

LUND UNIVERSITY

Master Thesis

Digital Food Technologies and Our Everyday Lives:

A Social Practice Analysis of Sustainable Food Consumption among Young Adults

Submitted to the Department of Service Management and Service Studies, Lund University,
Campus Helsingborg, in fulfillment of the requirements for the degree of Master of Science in
Service Management, Retail

SMMM20 | 30 credits

By:

Jared Offei Lartey

Supervisor: Ulrika Westrup

Department of Service Management and Service Studies
Campus Helsingborg, Lund University

June, 2021



ACKNOWLEDGEMENTS

I would like to acknowledge the contribution of all respondents who participated in this study. You opened up your everyday lives to provide the data on which this knowledge is produced. I would also like to thank my supervisor, Associate Professor Ulrika Westrup, of the Department of Service Management and Service Studies at Lund University. Your dedication to read my work, constructive feedbacks, questions and suggestions immensely shaped my ideas for writing this thesis. The memory of your excitement to see what findings my research produced will stay with me for a long time.

Finally, I would like to acknowledge the Swedish Institute for their generous financial assistance in producing this thesis, and the support offered me throughout my scholarship period at Lund University. The opportunity you have offered me to experience Sweden and the lifelong networks I have acquired being here has changed my life in so many ways.

Thank you all!

A handwritten signature in black ink, appearing to read 'Jaed', with a stylized, cursive font.

Lund, 19/05/2021

ABSTRACT

Amidst the present Covid-19 pandemic, consumer interactions with digital food technologies have expedited. This thesis examines how social network platforms and ethical consumption apps, enable and shape the everyday sustainable food consumption practice of young adults in Skåne, Sweden's southernmost region. Drawing on social practice theory and qualitative methods, the study addresses a discursive confusion on the ontology of sustainable food consumption practice. It provides new empirical evidence on technology-enabled skills and competencies for sustainable food consumption, and analyzes the ways that young adults are shaped by digital technologies. The empirical material consisted of fifteen in-depth interviews, which were analyzed based on ten emergent themes. Contrary to dominant conceptions of sustainable food consumption as an intention, decision outcome, or a derivative from core assumptions in sustainable development, the findings suggest that this practice is complex, multifaceted, and revolves on combinations from three lifestyles; practicing efficiency and no food waste, practicing responsible everyday food choices, and practicing environmental conscience. The findings also highlight four categories of skills and competencies enabled by digital food technologies, and suggest that, to translate these into action individuals must be conscious, creative and experimental. It concludes that digital technologies are no neutral mediators of food consumption, and the findings explain how young adults subvert, balance or consent the shaping of their food consumption sometimes sub-consciously. These findings altogether, lead to a post-study framework that identifies five preconditions for sustainable food consumption practice; personal suitability, valence, trust, available choices, and the paradox of price.

Keywords: sustainable food consumption; digital technologies; social practice theory; social network platforms; ethical consumption apps; qualitative; Sweden.

TABLE OF CONTENT

Chapter One: Introduction	1
1.1 Sustainable Food Consumption	1
1.2 Problematizing Sustainable Food Consumption	3
1.3 Research Aim and Questions	5
1.4 The Structure of this Thesis	6
Chapter Two: Theoretical Framework	7
2.1 Chapter Overview	7
2.2 Defining Sustainable Food Consumption	7
2.3 Digital Technologies: Social Network Platforms and Ethical Consumption Apps	9
2.4 Empirical Studies on Digital Technologies and Sustainable Food Consumption	11
2.5 Social Practice Theory	13
2.5.1 Application and Limitations of Social Practice Theory	14
2.6 Socio-Technical Scripts, Qualification and Prescription	15
2.7 Summary	17
Chapter Three: Methodology	18
3.1 Chapter Overview	18
3.2 Research Strategy	18
3.3 Collection of Empirical Material	20
3.3.1 Sampling Techniques	21
3.3.2 Designing Semi-Structured In-Depth Interviews	22
3.3.3 Conducting Semi-Structured In-Depth Interviews	23
3.3.4 Data Analysis	24
3.4 Choosing the Literature	25
3.5 Ethical Considerations	25
3.6 Quality Considerations	26
3.7 Reflecting on the Limitations of Methodological Choices	27

Chapter Four: Analysis of Findings	28
4.1 Chapter Overview	28
4.2 Practicing Efficiency and No Food Waste	28
4.3 Practicing Responsible Everyday Food Choices	31
4.4 Practicing Environmental Conscience	34
4.5 Food Storage Hacks	37
4.6 Making Creative and Sustainable Recipes	38
4.7 Finding and Tracking Sustainable Deals	41
4.8 Being in the Known	43
4.9 Extending the Mind and Capabilities	44
4.10 Qualifying Food Choices	46
4.11 Prescribing Particular Actions to Shape Sustainable Food Consumption Practice	50
Chapter Five: Discussion and Conclusions	56
5.1 Chapter Overview	56
5.2 Discussion of Findings	56
5.3 Summary	60
5.4 Conclusions	61
5.5 Theoretical, Practical and Social Implications of the Study	62
5.6 Directions for Future Research	63
List of References	64
Appendixes	72
Interview Invitation and Agreement Form	73
Interview Guide	74
List of Figures	
Figure 1: Sustainable Food Consumption as a Social Practice	15
Figure 2: A Post-Study Framework of Sustainable Food Consumption Practice	60
List of Tables	
Table 1: Demographic Data and Interview Details	23
Table 2: Top Word Associations with Sustainable Food Consumption	72

CHAPTER ONE

INTRODUCTION

1.1 Sustainable Food Consumption

In a world partly scourged with poverty and hunger, food is considered a valuable resource (Cane & Parra, 2020). Sustainable consumption has therefore emerged in retail as an approach to manage food consumption with utmost care. The origin of sustainable consumption is generally traced to the Rio Earth Summit in 1992 (Jones, Hillier & Comfort, 2011; Schaefer & Crane, 2005). However, sustainable food consumption has recently been defined as a theme in retail research, concerned with studying micro and macro level actions to mitigate the effects of our food consumption on society (Rosenlund et al., 2020; Sörum & Fuentes, 2017). From a socio-cultural perspective, this concept can be defined as the conscious everyday practices in purchasing, consuming and disposing food with minimal impact on our environment, economy and society (Beatson, Gottlieb & Fleming, 2020; Markkula & Moisander, 2012).

Eight decades after the Second World War, achieving efficient food retail systems and promoting sustainable food consumption remains a complex issue, and the environmental effects of food consumption on our planet are huge (Anantharaman, 2018). Striving to mitigate this, sustainable food consumption has been featured as a significant element in retail strategy, national policies, and global development agendas. Such as the United Nations Sustainable Development Goals towards 2030 (Cane & Parra, 2020; Jones, Hillier & Comfort, 2011).

According to the United Nations, nearly one-third of all food is lost due to a deficiency of strategies, actions, and innovations that can promote sustainable food consumption (FAO, 2011). In Sweden, recent studies estimate at least 74 kilograms of food waste per household a year (Eriksson, Lindgren & Osowski, 2018). But neither has this been different in more developed retail economies like the UK, where approximately a third of all food purchased is wasted (Jones, Hillier & Comfort, 2011).

In light of this, sustainable food consumption is progressively emerging as an individual responsibility (Luchs, Phipps & Hill, 2015). Yet, existing studies in this field have largely been interested in corporate perspectives (Rosenlund et al., 2020; Kumar, 2016). Nevertheless, this

has been justified by the role retailers' play as a "gatekeeper between production and consumption", and their capacity to influence responsible food systems (Rosenlund et al., 2020, pp.3283; Fuentes, 2015).

Among retail scholars, sustainable food consumption has increasingly gained attention as an everyday practice. In recent studies, applying practice theory has enabled insights beyond the intentions and attitudes of sustainable food consumption, which surrounds many marketing studies today (Cochoy et al. 2020; Fuentes, Bäckström & Svingstedt, 2017; Prothero et al., 2011). It has also opened the research field to a comprehensive view on different meanings, knowledge, skills, competences, devices, and actions or practices that define an individual's food consumption (Cochoy et al., 2020). Along this trend, digital technologies through their agency are shaping consumption practices in a sustainable dimension (Cochoy et al., 2020; Fuentes & Sörum, 2019; Hansson, 2017).

There is an interesting assertion that social science research in present times has entered a third generation, which is rooted beyond the study of society and opinions to a digitalized world (Cochoy et al., 2020). In such a world we find ourselves, how consumers organize and take action towards sustainable food consumption is highly regulated by digital technologies. Fuentes, Bäckström and Svingstedt (2017) suggest that, the agency digital technologies provide in retailing can drive consumption in at least four ways; new information, social scape, experiences, and relationships with retailers. Yet still, "a smaller number of studies have focused on the variety of roles that digital tools take on in ordinary consumption practices" (Cochoy et al., 2020, pp.2).

Notwithstanding, the escalation of consumption has conventionally been problematized with dire consequences among retail scholars (Biswas, 2017; Sörum & Fuentes, 2017; Kärrholm & Nylund, 2011). There are at least three major problems that currently characterize research on sustainable food consumption. First is what Markkula and Moisander (2012) describe as a discursive confusion among consumers and scholars over the ontological meaning of sustainable consumption. This is a problem because it has created a knowledge-to-action gap, which a growing body of retail work on sustainable food consumption seeks to address (Beatson, Gottlieb & Fleming, 2020; Lehner, 2015). Second is the deficiency in mainstream linear decision-

making models in explaining how digital technologies enable and shape sustainable food consumption practices. As such theoretical frameworks are grounded in consumer behaviour (see Wu & Chen, 2014), they tend to approach sustainable food consumption as a potential decision than an actual practice embedded in skills, competences, materials, and technology (Beatson, Gottlieb & Fleming, 2020). In an interesting epistemological critique of this theoretical approach presented by Beatson, Gottlieb and Fleming (2020), consumer behaviour theories in sustainable consumption research have amassed an attitude-behaviour gap. Where conscious consumers say one thing but do another (Lekakis, 2014). Evidently this approach has mainly highlighted consumer choices or ideal behaviours in consumption, such as their preference for disposing food, than what they actually practice (Markkula & Moisander, 2012; Schaefer & Crane, 2005). The third problem with this field can be described as the deficiency of ethnographic methods that could deepen understanding on the systems and social practice of food consumption (Beatson, Gottlieb & Fleming, 2020). As a problem, there is a paucity of studies that deeply explore the socio-cultural aspects and the nature of agency between consumers and technologies that enable sustainable consumption (Fuentes & Sörum, 2019). The subsequent section problematizes some of these stated gaps within the field of retail and also summons three central questions that are lacking in the literature.

1.2 Problematizing Sustainable Food Consumption

Sustainable consumption has been characterized by different and disputed meanings. Markkula and Moisander (2012) accordingly argue that “a disquieting knowledge-to-action gap still seems to persist as regards attempts to translate the available information into practice” for sustainable food consumption (pp.106). As there seem to be no unifying core assumptions on what it entails, concepts in sustainable development have been a point of departure in many studies and this has widely been criticized (Vaughter & Alsop, 2017; Ritch, 2015; Markkula & Moisander, 2012). Arriving at some consensus on sustainable food consumption is important, since studies suggest that the availability of appropriate meanings is crucial to empower consumers and reduce their stress in taking sustainable actions in food consumption (Owens & Legere, 2015; Markkula & Moisander, 2012). Despite a generous volume of information on sustainable consumption available in digital platforms and alternative media, “the actual progress made in changing people’s consumption patterns has been modest”, and consumers are

bewildered in translating an overwhelming volume of information into practice (Hansson, 2017; Markkula & Moisander, 2012, pp.105). It can be tempting to think that more attention would have been dedicated on exploring what sustainable food consumption means to consumers. But regrettably, existing studies have largely been interested in retailer perspectives (see Saber & Weber, 2019; Sparks, 2018; Byrch et al., 2015). As Kumar (2016) concisely puts it, the strategies, functions, and consequences of sustainable consumption among retailers have taken centre-stage. As a solution to this issue gap, my first call is to understand how consumers make sense of sustainable food consumption in the light of digital technologies, and possibly delineate common elements in these meanings.

This brings us to the problem with theoretical approaches largely adopted in mainstream studies. While sustainable food consumption is embedded in social practices (Biswas, 2017; Reisch, Eberle & Lorek, 2013), studies on retailers and their consumers have been dominated with organizational and linear decision-making theories (Hansson, 2017; Wu & Chen, 2014; Vermeir & Verbeke, 2008). These have been valuable in for instance examining the paradox of price as a motivator and barrier to sustainable food consumption, or exploring food waste as a resource (Rosenlund et al., 2020; Ritch, 2015). However, the main limitation of this approach is the inattention to food consumption as an everyday practice. As a result, central questions on how meanings are formed, what competences are employed, and how digital technologies enable and shape food consumption practices have received very little attention in the literature, at the expense of several studies on how sustainability communications affect consumer intentions, attitudes towards food consumption, or motivations and barriers (Rust, 2020). It is more startling that studies aspiring to project the future of retail have failed to recognize this issue even with a mere footnote (see Grewal, Roggeveen & Nordfält, 2017; Rigby, 2011; Grewal & Levy, 2007). My proposed solution to this gap is a second call to explore how digital technologies such as social network platforms and ethical consumption apps enable various skills and competences and shape actions of consumers in terms of their purchase, consumption and disposal of food sustainably. The next section articulates my research aim, questions, and their significance.

I.3 Research Aim and Questions

At this point, the broad question I draw attention to is how digital technologies enable and shape sustainable food consumption practice in everyday lives. This informs the aim of my study, which is to understand and explain how digital technologies, particularly social network platforms and ethical consumption apps, enable sustainable food consumption through the provision of meanings, skills and competences, and how they shape purchasing, consuming, and disposing food sustainably among individuals. It is important to address this issue in this study because in our current pandemic times, food consumption and information that seeks to influence consumer choices in this process is heavily reliant on social network platforms and apps (Cane & Parra, 2020). Therefore, this study can provide social insights into how digital technologies support individuals to perform their roles in promoting sustainable food consumption. Moreover, knowing how individuals reflect on food consumption can inform policy making and social education around sustainable consumption. For retailers, this knowledge can feed into creating a proactive digital strategy on what information is important to promote, and what social actions can be targeted for a more sustainable food system. For the field of retail, this process can be valued as bridging the knowledge-to-action gap and the deficiency of studies on the agency between consumers and digital technologies in sustainable food consumption. But also, it supports the use of practice theory as a fruitful approach outside linear decision-making models. The following questions are investigated to accomplish this aim:

- How is sustainable food consumption understood among young adults?
- What skills and competences do social network platforms and ethical consumption apps enable in their sustainable food consumption practice?
- How do these digital technologies shape their sustainable food consumption practice?

These questions are investigated within the domain of retail and as a delimitation, it takes a consumer perspective of young adults (18-35 years) within Sweden's southernmost region; Skåne. While there are multiple developments in digital technologies, this thesis focuses on social network platforms and ethical consumption apps (ECAs) that socially and technically contribute to shaping sustainable food consumption practice in everyday lives.

I.4 The Structure of this Thesis

The subsequent chapters are structured as follows. In the second chapter, which is my theoretical framework, I review relevant studies connected to my research aim, and I present my adapted theory and concepts I will employ to break-down and analyze my empirical material. In the third chapter, I will present and justify my methodological considerations. In the fourth chapter, I will present an analysis of my findings. In the fifth chapter which is the discussion and conclusions, I will discuss how my analysis addressed my research aim and questions, summarize my results, draw major conclusions and reflect on the implications of my study and directions for future research.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Chapter Overview

This chapter is presented in two parts. In the first part, I review the concept of sustainable food consumption, digital technologies, and earlier empirical studies of relevance to my research aim. This is followed by a second part, where I explain social practice theory and the concepts of socio-technical scripts, qualification and prescription, which I will employ to break-down and analyze my empirical material in chapter four. Finally, I will attempt to bring all the parts of this review together into a summary.

2.2 Defining Sustainable Food Consumption

The notion of sustainable consumption in previous studies has taken “multiple different and often contested meanings”, and still remains open to debate (Markkula & Moisander, 2012, pp.106; Schaefer & Crane, 2005; Dolan, 2002). Consequently, there seem to be no consensus or boundaries on the notion of sustainable food consumption (Jones, Hillier & Comfort, 2011). Nevertheless, existing studies have deconstructed the concept from either consumer or firm perspectives (Ritch, 2015), or behavioural and socio-cultural perspectives (Schaefer & Crane, 2005). For instance, the plurality of sustainability understandings among retailers (Byrch et al., 2015), and how this influences their commitment to address the food waste challenge (Ahmed et al., 2018; Owens & Legere, 2015). Other studies have focused on what communication strategies food retailers have adopted (Saber & Weber, 2019; Fuentes, 2015), and how they create utilitarian or hedonic values around sustainable food consumption (Babin & James, 2018).

According to Schaefer and Crane (2005), either of these perspectives has implications on who bears the responsibility for sustainable food consumption. Also, what seems common among these perspectives is a critique that they “tend to rely on the widely cited definition of sustainable development” based on the 1987 Brundtland commission’s report. Thus, sustainable food consumption is largely interpreted from meeting the “needs of current generations without compromising the ability of future generations to meet their needs” (Schaefer & Crane,

2005 pp.77). But this term has also been used synonymously with green consumption, ethical, and responsible consumption (Beatson, Gottlieb & Fleming, 2020; Sörum & Fuentes, 2017).

Exploring green consumption practices, Beatson, Gottlieb and Fleming (2020) also find that sustainable food consumption for consumers focuses on the environment. To them, it is a conscious process of purchasing, consuming and disposing food with minimal impact on the environment. While sustainability is widely seen from three pillars; the environment, economic and social responsibility (Owens & Legere, 2015), the environmental concerns have seemingly been common among consumers. In an earlier study, Markkula and Moisander (2012) similarly interpret sustainable food consumption as an ecologically conscious attitude. This focus on the environment has also been replicated in key words described by consumers. For instance, Azzurra, Massimiliano and Angela (2018) find that concepts including organic, fair trade, and less carbon emissions form a criteria for consumers to interpret sustainable food consumption. Sörum and Fuentes (2017) seemingly suggest boycotting products and producers for irresponsible behaviour.

Among young adults, Vermeir and Verbeke (2008) extend the notion to include consuming food that is animal-friendly, less price, healthy, earth-sustainable, and locally produced. Beatson, Gottlieb and Fleming (2020) also mention consuming food that requires less energy for production, less packaging, eco-labeling, and ingredients from unthreatened habitats or species. Rosenlund et al. (2020) have also linked the concept to a willingness to buy food that would otherwise expire at a discount. This later view is however interesting in how it views consumers as heroes of practices that save food from going waste.

On the retailer's perspective, Rosenlund et al. (2020) and Wu and Chen (2014) suggest sustainability as an interest to make food waste a resource than reducing food consumption. According to them, retailers often engage in food donations, repackaging vulnerable food into other forms of value, or similar social responsibilities. While reducing consumption is suggested as a possible solution to managing food sustainably (Cane & Parra, 2020; Owens & Legere, 2015), Schaefer and Crane (2005, pp.78) and Hansson (2017) have emphasized that "the need to reduce consumption levels is not universally accepted" in conceptualizing sustainability in food consumption. According to Huang and Rust (2011), this is explained by the pleasure

seeking and profit maximization interests of both consumers and retailers. There are other studies that suggest that sustainable food consumption for retailers revolve around communicating operational efficiency, information to induce behaviour, provision of sustainable food choices, and the promotion of sustainable practices in-store (Saber & Weber, 2019; Sparks, 2018; Wiese et al., 2012; Soron, 2010).

But towards a socio-cultural practice perspective, a growing body of literature has conceptualized sustainable food consumption as a lived experience or practice performed in everyday life (Cochoy et al., 2020; Beatson, Gottlieb & Fleming, 2020; Soron, 2010; Schaefer & Crane, 2005). According to Soron (2010), this conception enables a social and cultural understanding of the demand, roles, and challenges consumers face to respond ethically to food consumption “within an everyday environment that is highly commodified” (pp.172). In line with this view, Schaefer and Crane (2005) also draw attention to other interpretations of sustainable food consumption, such as hedonism and identity construction. This thesis therefore departs from a similar view of sustainable food consumption, as something performed through sayings and actions in the everyday lives of individuals, noting that what these actions and saying encompass in their everyday lives are “by no means stable or straightforward” (Hansson, 2017, pp.106). I will now proceed to conceptualize digital technologies in the context of thesis.

2.3 Digital Technologies: Social Network Platforms and Ethical Consumption Apps

Given the current digitalization of retailing, and how digital technologies have proved resilient as enablers of consumption in these pandemic times (Hagberg, Sundstrom & Egels-Zandén, 2016), there is a clear scientific and social need for a body of retail research that increases attention to the agency between consumers and digital technologies. Especially, how digital technologies enable and shape the sustainable consumption practices of individuals.

Some studies in journals including the International Journal of Retail and Distribution Management, British Food Journal, and the Journal of Cultural Economy have highlighted the digitalization of sustainable consumption, how new cultural practices, norms, and power emerge between consumers, digital platforms and ethical consumption apps (Cochoy et al., 2020). Remarkably, such studies have taken a more critical approach. As they have progressively drawn on sociological and practice-based theories that overcome the mainstream criticisms of

linear decision-making models that study sustainable food consumption only as an outcome of the consumer's decision process. It is therefore a recent call to examine how smart devices, apps, and social network platforms promote sustainability knowledge, and enable sustainable consumption in novel ways (Rantala et al., 2019; Cochoy et al., 2017).

Digital technologies today mark an important transformation in the retail sector (Hänninen, Smedlund & Mitronen, 2018; Hagberg, Sundstrom, & Egels-Zandén, 2016), and they have been increasingly promoted as a means to create sustainable customer value (Rantala et al., 2019; Babin & James, 2018). Within the context of retail, digital technologies encompass a number of market devices and electronic services, such as smart phones, 'wearables', mobile applications, self-service technologies, interactive in-store screens, and digital platforms that enable communication, collaboration, and the social production and consumption of retail activities (Cochoy et al., 2020; Fuentes, Bäckström & Svingstedt, 2017; Da Giau et al., 2016). However in this thesis, I focus on two significant developments in digital technologies; social network platforms and a category of mobile applications referred to as ethical consumption apps (ECAs) that socially and technically contribute to shaping sustainable food consumption practices (Hansson, 2017; Sörum & Fuentes, 2016; Kim, 2015).

Sörum & Fuentes (2016) suggest that mobile applications "have some potential to influence consumer actions" towards sustainable food consumption (pp.6). Also, Jones, Hillier & Comfort (2011), claim that these apps can help consumers find, purchase, and consume sustainable products and services by providing certain conditions including; information, availability, affordability and an appropriate setting for sustainability communications. According to Cochoy et al. (2020) and Hansson (2017) they also enable new cultural practices and behavioural change in connection with consumer demands and consumption norms. Cochoy et al. (2020) further suggest that while these can be empowering tools for digitalizing consumption, they raise concerns about new forms of agency and power in shaping consumption in a moral dimension. On the other hand, they suggest that consumption apps have positive implications for the co-creation of value and novel forms of participation in sustainability, which according to Vargo and Lusch (2017) is a foundational premise of a service-dominant logic and a domineering service economy.

According to Cochoy et al. (2020), these apps and digital platforms are “rooted in double-sided markets”, where they promote a social face towards consumers but a controlling face to retailers that capitalize on user-generated information (pp.5). However, they have a potential to assist consumers in food qualification to shape their choices towards a healthier behaviour and more mindful consumption roles. Yet, only few studies seem to focus on the role mobile applications play in framing sustainable food consumption.

Social network platforms also have an ability to influence attitudes towards sustainable consumption (Kim, 2015), and they are recently leveraged by consumers as a collective political action towards sustainable consumption (Cochoy et al., 2020; Sörum & Fuentes, 2017). As communities, they also enable consumers to participate in forums and share personal experiences that promote conscious consumption practices and responsible identities. As Sörum and Fuentes (2017) suggest, social networks promote constant negotiations among members to engage in responsible consumption habits and construct images and meanings about sustainability. These platforms can range from blogs, websites and social networks such as Facebook, Twitter and Instagram (Cane & Parra, 2020; Mahmoud et al., 2017; Sörum & Fuentes, 2017). According to Cochoy et al. (2020) and Gaber and Wright (2014) Facebook particularly allows consumers to purchase or donate food. Pantano and Gandini (2018) also mention their intensive use among young consumers. However, studies on how digital platforms shape retail and consumption practices are very limited (Hänninen, Smedlund & Mitronen, 2018). In the next heading, I will proceed to review recent empirical findings on the subject.

2.4 Empirical Studies on Digital Technologies and Sustainable Food Consumption

Recent empirical studies have included the measurement of sustainable food consumption (Azzurra, Massimiliano, & Angela, 2019), how digital devices transform consumption practices (Jenkins & Denegri-Knott, 2017; Sörum & Fuentes, 2017; Sörum & Fuentes, 2016), motivations and barriers to sustainable food consumption practices (Beatson, Gottlieb & Pleming, 2020), the promotion of ethical consumption in digital platforms and apps (Hansson, 2017), how consumers construct ethical identities on digital platforms (Sörum & Fuentes, 2017), food sharing models and social media (Choudhary et al., 2019; D’Ambrosi, 2018; Michelini, Principato

& Iasevoli, 2018), and the role of digital platforms in minimizing food waste (Mattila, Mesiranta & Heikkinen, 2020; Cane & Parra, 2020; Secondi, Principato & Mattia, 2020) among others. To borrow Latour's (2000) words, these studies have collectively highlighted a growing need to address the "missing masses" of knowledge on how digital technologies shape sustainable food consumption practices at a micro level (pp.151).

By examining the role digital devices play as promoters and prescribers of ethical consumption, Hansson (2017) finds that they endow consumers with calculative, comparative, complexity reduction, product information, and shopping capabilities that direct food consumption. This is also similar to Jenkins and Denegri-Knott's (2017) claim that digital technologies are mind extenders and go-to inspirational devices for sustainable consumption. Nevertheless, it is argued that these "technologies are not neutral mediators of consumption" (Sörum & Fuentes, 2017, pp.162). Jenkins and Denegri-Knott (2017) reveal that the technological agency in sustainable food consumption can drive consumers to perform specific forms of work, drawing on new knowledge, skills and competences. Sörum and Fuentes (2017) also highlight this agency referring to the Foucauldian concept of governmentality, to elaborate on how the everyday consumption practices of individuals are regulated by technologies. Drawing on Foucault (1988), Sörum and Fuentes (2017) show that digital technologies are in themselves systems of power that regulate human practices.

Sörum and Fuentes (2017) and Hansson (2017) also draw attention to notion of socio-technical scripting, where digital technologies such as apps are embed with scripts of ethical behaviour to guide consumers in qualifying sustainable choices and prescribing what to include or reject in their everyday consumption. While this suggests that technologies nudge consumers to make particular choices is food consumption, Jenkins and Denegri-Knott (2017) assert counter arguments that consumers are not nudged to follow prescriptions suggested by digital technologies. Rather, they see a distribution of tasks between consumers and the technologies they adopt to guide their sustainable consumption. Sörum and Fuentes (2017) also draw on the concept of affordance, to show how digital platforms such as Facebook function to promote some actions and make others less probable. As Cane and Parra (2000), they also find that the collective interaction between members on digital platforms create responsible norms, values and meanings that shape food consumption practices.

Cane and Parra (2020) and Secondi, Principato and Mattia (2020) both find digital platforms and apps as effective in reducing food waste. According to Cane and Parra (2020), mobile platforms can particularly promote food conservation, food sharing, and information on best practices to use food. In an earlier study, D'Ambrosi (2018) also found social media as an effective platform for food sharing. However, she notes that these platforms are still poorly utilized for collaborative food consumption practices. Nevertheless, Cane and Parra (2020) show that consumers may use apps to locate retailers and products that risk being unsold or expiring at reduced prices. But this does not only benefit consumers. As Secondi, Principato and Mattia (2020) and Mattila, Mesiranta and Heikkinen (2020) find, it creates mutual value for both retailers and consumers. My next heading explains the theory supporting this thesis.

2.5 Social Practice Theory

As I introduced in the first chapter, practice theories have received increased attention in conceptualizing sustainable food consumption in retail studies (Beatson, Gottlieb & Fleming, 2020; Fuentes & Hagberg, 2013; Schaefer & Crane, 2005). This has partly been connected to the limitation of linear decision-making models that approach sustainable consumption as an outcome of an individual's decision process than a practice performed in everyday life (Beatson, Gottlieb & Fleming, 2020). According to recent studies, using social practice theory fruitfully portrays sustainable food consumption as a set of "performative practices" in the everyday lives of consumers, which spans across how they purchase, consume, and dispose food sustainably (Beatson, Gottlieb & Fleming, 2020; Fuentes & Fredriksson, 2016 pp. 493).

This concept of practice according to Reckwitz (2002) takes its roots from "a nexus of doings and sayings" (pp.250), and it comprises routinized behaviours of several interconnected elements, such as knowledge, know-how, emotions and things (Halkier, Katz-Gerro & Martens, 2011). Within retail studies, Fuentes and Fredriksson (2016) suggest that it "takes as its starting point the actual doings and sayings" of retail actors in enacting sustainable consumption (pp. 493). They also suggest that practices are social, material, and performative (Fuentes & Fredriksson, 2016).

Using social practice theory therefore considers the sayings and doings of individuals as the smallest unit of social analysis, rather than the 'atomized' individual who performs them

(Beatson, Gottlieb & Fleming, 2020; Reckwitz, 2002; Fay, 1996). As illustrated below in figure 1, this focus on sayings and doings of individuals enables an understanding of how knowledge, meanings, skills, competencies, materials, and technologies interact to produce actions performed by individuals in their sustainable food consumption practice. According to Beatson, Gottlieb and Fleming (2020), social practice theory is also a qualitative methodology that focuses on “practices surrounding consumption processes rather than on what underlies decision-making” (pp.198). It is therefore a paradigm shift from examining cognitive processes and moments, towards social actions and cultural norms embedded in the interactions of human and non-human actors (Beatson, Gottlieb & Fleming, 2020). Figure 1 below identifies meanings, skills and competencies, and digital technologies as three elements considered in this thesis for analyzing sustainable food consumption practice.

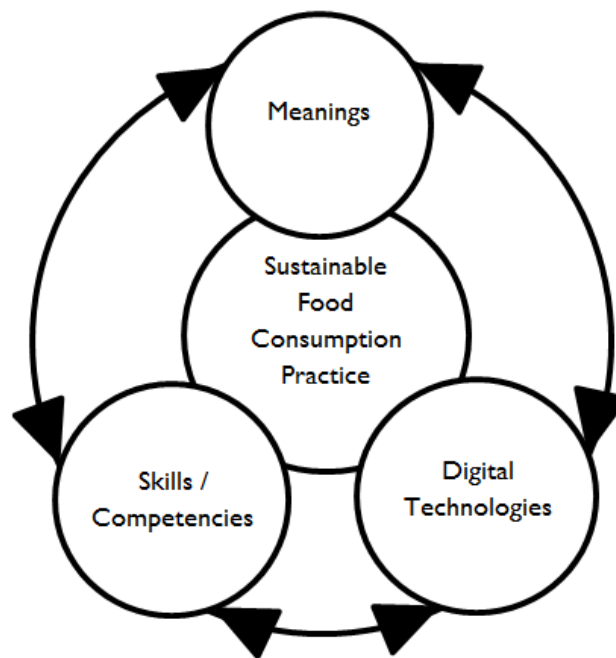


Figure 1: Sustainable Food Consumption as a Social Practice (Adapted from Fuentes & Svingstedt, 2017)

2.5.1 Application and Limitations of Social Practice Theory

Applying social practice theory to the study of sustainable food consumption in this thesis offers a number of opportunities. First, it enables an assumption in this thesis that, sustainable food

consumption is an actual practice routinely performed as part of everyday life than an intention or a consumer's ideal behaviour. Second, it enables an assumption in this thesis that the interaction between consumers and digital technologies produces new knowledge, meanings, skills and competencies that shape their sustainable food consumption practice (see figure 1 above). Hence to address the questions of how young consumers understand sustainable food consumption and the skills and competences social network platforms and ethical consumption apps enable for them, I focus on the analysis of their everyday doings and sayings. This includes how social network platforms and ethical consumption apps provide what Hansson (2017) describes as socio-technical scripts that enable consumers in the qualification of food and retailers as acceptable or non-acceptable, and eventually prescribing their sustainable food consumption actions. These interrelated concepts of socio-technical scripts, qualification and prescription also form a theoretical lens I will later employ to break down and analyze my empirical material.

However as Morgan (2006) suggests, a good application of theory involves being aware of its limitations to understand the social world. In applying social practice theory to the study of sustainable consumption in this thesis, there is a limitation that this theory shadows changes in sustainable food consumption accounted beyond social and cultural practices. Moreover, this theory seemingly assumes consumers as self-contained individuals (Fay, 1996), that can better be understood by their actions than decisions or intentions. While this is inherently an advantage from the perspective of this thesis, it may be seen as a limitation from physiological and behavioural perspectives. Finally, social practices here are given preference over the wider social systems in which these practices are constructed. It may therefore be a critique that a practice-based theory overlooks holism, the philosophy that sustainability-oriented food consumers are shaped by their participation and inclusion in a broader society (Fay, 1996).

2.6 Socio-Technical Scripts, Qualification and Prescription

In order to address the question of how social network platforms and ethical consumption apps shape the sustainable food consumption practice of young adults, the interrelated concepts of socio-technical scripts, qualification and prescription will be applied to interpret my empirical material.

According to Hansson (2017), socio-technical scripts are ideas (text or visual images) inscribed in digital technologies that direct or persuade individuals to perform certain actions to shape their behaviour in particular ways. In this study, it is an assumption that these scripts read, viewed or interpreted “allow or forbid the actor” and shape their views about food consumption in a sustainable dimension (Hansson, 2017, pp.106). Scripts therefore contribute to the norms and values that shape sustainable food consumption (Sörum & Fuentes, 2017). For instance, knowledge about what kinds of food brands to purchase, how to share or dispose food, making recipes with food close to expiring, or where to find sustainable deals can be scripted in social network platforms and ethical consumption apps. In line with Hansson (2017), it is an assumption here that young adults being exposed to scripted ideas, are able to qualify their food choices as sustainable or unsustainable for consumption. On social network platforms, these scripts can be inscribed by other consumers who consider themselves knowledgeable, or retailers and service providers in the case of ethical consumption apps (Sörum & Fuentes, 2017). As such, what counts as sustainable “is by no means stable or straightforward”, and depends on what scripts consumers are exposed to (Hansson, 2017, pp.106). An assumption that will be brought into analyzing how young adults understand sustainable food consumption practice. This therefore brings us to the theoretical concept of qualification, where scripts are translated into an evaluative criterion.

Qualification involves a number of calculative tasks and can take the form of qualitative and quantitative judgments (Callon & Muniesa, 2005). Hansson (2017) suggests that for objects to undergo qualification, “they first need to be detached from other contexts, classified, sorted or listed” (pp.106). This is succeeded by considering such properties as quality, functions, ingredients, packaging, sustainability labels or environmental impact among others (Hansson, 2017; Cochoy, 2008). In this thesis, the process of qualification shows how social network platforms and ethical consumption apps through their scripts provide information to shape the practice of sustainable food consumption. Qualification also results in a prescribed practice.

According to Hansson (2017) qualified actions are translated into prescriptions, thus what to practice, or what is acceptable as sustainable for consumption. As a result of prescription, individuals can be seen as acting according to some standards (Sörum & Fuentes, 2017). However these prescriptions for sustainable food consumption practices can be seen as open

and closed. While Hansson (2017) suggests that digital technologies can nudge consumers to follow particular practices, Jenkins and Denegri-Knott's (2017) suggest that consumers are seemingly guided by these prescriptions. Digital technologies can hence be considered as extending cognitive abilities to engage in sustainable food consumption than imposing a practice. As a consideration for analysis in this thesis, this argument outlines a limit to the extent to which digital technologies shape sustainable food consumption practice. The next section offers a summary of the core issues in this chapter.

2.7 Summary

In this chapter, I have reviewed some multiple, different and contested meanings of sustainable food consumption. These have included core assumptions from the sustainable development goals. But also, socio-cultural meanings that evolve mainly around the environment and social responsibility. I have also conceptualized digital technologies in this study as social network platforms and ethical consumption apps, in addition to a review of some empirical studies on how they enable and shape sustainable food consumption practice. In figure 1, I illustrated a social practice theory of sustainable food consumption practice in this thesis, which depicts an interconnection between meanings, skills and competencies, and digital technologies in enabling and shaping sustainable food consumption practice. I have also explained that digital technologies can be embedded with socio-technical scripts that guide individuals in qualifying their food choices or actions, and may eventually prescribe what they can accept as sustainable or not. These theoretical concepts will later be employed in my analysis of findings. In the next chapter, I will present my methodological considerations for collecting and analyzing my empirical material.

CHAPTER THREE

METHODOLOGY

3.1 Chapter Overview

This chapter outlines my methodological considerations. It also connects my research aim, theory, methods of analysis and my empirical material into a whole. It presents various rationales behind my research strategy, sampling and interview procedures, thematic analysis, quality considerations and ethical practices articulated during my data collection. As scientific truth is contemporarily viewed as contingent on time, negotiation and conceptual schemes of reason, I will close this chapter with a reflection on the limitations of my methods in interpreting my results.

3.2 Research Strategy

To understand and explain how digital technologies enable and shape sustainable food consumption as it is performed, I departed from a belief that practice varies across individuals (Hansson, 2017). Therefore to address my research aim, it was important to depart into the field with sensitivity and openness in order to access the different realities that may exist about how digital technologies enable and shape sustainable food consumption practice (Creswell & Poth, 2016; Andrews, 2012). This belief is founded on an epistemology of perspectivism. Fay (1996) argues that every epistemic endeavor “takes place from a point of view defined by its own intellectual and political commitments and interests” (pp.2). In other words, the analysis and interpretation of my empirical material is a result of “seeing from a particular perspective”, i.e. through the lens of social practice theory (Fay, 1996, pp.2).

Drawing from this theory, I departed from a belief that sustainable food consumption is constituted through the sayings and doings of individuals, in other words through their practices lived and told (Fuentes & Fredriksson, 2016; Reckwitz, 2002). This is aligned with constructivism, an ontology that proposes “all knowledge is a constructive activity in which knowers are contributors” (Fay, 1996, pp.76). Knowledge is thus actively constructed through cognitive processes and meanings of individuals (Andrews, 2012; Barad, 2007; Fay, 1996). As a

researcher, my role was to interpret and impose on the lived and told practices “a narrative structure to render them intelligible” (Fay, 1996, pp.190).

Social practices can be studied by different methods, since this promotes trustworthiness and reliability of results about a phenomenon for mapping future knowledge upon the present (Flick, 2018; Bryman, 2016). In the context of sustainable consumption, quantitative, qualitative, and mixed methods have been applied to empirically understand the phenomenon (Rosenlund et al., 2020; Azzurra, Massimiliano, & Angela, 2019; Vermeir & Verbeke, 2008). But through a cursory classification of existing studies, it is possible to see a domination of literature reviews, quantitative studies, and conceptual papers. Quantitative methods are an old tradition, as behavioural approaches in this field have been interested in measuring sustainability intentions and the adoption of green choices. However, the domination of conceptual papers in conceptualizing sustainable food consumption lends itself to a host of critiques, and eventually something of little empirical value (Mahmoud et al., 2017; Grönroos, 1997). In a review on the state of the field, Kumar (2016) suggests the need for more qualitative studies that apply ethnographic methods. This can deepen an understanding of the social agency between consumers and digital technologies, especially how they enable and shape sustainable food consumption practice.

In this thesis, I adopted a qualitative approach, and this choice is founded on three motives. First, in order to understand and explain how digital technologies enable and shape sustainable food consumption practice, it was important to consider a research approach that allowed meanings and interpretations to be constructed from complex experiential data (Tracy, 2019; Creswell & Poth, 2016). Or to borrow Ivanova-Gongne et al.’s (2018) words, the ability to generate “rich qualitative data” for analysis (pp. 194). Since majority of my research questions sought to answer ‘how’ meanings are formed or ‘how’ sustainable food consumption practices are constituted, a qualitative approach was operationally suitable to open up the research process to plural social perspectives (Flick, 2018).

Second, using a qualitative approach supported an abductive reasoning in the analysis of my empirical material. Thus grounding the research in a theoretical context of social practice and the world-view of individuals that formed my empirical material for analysis (Bryman, 2016;

Dubois & Gadde, 2014). Following an abductive reasoning also facilitated inductive theory-building from findings in my empirical data to develop my research theory (see post-study framework, figure 2 in chapter five).

Finally, using a qualitative approach was fundamental to address the deficiency of qualitative methods and the limitations of linear decision-making theories that dominate the field. There seem to be a good connection between social practice theory and a qualitative approach (see Beatson, Gottlieb & Fleming, 2020; Fuentes, 2015; Halkier, Katz-Gerro & Martens, 2011). Drawing on Beatson, Gottlieb and Fleming's (2020) argument in a similar study of green consumption practices, social practice theory can be seen as a qualitative methodology that focuses on "practices surrounding consumption processes rather than on what underlies decision-making" (pp.198). In line with this, adopting a qualitative approach allowed insights into consumption practices beyond consumer decisions.

3.3 Collection of Empirical Material

Based on the nature of my research questions, I reasoned that an appropriate description of my empirical material was young adults between the ages of 18 to 35, educated about sustainability, and use social network platforms and ethical consumption apps to guide their sustainable food consumption practice. In a study on a networked shopping experience, Pantano and Gandini (2018) argue that digital technologies play a dominant role in consumption practices among young adults. Likewise, Vermeir and Verbeke (2008) also consider this group as "consumers of the future" who are in process of forming consumption habits and values (pp. 545). Fuentes and Svingstedt (2017) have also justified this group as heavy users of the "internet and mobile devices" (pp. 140). But there are different classifications on the age of young adults, such as 18-23 (Pantano & Gandini, 2018), 19-22 (Vermeir & Verbeke, 2008), 19-29 (Fuentes & Svingstedt, 2017), and 18-35 (Petry, 2002). However, in this study I adopted participants within the ages 18 to 35, since it was relatively broad to accommodate valuable participants that may otherwise be left out.

This study was also conducted in Skåne and participants were narrowed to the geographical territories of Lund and Helsingborg. This is because both cities are relatively large within the region and as student cities, they were appropriate to find educated young adults on

sustainability. Having decided this, I then chose to apply a purposive and snowball sampling technique to find participants with the desired empirical material (Bryman, 2016; Yin, 2015; May, 2011).

3.3.1 Sampling Techniques

The logic behind sampling in this thesis was how do I understand my object of research as deep as possible, rather than covering the population as wide as possible? (Flick, 2018). First I purposively selected two students of Lund University's sustainable service management program, living in Lund and Helsingborg respectively. Purposive sampling here was an intentional selection of participants based on experiences considered "fit for purpose" and an ability to elucidate sustainable food consumption (Flick, 2018; May, 2011, pp. 100). This process was for a pilot study and included a pitch of my study's purpose and an oral confirmation of their engagement with digital technologies for sustainable food consumption. One in person and another via phone. As persons suitable for the study, both were previously engaged in sustainability projects and familiar with sustainability communications on Facebook and ethical consumption apps. One was also in the process of changing her food habits into a vegetarian. Showing they had good insights to shape my initial interview guide.

After this, 13 other participants were selected based on a snow-ball technique, where participants were asked to recommend other participants of their characteristics who were then requested to apply and confirm their suitability through a Google form (see appendix 2). This was in line with the conception of snow-ball sampling as an organic non-probability technique where research participants recruit other participants within their social network that may otherwise be difficult to access (Tracy, 2019; Flick, 2018). I also considered participants of my pilot interviews as part of my sample, since they had very good experiences and shared relevant examples about my topic. After a total of fifteen interviews, I considered my interviews at the point of saturation. This is coherent with similar studies such as Beatson, Gottlieb and Fleming (2020) who claim that, given a certain amount of structure in data collection, "data saturation occurs for most research projects at 12 interviews" (pp. 200). I will now delve into how these interviews were designed and conducted.

3.3.2 Designing Semi-Structured In-Depth Interviews

In order to understand and explain how digital technologies enable and shape the sustainable food consumption practice of young adults, I conducted fifteen (15) semi-structured in-depth interviews, in total lasting about 46 minutes on average (see Table I on next page for demographics). The maximum and minimum duration of interviews were 114 and 32 minutes respectively, and the variation between these outliers were partly accounted for by factors including having a more engaging interview about the topic, reiteration of some experiences, or contrarily getting to the point of what needed to be shared during the interview. The logic behind the in-depth interviews was to have an open dialogue with respondents from a specific question set, while making room for other issues that may arise in the process or “topics of particular interest” to them (Westrup, 2018; Bryman, 2016, pp. 471; Creswell & Poth, 2016). Thus I was able to ask the young adults spontaneous follow up questions and allowed them to flexibly build on previous answers in the interview process, in order to increase the richness of my empirical data for analysis through a social practice lens (Beatson, Gottlieb & Fleming, 2020). This also created a relatively natural and less obstructive interview atmosphere that mitigated sensitivity and promoted openness about their food consumption practice (Arsel, 2017; Creswell & Poth, 2016; Bryman, 2016). To aid their reflexivity, I also introduced interview prompts (suggested by Leech, 2002) that were deduced from my literature review to draw on their memories when they seemed struggling to reflect on a posed question (see for instance question 8 and 17 in appendix 3; interview guide).

After the two pilot interviews, I introduced an extra question on how respondents would enact sustainable food consumption without technologies. I had 21 questions in total organized in three sections (see interview guide in appendix 3). Apart from demographic questions about their age, city of residence, kinds of platforms and apps they were familiar with, or whether they had other respondents to suggest, all questions were open-ended and in a very personal tone. For instance, I asked participants if they can identify any three phrases that define their personal engagement with sustainable food consumption, and I often encouraged them to give examples in order to understand their everyday practices.

3.3.3 Conducting Semi-Structured In-Depth Interviews

The interviews mainly took place on Zoom and Facebook depending on the respondent's choice, usually in the mornings or evenings when they were fresh or relaxed. However, four participants preferred to have in-person interviews at a social distance. Participants were also given the initial questions in advance to prepare, since I believed that to know something, one must be able to identify and reflect upon it (Fay, 1996). One interviewee disclosed how this was advantageous when she stated that "when I first read your question I said not really. But then, I reflected on it and said of course" (Interviewee 12). Usually I began by building some rapport with them, in the form of small talks about their studies, what they were recently up to, and assuring them their narrations were something I was passionate to learn from. Then I reiterated the purpose of the interview, followed by "grand tour questions" about their meanings, skills, competencies and the shaping of their food consumption practice (Leech, 2002 pp. 667). During the closing, I provided a very brief bulleting from my interview notes to participants as a way to establish "member checking"; a confirmation of their narrations (Birt et al., 2016 pp. 1802; Doyle, 2007 pp. 888). After some interviews, participants voluntarily sent links to social media pages, wrote additional statements to me via Facebook, and pictures of food they recently saved using consumption apps to buttress their lived experiences. Thus they were temporarily kept in a state of reflection after the interviews. Some of these extra materials were also considered during the analysis.

Table 1: Demographic Data and Interview Details

Name	Gender	Age Range	City	Occupation	Interview Date	Duration	Mode
Interviewee 1	Female	26-30	Helsingborg	Student	March 20, 2021	35 mins.	In-person
Interviewee 2	Female	22-25	Helsingborg	Student	March 22, 2021	35 mins.	In-person
Interviewee 3	Female	31-35	Helsingborg	Student	March 17, 2021	40 mins.	In-person
Interviewee 4	Female	26-30	Helsingborg	Student	March 12, 2021	37 mins.	Zoom
Interviewee 5	Female	22-25	Lund	Student	March 11, 2021	61 mins.	Zoom
Interviewee 6	Female	22-25	Lund	Student	March 18, 2021	37 mins.	Zoom
Interviewee 7	Male	26-30	Lund	Student	March 21, 2021	40 mins.	Facebook
Interviewee 8	Female	31-35	Helsingborg	Student	March 23, 2021	36 mins.	Zoom
Interviewee 9	Male	22-25	Helsingborg	Student	March 17, 2021	35 mins.	Zoom
Interviewee 10	Female	26-30	Helsingborg	Student	March 10, 2021	32 mins.	In-person
Interviewee 11	Female	26-30	Helsingborg	Student	March 26, 2021	114 mins.	Zoom
Interviewee 12	Female	22-25	Helsingborg	Student	March 26, 2021	62 mins.	Zoom
Interviewee 13	Female	26-30	Helsingborg	Student	March 17, 2021	38 mins.	Zoom
Interviewee 14	Female	31-35	Helsingborg	Student	March 19, 2021	51 mins.	Zoom
Interviewee 15	Male	31-35	Lund	Student	March 21, 2021	36 mins.	Facebook

3.3.4 Data Analysis

I considered the analysis of qualitative data as an iterative process (Tracy, 2019; Flick, 2018; Miles, Huberman & Saldana, 2014). Therefore as an interpretivist, my analysis was not necessarily a second stage after conducting the interviews. After each interview, I compared the playback with a transcription from Otter, an artificial intelligence powered transcription software. Since “we start knowing something at least the second time when we encounter it”, final transcripts were closely read multiple times to gain familiarity (Latour, 1987, p. 219). After this step, it was now possible to code the data in an Excel sheet.

I applied open coding by categorizing the text under labels or keywords that defined the logic and characteristics of the responses (Williams & Moser, 2019; Miles, Huberman & Saldana, 2014). It also allowed me to identify responses with particular research questions, patterns such as frequency of words used, differences and similarities in the text. But also, I was able to reduce the data into a more focused and simplified form for a thematic analysis (Creswell & Poth, 2016; Miles, Huberman & Saldana, 2014). The thematic analysis involved a systematic description and reporting of my findings using appropriate themes (Nowell et al., 2017; Creswell & Poth, 2016).

Within social practice theory, the doings and sayings of individuals are considered the basic unit of analysis on any practice performed (Fuentes & Fredriksson, 2016; Reckwitz, 2002). Therefore the thematic analysis was based on the doings and sayings in the everyday lives of young adults. To analyze how digital technologies enable and shape the sustainable food consumption practice among this group, I earlier conceptualized digital technologies as social network platforms and ethical consumption applications (in chapter two). In the empirical material analyzed, five social network platforms were mentioned by the young adults. These were Instagram, Facebook, LinkedIn, Reddit and YouTube. Karma, Too Good to Go and 21 Day Vegan also emerged as ethical consumption applications that were used by the young adults in their everyday sustainable food consumption practice.

Drawing on the theoretical concept of socio-technical scripts (Hansson, 2017), the analysis revealed that inscriptions in digital technologies promoted sustainable foods and encouraged specific practices through text, visual images and videos. This enabled various meanings among

the young adults about sustainable food consumption. Three themes emerged in this regard; *practicing efficiency and no food waste*, *practicing responsible everyday food choices*, and *practicing environmental conscience*. But also, the analysis showed that digital technologies appear to equip young adults with various skills and competencies (Beatson, Gottlieb & Fleming, 2020; Fuentes & Svingstedt, 2017), which centered around four themes; *food storage hacks*, *making creative and sustainable recipes*, *finding and tracking sustainable deals*, and *being in the known*. Moreover, three themes emerged to describe how digital technologies shape the sustainable food consumption practice of young adults; *extending the minds and capabilities*, *qualifying food choices*, and *prescribing particular actions to shape sustainable food consumption practice*. In chapter four, I will present an analysis of my empirical material categorized under the ten themes identified above.

3.4 Choosing the Literature

During the selection of my literature for writing the theoretical framework in chapter two, I limited my search to four academic databases. These were Lund University's LUBsearch, Emerald Insight, EBSCOhost and Google Scholar. I then queried these databases with three phrases; "sustainable food consumption", "sustainable food consumption and digital technologies", and "sustainable consumption and practice theory". The queries generated were then screened in two stages, first by relevant topics, and later by the content of their abstracts. After this I grouped the literature in three folders; "empirical papers", "conceptual papers" and "extra literature and books". During the process of reading the full texts, leads to additional papers were also identified. The final literature for this thesis reflected studies from interdisciplinary fields, mainly comprising retail, sustainability, marketing and ethnography.

3.5 Ethical Considerations

It was a belief in writing this thesis that science must strive to achieve ethical practices that contribute to the overall integrity of the research process (Bryman, 2016; May, 2011). This translated in balancing my personal interests in designing the study and a responsible relationship with people I encountered (Pryke, Rose & Whatmore, 2003). All participants were informed about the purpose of the study, and this was done during the invitation and at the beginning of interviews (Bryman, 2016). Most interviews were also conducted via Zoom or

Facebook to eliminate the risk of a Covid-19 infection. Also, I sought informed consent before recording interviews (Silverman, 2013), through my Google form (see appendix 2). I made an additional reminder before interviews proceeded. During the interviews, I also sought necessary clarifications to avoid misrepresentation of their lived practices, and they were reminded of their rights to refrain from sensitive or very personal questions (Bryman, 2016). As an interpretivist, it was an interest to produce social explanations about the sustainable food consumption practice of young adults, and reinforce meanings in the empirical data. However to build convincing arguments, I reinforced my claims with direct quotations to allow the data speak for itself and mitigate potential bias (Mason, 2017; Denzin & Giardina, 2016; Booth et al., 2008). All participants were also assured of their anonymity and the confidentiality of their data for the purpose of this research (Bryman, 2016). In chapter four, I have accordingly adopted pseudonyms such as interviewee 1, 2 and 3 to mask their identities.

3.6 Quality Considerations

To ensure quality and trustworthiness in the thesis, one of my considerations was the provision of multiple accounts on how digital technologies enable and shape sustainable food consumption practice (Bryman, 2016). Also as I showed in section 3.3.1, different sampling techniques were combined to guarantee that only respondents with the required empirical material were selected. By conducting two pilot interviews, I was able to shape my interview guide to ensure it captured appropriate questions to achieve my research aim. My interview guide was also designed based on my theoretical framework and it covered all my three research questions to establish an internal validity on the relationship between digital technologies and the everyday sustainable food consumption practice among young adults (Steils, 2021; Bryman, 2016; Johnson, 1997). Quality of the empirical data generated was also validated at the close of all interviews, through the process of member checking, where I sought confirmation from interviewees based on my interview notes (Birt et al., 2016; Doyle, 2007). Nevertheless, while the findings from this study may be coherent with practices of other young adults, they are not intended to be generalized on young adults outside my sample. Rather an external validity is established from the possibility to generalize the findings on my theory (Bryman, 2016; Yin, 2015). Thus findings may be similar to other studies that apply a social practice theory to study the sustainable food consumption of young adults. Finally, quality

determined in this thesis draws on the ability of my results to inform retail theory, practice and society.

3.7 Reflecting on the Limitations of Methodological Choices

While a substantial justification is provided about my beliefs, research approach and methods, I do not shun from the potential that, these choices had some limitations on the production and interpretation of my results. First, since I approached the study from perspectivism, there may as well be different interpretations of how digital technologies enable and shape the sustainable food consumption practice of young adults. This implies that my results may not be sufficient for generalization on young adults in Skåne, but can rather be valued for the provision of a deeper understanding and inductively supporting the use of social practice theory in sustainable food consumption research.

Also, the snow-ball sampling technique resulted in a gender bias of only three male participants compared with twelve females. While the results of a balanced gender representation cannot be predicted, there is evidence of gender related influences on sustainability practice (Bulut, Çimrin & Doğan, 2017; Pinto et al., 2014). Writing on the culture of technology, Pacey (1983) has also argued that the skills of women are “of a different order from those of men” (pp. 97). My snow-ball technique could have hence been adjusted through gender quotas. But in its absence, this did not necessarily flaw the significance of my results produced.

Finally, while semi-structured interviews seemingly bypassed the challenges of asking very personal or sensitive questions, it in some instances skewed substantial control of the interview procession towards my interviewees. Unlike structured interviews, this resulted in interviewees going back and forth as it suited them with answering questions and adding details, some of which were outside my research aim. The main challenge with this during analysis was that, it required dealing with a “tension between science and creativity” to connect the dots in their responses and make sense of the data (Bailey, White & Pain, 1999, pp. 169).

CHAPTER FOUR

ANALYSIS OF FINDINGS

4.1 Chapter Overview

This chapter presents a thematic analysis of my findings based on considerations discussed in my methodology. I also draw on social practice theory as a lens, and concepts discussed in my theoretical framework to break down my empirical material. The analysis presents three emergent themes from the empirical material on the meanings of sustainable food consumption; *practicing efficiency and no food waste*, *practicing responsible everyday food choices*, and *practicing environmental conscience*. This is followed by four emergent themes on skills and competencies; *food storage hacks*, *making creative and sustainable recipes*, *finding and tracking sustainable deals*, and *being in the known*. Then, three themes describing how digital technologies shape sustainable food consumption practice; *extending the mind and capabilities*, *qualifying food choices*, and *prescribing particular actions to shape sustainable food practice*.

4.2 Practicing Efficiency and No Food Waste

Among the young adults, the meaning of sustainable food consumption as practicing efficiency and no food waste was reflected in their sayings and doings related to keywords like efficiency and no food waste, but also planning, maximizing food, preserving food, and sometimes using the Swedish word “lagom” to emphasize purchasing or consuming just the right amount of food.

One interviewee who describes herself as vegan, following food influencers on Instagram and YouTube described her practice as follows:

I think people kind of passively consume food sustainably, I actively consume them [food]. Because you know normally, I buy food the sustainable way regarding all respects. But also, I always think about what to do with food, how to deal with the food waste, how to give them a life back /---/ how to make good use out of the food waste by composting them.
(Interviewee I)

For this interviewee, the practice means going beyond passive actions such as sorting food waste because it is required in many Swedish homes, or perhaps just purchasing food promoted

as sustainable. Rather similar to what Beatson, Gottlieb and Fleming (2020) describe as a continuously lived experience, she views sustainable food consumption as an active lifestyle and continuously thinking of how to make the best out of food, which sometimes required what she described as making closed circles by giving food waste a second life with composting.

To say more about her lifestyle, she cites this example of efficiency in her food consumption:

Well it's easy, whenever I have the left over, from dinner or lunch, normally I put them in the freezer, or over the weekend I gather them all together and put it at the backyard. After a couple months, all these kinds of waste turns to be very good nutrition for my trees or plants. So it's like a close circle, you know, you eat and then you make it become valuable again. (Interviewee 1)

This view that practicing sustainable food consumption was an active lifestyle than taking passive actions was also reflected in the description of another interviewee who finds shopping and no waste as her first associations with the practice. This interviewee is also engaged with an international community in Sweden on Facebook, where socio-technical scripts about sustainable food consumption are promoted (Hansson, 2017). As she puts it:

Well, for me, it's like a style of life. And it's a new style of life /---/ So coming from the Middle East, especially in the Gulf, we don't think twice about how much food or these kinds of questions regarding food. But then, I realized that I need to give a second thought and change my style of life. I needed to put together a better sustainable style of life /---/ I have of course waste, I mean that the waste I have is the residue of cooking a meal for example, but not throwing food. (Interviewee 8)

Efficiency and reducing food waste, as sustainable food consumption has been suggested in previous literature (Saber & Weber, 2019; Soron, 2010). But this young adult also shared an example beyond practices in homes to how she enacts this by saving single bananas from going waste in retail spaces:

One of the highest waste in supermarkets in Sweden, you know, is the one piece bananas. People take part of the bunch and there is only one choice left somewhere /---/ So I go and take the finger bananas. If you saw these, please take them! Because they will be thrown! (Interviewee 8)

For another young adult fascinated about the food saving application Too Good to Go, her meanings included balancing an active consumption lifestyle with efficiency, by maximizing the function of food. She narrated this with an example from consuming broccoli and chicken:

For me, it's more about consuming continuously, but not to amass waste, that's true /---/ Maximizing the function of the food, I think. Throw away as little as possible. For example, when I buy broccoli, I don't like the stalk, but I have to eat it or make function of it. Also, when I buy chicken, I don't really like the skin. But being sustainable means that I have to make use of it. (Interviewee 3)

Similar to this young adult, another who follows sustainability practices promoted on Facebook, Instagram and LinkedIn revealed how efficiency was enacted with her food preparation:

I would say food that is prepared in an efficient way, with the least amount of wastage in preparation. (Interviewee 10)

But the meaning of sustainable food consumption as efficiency and no food waste can also translate as planning, shopping smartly, and structuring one's fridge as one Instagram user who was very emotional about food waste she saw in hotels puts it:

As I said, I think buying just the right amount of food, and I also try, like once a week to go through my fridge and check on dates and stuff like that and then try to put the stuff which has sooner expiry date to the front, or to a special spot that I know okay that stuff will expire, use it, eat it, whatever /---/ and then you have a structured fridge. I sometimes end up just when I have a lot of veggies in my fridge, cutting all of them, putting them in a pan or in a pot and create like a sauce and just eat it with pasta or something like that. Just to use everything and I don't want to say that it's creative, but it tastes good. I don't waste the food! So when I go for groceries I actually write a list. (Interviewee 11)

Aside this, it emerged that efficiency and no food waste translated as having the right amount, or 'lagom' as interviewee 2 put it. She is influenced by scripts promoted on Facebook, YouTube, and an Instagram account called Cheap Lazy Vegan. She described her practice this way:

/---/ maybe no food waste, which I don't do very much, because usually I just buy just the right amount I need, you know, lagom. I have a recipe and then I follow it /---/ so it's not really that much left. (Interviewee 2)

Her reference to the Swedish word 'lagom' was similar to another interviewee who described the meaning of her practice this way:

I know how much I need for a week, I want to live like lagom, like with minimal food waste. I actually have almost no food waste. Just some trash you know, which is not eatable but I don't have this kind of [food waste] problems. (Interviewee 13)

Nonetheless, while a lifestyle of no food waste appears as something admired among the young adults, it seemed not easy come by. An interviewee who spends time on Instagram, and a proud food saver on Too Good to Go described the challenge as follows:

Well, I spend my time on Instagram. So I will say Too Good to Go and Instagram gives me the most ideas /---/ I would say the first thing that just popped up, is zero waste. For me, this idea [sustainable food consumption] is like highly related to zero waste. I feel like is hard to reach that goal, but we need to be on the way, you know /---/ when it comes to zero waste, more or less in my daily food consumption, the food waste will be something there. Like, it's hard to really do without any waste in my daily life. (Interviewee 5)

Aside the challenge of making no food waste, this interviewee's engagement with Instagram and Too Good to Go confirms that, the meanings of a practice can be entangled with human and non-human actors (Beatson, Gottlieb & Fleming, 2020). While these findings are insightful, the thematic analysis suggests further meanings than efficiency and minimizing food waste in the everyday lives of young adults. Another set of meanings are captured in my second theme; practicing responsible everyday food choices.

4.3 Practicing Responsible Everyday Food Choices

In the empirical data, the meanings of practicing responsible everyday food choices were linked with such performances as shopping for food labels connected with sustainability, including ecological, vegan, organic, healthy, green, locally produced and fair trade. These have also been asserted by Azzurra, Massimiliano and Angela (2019) as labeling criteria.

In the following excerpt, one interviewee narrated that her meanings have changed into preference for organic foods over those processed. Her responsible lifestyle during grocery shopping.

Previously, I thought consuming less meat was sustainable, but I also consider the eco label of organic food in Sweden /---/ So I am gradually trying to think, oh, maybe I can do more like focusing on my everyday food buying practices when I'm at the grocery store. So I will go to the grocery and see the eco label if they're organic or not /---/ I think it's important that we consume the raw food, than the processed food. For example because processed food would take more energy /---/ also consider the package part. (Interviewee 6)

When asked about words that could summarize her sustainable food consumption practice, two of them were raw food and vegan. Interestingly, some vegans and non-vegans linked sustainable food consumption to vegan products. An interviewee who turned vegan based on scripts promoted on YouTube put her practice of responsible everyday food choices this way:

I've been thinking that plants are sustainable. Because you know according to a vegan, the biggest problem with the food consumption would be the meat. And also, if I see something ecological then I think that's better. When I go to the store, I think mainly to buy things like vegetables /---/ instead of buying eggs. Because I know so much about it. I was also watching all YouTube clips. So I know that for example, when you look at what's in milk, it's not healthy either. (Interviewee 2)

This excerpt suggests that these different labels make the practice of responsible everyday food choices confusing, and young adults apply their own hierarchies in selecting responsible food choices. Two other interviewees who were not vegans described the surprising association with shopping vegan labels as follows:

When I think of that [sustainable food consumption], a first thing that comes is it should be vegan. I don't know why, although I'm not a vegan person. But that comes to my mind. (Interviewee 4)

And the other is that vegan could count as sustainable consumption. It's more like behavior. Like you can consume more vegetables instead of meat. (Interviewee 9)

However, the making responsible food choices did not necessarily correlate with having an environmental conscience. The following statement appears to highlight the distinction:

I don't think I would have gone vegan for the environment. Because it's not as an important question for me as animals. Which is a super important question. (Interviewee 2)

There were also others who's practicing of responsible food choices meant opting for local, regional and seasonal products. One example of this was looking out for products labeled "från Sverige" translated as from Sweden. As some young adults, the following excerpt from this interviewee also showed that the practice is not cheap:

Just like you say, I like to buy some local food. You know, to support the local farmers /---/ locally produced food labeled från Sverige is more, more, more into the category of sustainable food consumption. Because, I don't know, I don't agree with eco. I realized the locally produced food are much expensive than imported food. Apple is a very classic

example. I think the apples from Spain is very cheap like 1kg for 20 or 29 kronor. While the Swedish apple is like 49 kronor for 1kg. (Interviewee 5)

Another interviewee described purchasing regional and locally produced food over ecological labels in her shopping, using apples as example.

/---/ for me also, just because it has an eco label doesn't mean necessarily that it's better than something regionally produced. So, for me, let's go back to fruits, let's say we have apples on one hand, you have Swedish apples, produced in Sweden grown in Sweden, whatever, and on the other hand, you have apples from Italy, but they are ecological, I would prefer the Swedish apples, because they were produced in the country I live in. So, first of all they have a shorter way to get to the supermarket. And, yeah I kind of trust Swedish farmers, like, why should they use too bad stuff especially for apples? (Interviewee 11)

The previous narration showed that young adults may apply their own hierarchies when they have to choose between responsible choices. But for some others, practicing responsible choices in their everyday lives meant consuming those foods that were natural, organic and healthy (Vermeir & Verbeke, 2008). A young adult who follows influencers on Instagram described it as follows:

For me, it's mostly about buying some organic and naturally produced food. It's like the quality of the food and how it was produced. For example eating a very healthy, nutritious food, and real milk, not this kind of technically produced milk in big scales in those huge factories. So it's more natural, and it's kind of more sustainable. (Interviewee 13)

Likewise, another young adult who participates in Facebook online events to learn more about sustainable food consumption, stressed on her practice of responsible choices in this way:

I think it's important that not only consumers change their behavior, but also to give them the possibility in the system to actually do these conscious choices /---/ I buy organic labels but I do not know which one is better, or which I actually can trust. Because there's so many different things, and then they have different standards. So I think it needs to be easier for people to make the right choices. (Interviewee 12)

There was still more to practicing responsible everyday food choices than shopping for sustainable labels or healthy food. According to one young adult, his lifestyle required performing due diligence on the source. He put it this way with an example from a shopping experience:

You have to look for the source. What is the source for this food? Is it produced in an unsustainable way? Then even vegetables can be unsustainable if it is produced in an unsustainable way. So you have to be sure, what is the source? /---/ So to me, sustainable food consumption is the combination of both looking for source /---/ and eating with a conscience, eating in a sensible way /---/ I can tell you a little experience that I have in some supermarket in Sweden, they mentioned the name of the country that produced a product like a there is a tomato from the Netherlands and a tomato from Turkey. So, as a buyer, the product from Spain or Netherlands may be a bit expensive for you, but the product from Turkey or some other country may be less expensive. But you know that under EU the product is more sustainable, because they have rules for that. So, you can buy the product from Netherlands or from Spain rather than buying a cheap product from turkey or some other countries. (Interviewee 7)

As well another interviewee described her concern for the food source, especially how food is grown, this way:

I need to take into consideration how long fruits are grown, how many pesticides or synthetic fertilizers are used. And I think for me, it is interesting to learn more about it. Also, Facebook helps me in that way, where I can see if there are any presentations or events to learn more about that. (Interviewee 12)

The above extracts are well explained in an assertion that practices are performative and material (Fuentes & Fredriksson, 2016). As such, the making of responsible everyday food choices by young adults buttressed performances and the qualification of materials to enact sustainable food consumption practice. A final theme from the empirical data on meanings was a lifestyle of practicing environmental conscience. I will now turn to present this analysis.

4.4 Practicing Environmental Conscience

Similar to an assertion that sustainable consumption focuses on the environment (Beatson, Gottlieb & Fleming, 2020; Owens & Legere, 2015), some young adults varied by practicing environmental conscience. From the empirical data analyzed, practicing environmental conscience was connected with keywords such as avoiding plastics, less packaging, recycling, carbon emissions, transportation, and avoiding energy and resource consuming foods. One young adult described with an example, why it is not environmentally sustainable to consume beef burgers this way:

I am aware that eating beef is much worse than eating a lot of tomato or vegetable. Just a fun fact, we all know to produce one burger you may need 1000 gallons of water. Yes, from the beginning of the cow's lifespan to your table. /---/ so it's a lot of water we waste while consuming beef, because the cow needs a lot of water, a lot of food, and they are a big source of carbon dioxide emission. So it's really, really high. You should be more sensible. (Interviewee 7)

This young adult is clearly passionate about food that risks high carbon emissions to the environment. Speaking of the environment and carbon emissions, another stated she had so to speak, a beef with beef:

It's also about buying non-beef products, because beef is something that has so much carbon emission! (Interviewee 8)

Likewise, one young adult described how much she was aware of the impact of her lifestyle on the environment this way:

The dairy and meat industry are the main causes of the increase in the carbon emission. So becoming vegan is one of my active choices besides going into the market to buy sustainable foods. (Interviewee 1)

These findings are interesting because, the young adults who share this lifestyle feel there are working in a collective action with others to protect the environment (Cochoy et al., 2020; Sörum & Fuentes, 2017). It was their lifestyle to eat to save the environment, and they seemed to be well informed about what collective impact this makes. But there were also others who practiced avoiding plastics and foods with packaging to show a conscience for the environment in their everyday lives. One described her conscience and frustration with plastic wrapped vegetables as follows:

I mean I am more conscious about stuff [food] packed in plastic. Why do I need to buy bell peppers wrapped in plastic? I still don't get this! Why do you [supermarkets] need to cover a cucumber in plastic? I don't get that! Maybe my personal thing, I try to avoid these plastic bags in supermarkets. So I bring my own bag to carry everything home when I shop at ICA or Hemköp. (Interviewee 11)

Similar to this lifestyle of avoiding plastics and packaging to show conscience for the environment, another young adult shared the following excerpt:

When I started this sustainability journey, three, four years ago, for me, it was focusing first on reducing plastic /---/ So I tried to buy fruit and vegetables without packaging, and also

tried to go to package free shops. Which is easier when you're living in the big city. Sometimes the organic one is packaged in plastic. And I am like I don't like plastic! (Interviewee 12)

She also described one experience of shopping, where she protested plastic carriers from the cashier twice, which was similar to studies that find boycotting as a practice in ethical consumption (Sörum & Fuentes, 2017).

When I recently went shopping with my friend, the cashier said she would put the fruits in the plastic bag. And we say no, we don't want the bag. We only like loose fruit and we have our own bag. She also said the same with potatoes, because they had bad soil on them, and we said no, we don't want it. So she said but then your bag will be soil too, and we said yes, we can wash it! (Interviewee 12)

Finally, recycling was something young adults connected with practicing environmental conscience. When one interviewee was asked about his first three associations with the practice of sustainable food consumption, his second association was recycling. He described it this way:

So the second one is recycling, and the third is green. I always buy green stuff like vegetables, beans, cucumbers, asparagus and those kinds. But I always find those foods that can be recycled when it comes to packages. It's like priority to consider the recycled packaging. (Interviewee 9)

For another, the sight of canned foods or non-recyclable packaging felt horrible. She put it this way:

I feel that with metal packaging, it will not be recycled if I do not throw it [dispose] in a good way /---/ sometimes when I see these kinds of foods for example corn in metal cans, I feel horrible. (Interviewee 13)

Both interviewees did not state they personally performed recycling of food packaging. However, finding emotions around recycling here supports the view that, emotions about things are elements of a social practice (Halkier, Katz-Gerro & Martens, 2011).

Altogether, the three themes I have presented so far buttress that, sustainable food consumption as a social practice can comprise multiple meanings, as performed by different individuals (Markkula & Moisander, 2012; Schaefer & Crane, 2005). They also illuminate how young adults understand the practice of sustainable food consumption. Their top word

associations with sustainable food consumption and connections with the three themes presented so far is tabulated in appendix I. In the next heading I present a thematic analysis of my empirical data from another dimension of my theoretical framework; skills and competences for sustainable food consumption practice.

4.5 Food Storage Hacks

The young adults were asked what is it that social networks platforms and ethical consumption applications enable them to do in their everyday sustainable food consumption practice. It emerged that different scripts promoted on social network platforms especially, enabled them to learn several tips and tricks on how to store, preserve or prolong various fruits and vegetables. One interviewee described a trick she applies in her everyday life from Instagram, about how to preserve tomatoes from quick decay this way:

I check the Instagram account of Too Good to Go for ideas to store my fruits and vegetables /---/ there's like some tips and tricks for consumption. I can really do them in my daily life. Normally you store tomatoes with the green leaf side up right? But I saw that you have to do it upside down so the leaf side is down and the other side up in the fridge. At least it helps the tomato to decay slowly. (Interviewee 5)

It appeared she had also learnt another trick on Instagram for preventing potatoes from growing sprouts. She described it this way:

When you buy some potatoes, I saw that you can put one apple between the potatoes, so it can slow down the potato, like they won't grow the sprouts. (Interviewee 5)

Similar to these hacks, another young adult described how she learnt to preserve vegetables from Enac, an account she follows on Instagram. She believed she couldn't have learnt these tips and tricks from her mom.

I know one account [Instagram] from Indonesia. The name is Enac, and on this account they tell me so many things about how to preserve vegetables longer. When I buy vegetables and it's too big for example cabbage or spring onion, it's really easy to get rotten. And I'm so upset, but sometimes it's already rotten and I have to throw it away /---/ So I learned many things there [Instagram] to preserve vegetables. It's a little technique, you have to clean it and then chop /---/ and put it in a box with paper towel in it. It makes the spring onion last really long, even three weeks and not rotten, still in the normal /---/ Yeah, I didn't know that

before. And I think that kind of skill, I will never get even from my mom if I didn't see from Instagram. (Interviewee 3)

This excerpt from interviewee 3 shows that socio-technical scripts from digital technologies contribute to learned skills for sustainable food consumption among young adults (Sörum & Fuentes, 2017). Another young adult described skills she learnt for prolonging carrots and ginger from Zero Waste Guide, an Instagram account in the following excerpt:

I also follow the Instagram account called Zero Waste Guide. And they provide a lot of great instructions on how to prolong your food for example carrots. I tried that before. Because when I have a pack like 250 grams, it's really hard for me to eat them all. So I like to follow their instructions, and I peel the carrots first and store in water in a bottle. It helps me prolong those carrots to around three weeks /---/ and this morning, I just saw how to store ginger. Cut into very, very small pieces and put it into an ice cube tray in the fridge. So when you need them, you just put those into the dish you want to make. (Interviewee 6)

But aside Instagram, another interviewee described similar skills she had learnt for storing carrots and spinach from YouTube as follows:

What I've recently learned is to store carrots in water so they don't get so way soft, and even if they're already soft, you can place them in water and they will get not soft again /---/ I just have it in water and its crispy /---/ and also for spinach you get it off the plastic bag and then store it in a container with wet cloth. (Interviewee 12)

From using Facebook, another young adult shared her storage hacks for avocados and bananas:

There is one thing I have learned from Facebook. When you have avocados that are not ripe and you store them with bananas, they ripe faster. Maybe the bananas also ripe faster. So if you have the two together, and you don't want to use them sooner, hmm. And I think it works. It feels like it. (Interviewee 2)

Aside the food storage hacks the young adults developed through social network platforms, they also appear to have developed skills and competencies around the making of creative and sustainable recipes. I will now delve into an analysis of this theme.

4.6 Making Creative and Sustainable Recipes

For one young adult, she has learnt to create recipes from expiring fruits and vegetables. Something she saw on Instagram. She described her new skills are something creative and

sustainable, and her descriptions shows how scripts promoted on social network platforms could prescribe best practices for young adults in their everyday sustainable food consumption practice (Sörum & Fuentes, 2017).

I have seen some videos in Instagram, especially like people trying to show how they make some recipes from banana that is going to expire or which is completely black from outside. That was interesting for me. I think I can say that like for the bananas, I have tried making banana bread out of the bananas that are cheap in the market. Although it would not be that good for others, I am happy I have learnt to make it. (Interviewee 4)

This interviewee's creativity shows that new norms emerge from digital technologies (Cochoy et al., 2020). Throwing more light on her new creative skills, she shared another example of how she learnt to make chips from potato peels as follows:

Previously I didn't care about the scraps of potato for example, so I usually threw the peel of potato. But on Instagram, I saw a video that a girl was making chips from potato peels, that scrap, you know. I was interested in that. And from the next day, I also tried to save the peels and freeze it in the freezer. But the thing is, I forgot to do this after sometime. It's still in my freezer. But someday, I need to do an experiment of that. Usually, I wouldn't have done creative things out of my vegetable scrap. But now, I would love to do something new. (Interviewee 4)

A salient finding from her example is that, while young adults may learn new skills and competencies, there may still be a knowledge-to-action gap, where they learn a new skill but may not experiment it. Image 1 below provided by interviewee 4 shows some potato peels that were still kept for the purpose of a food experiment.



Image 1: Frozen Potato Peels Awaiting a Food Experiment

For another young adult who describes herself as a vegan, learning to make recipes from an app was a skill she needed to survive.

Okay, for me, I was bad at cooking before I came to Sweden. So it's really, really important for me to find great recipes online. So I use an app called 21 Day Vegan. I learnt very great menus from there. The favorite one, I would say chickpeas and zucchini. (Interviewee 6)

Another vegan I interviewed had remarkably learnt to make a new recipe almost every week from YouTube and another app called Undertian. Here is how she described it:

Well, if I hadn't watched [YouTube] videos and gotten that information, then I would probably eat like I did before /---/ that's a shame. I have actually started since last year to cook a new recipe almost every week. Because I try to make plant-based food, I would say that most of them are pretty sustainable /---/ I recently look at Undertian, they have a lot of vegetarian and vegan recipes. And it's all like the portion under 10 kronor. So it's meant to be pretty cheap food that I can make myself. One of my favorites is the quinoa recipe. (Interviewee 2)

Likewise, another young adult was impressed about an app that suggested recipes she could make with ingredients she already had, than having to buy more food, which she finds sustainable. She described it as follows:

I learned on an app where you can write down your ingredients that you have at home. And then it will show you a suitable recipe that you can make with what you have at home, maybe you need some more stuff, like two or three things, but mostly it's good with what you have at home without having to buy much stuff. (Interviewee 12)

But unlike this young adult, another described her experience with an app that allows her to learn recipes based only on eco labeled products. She put it this way:

I really want to share one thing with you. It's about cooking a dish. There is an app that provides me some recipe. I can choose different foods I want to learn right away, and there is one category which is sustainable. So all the products they choose for me for the recipe are only eco products. (Interviewee 5)

The described skills and competencies in the above excerpts are remarkable. Within social practice theory, an individual's practice is also seen as interconnected with various skills and competencies that enable performances in their everyday lives (Hansson, 2017; Fuentes & Svingstedt, 2017). Aside learning creative and sustainable recipes for their everyday food consumption, it emerged that various social network platforms and apps allowed the young

adults to develop competence in finding and tracking sustainable retailers and products. I will now turn to present these findings on the theme finding and tracking sustainable deals.

4.7 Finding and Tracking Sustainable Deals

From a thematic analysis of the empirical data, keywords including shortcut to retailers and cheap food deals were common among descriptions of young adults regarding competencies enabled by digital technologies for their everyday sustainable food consumption.

For one young adult who used the app Karma, it is easier for her to find, track, and buy cheap food which would have otherwise been disposed by nearby restaurants. However, she also noted the inconvenience of having to go to the city center to get a meal. She described her competence this way:

With Karma I am able to find cheap deals for food which are going to be discarded or going to be wasted. It's kind of a hard thing to create, that enables people to have food at cheap price. So yeah, that's kind of cheap deals for me, and also saving food which are about to get discarded. But sometimes, I don't want to go and pick only that single product all the way to the city center, you know. (Interviewee 4)

The above excerpt complements studies that suggest consumption applications are competent in identifying products that risk being unsold or expiring (Cane & Parra, 2020). Interviewee 4 also stated that she recently found Rscued, a sustainable retailer that makes juice from discarded fruits on Instagram in the excerpt below:

I think I found a company named Rscued on Instagram. So they are trying to make juice out of discarded fruits. I guess apples and oranges, and this sort of things inspires me to take initiative to reduce waste. (Interviewee 4)

For another young adult, Instagram provided shortcuts and relevant captions for her to identify sustainable retailers. It seemingly reduced her complexities (Hansson, 2017), this way:

Instagram gives me like a shortcut to target retailers. When they advertise, it is comfortable to read the entire caption. I think they usually put a link where I can click and it will direct me to the original source [retailer's website]. I will never have gone to the website, if I never see from Instagram. That is what I meant by giving me a shortcut, and it basically makes it easier to try to be sustainable in food consumption. (Interviewee 3)

Another interviewee who claims to be a passionate food eater suggested that, an app she used gave her competence in tracking seasonal fruits and vegetables to enable her sustainable food consumption. She described it as follows:

I love food, I am a passionate food eater, and the app tells me about the seasonal vegetables and fruits. So, which means they only show me fruits or vegetables in this month. It's somehow sustainable consumption, like I won't buy something not in the right season. (Interviewee 5)

For another young adult, she carries her Karma app along with her when she travels, since it allows her to find sustainable and cheap food deals:

Karma is a very great food app. Even when I was traveling in Stockholm with my friend and we wanted to find something easy, quick and cheap, we used karma as our food app. (Interviewee 6)

One interviewee was shocked to have found fresh bread for a purchase she made via the same Karma app. She narrated her experience finding a great deal this way:

So I mostly use it for getting bread [Karma]. Also for like, sandwich, like cheese sandwich or for sweets like kanelbullar. One morning I run about 3 kilometers to pick my bread at a bakery, and he gave me the chance to pick from the shelf what I want to have. It was really fresh but I got it for a lower price. So I was really confused. Because the other places where I found, I have the feeling it was the leftovers from the day before. (Interviewee 12)

Another young adult described Facebook and Instagram as a place where he found sustainable products. He also mentioned that knowledge from the platform enabled him to set his priorities before going for shopping.

I see some promotions on Facebook and Instagram from från Sverige. You know that it is on packaging. It marks products or food that is produced in Sweden like noodles or milk or some meat. So once I saw these promotions, when I go to the market I give priority to those foods. (Interviewee 9)

All together, these responses show that digital technologies play a vital role in digitally enabling the sustainable food consumption practice of young adults (Fuentes, Cegrell & Vesterinen, 2021). Nevertheless, a final theme that emerged around their skills and competences was the ability to be in the know. I will now turn to present this analysis from the empirical data.

4.8 Being in the Known

It emerged that having the right information was a requisite for young adults to practice sustainable food consumption (Fuentes, Bäckström & Svingstedt, 2017; Hansson, 2017; Jones, Hillier & Comfort, 2011). To do this, it was important for them to be in the known or be aware of what they were actually consuming, and they drew on various social network platforms and apps to develop this competence. This competence was sought especially among those that were concerned with living a life of responsible food choices.

This extract describes how an app provided an interviewee the competence to be in the known everyday:

Since I am trying to find a better way to consume, I do not want to buy milk and eggs. So I always have a concern to think about what can be the substitute for the proteins, but still maintain of course, the nutrition for myself. On the 21 day vegan app, I can see the substitute protein foods, calories, and the nutrients I have to consume every day. (Interviewee 6)

For another, she found an app that could help her qualify her food choices, and be in the known of what her food contains. She described it this way:

There is an app that works like crowd check, which I can use for food. It tells me if there's something in it that I don't want to eat like gluten or palm oil, and if it has much sugar and salt. I think it's sometimes difficult when you don't know what you really consume because there are many certifications people put on products to make them look sustainable. But with this app I can check for myself. (Interviewee 12)

Another young adult concerned about her health and nutrition preferred to be in the known by connecting with others who shared similar interests with her in a Facebook group. She described it this way:

This is the thing, there are some particular groups on Facebook for people who have the same aims and goals like me to lose weight, be more healthy and conscious about nutritious food. We kind of gather, and people give advice and kind of lectures on what is healthy food, and all these kind of subjects. For people like me who are not experts, we get information from these kinds of communities. (Interviewee 13)

Her narration shows that collective interaction in digital platforms creates competency (Cane & Parra, 2020). For others, being in the known or current was acquired by following specific accounts on YouTube and Instagram. One interviewee described it as follows:

But the main source that I get current information about my food consumption is following some people who have the lifestyle like my life style. I follow them on Instagram to get the information I need. On YouTube, I am following some YouTubers concerned about zero waste. So I look for information from the people who are doing same thing and have the same interests as me about living zero waste. (Interviewee I)

Altogether, the previous four themes I have presented show that digital technologies enable specific skills and competencies that enable young adults to practice sustainable food consumption in their everyday lives. In the next headings I analyze the third dimension of my theoretical framework; how digital technologies shape sustainable food consumption practice.

4.9 Extending the Mind and Capabilities

In the empirical data collected, social network platforms and ethical consumption apps shaped some young adults by extending their minds. This is similar to being mediators of their consumption, or go to devices when they wanted information, confirmation or an inspiration to take particular actions in their everyday lives (Jenkins & Denegri-Knott, 2017). Their keywords used to describe this theme included seeking confirmation, source of information, facilitation of consumption and assisting their lifestyle.

One interviewee suggested that, to be shaped, one must be consciously interested in a practice. During his interview, he claimed that information from Facebook rather extends his capabilities for sustainable food consumption as follows:

I think when we say something shapes you, you tend to learn more about something you already like. It requires someone to be interested in the subject. Again, if someone does not care, they would not want to seek information. In my case, I tend to refer to social media like Facebook when it comes to learning more about sustainability. If I am interested in something, I probably watch videos or whatever there. (Interviewee I5)

Another Instagram user described herself as someone who already has the motivation to practice sustainable food consumption, as such these technologies rather facilitate her knowledge and ability to follow others who share her food interests. Here is how she put it:

It doesn't have a big impact in terms of shaping my awareness of sustainable food consumption. But instead technology or social media actually facilitates my experience. I go to social media to find out more information, other influencing people who have the same interest with me about food. So it brings me more information in terms of that for sustainability /---/ But inside of me, I feel like I need to do that. I see the problem, I've seen the animals being treated not very well by human beings, I see the environment was damaged by human beings, by the factory. So its like an inner call for me, you know, to do something more sustainable, to make a better living for future generation or at least for myself to live. (Interviewee 1)

Like this interviewee, another young adult felt she already had that inner drive to practice sustainable food consumption. As such, she described ethical consumption applications as something that assists her lifestyle and she also thinks they provide her the necessary information to enable her practice of sustainable food consumption. However she mentions that she wouldn't have being able to get the necessary information if there were no digital technologies. Here is an excerpt from her interview:

I wouldn't say they shape us, but they assist us to make sustainable food decisions. Because like me, I already know it's important not to throw away food. And also, it's important to eat vegan. So for me, those apps are just assisting my lifestyle /---/ I check and try to learn recipes from social media and apps. I would say I learnt the negative environmental impact of food, that kind of knowledge from social media. So if there were no such technologies 50 years ago, I wouldn't have information. But now we since we have that kind of thing, I have quite a lot of resources /---/ So that I can choose what I want. (Interviewee 6)

Another interviewee suggests that her engagement on Facebook definitely develops her sustainable food consumption practice. However, she did not agree it explicitly shapes her. It therefore emerges from her description that digital technologies extends or develops her interest (Jenkins & Denegri-Knott, 2017), as she put it below:

It [Facebook] definitely develops my interest in food sustainability. Or in lightest, but it doesn't shape it. (Interviewee 8)

One interviewee also spoke about how digital technologies strengthened her consciousness, in this way her ability to engage in sustainable food consumption. She gave an example of how she now feels informed to consume fruits and vegetables that are not in normal shape:

I would say it sometimes does, I think. It develops me further. Not me personally, but a lot of people are not aware of this, and when you're already aware of it, it's just strange. It

develops my consciousness about things. Like proving that okay I'm doing it correct /---/ Like with these fruits and veggies I talked about, who are not in shape. By learning from influencers on Instagram, I have actually started buying that stuff. I even get more conscious that a banana doesn't need to look like this to be a good banana or a carrot doesn't need to be a straight carrot, it can look different and that doesn't change the taste /---/ I think there needs to be more kind of apps that improve this. (Interviewee 11)

One salient finding from the above excerpt is that, shaping of practices can happen on a sub-conscious level. This is seemingly lacking in the literature. For some two other young adults, digital technologies extended their minds and capabilities by helping them confirm already planned food choices, which seem complex. They described it this way:

Well, I do sometimes join conversations or look at posts that would kind of fit into what I already believe. So in that way, I kind of get confirmation, I tend to be seeking for confirmation of my sustainable food practice on these platforms. (Interviewee 10)

I used Instagram when I wanted to for example find more about white eggs. You know, those eggs without this yellow part are very healthy food I need for myself. I knew it was possible but I kind of had no idea how because it is not a very regular product. So I confirmed on Instagram (Interviewee 13)

While these interviewees seem to distance their practices from being shaped, their examples and narrations suggest that digital technologies are not “neutral mediators of consumption” (Fuentes & Sörum, 2019; Sörum & Fuentes, 2017, pp.162). Not only do these technologies extend the minds and capabilities of young adults, but also, it seem to shape how these consumers qualify what fits as a sustainable food choice (Hansson, 2017). I analyze these findings in the next theme.

4.10 Qualifying Food Choices

In the thematic analysis of the empirical material, qualification as a way of shaping sustainable food consumption emerged from keywords including advice, expert, and shaping choices for eco labels. For one interviewee who considers herself less of a biological or agricultural expert in qualifying ecological products, she relies on scripts promoted in social media. Below is an excerpt on how she explained the shaping by qualification of her food choices:

Yes of course! /---/ Because that kind of knowledge is kind of specific [knowledge on ecological foods]. I am not the biologist, I am not the one who knows very well about

agriculture. So whenever I need that kind of information, I need to find out on social media to know exactly which one is ecological, or which one is not. (Interviewee 1)

The findings in the above excerpt draw attention from the theoretical concept of qualification. They show that digital technologies shape the qualitative and quantitative judgments of young adults in their sustainable food consumption practice (Hansson, 2017; Callon & Muniesa, 2005). These judgments include such things as food quality, functions, ingredients, packaging, and sustainability labels (Hansson, 2017; Cochoy, 2008).

Another interviewee described how her scrolling behaviour on Instagram shaped the way she qualified food unconsciously during grocery shopping.

Not that tendentiously. It's most of the time accidentally. I have this scrolling Instagram behavior, and then when I found information about which foods are more like in Sweden people say *ecologiska*, which are more better to choose, I keep those kind of information in my mind. Sometimes I remember that when I do my groceries. (Interviewee 3)

Like mind extensions, the above excerpt show that qualification may proceed on a sub-conscious level. For another young adult, the application Karma influences her qualification of foods. She seems to be programmed to consider consuming expiring foods first. She explained it this way:

Because of saving food, they might have. Yes, they influence me to choose the product [food], because I think they are trying to make it my behavior to consume the foods that are going to expire first. (Interviewee 4)

Similar to choosing expiring food first, another interviewee suggests that digital technologies shape her judgments on ecological foods as priority. However, price was sometimes a barrier to her choice.

Yeah, I definitely go for the eco. When it is affordable. Also because sometimes it's crazy expensive. When it is affordable, and within my budget, yes, I go for the eco. These are my first choice. (Interviewee 8)

The paradox of price as a motivator and barrier to qualifying food is well iterated in the literature (Ritch, 2015). For another interviewee, his qualification was influenced by advice from social media, especially in making a choice between food labels. He put it this way:

I mean, they give you advice. It's good for everyone. It affects purchase behavior or intentions to protect the earth or the environment. I believe it does work for me. I have already noticed this. Some texts such as fair trade, even the från Sverige I see promoted on social media does affect me to buy the food items with such labels. (Interviewee 9)

Interviewee 10 shared an example of how an article on her most engaged platform, LinkedIn, shaped her qualification of milk. According to her, she is now able to make clear judgments between dairy milk and plant-based substitutes like Oatly. Here is how she described it:

Actually I am engaged most when it comes to LinkedIn. The most recent will probably be an Oatly post concerning their battle about labeling. I read that an amendment has been made within the European law, so Oatly is no longer able to use any animal product brands, branding names, such as milk, or dairy or anything like that in their communication. Previously they would draw comparisons with cow's milk in a very provocative way and how their product is more sustainable than cow's milk or whatever. Now I know that plant-based producers are no longer able to draw these kinds of comparisons in their communication which makes it easier to sort between them and dairy milk products. (Interviewee 10)

This narrative shows that digital technologies play a role in making comparisons during food qualification (Callon & Muniesa, 2005). For interviewee 5, while information from social network platforms shaped her judgments, it is still hard to make decisions. She identified trust about ecologically labeled products and price as barriers in her qualification of sustainable food.

I really get the awareness to make my food decisions, but sometimes I didn't make it into practice. Yes! Because I think somehow it can be hard to make it happen. For example, I know I have to buy food that is produced locally, but I realized the locally produced food are much expensive than imported food. I am still not sure if they grow organically or not. So, it's really hard. I think it can be very hard for a food producer to be 100% transparent. (Interviewee 5)

Interviewee 11 also touched on pricing but suggested that availability of sustainable food choices was a necessary condition in her qualification process. She described it this way:

It is nice that I get the right information to say okay this this high quality this is low quality. But this always depends on where you are and what you can actually buy because it doesn't help me that I am informed this product has the bad quality, but then I have to buy it because the supermarket market is not offering another. That doesn't help me. (Interviewee 11)

Nevertheless, pricing and available choices are not always the barrier. Interviewees 5 and 12 revealed that while social network platforms shape their qualification of food, another challenge in making sustainable food choices is the value people place on their food consumption. In other words valence, which is a new addition to the literature. They both described it this way:

Eating food is one of the most important things in our lives. But I see that when people purchase food they don't really think too much, you know. (Interviewee 5)

It's hard to change people's mindset or raise their awareness. Sometimes they have the knowledge to change something but they don't. For example in my country, people are willing to spend more on their cars, but when it comes to food, people want to always buy the cheapest, they don't care much. (Interviewee 12)

Adding to the problem of valence or value placed on food, another interviewee stated similar comments below:

In Germany, people spend a lot of money on gas for their cars, but if it comes to food, just the lowest price ever. They ask, why is this so expensive? But they are spending a lot of money on gas or even the car itself. And I am like why are you not caring about your body and what you eat? I'm not saying that everybody needs to be vegetarian or even vegan or should kind of stop eating meat, because I think we will not manage that. But just be a bit more conscious on what type you actually buy or what kind of food you buy, which is also again an aspect of money. (Interviewee 11)

Interviewee 12 also proceeded to narrate her qualification process at a sub-conscious level, based on information she gets from social network platforms:

I mostly rely on the knowledge that I have gained from social media. But not like having that in my hand at the supermarket and say okay this is sustainable or not. But I make some reference example when I compare avocado and meat /---/ With meat you need to care about the animal and those things before you I get the product. So I guess it's more sustainable to have the avocado. (Interviewee 12)

But this interviewee interestingly mentioned that she does not care about the price of sustainable products anymore, based on awareness she developed from YouTube.

I watched a movie on YouTube about how chickens are held in the cages and can't move and it looked really bad. This time I'm only buying organic eggs so it's like a habit to me now. I'm not even looking at the price anymore. Because it's like I can't buy the other one. (Interviewee 12)

Interviewee 14 also buttressed her qualification at a sub-conscious level. She put it this way:

Of course, I think everything around us. Social media has influenced us in a way or another. So it's not that I could be objective about this or that, or it's not that these don't have an effect on us, of course, they have, is just maybe at the sub-conscious level. (Interviewee 14)

Aside influencing judgments about food choices, digital technologies are said to have a controlling face by means of prescriptions (Cochoy et al., 2020; Hansson, 2017). Qualified choices may hence translate as a prescribed practice, when digital technologies suggest specific actions for one's everyday sustainable food consumption practice (Hansson, 2017). Or even so, nudge consumers into taking particular actions in their food consumption. My final theme presents findings on how young adults are shaped by prescriptions from digital technologies.

4.11 Prescribing Particular Actions to Shape Sustainable Food Consumption Practice

It was interesting to find that some of the young adults received prescriptions, or felt nudged to take specific food choices or actions based on socio-technical scripts promoted in social network platforms and ethical consumption apps. Prescription of particular actions as a theme also emerged from keywords including: forced, social pressure, good option, appeal, follow, and suitable.

One interviewee narrated how she felt forced by ads from Instagram to follow sustainable food trends this way:

/---/ you know like between the stories, I can sometimes see advertisement. Sometimes, the advertisement just popped up. So, I'm not sure I actively followed the products, they [Instagram] just force me to get that information which is sometimes helpful for me. (Interviewee 5)

This finding is interesting because, the prescription did not translate as a recommendation from qualified products as some studies suggest (Hansson, 2017). But contrary to this, another interviewee, a vegan active on Instagram and YouTube suggests that prescriptions can emerge from what she calls good options. She described it this way:

I would, I think so. When I have two good options, and the app says this, then I guess I would go with the option that the app says. Yeah. (Interviewee 2)

This interviewee also adds that without prescriptions, she would prefer to follow her usual shopping list, unless curious to try something new. Her account shows that sustainable food consumption must be governed, and this governance is something digital technologies provide (Sörum & Fuentes, 2017).

Without a recommendation, I feel more like I would probably stick to my list or if I'm curious to try the product, then I might buy it. (Interviewee 2)

For another interviewee fascinated by mystery food boxes she can purchase on Too Good to Go, she is always willing to try sustainable food prescriptions when they are cheap. She put it this way:

I am always eager to use this application, I want to. But every time I want to follow that [prescription], it's because it's super cheap, and it's like mysterious, because you will never know what will be the unsold product. Aah ha, so because I don't know what will be in the bag, I try it. (Interviewee 3)

She also stated that while she may not always follow prescriptions, the skills she learnt for preserving some vegetables were prescribed to her unconsciously.

But I do not always consider it consciously. Like the way I preserve spring onion for example. That is a prescription from social media. (Interviewee 3)

But in times when food prescriptions are expensive for this interviewee, she stated that she felt okay once the meaning of her sustainable food consumption practice was met; efficiency.

I feel okay, as long as I use it efficiently. (Interviewee 3)

It follows that while young adults may not necessarily feel obliged to follow food prescriptions due to price, it still makes them curious. One interviewee described this experience with an example of her admiration for a Ben and Jerry's ice cream.

Well, I think it depends. Maybe I try because I have never eaten that product. You know, and so I will try for once to know how it tastes. But it also depends on the price for me /---/ I would like to give you an example of Ben and Jerry. It's promoted on Instagram. And I think it's a sustainable product because of their criterion like fair trade and everything. When I saw it on Instagram and also heard from my friends about that product I tried it. Even though it cost me like 50 or 60 krona, which I think is expensive for me, I bought it, just bought for once. (Interviewee 4)

The above excerpt suggests that price can be a major barrier to sustainable food consumption practice. Another young adult was very explicit about feeling the pressure of food prescriptions by digital technologies, but he also acknowledged price as his barrier. He described it this way:

Yes, I think it has some pressure on me, because I know what sustainable products can do for the environment and what an unsustainable product can do. So it is a kind of pressure that I will have to buy. If I knew that this recommended product is sustainable. But I think that for a student with limited budget, you are not getting a lot of money. So it becomes difficult. (Interviewee 7)

He further described how trust of a prescription hinders his sustainable food consumption practice this way:

But on the other hand, so many companies are doing green washing. So if you have that in mind, it's difficult because the big companies have a lot of money. They can use their money to green wash people's mind. (Interviewee 7)

Fuentes and Sörum (2019) have earlier highlighted the importance of trust in technology-mediated consumption. The previous excerpt confirms that trust is an important condition for enacting sustainable food consumption practice. For another interviewee, the success of food prescriptions from apps are tied to her personal suitability, such as meeting her family needs. Here is how she described it:

For instance, I can buy a loaf of bread best before from Too Good to Go because I know that we are four [her family] and it will be finished. (Interviewee 8)

This interviewee appears to encounter prescriptions with what she described as a critical eye. According to her:

Yes sometimes I follow prescribed ones. But let me tell you, I have a critical eye. In a good way, not in a bad way, I would dig deeper, and I don't easily take things as it is from social media and different platforms. (Interviewee 8)

But for another, he seems just fine following recommended products he finds on social network platforms.

I will, I will take the advice. Because it is meant to make people healthy, reduce waste and protect the earth. (Interviewee 9)

But that said, some young adults felt everyone deserved to make their own decisions or choices from qualification, and also consider the effect of price. To emphasize the importance of price and suitable prescriptions, interviewee 11 narrated an example with avocados as follows:

I like the awareness and stuff, but I think everybody needs to make their own decisions, what is applicable for their personal life and certain situations. I would love to spend more money on some foods but on the other hand I'm like okay I don't have the money /---/ They can be good that healthy products [prescriptions], but this is kind of over advertised and a lot people telling you that it's so healthy and so good for your body. Do you know people jumped on that train [prescription] saying okay I need to add avocados because it's healthy. But at some point you need to make your own decisions and be aware of what kind of consequences these things can have. Just try not only to see one side, also see the other side, for example the production of avocados. (Interviewee 11)

Nevertheless, another suggests that the question of price does not prevent her anymore, since she can't think of anything aside buying something prescribed as sustainable. She described it this way:

When I first read your question I said not really. But then I reflected on it and said of course. I spend time or a lot of time on Instagram and YouTube and Facebook, much more than I like to, and I learn a lot of things /---/ I get angry when I see people comment on something that is said to be better and they are just criticizing it as not sustainable. But I think yeah, other things are not sustainable at all. At least I try to do something better when I choose it [prescription] /---/ I'm not even looking at the price anymore. (Interviewee 12)

The previous except suggests that price may not always be a barrier to prescriptions, rather as interviewee 12 describes below, she spends time to think over food prescriptions in connection to her personal suitability, as she did for a recommended oat powder:

I would say that when I see new products that are recommended as sustainable which I didn't know before, I have the feeling that I need to buy it. I wouldn't buy it immediately, but I would think that's cool, I want to try. But at the time I have learned to second guess if I really need it. So I also try to evaluate if it makes sense to me. For example I saw on Instagram an oat powder, which you can mix with water at home to get oat milk and avoid packaging I get with oat milk every time I buy, which is cool. But on the other side, it is really easy to make oat milk myself by mixing oats and water in a food processor. But I have the feeling I should buy it. (Interviewee 12)

Similarly, another interviewee claimed that she complements prescriptions with her personal judgment, and she described it this way:

There is a chance to do it [prescriptions]. Yes. But not everything that I see or whatever. It depends on how I do my judgment right about that product. But of course, If I see an advertisement on social media and consider it accurate with my own judgment or way of seeing what is sustainable in regards to food, then I will buy it. (Interviewee 14)

Food prescriptions on social media and ethical consumption apps can also be considered a social pressure, as interviewee 13 describes it. Since she cannot sometimes afford prescriptions at the price. Here is what she had to say:

I see them but no, I don't feel this social pressure on me to buy a sustainable option. Exactly, it feels like, if you're not buying, are you against us? No, guys, I'm really supporting all these ideas. But in some situations, I need to think about myself, a student price is very important for me. I'm sorry, but I'm kind of I'm supporting what you're doing. Continue doing that. I'm just not your consumer for this price. (Interviewee 13)

Altogether, the empirical material analyzed reveal that digital technologies make prescriptions of what specific actions young adults should take to be sustainable in their everyday food consumption practice. Nevertheless, this social pressure as one described it is often met with different preconditions, particularly price (Ritch, 2015). But also others such as trust and personal suitability.

I was also curious about how their everyday lives would have been shaped without digital technologies. Below are excerpts from the empirical data about other potential influencers:

My mom and my grandpa, because now I realized they are a treasure for me. They know a lot about how to grow the food. All the knowledge from the internet comes from who? From humans. That's the older generation. We have them! (Interviewee 1)

That's a good question. I think I if I couldn't learn all of that from YouTube and from Instagram influencers, I don't think I would have known as much. I think there is a lot of information that I wouldn't have known /---/ May be I would have learnt some things from my parents and friends. (Interviewee 2)

As a student and as a researcher myself of sustainability, I would have to learn it by reading so many articles. (Interviewee 7)

That's very difficult, because when you think about it, no technology, then you have no mobile phone, no Instagram, nothing. I think I would have relied on friends. But there is the question of where they got that information from right? I think I would rely on my mom and my grand mom. (Interviewee 12)

It can be deduced from the above excerpts that, while the young adults were entangled in digital technologies, some were likely to resort to older generations, or perhaps rely on friends and their studies to acquire the requisite knowledge for sustainable food consumption practice. However, the excerpts also reveal that some young adults could not think of being sustainable without digital technologies. In this regard, the doings and sayings of individuals are very much shaped by various technologies that mediate consumption (Fuentes & Sörum, 2019). The next chapter presents a discussion of the findings and how they address my research questions.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

5.1 Chapter Overview

This final chapter brings everything together with a discussion of my major findings, a summary of the study, and what conclusions can be drawn concerning my research aim and questions. In addition, I highlight the theoretical, practical and social implications of this study and suggested directions for future research.

5.2 Discussion of Findings

In the previous chapter, I have presented a thematic analysis of my empirical material and findings that emerged in the research process. As one step further, the question of how the analysis presented addresses my research questions, and why these findings are advancing, given what we already know, forms the core of my discussion here.

As one may recall from the introduction of this thesis, the broad aim of the study was to understand and provide an empirical explanation of how digital technologies enable and shape sustainable food consumption practice. To accomplish this aim, I summoned for answers to three questions among young adults, which were seemingly lacking in previous retail scholarship. Thus how is sustainable food consumption understood among young adults, what skills and competences do social network platforms and ethical consumption apps enable in their sustainable food consumption practice, and finally, how do these digital technologies shape their sustainable food consumption practice.

Addressing the first question, the empirical material analyzed suggests sustainable food consumption among young adults is a complex and multifaceted practice. This supports Hansson's (2017) assertion that the meaning of a practice is "by no means stable or straightforward" (pp.106). However in discord with previous behavioral studies that describe sustainable food consumption as an intention or choice (Wu & Chen, 2014), my analysis suggests its meanings revolve around practicing three distinct but interconnected everyday lifestyles. Young adults viewed sustainable food consumption as practicing efficiency and no food waste, practicing responsible everyday food choices, or practicing an environmental

conscience. These meanings said and lived are shaped by what they see and read on social network platforms and ethical consumption apps. Interestingly, the complexity of these meanings may not necessarily lie in their multiplicity as some studies suggest (Markkula & Moisander, 2012). But rather, how young adults blend more than one of these lifestyles in their everyday lives. Their top word associations exhibited in Table 2 in the appendixes shows that, young adults may hold all three meanings or some. Efficiency and no food waste have seemingly been treated as keywords in sustainable consumption, but not as lifestyles (Saber & Weber, 2019). More so, the meaning as practicing responsible everyday food choices reveal that choice in sustainable food consumption goes beyond passive decisions to an everyday lifestyle. This meaning also buttresses the importance of materiality in enacting sustainable food consumption (Fuentes & Sörum, 2019). Nonetheless, the findings showed practicing environmental conscience is parallel to previous meanings of sustainable food consumption linked to core assumptions in sustainable development (Vaughter & Alsop, 2017). It is also interesting that the three lifestyles are not explicitly linked to reducing one's own food consumption. This may suggest that practicing sustainable food consumption does not necessarily surrender the pleasure-seeking interests of consumers (Huang & Rust, 2011). Put succinctly, it is interesting to find there is more to the meaning of sustainable food consumption, beyond what we know from behavioural or decision-making theories. To identify, afford and appreciate what Latour (2000) describes as the missing mass, a more sensitive, perspectivist and a social practice view seems desired.

Now that we know how sustainable food consumption was understood among young adults, what skills and competences do social network platforms and ethical consumption apps enable in their everyday sustainable food consumption practice? The analysis reveals at least four categories of skills and competencies. The young adults had learnt remarkable food storage hacks, a skill seemingly shadowed in extant literature. They had also learnt to make creative and sustainable recipes, finding and tracking sustainable deals, and more significantly being in the known or on top of issues regarding sustaining their lifestyles. It was striking to find that some young adults struggled to imagine developing especially food storage hacks, without their engagement with apps like Instagram. These findings somehow support previous retail studies that suggest digital technologies drive consumption by providing new information and

experiences (Fuentes, Bäckström & Svingstedt, 2017). For instance, the young adults described how they were able to experience new ways of preserving mainly fruits and vegetables, or experimenting a new recipe with food saved or risking wastage. Nevertheless, it is tempting to think that being in the known was one of the most critical competencies to sustain their lifestyles. Also, while their developed skills and competencies were impressive, it was one thing to develop them, and another thing to utilize it. What explains this gap? Previous studies have drawn attention to the critical role of information, and an ability to make sense of the overwhelming amount of knowledge from digital technologies (Markkula & Moisander, 2012). To judge these claims by their methods, the suggested role of information and knowledge is transitorily true (Collins & Evans, 2017). However my analysis extends what we already know to include the finding that, young adults must be conscious, creative and experimental to translate their learned skills and competencies from digital technologies into action.

That said, we now arrive at the contentious question of how digital technologies shaped the sustainable food consumption practice of the young adults. The analysis suggests in first place that, social network platforms and ethical consumption apps are no “neutral mediators of consumption” (Sörum & Fuentes, 2017, pp.162). What is interesting however, are the ways in which these young adults are shaped, and how they subvert, balance and consent to the influence of digital technologies in their everyday sustainable food consumption practice. This interplay of power, as Foucault (1988) describes it, sometimes occurred on a sub-conscious level, an invisible dominance, until the young adults were in a state of reflection.

I found that digital technologies shaped the young adults in three ways. By extending their minds and capabilities to engage in sustainable food consumption practice, influencing their qualification of food choices, and prescribing particular food actions to be enacted in their everyday lives. For young adults who claimed their minds and capabilities were extended, they sought of felt as experts when their human competencies were augmented with non-human competencies offered by digital technologies (Beatson, Gottlieb & Pleming, 2020). However they shunned from admitting their practices were controlled by social network platforms and ethical consumption apps, using words including assist, facilitate, or develop. This finding supports an opinion that, other than prescribe or control consumption, digital technologies guide individuals in practicing sustainable food consumption (Jenkins & Denegri-Knott, 2017).

In the opposite, some young adults felt a sort of 'social pressure' from digital technologies, as their practices were shaped through qualification and prescription of particular actions to render their food consumption sustainable. This stressed what Cochoy et al. (2020) describe as the controlling face of digital technologies in consumption. But contrary to previous studies (Hansson, 2017), prescriptions did not necessarily translate from qualified food choices, as there were instances where young adults could not think in terms of alternatives.

The analysis equally suggests that young adults may counter the shaping of their sustainable food consumption practice, drawing on some internal and external preconditions. Internal preconditions included their personal suitability, such as how qualified food choices met their household needs or if locally produced food personally suited their lifestyle over ecological food. Another was their trust in prescriptions, food labels, and the sustainability claims of food producers. For instance, some young adults were concerned about green washing and if ecological products could be trusted as sustainable. In addition, their valence, which was interpreted as the value young adults place on their food consumption, was an internal precondition for the shaping of their sustainable food consumption practice. While valence and personal suitability is seemingly a novel finding, the importance of trust has earlier been highlighted in mediating sustainable consumption (Fuentes & Sörum, 2019). Away from these, price and the availability of sustainable food choices were identified as external preconditions for the shaping of sustainable food consumption practice among the young adults. The paradox of price as a motivator and barrier to sustainable consumption is prominently featured in previous literature (Rosenlund et al., 2020). Likewise, Jones, Hillier and Comfort (2011) have among others, noted availability and affordability as conditions for enacting sustainable food consumption. In figure 2 below, all five preconditions identified for the shaping of sustainable food consumption are unified with my theoretical framework. It is an aspiration that, this post-study framework would be valued as a contribution for advancing the use of social practice theory in sustainable food consumption research. The next section presents a summary of the study.

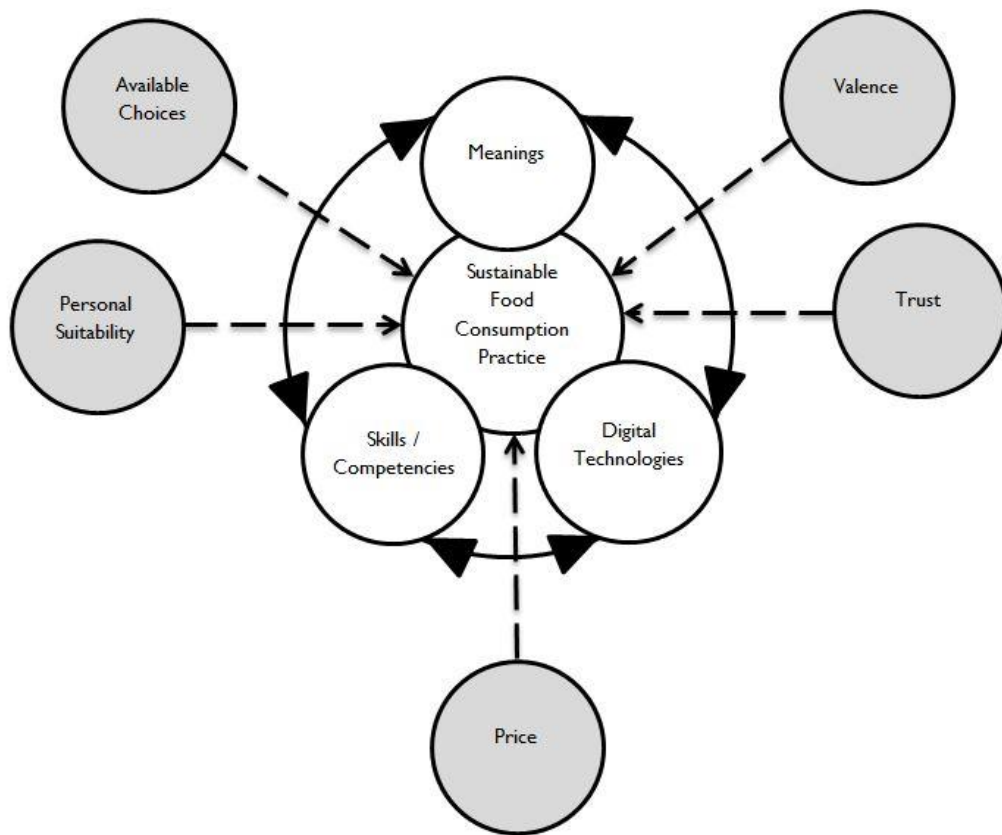


Figure 2: A Post-Study Framework of Sustainable Food Consumption Practice

5.3 Summary

This study proceeded with an aim to understand and explain how digital technologies, particularly social network platforms and ethical consumption apps enable and shape sustainable food consumption practice. This aim was premised on three central questions that were largely understudied in previous retail literature. Despite recent attempts to conceptualize sustainable food consumption, there seemed to be a discursive confusion on the question of how it is understood. Also the question of what skills and competencies digital technologies enable for this practice had received little empirical attention. Finally, how these technologies shape sustainable food consumption practice was not optimally addressed. To answer these questions, I drew a sample of fifteen young adults from two cities in Skåne, Sweden’s southernmost region, as my empirical material for analysis. This was guided by previous studies that suggested digital technologies played a dominant role in young adults’ consumption habits. The ‘holy grail’ was accessing their everyday lives or algorithms of their food consumption, and to achieve this, I engaged the young adults in semi-structured in-depth interviews. Drawing on social practice

theory and a thematic analysis of my empirical data, I was able to fruitfully produce the results presented and interpreted in chapter four. Based on these results, there is a sufficient ground to draw three major conclusions, about young adults and their engagement with digital technologies for sustainable food consumption.

5.4 Conclusions

First, it is possible to conclude that from a practice view, sustainable food consumption can be described as complex, multifaceted, and a combination of lifestyles revolving on practicing efficiency and no food waste, practicing responsible everyday food choices, and practicing an environmental conscience. But that said, the complexity of this practice is not necessarily emergent from its polysemy with different meanings, as some previous studies suggest. Rather, the complex ontology of sustainable food consumption materializes from performance; the ways that individuals blend all or some of these lifestyles in their everyday lives. More so, these lifestyles may not necessarily surrender the pleasure-seeking interests of consumers.

Second, it is possible to conclude that social network platforms and ethical consumption apps afford young adults remarkable skills and competencies for sustainable food consumption practice. Such as food storage hacks, making creative and sustainable recipes, finding and tracking sustainable deals, and being in the know. But the latter seems paramount among them to sustain their lifestyles. Moreover, it is one thing to develop these skills and another to utilize them. To integrate learned skills and competencies into sustainable food actions, this study suggests that individuals must be conscious, creative and experimental.

Third, it is possible to conclude that digital technologies are no neutral mediators of sustainable food consumption. Young adults are shaped by extending their minds and capabilities, qualifying and prescribing their food choices and actions. Power plays a role in these ways that digital technologies shape food consumption practice, sometimes sub-consciously. However, this power is often confronted with subversion, balance or consent by such factors as personal suitability, trust, valence, available choices and price. Beyond these conclusions, the next section outlines what this study implies for current retail research, practice and society.

5.5 Theoretical, Practical and Social Implications of the Study

For the field of retail, the results imply that using social practice theory can be a fruitful approach for researchers, to understand digital technologies and their agency in sustainable food consumption outside linear decision-making models. It also implies a needful shift from predicting consumer attitudes and behaviours about food consumption which have often turned out opposite, to understanding sustainable food consumption as it is performed (Beatson, Gottlieb & Fleming, 2020). The results render new meanings for conceptualizing sustainable food consumption practice, thereby addressing the discursive confusion suggested in previous studies such as Beatson, Gottlieb and Fleming (2020) and Markkula and Moisander (2012). This is an important progress towards theoretical certainty about the ontology of sustainable food consumption. Moreover the results imply new knowledge within retail literature regarding digitally enabling and shaping sustainable food consumption practice among individuals, especially young adults. It also builds on previous ethnographic studies such as Fuentes, Cegrell and Vesterinen (2021), Hansson (2017), Jenkins and Denegri-Knott (2017), and Sörum and Fuentes (2017). The results produced complement an effort to bridge the profound knowledge-to-action gap in sustainable food consumption literature (Beatson, Gottlieb & Fleming, 2020; Lehner, 2015), by extending what we previously know about the preconditions for this practice.

For retail practitioners, the knowledge produced on different meanings can be leveraged as a criterion for segmenting sustainable food consumers, and developing effective sustainability communications that resonate with young adults. For developers of ethical food consumption applications, this study suggests some alternative influences of adopted apps in the everyday lives of individuals.

For our society, this study kindles a reflection about our relationship with digital technologies and how they shape our everyday lives, especially in these pandemic times. The results illuminate how micro-actions especially that of young adults, contribute to far-reaching effects on food security, sustainable retail systems and addressing the food waste challenge. For policy makers and stakeholders, this study may be used as an empirical reference to justify investments in digital technologies that promote sustainable social practices for meeting the United Nations 2030 agenda for responsible consumption.

5.6 Directions for Future Research

In light of what has been achieved in previous research and what is contributed through this study, much is yet to be done within the domain of retail to advance the research area of sustainable food consumption. The following issues were beyond the scope of this study but can be considered as an agenda for future research.

Now that we know social practice theories afford an ability to identify and explain different food consumption lifestyles as they are performed, it would be a useful endeavor to investigate other consumer meanings of sustainable food consumption beyond what this study identifies. As I showed in the empirical findings, what constitutes sustainable food consumption practice among individuals is subject to change.

There is also a need for further ethnographic studies into those social and cultural traits of individuals that inhibit them from translating learned skills from digital technologies into sustainable food actions. This knowledge, I believe, could possibly advance the field of retail further in uncovering the black box of the sustainable food consumer.

Moreover as this study implies a needful shift from predicting consumer attitudes and intended behaviours, future studies can consider shadowing, which Czarniawska (2007) has described as a mobile ethnographic technique useful for studying individuals on the move. This method in post-pandemic times can contribute to more actual accounts on how sustainable food consumption is performed in everyday life.

Finally, some quantitative analysis is needed to test and possibly generalize the strength of association between sustainable food consumption practice and the various preconditions identified in the post-study framework (figure 2). By conducting such studies, it would be possible to identify the major barriers in practicing sustainable food consumption beyond price.

LIST OF REFERENCES

- Ahmed, S., Shanks, C. B., Lewis, M., Leitch, A., Spencer, C., Smith, E. M., & Hess, D. (2018). Meeting the food waste challenge in higher education. *International Journal of Sustainability in Higher Education*, 19(6), 1075-1094.
- Andrews, T. (2012). What is social constructionism?. *Grounded Theory Review*, 11(1), 39-46.
- Arsel, Z. (2017). Asking questions with reflexive focus: A tutorial on designing and conducting interviews. *Journal of Consumer Research*, 44(4), 939-948.
- Anantharaman, M. (2018). Critical sustainable consumption: a research agenda. *Journal of Environmental Studies and Sciences*, 8(4), 553-561.
- Azzurra, A., Massimiliano, A., & Angela, M. (2019). Measuring sustainable food consumption: A case study on organic food. *Sustainable Production and Consumption*, 17, 95-107.
- Babin, B. J., & James, K. W. (2018). Retailing and Value, Doing the Right Thing by Providing Value. In *Food Retailing and Sustainable Development*. Emerald Publishing Limited, 171-185.
- Bailey, C., White, C., & Pain, R. (1999). Evaluating qualitative research: dealing with the tension between 'science' and 'creativity'. *Area*, 31(2), 169-178.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, North Carolina: Duke University Press.
- Beatson, A., Gottlieb, U., & Fleming, K. (2020). Green consumption practices for sustainability: an exploration through social practice theory. *Journal of Social Marketing*, 10(2), 197-213.
- Biswas, A. (2017). A consumption value-gap analysis for sustainable consumption. *Environmental Science and Pollution Research*, 24(8), 7714-7725.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation?. *Qualitative Health Research*, 26(13), 1802-1811.
- Booth, W. C., Colomb, G. G., Williams, J. M., Bizup, J. & FitzGerald, W.T. (2016). *The craft of research (4th Edition)*. Chicago: University of Chicago Press.
- Bryman, A. (2016). *Social research methods*. (4. ed.). Oxford University Press.
- Bulut, Z. A., Çimrin, K. F., & Doğan, O. (2017). Gender, generation and sustainable consumption: Exploring the behaviour of consumers from Izmir, Turkey. *International Journal of Consumer Studies*, 41(6), 597-604.

- Byrch, C., Milne, M.J., Morgan, J., & Kearins, K. (2015). Seeds of hope? Exploring business actors' diverse understandings of sustainable development. *Accounting, Auditing & Accountability Journal*, 28(5), 671-705.
- Callon, M., & Muniesa, F. (2005). Peripheral vision: Economic markets as calculative collective devices. *Organization studies*, 26(8), 1229-1250.
- Cane, M., & Parra, C. (2020). Digital platforms: Mapping the territory of new technologies to fight food waste. *British Food Journal*, 122(5), 1647-1669.
- Choudhary, S., Nayak, R., Kumari, S., & Choudhury, H. (2019). Analysing acculturation to sustainable food consumption behaviour in the social media through the lens of information diffusion. *Technological Forecasting and Social Change*, 145, 481-492.
- Cochoy, F. (2008). Calculation, qualculation, calculation: shopping cart arithmetic, equipped cognition and the clustered consumer. *Marketing theory*, 8(1), 15-44.
- Cochoy, F., Licoppe, C., McIntyre, M. P., & Sörum, N. (2020). Digitalizing consumer society: Equipment and devices of digital consumption. *Journal of Cultural Economy*, 13(1), 1-11.
- Collins, H., & Evans, R. (2017). *Why democracies need science*. Denmark: John Wiley & Sons.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. New York: Sage Publications.
- Czarniawska, B. (2007). *Shadowing: and other techniques for doing fieldwork in modern societies*. Denmark: Copenhagen Business School Press.
- D'Ambrosi, L. (2018). Pilot study on food sharing and social media in Italy. *British Food Journal*, 120(5), 1046-1058.
- Da Giau, A., Macchion, L., Caniato, F., Caridi, M., Danese, P., Rinaldi, R., & Vinelli, A. (2016). Sustainability practices and web-based communication. *Journal of Fashion Marketing and Management*, 20(1), 72-88.
- Denzin, N. K., & Giardina, M. D. (Eds.). (2016). *Ethical futures in qualitative research: Decolonizing the politics of knowledge*. UK: Routledge.
- Doyle, S. (2007). Member checking with older women: A framework for negotiating meaning. *Health care for women international*, 28(10), 888-908.
- Dubois, A., & Gadde, L. E. (2014). "Systematic combining": A decade later. *Journal of Business Research*, 67(6), 1277-1284.

- Eriksson, M., Lindgren, S., & Osowski, C. P. (2018). Mapping of food waste quantification methodologies in the food services of Swedish municipalities. *Resources, Conservation and Recycling*, 137, 191-199.
- FAO (2011). *Global food losses and food waste: Extent, Causes and Prevention*, Food and Agriculture Organization of the United Nations, Rome.
- Foucault, M. (1988). Technologies of the self, in L.H. Martin, H. Gutman and P.H. Hutton (eds). *Technologies of the Self: A Seminar with Michel Foucault*. Amherst, MA: University of Massachusetts Press, pp. 16–49.
- Fay, B. (1996). *Contemporary philosophy of social science: A multicultural approach*. Oxford: Blackwell.
- Flick, U. (2018). *An Introduction to Qualitative Research*. (6th Ed.). New York: Sage.
- Fuentes, C. (2015). Images of responsible consumers: Organizing the marketing of sustainability. *International Journal of Retail & Distribution Management*, 43(4/5), 367-385.
- Fuentes, C., & Fredriksson, C. (2016). Sustainability service in-store: Service work and the promotion of sustainable consumption. *International Journal of Retail & Distribution Management*, 44(5), 492-507.
- Fuentes, C., Bäckström, K., & Svingstedt, A. (2017). Smartphones and the reconfiguration of retailscapes: Stores, shopping, and digitalization. *Journal of Retailing and Consumer Services*, 39, 270-278.
- Fuentes, C., & Hagberg, J. (2013). Socio-cultural retailing: what can retail marketing learn from this interdisciplinary field?. *International Journal of Quality and Service Sciences*, 5(3), 290-308.
- Fuentes, C., & Sörum, N. (2019). Agencing ethical consumers: Smartphone apps and the socio-material reconfiguration of everyday life. *Consumption Markets & Culture*, 22(2), 131-156.
- Fuentes, C., & Svingstedt, A. (2017). Mobile phones and the practice of shopping: A study of how young adults use smartphones to shop. *Journal of Retailing and Consumer Services*, 38, 137-146.
- Fuentes, C., Cegrell, O., & Vesterinen, J. (2021). Digitally enabling sustainable food shopping: App glitches, practice conflicts, and digital failure. *Journal of Retailing and Consumer Services*, 61, 102546.

- Gaber, H. R., & Wright, L. T. (2014). Fast-food advertising in social media. A case study on Facebook in Egypt. *Journal of business and retail management research*, 9(1), 52-63.
- Grewal, D., & Levy, M. (2007). Retailing research: Past, present, and future. *Journal of retailing*, 83(4), 447-464.
- Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The Future of Retailing. *Journal of Retailing*, 93(1), 1-6.
- Grönroos, C. (1997). From marketing mix to relationship marketing: Towards a paradigm shift in marketing. *Asia-Australia Marketing Journal*, 2 (1), 9-29.
- Hagberg, J., Sundstrom, M., & Egels-Zandén, N. (2016). The digitalization of retailing: An exploratory framework. *International Journal of Retail & Distribution Management*, 44(7), 694-712.
- Halkier, B., Katz-Gerro, T., & Martens, L. (2011). Applying practice theory to the study of consumption: Theoretical and methodological considerations. *Journal of Consumer Culture* 11(1), 3-13.
- Hänninen, M., Smedlund, A., & Mitronen, L. (2018). Digitalization in retailing: multi-sided platforms as drivers of industry transformation. *Baltic Journal of Management*, 13(2), 1746-5265.
- Hansson, L. (2017). Promoting ethical consumption: The construction of smartphone apps as “ethical” choice prescribers. In Cochoy, F., Hagberg, J., McIntyre, M.P., & Sörum, N. (Ed.), *Digitalizing Consumption: How devices shape consumer culture* (pp. 104-121). Oxfordshire, United Kingdom: Taylor & Francis.
- Huang, M. H., & Rust, R. T. (2011). Sustainability and consumption. *Journal of the Academy of Marketing Science*, 39(1), 40-54.
- Ivanova-Gongne, M., Kaporcic, N., Dziubaniuk, O., & Mandják, T. (2018). Collecting rich qualitative data on business relationships and networks in CEE countries: Challenges and plausible solutions. *Industrial Marketing Management*, 70, 193-204.
- Jenkins, R., & Denegri-Knott, J. (2017). Extending the mind: Digital devices and the transformation of consumer practices. In Cochoy, F., Hagberg, J., McIntyre, M.P., & Sörum, N. (Ed.), *Digitalizing Consumption: How devices shape consumer culture* (pp. 85-102). Oxfordshire, United Kingdom: Taylor & Francis.

- Johnson, R. B. (1997). Examining the validity structure of qualitative research. *Education*, 118(2), 282-292.
- Jones, P., Hillier, D., & Comfort, D. (2011). Shopping for tomorrow: Promoting sustainable consumption within food stores. *British Food Journal*, 113(7), 935-948.
- Kärrholm, M., & Nylund, K. (2011). Escalating consumption and spatial planning: Notes on the evolution of Swedish retail spaces. *European Planning Studies*, 19(6), 1043-1059.
- Kim, J. (2015). Sustainability in social brand communities: Influences on customer equity. *Journal of Global Scholars of Marketing Science*, 25(3), 246-258.
- Kumar, P. (2016). State of green marketing research over 25 years (1990-2014): Literature survey and classification. *Marketing Intelligence & Planning*, 34(1), 137-158.
- Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Harvard University Press.
- Latour, B. (2000) "Where are the missing masses? – The sociology of a few mundane artifacts", in W.E. Bijker & Law, J. (Ed.), *Shaping Technology/Building Society – Studies in Sociotechnical Change*. Cambridge, MA: The MIT Press, pp. 225–258.
- Leech, B. L. (2002). Asking questions: Techniques for semi-structured interviews. *PS: Political science and politics*, 35(4), 665-668.
- Lehner, M. (2015). Translating sustainability: the role of the retail store. *International Journal of Retail & Distribution Management*, 43(4-5), 386-402.
- Lekakis, E.J. (2014). ICTs and ethical consumption: The political and market futures of fair trade. *Futures*, 62: 164–172.
- Luchs, M. G., Phipps, M., & Hill, T. (2015). Exploring consumer responsibility for sustainable consumption. *Journal of Marketing Management*, 31(13-14), 1449-1471.
- Mahmoud, M. A., Kastner, A. N. A., & Lartey, J. O. (2017). Internet-based relationship marketing: A sub-Saharan African perspective. *Journal of Relationship Marketing*, 16(3), 179-196.
- Markkula, A., & Moisander, J. (2012). Discursive confusion over sustainable consumption: A discursive perspective on the perplexity of marketplace knowledge. *Journal of Consumer Policy*, 35(1), 105-125.
- Mason, J. (2017). *Qualitative researching*. London: sage.

- Mattila, M., Mesiranta, N., & Heikkinen, A. (2020). Platform-based sustainable business models: reducing food waste in food services. *International Journal of Entrepreneurship and Innovation Management*, 24(4-5), 249-265.
- Michellini, L., Principato, L., & Iasevoli, G. (2018). Understanding food sharing models to tackle sustainability challenges. *Ecological Economics*, 145, 205-217.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook (3rd Edition)*. London: Sage.
- Morgan, G. (2006). *Images of Organization*. Thousand Oaks, Calif: Sage.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13.
- Owens, K. A., & Legere, S. (2015). What do we say when we talk about sustainability?. *International Journal of Sustainability in Higher Education*, 16(3), 367-384.
- Pacey, A. (1983). *The culture of technology*. Cambridge, Massachusetts: MIT press.
- Pantano, E., & Gandini, A. (2018). Shopping as a “Networked Experience”: An Emerging Framework in the Retail Industry. *International Journal of Retail & Distribution Management*, 46(7), 690-704.
- Petry, N. M. (2002). A comparison of young, middle-aged, and older adult treatment-seeking pathological gamblers. *The Gerontologist*, 42(1), 92-99.
- Pinto, C. D., Herter, M. M., Rossi, P., & Borges, A. (2014). Going green for self or for others? Gender and identity salience effects on sustainable consumption. *International Journal of Consumer Studies*, 38(5), 540-549.
- Prothero, A., Dobscha, S., Freund, J., Kilbourne, W. E., Luchs, M. G., Ozanne, L. K., & Thøgersen, J. (2011). Sustainable consumption: Opportunities for consumer research and public policy. *Journal of Public Policy & Marketing*, 30(1), 31-38.
- Pryke, M., Rose, G., & Whatmore, S. (Eds.). (2003). *Using social theory: Thinking through research*. London: Sage.
- Rantala, T., Ukko, J., Saunila, M., Puolakoski, H., & Rantanen, H. (2019). Creating sustainable customer value through digitality. *World Journal of Entrepreneurship, Management and Sustainable Development*, 15(4), 325-340.
- Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European journal of social theory*, 5(2), 243-263.

- Reisch, L., Eberle, U., & Lorek, S. (2013). Sustainable food consumption: An overview of contemporary issues and policies. *Sustainability: Science, Practice and Policy*, 9(2), 7-25.
- Rigby, D. (2011). The future of shopping. *Harvard business review*, 89(12), 65-76.
- Ritch, E. L. (2015). Consumers interpreting sustainability: moving beyond food to fashion. *International Journal of Retail & Distribution Management*, 43(12), 1162-1181.
- Rosenlund, J., Nyblom, Å., Ekholm, H. M., & Sörme, L. (2020). The emergence of food waste as an issue in Swedish retail. *British Food Journal*, 122(11), 3283-3296.
- Rust, R. T. (2020). The future of marketing. *International Journal of Research in Marketing*, 37(1), 15-26.
- Saber, M., & Weber, A. (2019). How do supermarkets and discounters communicate about sustainability? A comparative analysis of sustainability reports and in-store communication. *International Journal of Retail & Distribution Management*, 47(11), 1181-1202.
- Secondi, L., Principato, L., & Mattia, G. (2019). Can digital solutions help in the minimization of out-of-home waste? An analysis from the client and business perspective. *British Food Journal*, 122(5), 1341-1359.
- Schaefer, A., & Crane, A. (2005). Addressing sustainability and consumption. *Journal of Macromarketing*, 25(1), 76-92.
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. New York: Sage.
- Soron, D. (2010). Sustainability, self-identity and the sociology of consumption. *Sustainable development*, 18(3), 172-181.
- Sörum, N., & Fuentes, C. (2017). "Write something": The shaping of ethical consumption on Facebook. In Cochoy, F., Hagberg, J., McIntyre, M.P., & Sörum, N. (Ed.), *Digitalizing Consumption: How devices shape consumer culture* (pp. 144-166). Oxfordshire, United Kingdom: Taylor & Francis.
- Sparks, L. (2018). The Changing Roles of Food Retailing. *Food Retailing and Sustainable Development: European Perspectives*, 101-117.
- Steils, N. (2021). Qualitative Experiments for Social Sciences. *New Trends in Qualitative Research*, 6, 24-31.
- Tracy, S. J. (2019). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. UK: John Wiley & Sons.

- Vargo, S. L., & Lusch, R. F. (2017). Service-dominant logic 2025. *International Journal of Research in Marketing*, 34(1), 46-67.
- Vaughter, P., & Alsop, S. (2017). Sustainable imaginaries: A case study of a large suburban Canadian university. *International Journal of Sustainability in Higher Education*, 18(1), 129-145.
- Vermeir, I., & Verbeke, W. (2008). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics*, 64(3), 542-553.
- Westrup, U. (2018). The potential of service-dominant logic as a tool for developing public sector services. *International Journal of Quality and Service Sciences*, 10(1), 36-48.
- Wiese, A., Kellner, J., Lietke, B., Toporowski, W., & Zielke, S. (2012). Sustainability in retailing—a summative content analysis. *International Journal of Retail & Distribution Management*, 40(4), 318-335.
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, 15(1), 45-55.
- Wu, S. I., & Chen, J. Y. (2014). A model of green consumption behavior constructed by the theory of planned behavior. *International Journal of Marketing Studies*, 6(5), 119-132.
- Yin, R. K. (2015). *Qualitative research from start to finish*. New York: Guilford publications.

APPENDIXES

APPENDIX I. TABLE 2: TOP WORD ASSOCIATIONS WITH SUSTAINABLE FOOD CONSUMPTION

	Interviewees Top Word Associations with Sustainable Food Consumption	Theme 1	Theme 2	Theme 3
Interviewee 1	Ecological, Non-Plastic, Composting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interviewee 2	Plant-Based, Ecological, No Food Waste	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 3	Efficiency, No Food waste, Natural	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interviewee 4	No Food Waste, Creative, Buying with Love	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interviewee 5	Locally Produced, Local Farm, Zero Waste	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interviewee 6	Less Packaging, Raw Food, Vegan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 7	Food Source, Reducing Food Waste, Conscience for Carbon Emissions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 8	Shopping, No Food Waste, Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interviewee 9	Green, Recycle, Healthy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 10	Local, Eco Friendly, Organic, Food Waste	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interviewee 11	Planning, Smart Shopping, Structred Fridge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interviewee 12	Conscious, Complexity, Organic, Regional	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 13	Efficiency, Recycle, Eco Friendly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 14	Healthy, Local, Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Interviewee 15	Natural, No Food Waste, Organic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Interviewees:		11	13	7

* Theme 1: Sustainable food consumption as practicing efficiency and no waste

* Theme 2: Sustainable food consumption as practicing responsible everyday food choices

* Theme 3: Sustainable food consumption as practicing environmental conscience

APPENDIX 2. INTERVIEW INVITATION AND AGREEMENT FORM

Hej! You are receiving this form because you have either been selected or recommended for participation in my master thesis interviews.

My name is Jared Offei Larrey and I am a final year master student at the Department of Service Management and Service Studies at Lund University. In my master thesis, I seek to understand and explain how the sustainable food consumption practices of young adults (18-35 years) are enabled and shaped by social network platforms and ethical consumption applications. Within the domain of retail, sustainable food consumption can be understood as a conscious process of purchasing, consuming and disposing food with minimal impact on our environment, economy and society. In recent years, food consumption has been portrayed as a complex problem in our society, and nearly one-third of all food is lost due to the deficiency of sustainable practices. If you would like to share your everyday practices on how you engage with digital technologies to enable and shape your sustainable food consumption, kindly fill my interview agreement form with your preferences. All information you provide is handled confidentially.

- I have knowledge about sustainable food consumption and social media or ethical consumption apps (E.g. Facebook, Instagram, Karma, Too Good to Go).
Yes [] No []
- I am willing to participate in the interview. Yes [] No []
- Via Zoom [] Facebook [] In person []
- I consent to recording the interview only for academic purposes and analyzed anonymously []
- Please state your preferred date and time []
- Your first name: []
- Gender: Male [] Female [] Other []
- Age: 18-21 [] 22-25 [] 26-30 [] 31-35 []
- Occupation: Student [] Employee [] Other []
- City of Residence: Lund [] Helsingborg [] Other []

APPENDIX 3. INTERVIEW GUIDE

Opening Questions

1. What have you been doing recently regarding your studies or work?
2. What was the latest thing you heard in the media about sustainability and consumption?
3. What social network platforms and ethical consumption applications do you associate with your sustainable food consumption? (*E.g. Facebook, Instagram, Karma, Too Good to Go, Hello Fresh*).
4. What kinds of information are promoted on these platforms about sustainable food consumption?

Grand Tour Questions

Understanding Sustainable Food Consumption among Young Adults

5. What does sustainable food consumption mean to you?
6. Have these views you have changed over time? When and how?
7. Do you think information and promotions on social network platforms and ethical consumption apps have played a role in this?
8. To sum your understanding can you identify any three phrases that define your personal engagement with sustainable food consumption? (*E.g. Eco, less price, saving food, buying locally produced, healthy, vegan*).

Skills and Competences

9. What is it that social network platforms and ethical consumption apps help you to do in your everyday sustainable food consumption? (*E.g. Locating retailers, finding sustainable deals*).
10. Can you share any examples of skills you have acquired for this purpose based on your engagement with social network platforms and ethical consumption apps? (*E.g. How to share and dispose food sustainably, making recipes from food close to expiry*).

Digital Technologies and the Shaping of Sustainable Food Consumption Practices

11. How has your engagement with social network platforms shaped the way you purchase food sustainably? Can you share any recent examples?

12. How has your engagement with social network platforms shaped the way you consume food sustainably? Can you share any recent examples?
13. How has your engagement with social network platforms shaped the way you dispose food sustainably? Can you share any recent examples?
14. How has your engagement with ethical consumption apps shaped the way you purchase food sustainably? Can you share any recent examples?
15. How has your engagement with ethical consumption apps shaped the way you consume food sustainably? Can you share any recent examples?
16. How has your engagement with ethical consumption apps shaped the way you dispose food sustainably? Can you share any recent examples?
17. Would you say these technologies influence how you qualify food choices? (*E.g. what is sustainable and what is not, screening labels, quality*). Why? How?
18. Do you in some way feel obliged to follow sustainable food practices promoted or recommended on social network platforms and ethical consumption apps? Why?
19. What would shape your sustainable food consumption if technology does not exist?

Closing

20. I am now done with my questions, is there something more you want to say?
21. Can you recommend another participant suitable for this interview?