative research is not one hundred percent achievable, but the researchers always ensure that they have used their best will. This is what they call confirmability. In order to address this criterion, the researchers of this thesis did not ask the participants any directional questions during the interviews. Furthermore, no interview guides were communicated before the interviews with the customers or the interviews with the managers in order to prevent the participants from having their personal opinions influenced beforehand. Only the general research field, the research intention as well as the conditions of participation were communicated beforehand. Also, in the case of the observations, no personal visual preferences were applied in the selection of the observed persons. Before the collected data were included in this study in their analyzed and interpreted state, both researchers had to agree to this work in order to limit subjectivity. The researchers of this study also included a selection of relevant quotes of the interviewees in order to underpin the empirical analysis and findings and make the reasoning behind it more obvious.

The last criterion used to declare this study's trustworthiness is transferability. Transferability describes "whether [the] results will hold in another setting or group of participants" (Kyngäs, Kääriäinen & Elo, 2020, pp. 46–47) which is harder for qualitative data since each interviewee is unique (Farrelly, 2013) and the social setting differs (Bryman & Bell, 2015). However, the authors of this study aimed to ensure this criterion by interviewing and observing culturally and demographically different participants. Furthermore, the authors included an anonymized list of the interviewees' demographics (see *Table 3*), the exact address of the McDonald's restaurant that was used for the participant observation, the interview and observation guides, and a description of each research step. This was considered important to make the study conduct apparent and comprehensible to other researchers and thus to make the findings verifiable and testable in other contexts and with different participants.

3.8 Reflection on Ethical and Political Dimensions

In addition to the best possible recruitment of participants, it is particularly important to protect them and the integrity of the research community (Easterby-Smith, Thorpe & Jackson, 2015) especially in the case of qualitative data (Saunders, Lewis & Thornhill, 2009). This is where the concept of ethics comes into play. "Ethics refers to the appropriateness of your behavior in

relation to the rights of those who become the subject of your work, or are affected by it" (Saunders, Lewis & Thornhill, 2009, pp. 183–184). Thus, researchers must ensure the soundness of the method and the moral defensibility of the research (Saunders, Lewis & Thornhill, 2009).

In this notion, Bryman and Bell (2015) developed a concept of different ethical stances with which researchers can be described in terms of the ethical position they chose to incorporate during the research process. Generally, there are four ethical stances research can portray themselves with, namely universalism, situation ethics, ethical transgression, and anything goes. For this study, the authors decided to incorporate the ethical stance of universalism. This is due to the fact that the researches of this work find it is essential not to break the ethical principles in business research (Bryman & Bell, 2015). These ethical principles were summarized by Diener and Crandall (1978 cited in Bryman & Bell, 2015). Their classification includes harm of participants, lack of informed consent, invasion of privacy, as well as deception. These four principles were adhered to and complied with as far as possible by the authors of this study. The individual actions taken to comply with the principles will now be explained.

First of all, harm to participants can encompass factors such as "physical harm; harm to participants' development or self-esteem; [and] stress" (Bryman & Bell, 2015, p. 128). Therefore, the authors offered all participant the choice to either conduct the interview in person or online to make them feel as comfortable as possible. Moreover, interviewees were informed about the interview topic and about the fact that there are no right or wrong answers beforehand to make them feel less stressed about their expressions of thoughts and motivations. Another factor that contributed to a low level of stress for the respondents on the customer side was that the authors only considered regular McDonald's eaters to prevent them from worries of not knowing. In case the interview was hold in person, snacks, a glass of water or a cup of coffee were offered to the respondents to make the setting more relaxing. In the case of the participant in-store observations the authors have paid great attention to observe the restaurant patrons as subtly as possible in order not to trigger a stress situation by staring at them. Furthermore, no judgmental statements were made about the observed persons.

Secondly, lack of informed consent relates to the condition that all "participants should be given as much information as might be needed to make an informed decision about whether or not they wish to participate in a study" (Bryman & Bell, 2015, p. 133). Therefore, all respondents were fully informed about the interview topic, the research purpose, and the

potential duration of the interview. In case of ambiguities, the participants were also given the opportunity to clarify questions. As mentioned earlier, the researchers incorporated a universalist stance in order to respect all ethical principles when conducting business research. However, participant in-store observations are a special case, as here the full information about the study and the conscious decision to participate is denied to the observed (Bryman & Bell, 2015). However, Erikson (1967) notes that even in the universalist position, adherence to all ethical principles without exception is not always possible. Jorgensen (1989 cited in Baker, 2006) also argues that researchers are not under the obligation to inform or protect everyone from the research intentions as long as the researchers are aware of the responsibility of their actions. Nevertheless, the authors have made the observation process as transparent and obvious as possible. In the McDonald's restaurant, it was always possible to see that notes were taken and that the observation guide was followed.

Thirdly, invasion of privacy refers to the obligation to maintain the confidentiality and anonymity of the information recorded and stored as part of business research (Bryman & Bell, 2015). Accordingly, the researchers of this study informed all participants beforehand that the conversations would be recorded, transcribed, and used exclusively as a basis for the data analysis of this master thesis. The interviewees had to sign the Lund University interview consent form before the interviews started. Thus, it can be assured that participants are informed, and that the data is confidential. By using anonymized participant names, it can also be ensured that the privacy and anonymity of the respondents is guaranteed. Since the interviews were recorded, transcribed, and stored, the authors can thus ensure the transparency of the data and also enable its verifiability, which helps to protect the integrity of the research community (Easterby-Smith, Thorpe & Jackson, 2015). Nevertheless, the in-store observations display a special case again as some problems may occur concerning the invasion of privacy (Bryman & Bell, 2015). In order to ensure anonymity and confidentiality, no detailed descriptions or pictures of the observed persons were taken. In addition, the resulting notes were only discussed within the research team in order to maintain a certain level of discretion. In addition, the authors of this study have also assured the interviewed McDonald's managers in an e-mail that all information will be treated confidentially and used exclusively for the research purposes of this work.

Lastly, deception refers to the fact that the object of research is not presented as it is described in reality (Bryman & Bell, 2015). In order to truthfully present the research subject and research purpose, all interview participants were familiarized with the research question and the general

master's thesis project at Lund University. In the case of in-store observations, the researchers also agreed to disclose the intention of their presence in the restaurant to the observed in case of doubt.

Besides the ethical reflection of this work, the political reflection is equally important. In order to be able to reflect on political influences on research, Easterby-Smith, Thorpe and Jackson (2015) proposed a model with four potential factors that could influence the researcher in their focus and process. Firstly, the experience of the researcher has influential political potential on the research process. More specifically, Easterby-Smith, Thorpe and Jackson (2015) argue that the "[p]ersonal background affects what the researcher is able to see, because experience acts both as a sensitizer and as a filter" (p. 110). Accordingly, socio-demographic variables such as social and racial background or gender influence the research outcome (Easterby-Smith, Thorpe & Jackson, 2015). However, the research team of this study consisted of two students with different cultural and educational backgrounds as well as business experiences which in the consequence mediated some of the influences of the researchers' background on the outcome of the study. It should also be mentioned that one of the study authors has already completed an internship in the marketing department of McDonald's and thus has a possibly positive attitude in the interpretation of the interview data. Nevertheless, the fact that two authors worked on the data interpretation also leads to the mitigation of the described bias. However, the company knowledge can also help to better understand the described motivators of the interviewees.

Secondly, the subject of study is regarded as a source of political influence. More precisely, it is about the problems or topics that are generally considered relevant for research or that are in the spotlight of a research discipline at a certain point in time (Easterby-Smith, Thorpe & Jackson, 2015). As mentioned earlier, in recent years there was an increasing interest in researching the restaurant industry and especially the intentions customers have when using SST (Xu et al., 2020; Jeon, Sung & Kim, 2020). On the one hand, the authors of this study benefit from positioning their study in emerging research streams as other researcher can build up on the findings this study will present eventually. On the other hand, researching within a currently popular research stream limits the number of gaps that could be filled (Easterby-Smith, Thorpe & Jackson, 2015). However, recent studies suggest that SSTs should be researched in combination with other social contexts such as the possibility to also choose interpersonal service offers when ordering fast-food (Scherer, Wünderlich & Wangenheim, 2015). Therefore, the authors of this study believe to be tackling an import issue that has not

yet been studied extensively. In addition, the marketing managers the authors spoke to, explained that they, too, are particularly interested in understanding restaurant guest's motivation to either choose SSKs or interpersonal service options and have conducted and are conducting internal market research on it. This also indicates that this study is of high practical importance both now and in the future "as practitioners are ahead of mainstream academics in identifying key problems and relevant solutions" (Easterby-Smith, Thorpe & Jackson, 2015, p. 115).

Thirdly, corporate stakeholders are considered to have a political influence on the research study as they can be "both sponsors and users of management research" (Easterby-Smith, Thorpe & Jackson, 2015, p. 114). The corporate stakeholder engaged in this study is McDonald's as the authors used two marketing managers as experts in order to assess the corporate perspective on the motivational factors why restaurant guests either use SSKs or interpersonal service options when ordering fast-food. However, McDonald's is not a funder of this study but rather a case in point. Nevertheless, Easterby-Smith, Thorpe and Jackson (2015) argue that corporate stakeholders are also able to contaminate a study by simply offering information that enhances the organizations' political agenda. Therefore, the authors of this study kept this in mind when conclusions and interpretations from the data are made.

Lastly, academic stakeholders are considered to also impact the research focus and process as a means of political factor (Easterby-Smith, Thorpe & Jackson, 2015). The authors of this study regard the Lund School of Economics and Management as being partly influential in the research effort. This is due to the fact that some formal guidelines like the research period or length of the study were applicable. However, the authors do not consider the thesis supervisor as being influential in terms of where the study was leading.

4. Findings and Analysis

In the following section, the findings derived from the semi-structured interviews and in-store observations are presented. The customer point of view is presented first, followed by the manager point of view. At this point, it is important to emphasize that the analysis includes statements that represent the majority of the interviewees as well as statements that show the minority in order to highlight nuanced statements. For the customer point of view, the thematic analysis enabled the authors to identify and analyze 13 themes, namely *decision control during purchase process, customization, displaying of product information, performance expectancy, products and categories, interpersonal decision pressure, interpersonal avoidance, human clues and skills, empathy and awareness, employee support, influence of important others,*

waiting times, and IT affinity. Whereas for the manager point of view, the thematic analysis enabled 10 themes to be identified and analyzed with similarity to the themes identified from the customers' perspective. These themes are used to structure this study's findings and are extensively described in the following subchapters. The findings are then related to the existing theoretical concepts in chapter 5.

4.1 Customer Point of View

4.1.1 Decision Control During Ordering Process

Participants showed high importance of the actual decision control they like to sustain during their ordering process which they can do more successfully with the use of the SSK. This is conveyed in the quotes below:

"I love to have everything under control and to decide myself what I want and choose them directly on the screen." (Participant 8)

"By the computer I can chill out […] and I can be like, oh, I want to put on extra onions without being like did you get my order that I wanted extra onions and like I have full control over my order." (Participant 1)

These insights show that restaurant guests feel much more control over the ordering process when they utilize the SSK in contrast to the human touchpoint. The reason for this could be that when ordering at the counter the control of the ordering process is shared with the employee, whereas this is not the case at the SSK. Activities that can lead to a greater sense of control over the purchasing process when using a SSK include, for example, selecting and clicking on the various products, and reconsidering them before confirming the final purchase order.

In addition, respondents reported greater control over the selection of products on offer as the following statements illustrate:

"I think that the kiosk offers me a bit less anxiety […] I'm going to go for this burger and then I see like, oh another one, eliminate it and take the other one." (Participant 2)

"I think […], it's really easy to like change the order if you want bigger soda, smaller soda, add stuff. And it like leads you through it." (Participant 7)

"And for me, the meal has also always been better just because it's the thing I actually want, but not the thing that I can think of top of my mind." (Participant 11)

On the one hand, this is due to the ease of scrolling through the product range. On the other hand, the participants find it easier to control the order at the SSK and consequently to change and adjust their initial decision. In addition, the participants state that by having the control

over the touchscreen, they learn about new products through the SSK and do not only select the products that are top of their mind.

Furthermore, the control over secure payment at the SSK is also seen as a motivator to prefer this service option over counter ordering as the following quote displays:

"I also feel like [...] more secure doing it there than standing or paying in front of the employee because [...] the environment feels more safe than entering your code or using your card directly in front of the employee, while others standing behind you [...] which yeah, leads me to [...] choosing things there." (Participant 13)

Overall, it can be shown that restaurant patrons' subjective perception of having control over the ordering process is a motivational factor for using the SSK. Control over the order is determined not only by the ease of selecting and changing the order, but also by the subjectively perceived payment security and more extensive product knowledge.

4.1.2 Customization

In addition to having more control when using the SSK to make orders at the fast-food restaurant, participants also emphasized their tendency to use the SSK as it enables them to personalize or customize their orders more. This can be made obvious by looking at the quotes below:

"I have the time to scroll through all their products. Also, I would say personalize my choice and really select from things that I want to eat." (Participant 13)

"I can kind of look around. Maybe grab a milkshake as well. Grab the right size of the fries or make them some other fries or whatever, so I probably make way more customized orders from the self-service desk for sure." (Participant 11)

Consequently, it can be shown that restaurant guests again make use of the advantage of SSKs and take their time to order which also motivates them and leads them to make more customized and therefore satisfactory food orders.

4.1.3 Displaying of Product Information

Besides customization, the participants showed that the way product information are displayed on the SSK is another motivator for them to use this service option instead of ordering at the counter with the help of an employee. More specifically, the fact that the SSK functions as a large tablet screen and that the customer can view the entire menu, including prices, were the main reasons for the interviewee's preference as the following quotes make clear:

"I really like the touchscreens, I feel like I can see everything at a glance and choose what I want, it's very interactive, it's very easy for me to use the touchscreen technology, and I always feel very well taken care of." (Participant 5)

52

"I can like see the actual prizes then [...] 'cause otherwise you don't really know what anything costs." (Participant 4)

Also, SSKs can enhance the service experience in the fast-food restaurant, as participants develop the feeling as if they were actually 'browsing' a restaurant menu or catalog at the kiosk, which is regarded preferable and even considered as a fun activity. This is shown by the following quotes:

"Like seeing all the options [...] you can compare the options way more and which also makes it more of a [...] restaurant experience for me rather than just a fast-food experience. [...] I also think it's kind of fun that you can kind of check it out." (Participant 11)

"They'll let you know, like you want a burger or like a chicken burger or a menu or a kid's menu, and then you can choose the category and then you just scroll around. So, for me it's like looking through a catalog and I think I preferred that." (Participant 1)

Equally, in the in-store observation, a child was observed ordering at the kiosk with his father, jumping up and down with joy as he was able to choose his food. This again shows that product presentation and selection can generate the emotion of fun. Furthermore, it was found through the interviews that 'browsing' through the kiosk increases restaurant patrons' knowledge and sales of non-standard products, which can be seen as an additional motivating aspect of the way product information is presented at the SSK, as the following insight shows:

"I was able to try out many different things, combine for example different sauces. Before I stick only with ketchup and the basic stuff, and I really like that experience because it enabled me to yeah, try out new things." (Participant 13)

On the contrary, the product information at the counter was felt to be displayed too small too far away, and not detailed enough. This becomes more obvious through the subsequent quotes:

"I can't see the production information at the counter, since they are displayed too small and usually I also can't see all the ingredients and the actual price." (Participant 5)

"At the counter, the menus there's never full menus [...]. There's always like the flying Big Mac and like weird ads." (Participant 1)

"They usually just show like the classic or like the most popular ones and then I also feel like I always miss ordering something 'cause I'm like, oh, you know, like I forgot [...] to like order a dip." (Participant 4)

Consequently, the provision of product information at the counter is perceived as a negative factor among the participants. In particular, the too small display of product information and the insufficient menu presentation speak against the use of the counter, as this can also lead to restaurant guests not actually ordering all of their meal requests. Overall, the clearer and more comprehensive product presentation at the SSK motivates restaurant guests to choose this service option over counter ordering.

4.1.4 Performance Expectancy

In addition to the more advantageous presentation of product information on the SSK, performance expectancy has a motivating influence on restaurant guests. On the one hand, the participants state that the standardized functionality of the SSKs is accommodating and motivates them accordingly to use the SSK, as long as the clicking and selecting also works technically flawlessly. This is revealed by the following statements:

"I visited McDonald's in different countries, it's always like structured the same way, or it's very hard to get lost." (Participant 9)

"Yes, if the system like responds well to the clicking and touching […] but when the screens aren't very responsive and you just kind of get annoyed." (Participant 9)

In addition, respondents indicate that they are more likely to anticipate their expectations to be met at SSKs. On the one hand, the service provided at the SSK is not subject to mood swings as they can occur at the human-operated counter. On the other hand, the respondents trust the machine more that their order will be completely taken and passed on to the kitchen staff, as the following statements show:

"If I don't know, let's say I just don't want ketchup. A machine is more reliable to type it. A person might, yeah, make a mistake." (Participant 2)

"With people it can be both and it can be nice if there is not too much stress, but it can be as well, kind of rude sometimes, whereas the interaction with the screen is of course every time, kind of the same." (Participant 12)

However, there are also factors that could still increase the performance expectancy of the respondents. For example, SSKs that are located outside the store or a final skip button for faster completion of the order would be desirable, which in turn could further increase the motivation to use SSKs. The following statements express this:

"I pressed finish like because I am finished and now you're telling me to stop and rethink my decision. I wish there was like a final skip, so I could just be fast track, right." (Participant 1)

"It would be nice if this self-checkout parts weren't inside. I mean, they could also have some outside of McDonald's, so you don't have to like stand because I know it gets quite crowded." (Participant 4)

In principle, the interviews show that the respondents have more confidence in the SSK with regard to the fulfillment of their expectations, which in turn increases the motivation to use the SSK.

4.1.5 Products and Categories

Moreover, the interviewees indicated that certain product categories would influence their motivation to either choose the SSK or the counter when ordering fast-food. Interviewees preferred the human touchpoint, i.e., the cashier at the counter, when they ordered products from categories such as Happy Meal or McCafé as toys were easier to select or products such as cakes can directly be inspected. These findings are illustrated by the following quotes:

"What I actually find inconvenient about the kiosk is that I can't select the toys for the Happy Meal in the same way as I can at the counter [...] you can simply select the toy better."
(Participant 5)

"When I do, I tend to go to the counter at McCafé because they have the products in the vitrine." (Participant 5)

Additionally, the interviewees preferred ordering at the counter when new products or product categories were available and when they felt insecure about the new tastes and ingredients. The following quote makes this obvious:

"If there's a new burger on the market, I'd rather go to an employee because I can ask, hey, what's in there, what's the sauce like, [...] and a machine doesn't describe it that way."
(Participant 8)

Furthermore, the participants reported that they would prefer to order at the counter when they only want to purchase single items or smaller menus as they anticipate a longer waiting time at the SSK as shown by the subsequent quote:

"I would use the counters like if I just go in for like a fries or like coke. If you do this self-checkout, it's going to take longer because then they will do all the other orders."
(Participant 4)

This finding was also confirmed by the in-store observation. During this observation, for example, a young man walked straight to the counter and ordered and paid for two hamburgers and a chickenburger within 30 seconds. Likewise, a construction worker could be observed who directly went to the counter and ordered two cups of cappuccino.

Thus, the preference for human touchpoints is motivated by certain product categories, the number of products restaurant guests are intended to purchase, the determination of guests as well as feelings of insecurity when consumers have the need to be supported in their decision-making process.

4.1.6 Interpersonal Decision Pressure

Furthermore, the interviews elicited that interpersonal decision pressure, not only caused by an employee but also by other guests in the restaurant, is considered to be a factor that determines

the touchpoint choice. When ordering at the counter, the interviewees felt pressure to not order fast enough if other guests were queuing behind them, which is not the case when ordering at SSKs. Hence, participants prefer the SSK to avoid the social pressure of having to place the order quickly, while they also feel the pressure from the employee to already know what they want to order, which, according to the participants, is not the case in most of the times at SSKs. The participants argued as follows:

"I would probably take a little more time at the kiosk because then I don't feel the social pressure to make a quick decision while ordering [...] so it feels more comfortable for me."
(Participant 11)

"I always feel like when you come up to the counter, they expect you to know exactly what you want at that moment. And then I feel like I just blurt out the first thing that comes to mind and then I order something that I didn't actually want." (Participant 4)

Moreover, interpersonal decision pressure also played a role when product suggestions were made. On the one hand, participants felt that SSKs would suggest more suitable products to the ones they already had in their virtual shopping card. On the other hand, they indicated to be less pressured to reject suggestion when they were proposed by a machine compared to product suggestions made by an employee. Nevertheless, consumers at the counter appreciated that new products were recommended, although they had more problems saying no if the product recommendation was presented in a friendly way and without pressure. This is illustrated by the following quotes:

"Most of the time it fits quite well with the products I already have in my shopping cart, but I don't feel so pressured [...]. I don't have such a bad conscience at the kiosk to press no as I would have it to a salesperson." (Participant 6)

"At the counter I feel it's nice to recommend new stuff [...] because they always ask it in a very kind way like oh we have this new mango slushy or whatever it is, aren't you gonna try it? And you're like no thank you and they're like, oh OK no worries [...] so it kind of gets harder saying no to them." (Participant 2)

Also, participants stated that they do not trust the product suggestions made by the employees at the counter because of the feeling of up-selling and the fear of being offered less fresh food. This becomes more obvious by the following statements:

"Uhm, I would always think because it would be something that they just want to sell they could not sell in the last hour because I know that they premade things, they do not cook on order." (Participant 6)

"I would get annoyed with the person because I would think they were trying to sell me more things to take advantage of me." (Participant 9)

Overall, the mentioned findings show that interpersonal decision pressure can occur through different situations and are not seen as positive aspects while ordering at the counter.

Accordingly, consumers tend to go to the SSK to avoid the interpersonal decision pressure, as less to no pressure is felt by the machine.

4.1.7 Interpersonal Avoidance

During the interviews, it was found that interpersonal avoidance also acts as a factor against counter ordering. On the one hand, this is due to the fact that consumers are sometimes simply not in the right state to talk to either staff or other guests and therefore prefer to avoid any personal contact when ordering. The following quotes provide examples for this:

"I normally go for fast-food when I'm quite drunk if you want to put it this way. So going to a kiosk where I don't have to talk to anyone is quite good because I don't want to make a scene of myself." (Participant 3)

"Sometimes I try to avoid the interaction with other people and if I'm like in the queue for ordering at the counter, some other guests could start talking to me and try to small talk […] and I would try to avoid this contact with random people." (Participant 13)

On the other hand, the interviews also showed that guests feel that they do not want to disturb the staff or do not want to be disturbed themselves. So, it can be said that interpersonal avoidance can be seen from both sides, on the one hand from the staff towards the customers and on the other hand from the customers toward the staff. This situation of interpersonal avoidance can be seen in the following statements:

"It feels like a situation where the staff don't really want you at the counter. It feels like you you're taking up their time with tasks that they don't really want to do, and it feels like they don't really appreciate the clients having questions, and I think that's also why I kind of feel forced to avoid them." (Participant 11)

"I think sometimes I'm that kind of person that I always have like music headphones on […] I don't want to bother anyone, and I don't want anyone bothering me." (Participant 2)

Another reason for avoiding the counter lies in the fact that in certain situations participants trust the personnel less with their order. It has been found that especially while traveling to countries with a different official language than one's own, ordering at the counter can lead to communication problems and the staff may misunderstand the order. In this case, customers prefer to rely on the SSK, because it allows them to set the language themselves and to avoid order misplacement. The following quote from a participant illustrates this:

"In Sweden, there is not a real problem with the language because most of the people speak English. But for example, when I was in Italy or France, I actually would have avoided to buy something at McDonald's if I could only buy something at the counter with the employee. Because most of the time they don't speak English that good. And then it's really hard to order something and get what you want […] choosing it from the kiosk you can basically just switch the language and still get the products you really want." (Participant 13)

However, the in-store observation has additionally shown that there are situations where interpersonal avoidance cannot be fully reached. During the observation, a young teenager was observed ordering at the SSK, but then had to go to the counter because he wanted to pay in cash. Hence, in the case of payment options, it can be said that interpersonal avoidance is not always possible. Nevertheless, no communication took place as the guest only showed his order number and paid. Therefore, it can be argued that interpersonal avoidance occurred in terms of not verbally communicating.

Consequently, it can be said that when certain situations arise, whether from the consumer's point of view or from other actors in the store, consumers mostly want to avoid interpersonal contact and therefore prefer the SSK.

4.1.8 Human Clues and Skills

Another finding that is critical to whether customers choose to order at the counter or at the SSK is the human clues and skills of the employees working at McDonald's. Here, it can be divided into personal characteristics, appearance, and the communicational skills to fulfill a pleasant interaction as well as the product knowledge of the staff itself. Hence, in order to choose the counter as an option, the personnel should be friendly, polite, and appear hygienic as well as appealing and approachable. Personnel at the counter, who look stressed and annoyed, would accordingly come across as uninviting. The following quotes support these statements:

"Being polite is important, because then you can expect the personnel to be friendly as well."
(Participant 9)

"The person's appearance is important. If that's not a hygiene appearance, then you kind of have lower expectations of the service and food as well […] If the person is nice looking appearance wise, both men and women, I just feel more invited to get to know that person and like to place my order with them." (Participant 12)

"If you can see it in their faces that they are stressed and preparing all the orders it feels like they wouldn't give you a good ordering service." (Participant 2)

Customers also want the interactive conversation to be pleasant when they go to the counter. It was found that interviewees felt that counter staff should be more passionate and engaging, and that fun conversations should be initiated more as the following statements show:

"I think that the workers nowadays at McDonald's are not used in interacting with people face to face." (Participant 2)

"I love if you have a fun employee working with who you can have a nice interaction with. For example, in Frankfurt when I come back from a night out I usually have a good, funny conversation with the counter personnel. That's a benefit which you don't get by choosing something from the kiosk." (Participant 13)

Another important skill that consumers expect from staff is that they have a good knowledge of the products and can advise and understand you properly. Here, a lack of knowledge about products and offers from the staff's point of view leads to consumers being annoyed and preferring to order from the SSK as shown by the subsequent quotes:

"Once, I tried to order something at the counter with an employee. He didn't get what I wanted to order. And so, it was really hard to get the product I wanted and then I just decided to take something else." (Participant 13)

"When you order from the staff, sometimes they don't even know about the special offers [...] and then you don't want to explain it to them, because it feels kind of stupid to explain it to someone who works there." (Participant 13)

During the in-store observation, it was also observed that guests do not like having to stand at the counter and wait to be served. Here, for example, it was observed that after one minute of waiting, the guest became increasingly restless, looked around and started to draw attention to himself. This shows that the presence of the employees can still be decisive.

Hence, these findings show that human clues and skills are important aspects of the decision-making process and help determine which order option to choose. However, past events also play a role here, which can lead to prejudice against certain ordering options in specific contexts.

4.1.9 Empathy and Awareness

Next to human clues and skills, empathy and awareness could be found to have a motivational influence on restaurant guests' decision to either use SSKs or interpersonal service options at the counter when ordering their food. This empathy or interpersonal awareness is described by participants for both customer and employee perspectives. On the one hand, the interviewees avoid the counter because they are aware of employee stress and do not want to be an additional source of stress. On the other hand, interviewees feel that they are now generally less wanted at the counter. This is made clear by the quotes below:

"It could be like very crowded so [...] I don't want to just bother an employee for that when we are like 100% capable of doing an order from a kiosk." (Participant 2)

"You also kind of feel like you are just an obstacle for them, they don't really want you to order at the cashier anymore. It feels like they just want to get you over with so they can focus on helping their colleagues." (Participant 11)

However, respondents also indicate that they have compassion and empathy for the employees behind the counter. This leads to two perspectives. First, the hypothesized job loss of not using the counter may be a motivator to order along with a staff member. On the other hand, the

subjectively perceived poor working conditions represent an emotional obstacle to ordering at the counter. This is illustrated by the following quotes:

"I want to keep them to have the work. So otherwise, someday the people won't have any work anymore. They are not needed so I help them to keep the work." (Participant 14)

"I'm a bit uhm, wary of the working conditions at McDonald's, which I know are not the greatest for the employees there. So, if I would interact with them, it would make me think about their condition you know, as workers that are not treats it fairly mostly, so going to the kiosk makes me kind of forget that and as I said already going to McDonald's, I'm just going there for a quick type of food opportunity, so I don't really want to think about the misery on earth." (Participant 3)

However, the interviewees also attribute a certain knowledge of human nature to the employees at the counter and think it is good when employees realize that there are no further product requests wanted. This is described as an advantage over the SSK as the inserted quote shows:

"But in the cashier, they would never be like, oh, do you want to add blah blah blah like they just like take the notes then shut up. So, I guess the kiosk is more like a seller that the person actually." (Participant 1)

Overall, interpersonal compassion and knowledge of human nature can be seen both as an inhibitor, but at the same time as a situational advantage of the human-staffed counter.

4.1.10 Employee Support

In addition to empathy and awareness, employee support was found to have an influence on restaurant guests' decision to either use SSKs or interpersonal service options at the counter. During the in-store observation it was for example noticed that costumers often went to the counter and asked the personnel specific questions while showing them their mobile phone. More precisely, interviewees elicited that they prefer to order with the help of employees if they want to redeem special offers with coupons or discounts, as the procedure of redeeming at a SSK does not always seem intuitive to them as the following quote points out:

"You have certain like bonuses that you can use or like if you're a student. They have also like student offers, but I've never figured out how to use it at like the self-checkout because I don't know where I'm supposed to put it in." (Participant 4)

Furthermore, employees are an important point of reference when orders at the SSK are incorrect or products have been incorrectly selected. Accordingly, employees can be seen as a supportive additional safeguard for restaurant patrons as the quote below reveals:

"Like we ordered in the self register, I think it was a smoothie or something that I got wrong for the kid. But then my husband went and talked to them and they brought it few minutes later." (Participant 7)

Furthermore, counter staff play an important role when it comes to ruling out health concerns, such as contained allergens. The interviewees not only state that they trust human statements more, but also that they can discuss health details in more detail in an interpersonal communication and that the SSK does not enable the allergy-friendly adaptation of products in an all-encompassing way. This is illustrated by the statements below:

"If it's a serious allergy, I think I would trust the person better. [...] I think it would just be to make sure that we get the information through to the people. Because I guess it's in the end, they are making the food, so it may be easier to get it like cleanly through." (Participant 7)

"When he tries to order like a specific type of gluten free 'cause he doesn't eat gluten. But if he wants to get a gluten free bun but there's already a chicken in the middle that has gluten in it, he can't remove it on the machines. [...] Some things you can't remove or you can't adapt. So, then I would go to a cashier 'cause they you know they are human, so even though the human direction is both annoying, it sometimes it's also like it lets you go into the minor details. So, I think that's a lot nicer." (Participant 1)

Additionally, during the in-store observation it was discovered that although dine-in guests ordered from the SSK, they still chose the human support using the table serving service option. This means that even though guests do not always like to have the staff help them with their order, they still like to have their food being served to their table by staff members.

In summary, it appears that restaurant patrons are motivated to use employees as service options when it comes to their own health and safety, to work around technical or product-related difficulties at the SSK as well as to be served at the table.

4.1.11 Influence of Important Others

During the interviews, additional situational factors were investigated, which revealed that the influence of important others exists. It was found that friends and family as well as other guests have an influence on the consumers regarding the choice of the ordering option. On the one hand, it has been found that when consumers go to McDonald's with friends or family, they prefer the SSK. When friends go to the kiosk, participants reported automatically going to the kiosk as well due to peer pressure mechanisms. When ordering with family, it is argued that it is easier to place a collective order at the kiosk because it is usually a larger order and there is more time for discussion and decision-making. On the other hand, the interviewees explained that SSKs are a much better place to exchange and compare orders with friends and discuss if they wanted to share products together. Talking to friends in front of the counter staff and expressing opinions about orders is not seen as an option, as these discussions make customers feel uncomfortable. The following statements show this:

"When I go to McDonald's with a group of friends and they're all going to the machine, I would go to machine as well." (Participant 1)

"With family I always choose the kiosks because everyone has an opinion. Everyone wants something and then it's way easier to place an order at the kiosk than changing your mind in front of people." (Participant 6)

"At the kiosk it's easier to discuss. Otherwise, you just stand in front of the counter where you see the selection there and then you're discussing out loud [...] with your friends and I don't feel comfortable If everybody else would be listening in." (Participant 13)

This finding was also observed during the conducted in-store observation. During the observation, it was noticed that as soon as a group entered McDonald's together, they went directly to the SSK. It was also observed that in the case of families, parents spend a lot of time showing and explaining the individual products to their children before completing the order together at the SSK.

The influence of other guests as the last situational factor, however, does not show a clear preference towards one of the ordering options. Here it is much more important to choose an option that helps to avoid certain types of guests. Correspondingly, the order option is selected according to the situation, in which as few contact points as possible are agreed with certain guests as the following quotation shows:

"When drunk people are also ordering at McDonald's at the same time as I do, I want to be further away from them [...] and that would involve a situation where I choose a different way of ordering [...] I love to have the option to not get closer to disturbing guests if they're being loud or I don't know smelly or aggressive." (Participant 9)

Altogether, it can be said that important others have an influence on the choice of the order option, but it needs to be differentiated here according to the situation and the respective individuals since it is not always clear which order option dominates.

4.1.12 Waiting Times

Regarding the theme of waiting time, the interviews showed that queues do have an impact on order satisfaction, but not on the choice of ordering option. The participants also mentioned that if they did not know what to order they would go to the kiosk even if the line at the counter was shorter as the following quote shows:

"I don't like to stand in line [...] even if there might be a shorter line in front of the counter compared to the self-service kiosk I still would prefer to stand in line for the kiosks." (Participant 4)

The only reason why one would still go to the counter to shorten the waiting or ordering time includes that the customers already know what they want and do not need to be assisted. The following statement describes this as follows:

"If there was a long line in front of the touch screens and there was no line at the counter and I know exactly what I'm having, I just want to eat Nuggets for example, I'll go straight to the counter." (Participant 1)

What was discovered as an interesting finding, however, is the fact that people perceive waiting times to be different depending on the ordering option. At the SSK, for example, it was discovered that although the entire ordering process might take longer, consumers do not perceive this as actual waiting time, but rather value the fact that they can easily take their time. The following quote describes this as follows:

"It's true that at the self-service kiosks the selecting things process takes longer, but it doesn't really feel like waiting time [...] that's why I still think it's faster than ordering something at the counter with the employee." (Participant 13)

Consequently, the choice of ordering option depends on the order of the guest himself and is in principle perceived as shorter at the SSK than at the counter.

4.1.13 IT Affinity

Another important finding from this study is that younger generations adopt to new technologies more quickly because they are more familiar and curious with them and have grown up with them. While older generations need more time to adopt because newer technologies do not seem to be as intuitive from the start. In the in-store observation, an elderly man was observed first starting his order at the SSK, but then walking around confused and finally completing the order at the counter. This shows that even older generations are willing to try new technologies, but may need several attempts to use them effectively. During the interviews, younger and older interviewees described this fact as follows:

"For my age. It's quite easy to adopt because we kind of grow up with that technological change. So, for me it was never really a hurdle. You're kind of curious as well when you see one of those machines, like new machines or new technologies you kind of want to try it out to see how it works." (Participant 12)

"I would say I adopt more or less fast to new technologies. But for me they are sometimes not that intuitive. That's why I have to check how it works first and this might take a little longer." (Participant 15)

The higher level of IT interest among the aforementioned demographic group also suggests that younger people are more likely to prefer digital touchpoints and understand technological innovations better than older people.

63

4.2 Manager Point of View

4.2.1 Decision Control During Purchase Process

The managers see a motivator for restaurant guests to use the SSK in the fact that they can better realize their independence in terms of selecting, orienting, browsing, and time management without feeling pressure from other guests, as the following statements illustrate:

"The guests like that simply independently to press, to decide, to orient a bit, to have a bit of time. Just quickly my BigMac menu what I always order or I want to browse a bit."
(Participant 18)

"When a guest goes to the counter, he is always a bit under pressure because he sees the guests behind him and does not know what the food is actually called." (Participant 19)

Accordingly, control over the order due to autonomy and 'relaxation' can be seen as a motivating factor for the use of the SSK from a managerial perspective.

4.2.2 Displaying of Product Information

In addition to the actual control of the ordering process at the SSK, the managers also see the presentation of the products as decisive for the guests' choice of SSK. This is based on the visually appealing presentation of the products and on the possibility of browsing through the entire range. This is conveyed by the following statements:

"If they want to have a look at what's new or want to browse a bit and have a look at what's on offer, then they go there." (Participant 19)

"We have become very visual there, so we have reduced the categories. We've actually put pictures behind all the categories and have actually created a lot of picture content and taken out the information. So, I think that was incredibly important to the guests, that they can easily navigate through the kiosk." (Participant 19)

However, managers also see the visually appealing and entertaining advertisements called 'takeover' on the counter screens as a motivating factor for guests to use the interpersonal service option. This is shown in the following quote:

"I could also imagine the digital menu boards being entertaining, you stand in front of it and then the full takeover comes, which is inspiring." (Participant 18)

Overall, it appears that from a manager's perspective, appealing visuals are emphasized to attract restaurant guests to both service options.

4.2.3 Performance Expectancy

The interviews with managers also revealed that the expectation that the kiosk would be easy and intuitive to use was seen as a motivator to utilize it, which is supported by the following statement:

"It has to be really intuitive, just like you actually move around on a smartphone [...]. We also have icons that are more like app icons and that you find yourself somewhere in what you use every day." (Participant 19)

This shows that digital adoption in all areas of life and the self-evident use of smartphones is also used in the strategy to motivate and convince restaurant guests to use the kiosks.

4.2.4 Products and Categories

Furthermore, the manager interviews show that there are particular recurring marketing strategies that create a preference in restaurant patrons to choose the human-occupied counter as a service option. The non-food promotion described below illustrates this:

"Yes, special promotions. Every year we have the Easter countdown, where on one day you can win socks, for example, or Coca-Cola glasses that come free with the McMenu. So, I think everyone would always go to the counter first to make sure that they get their glass and their non-food." (Participant 19)

This means that there are certain conditioning effects among restaurant patrons that may cause habit effects and learned behaviors to lead to touchpoint preference in certain situations.

4.2.5 Interpersonal Avoidance

From a managerial point of view, it was found that interpersonal avoidance is basically based on two facts. On the one hand, managers understand the interpersonal avoidance of guests towards ordering at the counter for security reasons, and on the other hand, they are aware that their staff may also have language barriers that make communication difficult. For the primary reason, health safety as well as personal guest reasons were mentioned, as the following quotes indicate:

"By having secure, contactless ordering and payment at the kiosk, we want to give people the assurance that they won't catch diseases such as COVID." (Participant 19)

"We have noticed that kiosks have become much more accepted because they offer security when you don't necessarily want to come into contact with so many people." (Participant 19)

Regarding the second factor, the language barrier, it was understood from management that certain guests prefer to place their orders at the kiosk rather than trying to communicate with the staff in order to avoid misunderstandings. The following statement supports this finding:

"Unfortunately, in some cases there is a language barrier with the staff and then, as a guest, it is understandably easier to get along if you can simply move around the kiosk on your own and are not dependent on the employee." (Participant 18)

Interpersonal avoidance is therefore based on personal safety preferences from the customer's point of view as well as on avoiding possible communication misunderstandings with the staff at the counter.

4.2.6 Human Clues and Skills

Managers are aware that guests expect friendliness, respect and good interaction as the following quote indicates:

"A key point is the friendliness of the staff. And that's really what guests expect when they go to the counter, that they have someone there who's going to treat them with respect and kindness and interact with them in some way [...] this gives the guests a good feeling and a good experience." (Participant 19)

It was also found that managers know that the interaction between guests and staff depends on how one communicates. The following quote shows that it should be important to conduct conversations in a sympathetic and nice way:

"An employee is not a machine and should not simply rattle off the conversation. I think it depends on the way the employee presents the service [...] it's important that the employee makes the interaction somehow sympathetic and nice." (Participant 18)

At the same time, the managers are aware that this can be more difficult to implement since McDonald's is operating in the fast-food industry, where a high value must also be placed on speed. The following statement illustrates this:

"We have a hard time with this ourselves, on the one hand, we are a fast-food restaurant, so you come to us and you expect somehow to get your order quickly [...] this is why we, first of all, focus the employees on speed to get the orders out quickly [...] so we are aware of the fact that fast can be unfriendly, so we know that we have this inner conflict somehow." (Participant 19)

Consequently, it was found that human clues and skills are also important from a management point of view, but that it is difficult to apply them in every situation.

4.2.7 Empathy and Awareness

Furthermore, the managers' perspective shows that, especially after the peak phase of the pandemic, a motivator arose for older guests to use the counter as their preferred ordering service option. The managers see the reason for this in the fact that the reduced contacts caused by the pandemic have led to feelings of loneliness, especially among older guests, which they want to compensate for with any conversation, including that at the ordering counter, as illustrated by the statement listed:

"Corona in particular has relatively eliminated personal contacts. Especially older [...] have become a bit lonely, they don't go to the technology for the time being, but rather to a person who is standing there, who can also advise them a bit." (Participant 18)

The managers also point out that the brand's advertising communication conveys a lot of interhuman relations and empathy as values, and thus the presence and helpfulness of the employees is a basic requirement. Thus, the promotional communication can also create a motivator that subconsciously endows guests with the preference to also want to experience the conveyed values in the restaurant, as the following statement expresses:

"Yes, the fact that the guests can ask something again and get an answer and that someone is still standing there makes it more human somehow, because if you look at our advertising, for example, or how McDonald's normally presents itself, then employees and people play a very important role in the whole thing." (Participant 19)

In addition, the managers also point to the empathic abilities of the employees to realize how emotionally charged guests are and to anticipate their stress and time pressure level. According to the managers' statements, this is also a motivating factor to use the counter to facilitate smooth ordering processes due to interpersonal emotional understanding, without delaying the ordering process by further inquiries. This is shown by the following statement:

"The employee should also notice if the guest is totally under pressure and just wants to have his cheeseburger and fries zack zack, [...]then he should not make any suggestions at all." (Participant 18)

Overall, this shows that managers are aware of the fact that brand values, i.e., interpersonal exchange and understanding, definitely have an influencing effect on restaurant guests and also affect their service option decision.

4.2.8 Influence of Important Others

Managers are aware that larger groups prefer the SSK as a more convenient and better option compared to the counter. On the one hand, managers know that group dynamics lead to using the same order option in each case. On the other hand, managers know that group ordering is easier at the SSK due to emerging discussions and longer ordering times. The quotes below confirm this as follows:

"We know that when you are out in a group, you are very guided to go to the kiosk when everyone is going to the kiosk [...] especially with a group, you can make a big order very calmly at the kiosk and then you don't have to stand in front of the staff for so long and you can discuss a bit more." (Participant 18)

"Larger groups usually always go to the kiosk because they simply have time there and can order one after the other in a relaxed atmosphere. So, the kiosk has clear advantages over the checkout [...] it would be totally crowded at the checkout as a large group [...] we also notice

that at the checkout it's more likely to be individuals or at most two people ordering."
(Participant 19)

Nevertheless, the managers emphasized that families would prefer the counter. On the one hand, it was mentioned that counter ordering makes it easier to choose the Happy Meal toys. On the other hand, counter ordering enables parents to better control their children. The following quote illustrates this:

"Families prefer to go to the counter because the staff member enters the order for you while the parents have the child by the hand. It's also easier to make preferences at the counter about the toys that are in the happy meal." (Participant 19)

Accordingly, managers are aware that there is an influence of important others in the choice of ordering option.

4.2.9 Waiting Times

Regarding the waiting time, it was found that managers have the opinion that all guests prefer the SSK, as the waiting time can be shortened considerably there. It was also mentioned here that McDonald's wants to focus more on the SSK as an ordering option in order to reduce the waiting time. The following statements support these findings:

"It's faster for the guests because they can just go to the kiosk [...] They order, and they don't have to wait in line." (Participant 19)

"We know that it doesn't take long to order at the kiosk [...] guests would rather wait one minute at the SSK than 10 minutes at the counter [...] that's why we put a lot of emphasis on the terminals and at the moment we actually only have a maximum of 2 checkouts open." (Participant 19)

Consequently, managers stated that when a customer wants to order fast, that they always would prefer to choose the SSK to reduce the waiting time.

4.2.10 IT Affinity

Managers are aware that SSKs are more likely to be chosen by younger generations. It was also mentioned that IT aversion behavior, such as preferring to pay with cash, is seen as a motivator to use the counter. The following two quotes illustrate this:

*"So younger guests do much better at the kiosk than the older guests. It works better for them." (Participant 19)*

"But there are still those who like to pay with cash or want to get rid of their small change, and they go to the counter." (Participant 18)

From a managerial perspective, it is evident that general attitudes towards technology are influential in the choice of ordering options for guests.

4.3 Summary of Findings

To present the motivators and demotivators shown and discussed in a consistent and clear manner, the framework of the current state of knowledge that was already presented in chapter 2.6 was further developed to include them. It should be noted that the themes filtered out from the data analysis are listed as factors and that there are deviations from the terms of the primary framework derived from theory. Nonetheless, the discussion of the findings of this study with the findings from the theory allows for a detailed cross-check of all the research findings in Chapter 5 of this thesis. In the following, the final framework is presented in figure 5.

Figure 5. Final Theoretical Framework of Motivators for Service Options in Fast-Food Restaurants
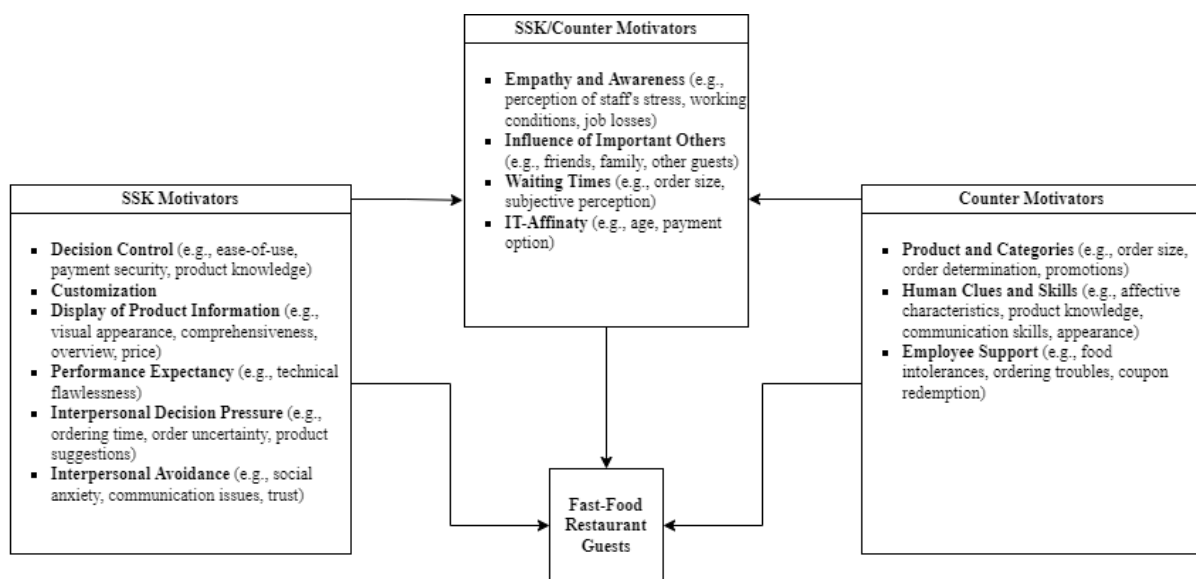
As shown in the figure above, this research paper found six overarching motivators for using SSKs, three overarching motivators for using the counter, and four overarching motivators that can result in a tendency to use either SSK or the counter, depending on the individual aspects that lie in amongst them. The brackets list the relevant sub-terms that further describe the corresponding motivator. These have already been described in detail in the findings and analyses section.

5. Discussion

In this section, the findings described in the previous chapter are discussed in relation to the existing theories. In doing so, the authors will identify areas of consensus and inconsistency, as well as new findings that have not yet been covered by the literature. Furthermore, the perspectives of managers and customers are compared. Accordingly, this allows the authors to answer the research question, namely: *What motivates restaurant guests to choose self-service*

kiosks or interpersonal service options at the counter when ordering in a fast-food restaurant and is there a discrepancy between the guests' and managers' perspectives?

5.1 Areas of Consensus

First of all, this study could show that the control of selecting and changing the order, controlling payment security and having a more extensive product knowledge during the ordering process sets up an important motivator for the fast-food restaurant guests to use the SSK. This is in line with Lee and Allaway (2002), who showed in the online self-service field that a sense of control leads to a higher value perception and willingness to use SSTs. Consistent with Ahn and Seo (2018), this study also shows that customization of the order itself increases the intensity of SSK use. Apart from this, there is also a consensus of this study and the work by Jeon, Sung, and Kim (2020), which shows that performance expectancy is as an influential variable for kiosk usage. The present study shows that the ease-of-use and less situational influences, such as mood swings of the staff, make guests more likely to anticipate that their expectations will be met at the SSK, which has a motivating effect. In addition, this study is consistent with Collier and Kimes (2012) who showed that accuracy in ordering is a motivator for using SST based on mobile food ordering services. This study was able to show the same motivational effect for the use of SSKs in the fast-food restaurant context.

The present research project is also consistent with Weijters et al. (2007) in terms of demonstrating that the number of items ordered influences the service option selection. Within the factor of interpersonal avoidance, the importance of the availability of language selection features at the kiosk as a motivator to use it was illustrated, which was also shown by Park, Lehto and Lehto (2021) for the restaurant context.

Moreover, Vannucci and Pantano (2020) stated that, on the one hand, product suggestions from employees are demotivating for the use of the counter due to the assumption of deceptive upselling. On the other hand, product suggestions are more trusted by the SST because they seem less biased and more personalized. This is consistent with this research paper, as through the interviews a distrust of product suggestions from employees was found that is based on the fear of being offered less fresh food, whereas the product suggestions at the SSK were perceived as more suitable to their existing virtual shopping cart.

Considering human clues and skills, the authors found that all of the findings in this study are consistent with what is already stated in the existing research. With regard to affective characteristics, it was discovered, as in the study by Sundaram and Webster (2000), that staff

friendliness and politeness are regarded by guests as prerequisites for using the restaurant counter. Also, Wall and Berry (2007) revealed that the human clue of a smiling face, for example, motivates people to use the interpersonal service option. Furthermore, the interviews that were conducted for this study showed that the staff's product and menu knowledge, hygienic appearance as well as their ability to communicate this, determines whether customers use the counter or not. This is in line with Becker et al. (1999) as well as Ko and Su (2014) who also emphasize the linguistic skills, hygiene, and menu knowledge of the staff as a motivator to choose a human touchpoint.

In addition, Dean's (2008) finding of his cross-sectional SSTs study could be confirmed for the fast-food sector, and consequently SSKs. Following the findings of Dean (2008) and this thesis, women are more concerned that technology may cause employees to lose their jobs, which is why women may have more of a tendency to order at the counter.

Moreover, this research also shares findings with Wang, Harris and Patterson (2012) regarding customer's task complexity and the resulting touchpoint preference in the retail context. Wang, Harris and Patterson (2012) postulate that consumers prefer SSTs only for simple tasks. This is in line with this thesis's findings for the fast-food context. Here, restaurant guests preferred the counter in case of allergies, other food intolerances, or redeeming discounts which resembles a higher task complexity and the need for staff's support. The manager interviews also showed that the counter is preferred for more complex tasks, such as selecting non-food items for special promotions.

In terms of IT affinity, the study for the fast-food restaurant context showed that older generations prefer personal interaction at the counter and take longer to adopt new technology, as it is not perceived as intuitive. Still, it can be said that older guests are willing to try new technologies such as SSKs but need human assistance to adopt. This also confirms the findings of Simon and Usunier (2007), which also show a negative influence of age on the use of technology in the area of banking by phone. Dean (2008) also showed in his cross-sectional SST study that older generations generally prefer human interaction.

5.2 Areas of Inconsistency

This study finds no consistency regarding the findings of Leung, Torres and Fan (2021) that fast-food patrons spend more time at the quick service restaurant counter when restaurant crowdedness is low. Rather, the study's observation found that much more time was spent at the kiosk than at the counter when the level of crowdedness was low. Moreover, it was observed

that guests generally only selected the counter as a service option when they had small orders and/or already knew what they wanted to order. In general, the customer interviews also showed that customers spend much more time at the kiosk compared to the counter.

Further, the findings of Geldermann, Ghijsen and van Diemen (2011), which were based on passengers at the airport, cannot be shown in the context of the fast-food restaurant. Geldermann, Ghijsen and van Diemen (2011) found that there is a preference for interpersonal services when both service options have queues of equal length. However, in the fast-food restaurant context, this study uncovered that there is a general preference for SSKs, especially when diners do not know in advance what they want to order. It was also found that the time period of ordering at the SSK is not perceived as waiting time from the customer's perspective.

As already shown in the previous section (see *Chapter 5.1*), an influence of age on the use of the SSK in the fast-food restaurant sector could be demonstrated. This contradicts the findings of Weijters et al. (2007), who found no influence of age on the use of self-checkouts in the retail sector.

In addition, Dabholkar and Bagozzi (2002) and Weijter et al. (2007) showed that fun serves as a direct factor for guests to use table touch screens in fast-food restaurants and for customers to use self-checkout services in retail. However, this study found that fun can also serve as a motivator for patrons to order at the counter. In this case, a fun conversation with the employee is especially valued.

5.3 Areas of Novelty

One of the newly discovered findings, which is not yet explicitly shown in the existing literature, is the motivating factor of how product information are displayed on the SSKs. In particular, the price presentation and the more comprehensive and clearer product view were seen as motivators for choosing the SSK instead of the counter. At the same time, the product display is perceived as too small and the product selection as too limited at the counter, which acts as a demotivator for counter orders.

Another new finding which acts as a decisive motivator for choosing a service option has been found to be specific products and categories. Here it was elicited, that new products and products involving children's decisions (e.g., Happy Meal) lead to preference for interpersonal services. This is due to the fact that on the hand taste profiles of new products can be better explained by humans. On the other hand, children are enabled to select the toy more easily when an employee shows the toy range.

In the fast-food context, it was also revealed that guests feel interpersonal decision pressure at the counter both from the counter staff and the people queueing behind, which is demotivating for ordering with the help of the personnel. An additional new aspect of interpersonality is the situational avoidance of personal contact with others. It was found that restaurant guests are motivated to use the SSK because, on the one hand, they do not want to interact in person. On the other hand, they want to avoid comprehension problems with the staff.

In one of the previous sections (see *Chapter 5.1*), it was described that there is a consensus with Vannucci and Pantano (2020) regarding guests' distrust of product suggestions at the counter. However, this study also found that product suggestions at the counter per se are not necessarily unwanted. Rather, guests want to be understood by the staff when they do or do not need product suggestions. The empathy of the staff towards the guests is an important factor here. At the same time, however, interpersonal decision pressure makes it more difficult to say no to product suggestions at the counter, which has not yet been investigated in this way in existing research.

On the other hand, there is also an empathy from the guest towards the personnel at the counter, which influences the choice of service option. It was found that when customers perceive the staff to be stressed, they consciously avoid the counter to prevent the staff from additional stress. Also, it was found that customers intentionally choose not to go to the counter because of assumed bad working conditions of the staff, which they do not want to be confronted with before eating.

Furthermore, this study found out that in terms of in-store consumption, guests prefer to choose a combination of digital and human touchpoints. Here, it was observed that even if most of the guests prefer to order at the SSK, they like to have an interpersonal experience by selecting the table serving service option. Thus, this study points out that the combined presence of digital and human touchpoints has its relevance of existence.

Compared to the existing literature, this study has been able to identify important others such as friend groups, family members, and other guests that can be considered as an additional motivator for deciding on the service option used when ordering fast-food. In particular, a preference for the SSK was shown among friend groups and families. This preference is based on the possibility to order together at the kiosk in a more stress-free way, to discuss the order and to explain the products to children. For other guests, a distinction must be made depending on the situation and the person, as it is not always clear which ordering option is preferred. For

example, if loud or disturbing guests are perceived at the counter, there is a tendency to go to the kiosk and vice versa.

5.4 Gap Discussion

Since the purpose of this paper is also to identify potential gaps between the customer and manager perspectives, this section compares the manager's findings with those of the customers. In doing so, different gaps but also similarities between the different themes that were identified are analyzed and described below.

Decision Control during Ordering Process

For this theme, no specific gaps were identified. Managers are aware of the fact that the independence of the guests, the greater control by browsing the products, and the more relaxed ordering process are motivating factors for the use of the SSK. This is also in line with the perception of the guests.

Displaying of Product Information

Both gaps and similarities were identified in this area. In the perception of the managers, for example, the product presentation, called full-take-over, on the screens at the counter is seen as an incentive to also use this touchpoint for ordering. However, this contradicts the guests' perception, since they describe the product presentation at the counter as too small and too limited, which is a general demotivator for ordering at the counter. In the case of the SSKs, however, both customers and managers agree that they are considered motivating to use this touchpoint because of their visual presentation and good overview of the products and prices.

Performance Expectancy

Also here, both gaps and similarities were identified for this theme. Managers are unaware that certain features exist that guests desire, which could increase the expected performance of SSKs and in turn increase their usage. For example, a final skip button that leads directly to the payment process without further inquiry was desired. Also, the localization of the SSKs in the outdoor area was seen as desirable so that crowding inside can be avoided. Nevertheless, there is agreement among customers and managers that performance expectancy in terms of ease of use, intuitiveness, and reliability increases the motivation to use the SSK.

Products and Categories

Here as well, both gaps and similarities were identified for this area. One of the gaps is that managers do not have the awareness that guests prefer to order new products at the counter to get a personal taste description. In addition, the observation showed that small orders are

preferably ordered at the counter in a grab-and-go process, which contradicts the perception of the managers. However, there is no gap in the awareness that some products are generally ordered at the counter, as has already been explained with the example of Happy Meal, since the choosing is considered easier with the help of the personnel.

Interpersonal Avoidance

Also, in the theme of interpersonal avoidance both gaps and similarities are identifiable. The gap in customer and manager perceptions is that customers at times feel a conveyed sense of undesirability from employees and therefore perceive it as demotivating and uninviting to order at the counter. However, there is a consensus in manager and customer perceptions that language barriers, especially from staff, promote interpersonal avoidance and thus lower use of the counter.

Human Clues and Skills

Here, only similarities were identified. Both, managers and customers elicited the importance of affective characteristics, such as staff's friendliness, politeness, respect towards guests, and pleasant interactions, on restaurant patron's intention to engage with employees and use the interpersonal service option at the counter. Nevertheless, the managers had to admit that McDonald's is in a dilemma to ensure the perceived desirable affective characteristics of the employees. Here, the speed of order processing conflicts with the desired positive mood of the staff members.

Empathy and Awareness

Two gaps were uncovered in relation to the theme of empathy and awareness. Firstly, managers are not aware that guests seem to show empathy towards staff and therefore choose the counter instead of using the SSK, as they are afraid that employees might lose their jobs if everyone only uses the SSK for orders. Secondly, managers are not aware that certain restaurant patrons feel that there are bad working conditions among the employees, which is why they prefer to use the SSK in order not to be confronted with the bad working conditions before eating.

Influence of Important Others

In the theme related to the influence of important others, one gap and one similarity could be elicited within the customer and manager perception on what the motivational drivers for a certain service option are. Regarding the identified gap, managers are not aware that disturbing or conspicuous persons influence the choice of order option. For example, drunk guests ordering at the SSK may encourage other guests to order at the counter to avoid confrontation. On the other hand, managers and customers agree that going to the fast-food restaurant with

friends generally leads to a preference for the kiosk. The reasons given for this preference, such as the possibility of ordering together, discussing together and being able to take more time as a group, are also in agreement between customers and managers.

Waiting Times

In connection with waiting times, a discrepancy between the manager's view and the reality in the restaurant could be noted. According to manager statements, guests also use the SSK for smaller orders due to waiting time advantages. However, during the observation of the guests in the restaurant it became clear that a large number used the counter to place small orders, such as 2 coffees. For this order process, the restaurant guests often needed less than 30 seconds.

IT Affinity

No gaps could be detected in the area of IT affinity. Here, the perceptions of managers and the statements of the interviewees, as well as the perceptions from the observation, agreed that younger customers find it easier to orient themselves on the SSK and integrate these new technologies more quickly and successfully into their usual ordering behavior.

Summary of Gap Discussion

In summary, the managers are very well informed about what motivates or demotivates customers to use certain ordering options. Nevertheless, this gap analysis has revealed some aspects that can be incorporated into their awareness and strategic directions. This concerns especially the areas of display of product information, performance expectancy, products and categories, interpersonal avoidance, empathy and awareness, influence of important others, and waiting times.

5.5 Chapter Summary

At the beginning of the discussion, the findings of this study were compared with existing research findings in the literature in the area of interpersonal service options, SST, and SSK, and consequently similarities, discrepancies, and entirely new findings were described. Thus, in combination with the final framework (see *Chapter 4.3*), the motivators of fast-food restaurant patrons could be crystallized, which answers the first part of the research question of this thesis. In the second part of the discussion, the results from the customer interviews and in-store observation were compared with the results of the manager interviews and consequently gaps between the perceptions but also similarities were shown. Thus, the second part of the research question could be answered.

6. Conclusion

This aim of this study was to understand the motivational factors restaurant guests use in their decision to either choose SSKs or interpersonal services at the counter when ordering fast-food. Also, the authors were intended to identify whether or not gaps between customer and manager perspectives exist regarding the motivators of choosing one of the mentioned service options. The results of this qualitative study revealed that for the fast-food context, explicit motivators of restaurant guests exist for the SSK or counter usage. Besides, it was also found that there are motivators that can create a preference for both SSK and counter, depending on the specific situation and the guests' perceptions and profiles.

In terms of SSK motivators, six overarching factors could be identified. Firstly, fast-food restaurant guest highlighted their *decision control* during the ordering process, including ease-of-use and payment security, as one motivational factor to use SSKs. Secondly, SSKs are preferred because of their simpler *customization* options. Thirdly, the *display of product information* can be seen as decisive for the use of the SSK, as products and prices are presented more clearly and visually appealing than on the counter. Fourthly, the *performance expectancy* is a motivator to use the SSK, i.e., restaurant guests are more likely to expect to be satisfied at the kiosk provided the technical functionality is flawless. Fifthly, SSK use in fast-food restaurants is motivated by the reduced *interpersonal decision pressure* that results, for example, from less stressful ordering and easier rejection of product suggestions. Lastly, fast-food restaurant guests are motivated to use the SSK to accommodate *interpersonal avoidance* in terms of unwillingness to communicate or apprehension of employees' language difficulties.

Regarding counter motivators on the other hand, three overarching motivators were found. The first identified counter motivator reflects *products and categories* and shows, for example, that if restaurant guests already know what they want to order and they only want to order a few products, they prefer to do this at the counter as it is perceived faster than at the SSK. The second motivator reflects *human clues and skills* and shows that guests use the counter, among other things, because they also like to have an entertaining conversation with the staff. The third motivator is *employee support*, as staff assistance is especially needed in cases of food intolerance, ordering difficulties or coupon redemption.

Three overarching motivators were found that can be both drivers for ordering at the SSK and/or the counter. Firstly, *empathy and awareness* showed that when restaurant guests perceive the staff to be stressed, they prefer to use the SSK to not put additional pressure on the personnel. Other customers deliberately choose the counter because they fear that by using

SSK exclusively, employees could lose their jobs. Secondly, the *influence of important others* can be identified as a varying motivator. Groups of friends in particular prefer the SSK because it is easier to order together. But other guests are also influential. For example, guests who are perceived as annoying at the kiosk can motivate them to use the counter, and vice versa. Thirdly, perceived subjective *waiting time* can serve as a motivator for both service options. On the one hand, guest's own ordering time at the SSK is not perceived as waiting time, which shortens the general waiting time and thus motivates the use of the SSK. On the other hand, small orders are preferably placed at the counter when there is no queue. Fourthly, the *IT affinity* of restaurant patrons could be shown to be a motivator for using either SSK or counter. In particular, older guests use the counter due to the lower intuitiveness of the SSKs for them.

In addition, the gap analysis of customer and manager perceptions showed that managers are in principle very well aware of the guests' motivators for the respective touchpoint. Nevertheless, the study identified certain gaps, which have been described in detail in the section 5.4.

6.1 Theoretical Contributions

The theoretical contributions to the field of restaurant and customer service experience research of this thesis are manifold. On the one hand, this study systematically aggregated the key findings of relevant existing research and summarized them clearly to make the state of knowledge readily available to other researchers. On the other hand, this study was able to find consensus and show inconsistencies with existing studies but also elicited novel results which have not been described in the academic literature yet. Among others, consensus on the motivational role of decision control, performance expectancy, interpersonal avoidance, human skills and clues, task complexity, and IT-affinity in terms of the demographic variable of age for the use of different SSTs could also be shown for the SSK use in the fast-food restaurant context. In the area of inconsistency, it could be shown that motivating factors from other SST areas work differently for the motivation to use SSKs or counters in the fast-food restaurant context. This concerns, for example, the influence of waiting time, crowdedness, and the factor of fun on the respective choice of touchpoint. However, it is worth noting that this study identifies displaying of product information, new products, interpersonal decision pressure, interpersonal avoidance, empathy and awareness, and the influence of important others as new motivators for using the SSK or interpersonal option in the quick-service restaurant context.

The theoretical findings of this study were also summarized in a framework (see *Figure 5*) which can be used by other researchers as a basis to understand the usage of SSKs and counters

in the fast-food restaurant area. This can help to test and explore this study's factors in other service fields. Moreover, the study can also be used as a theoretical inspiration to generally explore the manager-customer perspective.

6.2 Practical Contributions

From a managerial perspective, it is strategically and operationally important to understand restaurant guests' motivations that they use in their choice between SSK and interpersonal services when ordering fast-food. The results of this paper equip managers with the essential knowledge of restaurant guests' motivators and implications how to successfully address them. Firstly, operators of food services need to ensure that restaurant guests retain their ease of use in terms of their decision control at the SSK. It is also important to keep the customization options at the kiosks simple. Furthermore, the visually appealing and comprehensible presentation of products and prices must be ensured. This should also be taken into account if the intention is to increase counter usage. In addition, it is essential to ensure the technical flawlessness of the screens at the SSK, as this is an important motivator in terms of performance expectancy. It is also important to keep the number of suggestions for additional sales as low as possible so as not to annoy customers.

At the same time, product suggestions at the counter must not appear too intrusive, as this would exert additional demotivating pressure on the guests, which would speak against using the counter and in favor of using the kiosk. For managers, it is also important to train employees' communication skills in order to prevent misunderstandings at the counter and a general aversion to human-to-human interaction. In this context, polite but also amusing characteristics of the employees are particularly desirable, as these are seen by customers as motivating them to order at the counter. Therefore, managers can promote these desirable characteristics through employee training. In addition, restaurant guests are motivated to use the counter when it comes to claiming special promotions or securing the validity of discounts as well as assessing any health risks. Accordingly, it is advisable to sensitize employees to these issues so as not to disappoint guests when they use the counter.

Furthermore, managers need to be aware that some guests may be concerned about working conditions and possible job losses due to technology use. This can be both a hindrance and a booster for the respective touchpoint. Image campaigns could mitigate these subjective perceptions. Also, knowledge of the influence of important others in the quick service restaurant on the particular touchpoint decision can be used by decision makers for communication campaigns or advertising to target a certain touchpoint usage. For example, a

friend group shown at the SSK can promote SSK usage. In addition, managers must consider the IT affinity of their guests as a motivating or demotivating factor for SSK use. Accordingly, it may be advisable to introduce older guests to the new technologies through staff support or to ensure a staff presence at the counter in case of possible uncertainties at the SSK.

Last but not least, this study was able to elicit specific wishes from restaurant guests that increase the satisfaction and motivation of SSK or counter use. On the one hand, SSKs in the outdoor area as well as final skip-buttons that speed up the ordering and payment process are desired. On the other hand, product information should be displayed larger at counter displays.

6.3 Limitations and Suggestions for Future Research

Despite the highlighted theoretical and practical contributions of this work, it is also subject to some limitations, which in turn may also represent potentials for future research. The data collection method may have a weakness in the selection of samples because the interview participants were not interviewed in a McDonald's restaurant and thus did not reflect on any current experience, but only on their past motivations. Accordingly, future studies may conduct the interviews directly in the store.

Additionally, the authors took care to ensure that cultural heterogeneity was prevalent among the customer interview participants. However, only German managers were interviewed for the manager interviews, which means that only German customers could be included in the managers' perspectives. Accordingly, future research can also include managers from other countries and cultures in their studies. Also, despite the consideration of different ages, genders, and cultures among the interviewees, almost all participants are engaged in activities related to higher education. Thus, future studies may attempt to interview people from more diverse social backgrounds.

This study focused exclusively on the use of touchpoints in the fast-food restaurant sector and specifically McDonald's, which means that no conclusions can be drawn about other restaurant categories or industries. Nevertheless, other studies may verify the findings of this paper in other categories, industries or corporations. In addition, the theoretical findings presented here can be tested in quantitative research.

Furthermore, only the two ordering options SSK and counter were considered in this study. However, especially in the area of fast-food restaurants, there are other self-service or interpersonal service options, such as ordering by cell phone or ordering at a human-occupied

drive-through window. Future studies could expand the range of ordering options to be investigated, as these will almost certainly evolve in the emerging years.

However, the authors of this study are confident that despite the limitations pointed out, the findings and contributions of this study is valuable to other researchers and managers in the field.

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Appendices

A Interview Guide for In-Depth Semi-Structured Customer Interviews

1.The facesheet, which is used to record the time, date, and place of the interview, special conditions or circumstances that may affect the interview, and demographic information about the respondent being interviewed (Guion, Diehl & McDonald, 2001)

- *Time?*
- *Date?*
- *Place of the Interview?*
- *Special conditions or circumstances that may affect the interview?*
- *Please introduce yourself (Age, Gender, Education, Job Title, Culture)*

2.The interview questions, which are placed on the left side of the page, along with a blank space on the right side of the page for written notes (Guion, Diehl & McDonald, 2001)

Opening	Written Notes
Do you usually go to McDonald's and order in store?	
Describe and compare your last McDonald's fast-food restaurant visit with one you had 5 years ago. Think about the whole journey, from entering the store until leaving it again.	
Do you remember any interaction with employees and/or self-service kiosks in your past McDonald's ordering process? Can you share this interaction?	
Overall Factors of dis-/satisfaction	**Written Notes**
Can you tell me an example of a McDonald's ordering experience which you felt very satisfied?	
Can you tell me an example of a McDonald's ordering experience which you felt very dissatisfied?	
Attitude towards new technologies	**Written Notes**
What kind of technologies do you usually use in your daily life? Why do you use them?	

How fast do you usually adapt to new technologies like self-service kiosks for example? Why?	
SSK	***Written Notes***
Do you usually use a self-service kiosk when you order at McDonald's? Why do you choose to use them?	
Are there particular situations when you use self-service kiosks at McDonald's? Why?	
What do you like about using self-service kiosks?	
Were you satisfied with the service you experienced? Why?	
What do you think about the self-service kiosk making product suggestions to you?	
Use five words to describe the perfect SSK ordering experience at McDonald's. Describe and explain each word.	
Interpersonal Service	***Written Notes***
Do you usually go to the counter and order there when you are at McDonald's? Why?	

Are there any situations, in which you appreciate ordering at the counter of McDonald's? Why?	
What are factors that would hinder you from ordering with the help of an employee?	
Were you satisfied with the service you experienced? Why?	
What do you think about McDonald's staff making product suggestions to you?	
Use five words to describe the perfect interpersonal ordering experience at the McDonald's counter. Describe and explain each word.	
Additional situational factors	***Written Notes***
What influence do other guests/friends/employees have on the choice of your order option and decision making?	
Wrap-up	***Written Notes***
Is there anything else you would like to add about your ordering experience at McDonald's independently from the touchpoint?	

3.The post-interview comment sheet, which is a place to write notes after the interview; these notes should include feelings, interpretations, and other comments that arose during the interview (Guion, Diehl & McDonald, 2001)

- *Feelings?*
- *Interpretations?*
- *Other comments?*

94

B Interview Guide for In-Depth Semi-Structured Manager Interviews

1.The facesheet, which is used to record the time, date, and place of the interview, special conditions or circumstances that may affect the interview, and demographic information about the respondent being interviewed (Guion, Diehl & McDonald, 2001)

- *Time?*
- *Date?*
- *Place of the Interview?*
- *Special conditions or circumstances that may affect the interview?*
- *Please introduce yourself (Age, Gender, Education, Job Title, Culture)*

2.The interview questions, which are placed on the left side of the page, along with a blank space on the right side of the page for written notes (Guion, Diehl & McDonald, 2001)

Opening	Written Notes
What do you think has changed the most for guests in the last five years in terms of their ordering process at McDonald's?	

SSK	Written Notes
Why do you think guests use self-service kiosks when ordering food at McDonald's?	
Do you think there are special situations where guests prefer self-service kiosks?	
What do you think guests like most about using the SSK?	
Are the guests satisfied during the use of the SSK? Or is there feedback from the guest's point of view that often comes up?	
What is your perception, are product suggestions for the guests at the self-service kiosks positively received?	
Summarize guests' perceptions of their self-service kiosks using five words. Describe and explain them.	

Interpersonal Service	Written Notes
Why do you think guests use the staff at the counter when they order food at McDonald's?	
Do you think there are special situations in which guests prefer staff at the counter?	

What do you think the guests like the most when using the staff at the counter?	
Are the guests satisfied during the service at the counter? Or is there feedback from the guest's point of view that often comes up?	
What is your perception of choice, are product suggestions for the guests positively received at the counter?	
Summarize the guests' assessment of their counter staff using five words. Describe and explain them.	
Additional situational factors	**Written Notes**
Do you think guests are influenced by other guests/friends/employees in their choice of ordering process?	
Wrap-up	**Written Notes**
Is there any other information you would like to share with us regarding self-service kiosk and counter staff?	

3. The post-interview comment sheet, which is a place to write notes after the interview; these notes should include feelings, interpretations, and other comments that arose during the interview (Guion, Diehl & McDonald, 2001)

- *Feelings?*
- *Interpretations?*
- *Other comments?*

C Lund University Interview Consent Form

LUND UNIVERSITY
School of Economics and Management

<u>   </u>*]Thesis title]*

<u>   </u>*[your name/s]*

Interview Consent Form.

I have been given information about

<u>   </u>*[thesis title]* and discussedthe

research project with

<u>   </u>*[your name/s]* who is/are

conducting this research as a part of a Master's in

<u>   </u>*[programme name]* supervised by

<u>   </u>*[thesis advisor's name].*

I understand that, if I consent to participate in this project, I will be asked to give the researcher a duration of approximately<u>   </u>*[interview time]* of my time to participate in the process.

I understand that my participation in this research is voluntary, I am free to refuse to participateand I am free to withdraw from the research at any time.

By signing below, I am indicating my consent to participate in the research as it has been described to me. I understand that the data collected from my participation will be used for thesis and journal publications, and I consent for it to be used in that manner.

Name:

Email:

Telephone:

Signed:

D Illustration of McDonald's In-Store Observation

E Illustration of the Number of Statements Identified Using the ATLAS.ti Software

297 results   Sort by: Name

F Illustration of the Statement-Theme Mapping Process Using Color-Coding

83 Quotes

62 Quotes