Exploring the interaction between online practices and offline domestic food practices in family homes: implications for food waste reduction campaigns

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A thesis submitted in partial fulfilment of the requirements of the University of the West of England, Bristol, for the degree of Doctor of Philosophy

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Date of submission: 03 June 2023

Acknowledgements

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Abstract

Food waste is a significant problem in the food system, contributing to the environmental impact of food production and distribution as well as food inequality. In the UK and other high-income countries, a high proportion of the food waste in the food system takes in people's homes. Food waste levels have remained high despite numerous campaigns aimed at reducing it. Existing research shows that the levels of food waste are particularly high in households with children. It also shows that the causes of food waste are different in different household types. Yet food waste campaigns are generally targeted broadly at all households.

This research explores how middle-class parents in the UK navigate their domestic food practices using social media. By doing so, it seeks to provide insights into how food waste reduction campaigns can be more effective in future, including by targeting them more effectively at different households. The research took place in two phases. Phase one involved an analysis of posts on the popular online parenting forum Mumsnet Talk. Phase two involved interviews with parents who use social media in relation to food. The study has used a Social Practice Theory lens to explore the mechanisms linking domestic food practices in family homes and social media use.

Seven processes of linkage that connect online and offline practices have been identified in this research. It has also identified factors which shape the flow of information within these processes. While existing research has characterised how parents change and adapt their food provisioning practices and the role emotion plays in practice change, this research through the processes of linkage that have been identified, provides insights into the role social media plays in this navigation, negotiation and change.

This research makes theoretical contributions, including to understandings of the way media discourse shapes day-to-day practices. Existing practice theory-informed conceptualisations of media discourse describe it as a resource that is drawn upon to inform practices, this research characterises a recursive relationship between social media discourse and offline practices in which they are co-constructive. It means that what happens on social media can only be understood within the context of the offline practices which take place around it.

Informed by the processes of linkage, practical insights are provided that should aid future targeted food waste reduction campaigns, both those that might use social media and

those that take place elsewhere. These insights include the different ways know-how is curated on social media and why this is so effective at bringing about adaptation and change to the ways domestic food practices are performed.

Chapter 1: Introduction

1.1 Overview

High levels of household food waste have remained a challenging problem to solve in the UK and elsewhere in spite of numerous campaigns aimed at combatting it. This research seeks to inform future domestic food waste reduction campaigns so that they are more effective, using innovative approaches such as social media.

This chapter sets out the problem at hand, the high levels of domestic food waste and the environmental and social impact of this. It also justifies the specific focus of this research, the interaction between what happens in family homes in relation to food and the use of social media by parents. It will do this by describing why food waste in family homes is worthy of specific attention in developed countries and the need to explore the interconnections between what happens in the home in relation to food and information and conversations online given the increasing interconnections between food and the digital world. Finally, this chapter provides an introduction to the theoretical approach employed in this research and outlines the research objectives.

This research project was conceived and started before the COVID-19 pandemic. But the interviews with parents that form part of the research data took place during the pandemic, a time when day-to-day family life, including what happened in the home in relation to food, was disrupted. The impact of the pandemic on food provisioning in families is not the focus of this research, so it is not explored in detail in this research. However, where parents described how their food provisioning practices had changed due to the pandemic, this is acknowledged when the data is presented.

This PhD is relevant to food waste behaviour change practice and policy as well as science communication practice and research.

1.2 Origins of the research

My initial impetus for this research can be traced back to 2016 and an out-of-date pot of yoghurt in our fridge. My wife was standing with the fridge door open and asking whether the yoghurt should be thrown away. I responded that I would eat it, as otherwise it would be a waste of money, but that it would be too risky to give it to our children, Joe and Chloe, who were aged nine and five at the time. As someone who teaches risk communication on a science communication MSc programme, the ways in which we make risk-related decisions is something that has always been of interest. This conversation was a reminder

of the complex ways we make decisions around food in the home, involving judgements about risk and health, food waste and family budgeting.

At the same time, I have also been conscious of the amount of food that we throw away as a family. The healthy, vegetable-rich diet that we try to provide to our children as parents is not one that our children have always appreciated. Some meals have ended up in the recycling bin almost untouched. Attempts to introduce new meals into our weekly repertoire have often been viewed with suspicion. The problem with food waste in our home is one that has continued unresolved.

All of this led to my interest in domestic food waste as well as communication in relation to food, including food waste reduction campaigns, food safety guidance and communication with parents in relation to healthy diets for children.

1.3 Definition of key terms

1.3.1 Food waste

The term 'food loss' is often used to refer to the decrease in the amount of edible food available during the production, post-harvest and processing stages of the food supply chain (Gustavsson, Cederberg and Sonesson, 2011), whereas 'food waste' is the food disposed of at the retail stage and in people's homes (Parfitt, Barthel and Macnaughton, 2010).

The distinction between food loss and waste is useful when considering the food system as a whole, enabling distinctions to be drawn between inadequacies in the food production infrastructure that lead to a reduction in the food available for consumption, such as when it goes mouldy in warehouse storage, and the behavioural factors that lead to food waste later in the food system. There is no clear line in the food system where 'food losses' end and 'food waste' begins. For example, Porpino, Parente and Wansink (2015) describe food waste as: "…unintended losses of food produced for human consumption occurred (sic) in the distribution and consumption stages of the food supply chain…" (ibid., p.620). In this research, food loss will refer to food that is no longer available for consumption in all stages of the food supply chain, from farms to processing and large-scale storage. Food waste will refer to food lost to consumption at the retail and consumption stages. The focus of this research is food waste in people's homes, domestic food waste.

Domestic food waste can be divided into three types – unavoidable, meaning food that could not have been eaten such as eggshells and tea bags, possibly avoidable being food and drink some consume and others do not such as bread crusts and potato skins and

avoidable (Quested, Ingle and Parry, 2013). Avoidable food waste is defined as: "Food and drink thrown away because it is no longer wanted or has been allowed to go past its best." (Quested, Ingle and Parry, 2013, p.23). For simplicity and brevity in this research, food waste shall be taken to mean any food that could conceivably be eaten but is not and is thrown away, so including possibly avoidable and avoidable waste.

1.3.2 Social media

Research conducted within this PhD involves an analysis of the content of posts on Talk, the online forum of the parenting website Mumsnet, as well as interviews with parents about their use of information online about food, including on online platforms such as Facebook, WhatsApp and Instagram. The plethora of digital technologies that afford different degrees of interaction between participants, interaction with different numbers of individuals and different hierarchies of those interacting, has created challenges in defining these technologies. There is a lack of consistency in the definitions of terms such as 'personal media', 'social media' and 'social networking sites' in the research literature. Within this research, for the sake of simplicity, it is useful to use a term that encapsulates all forms of online platforms that are being studied.

Luders (2008) makes a useful distinction between personal media and mass media after noting that online means of communication now available to individuals, such as an email newsletter distributed to thousands of individuals, have the ability to be read, listened to or watched by thousands of people; something that was historically the preserve of mass media. Luders (2008) observes that a clear dichotomy between personal media and mass media cannot be made, instead proposing a model in which personal media and mass media are located differently on two axes. On one axis: "…personal media are more symmetrical, facilitating mediated interaction, whereas mass media are more asymmetrical." (Luders, 2008, p.698). On the other axis: "…personal media are closer to the de-institutionalised or de-professionalised content pole, whereas mass media are closer to the institutionalised or professional pole." (Luders, 2008, p. 698). This definition provides a distinction between personal communication online and mass media, which is useful for this research. However, personal media is a broad term as defined by Luders (2008) as it encapsulates forms of communication, such as email and mobile phones, that do not fall within the focus of this research.

Boyd and Ellison (2008, p.211) provided an oft-cited definition of social networking sites:

> …web-based services that allow individuals to (1) construct a public or semi-public profile with a bounded system (2) articulate a list of other users with whom they share a connection and (3) view and traverse their list of connections and those made by others within the system.

The Mumsnet Talk forum does not fit this definition, since users post anonymously using pseudonyms and do not have a profile. Within this PhD, the term which appears to fit the online platforms studied best is that of social media, as defined by Carr and Hayes (2015, p.50):

> Social media are Internet-based channels that allow users to opportunistically interact and selectively self-present, either in real time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others.

This definition encapsulates the social aspect of all the platforms being studied as part of this research and given that it does not stipulate that users create profiles, it includes online forums such as Mumsnet Talk. It also includes other platforms that could be considered social networks, such as Facebook, as well as WhatsApp that enables interaction with a relatively narrow audience. So the term social media will be used in this research as the term that encapsulates all the platforms being studied.

In common with other research on online forums (a relevant example being Pederson and Lupton's (2018) study of interactions on Mumsnet Talk) the term 'thread' will be used in this research to denote a conversation on the forum involving two or more participants. These threads usually start with a parent asking a question on Mumsnet Talk.

1.3.3 Family homes

The terms family home and household do not necessarily refer to the same thing. A household is a much broader term that applies to any circumstance where more than one person shares accommodation and pools their resources to varying degrees (Beardsworth and Keil, 1997). A family home is a specific type of household. In this research, a family home is taken to mean a household that includes a parent or parents plus at least one child.

1.4 The food waste problem

Globally it is estimated that one third of the edible parts of food produced for human consumption is lost or wasted – roughly 1.3 billion tonnes per year (FAO, 2011). This waste produces 3.3 billion tonnes of carbon dioxide equivalent in greenhouse gas emissions (FAO, 2013). If it were a country, food waste would be the third largest greenhouse gas emitter in the world, after China and the US (ibid.). The main contributors to the carbon footprint of food waste are cereals, contributing 34 per cent of the total, followed by meat (21 per cent) and vegetables (21 per cent) (ibid.).

Food is lost or wasted throughout the food supply chain, from production to consumption (FAO, 2011). Each stage of food production and each foodstuff has its own source of greenhouse gases. For cereals for example, the production and application of nitrogen fertiliser has resulted in rising levels of nitrous oxide (N_2O) in the atmosphere (Martínez-Dalmau, Berbel and Ordóñez-Fernández, 2021), with N_2O being a greenhouse gas 265- 298 times more potent than carbon dioxide (US Environmental Protection Agency, 2021). Whereas with ruminants, such as cattle and sheep, methane, also a powerful greenhouse gas, is the major source of emissions (FAO, 2013).

The transportation of food impacts on global warming because of the long distances over which it is transported, including by air (Wakeland, Cholette and Venkat, 2011). The refrigeration of food to keep foods chilled or frozen through the processing, storage, transport and sale of foodstuffs, is also contributing to greenhouse gas emissions (Coulomb, 2008).

As well as contributing to global warming, pollutants from food production effect air, water and soil quality as well as human health (Davis, 2020). Globally, the blue water footprint of the food lost or wasted at all stages of the food system was 250km^3 in 2007, more than 38 times the blue water footprint of households in the US (FAO, 2013), with blue water being water taken from ground or surface water. Food waste also contributes to the loss of biodiversity through agricultural activities (Aktas et al., 2018).

At the same time, nearly 2.37 billion people did not have access to adequate food in 2020 (FAO, IFAD, UNICEF, WFP and WHO, 2021). Food waste has implications for food security as reducing it would help to feed more people (Aktas et al., 2018).

In low-income countries, such as those in sub-Saharan Africa and South-East Asia, most food is lost in the early stages of the supply chain, such as through poor harvesting techniques and the challenges of keeping stored food fresh in warm conditions (FAO, 2013;

Aggidis et al. 2013). As national income increases, the principal source of food waste tends to travel up the food system – regional and national food storage and distribution facilities fail to match improvements at the farm level in countries such as India and the former Soviet republics (Aggidis et al. 2013). In high-income countries, a high proportion of waste takes place at the consumption stage (FAO, 2013). The environmental impact of food wasted at the consumption phase is particularly high, given the cumulative environmental impact of all phases of the food supply chain that have gone before it (FAO, 2013).

Each consumer in the EU wastes an average of 123 kilogrammes of food per year and almost 80% of this is avoidable in that it is edible food that is not eaten (Vanham et al., 2015). Food waste by consumers appears to be a particular problem in the UK. Brautigam, Jorissen and Pfeifer (2014) found the proportion of food wasted or lost throughout the food system that is the result of consumers in the UK, 53%, is the second highest of 27 EU member countries. While the environmental impacts of domestic food waste can be reduced by avoiding it going into landfill using local authority food waste collections and home composting, the largest environmental benefits are derived from avoiding food waste in the first place due to the energy and other resources required to grow, transport and store food (Quested et al., 2013).

Research into domestic food waste often looks at waste in households with different characteristics including the number of household members, the ages of those members and socio-economic characteristics. However, research indicates that households with children produce more food waste than other households (Hebrok and Boks, 2017). As a result of this, an OECD working paper made a policy recommendation that food waste reduction campaigns should be aimed at households with young children (Millock, 2014).

So while there are several factors about the nature of the food we eat that make it more or less sustainable, such as the amount of meat in our diets and the distance and means food is transported (O'Neill et al., 2019), the focus on this research is on food waste, given the scale of the problem.

1.5 Efforts to reduce food waste

Food waste has been a focus of a recent increase in attention as both the subject of research and policy (von Massow et al., 2019). The importance of the food waste challenge is relevant to the UN Sustainability Development Goals (SDGs), with SDG2 being to "End hunger, achieve food security and improved nutrition and promote sustainable agriculture." and SDG12 being to "Ensure Sustainable Consumption and Production

Patterns." (UN, 2015). UN SDG 12.3 is specifically to halve per capita food waste at the retail and consumer level by 2030, a goal that both the European Union and UK Government have pledged to meet (Council of the European Union, 2020; House of Lords, 2022).

The FAO has a global initiative to reduce food waste, Save Food (FAO, 2022) and the European Union is planning to propose legally binding targets for food waste reduction by the end of 2023 (European Commission, undated). The European Commission's Farm to Fork strategy on food waste describes investigating ways to reduce waste at the production stages and "…revising EU rules to take account of consumer research." (European Commission, 2020, p.14).

Efforts to reduce food waste in the UK have been focused through the charity Waste and Resources Action Programme (WRAP). Its initiatives include Love Food Hate Waste, aimed at providing practical advice to consumers on using up leftovers and raising awareness, explaining the link between food waste and climate change (WRAP, 2018). WRAP also works with food manufacturers and retailers on food waste reduction initiatives (Quested et al., 2011).

Food waste in the UK appears to be reducing. Post farm gate food waste in the UK was 9.5 million tonnes in the UK in 2018, a 15% reduction compared with 2007 (WRAP, 2020). Yet progress has not been consistent, with progress in reducing household food waste stalling between 2012 and 2015 (ibid.) and it remains at a high level. The UK's National Food Strategy recognises the environmental impact of household food waste (Dimbleby, 2021), but it lacks detail on how levels of waste can be reduced.

A common approach suggested to reducing domestic food waste is to raise awareness among consumers (FAO, 2011). Food waste reduction campaigns across Europe have aimed to increase consumers' awareness of food waste and its impacts; this is particularly the case in the most industrialised countries of Germany, France, the Netherlands and Italy (Secondi, Principato and Laureti, 2015). These campaigns have also encouraged and facilitated the use of leftovers by providing recipe ideas (Hebrok and Boks, 2017). Similar awareness campaigns have been employed outside Europe, such as the Reduce Food Waste, Save Money campaign in Canada in which households were provided with information on the environmental and social impacts of food waste and tips on food planning and using up leftovers (van der Werf, Seabrook and Gilliland, 2021).

However, a growing body of research indicates that attitudes towards food waste have little influence on levels of domestic food waste (Stancu, Haugaard and Lahteenmaki, 2016). There is an intention-behaviour gap, in that intentions to reduce waste do not necessarily manifest themselves as actual reductions, in part due to the actions of other family members in family homes (Hebrok and Boks, 2017).

As well as behaviour change campaigns, the high levels of domestic food waste have led to research into finding technological solutions, such as packaging that reduces the rate of food decay (Wikström and Williams, 2010), using techniques such as moisture control and the release of preservatives (Liegeard and Manning, 2019). Intelligent packaging that can monitor food quality and communicate this to consumers (ibid.) and smart fridges that can perform functions such as monitoring food and suggesting meals based on their contents as part of a 'smart home' (ibid.) are also being investigated. One particularly innovative idea is that of the 'grumpy bin' that visualises and articulates its mood using an e-ink display and sound effects, with the mood influenced by the weight of food disposed of (Altarriba et al., 2017).

Today, there are also digital technologies aimed at enabling the redistribution of food leftovers to those who want or need it (Hebrok and Boks, 2017) including the use of web platforms and apps (Michelini, Principato and Iasevoli, 2018). These could help to reduce food waste as well as helping to redistribute foodstuffs to social groups who need it (ibid.).

There has been limited exploration of the use of social media as a tool to reduce domestic food waste. Notable exceptions are a campaign on Facebook by food retailer Asda in which customers were invited to post their favourite recipes that use up leftovers (Young et al., 2017) and a BinCam system that captured images of food waste placed in a bin and uploaded them on Facebook alongside photos of the owners of the bin (Comber and Thieme, 2013). There has also been experimentation with online food waste education campaigns, such as a website providing podcasts, infographics and videos outlining strategies to reduce food waste (Wharton et al., 2021) and an online quiz testing consumers' knowledge of food waste as a problem and how to reduce it (Soma, Li and Maclaren, 2020). However, in their summary of a research project exploring the use of social media in food waste reduction campaigns, Hou et al. (2022) highlight a lack of research into the potential of social media campaigns to reduce food waste.

1.6 Connections between food, parenting and the online world

Food and media are closely connected in contemporary life. As Leer and Klitgaard Povlsen (2016, p.1) put it in the introduction to their book *Food and Media:* "…media pervade all spheres and all chains of contemporary food-ways, from certified labels to television chefs and blogs and recipes on the internet." The proliferation of online media has created new connections with food. From meal planning apps and online supermarket shopping to recipe websites and cooking how-to guides on YouTube as well as food safety guidance on institutional websites, what happens in our homes in relation to food is informed and shaped by information and resources online. Outside of the home, smartphones enable people to find the best places to eat using geolocation technology, then share photos and comments about their eating experiences (Lupton, 2018). The relationship between food and media is a reciprocal one. While media pervades all aspects of our lives related to food, the digital world has also been colonised all things food related (Lewis, 2020); blogs, websites, online forums, apps and social media groups are all dedicated to food (Lupton, 2018).

At the same time online sources are employed by today's parents for everything from health-related guidance to advice on the upbringing of their children (Plantin and Daneback, 2009; Bernhardt and Felter, 2004). These online resources are places of advice and social support. Bringing the worlds of food and parenting together, parents seek information about food digitally, whether it's advice about diet and nutrition on a parenting app (Lupton and Pedersen, 2016) or a blog specifically for home-cooked family meals (Lupton, 2018), as well as conversations about food on parenting forums.

Parenting websites have been available since the 1990s and are a popular medium for parents, combining information about pregnancy and parenting with discussion boards or forums (Lupton, Pedersen and Thomas, 2016). The most popular parenting websites include Mumsnet and NetMums in the UK and BellyBelly, BabyCenter and CafeMom in the US (ibid.). Mumsnet, whose forum, Talk, is the focus of the first phase of this research, is the UK's largest online network of parents with eight million unique visitors per month and 1.2 billion page views per year (Mumsnet, 2022c). Mumsnet Talk covers all aspects of parenting life from pregnancy to looking after teenagers to money, relationships as well as food and the family.

There are also specialist websites for parents in specific circumstances such as single or step-parents and parents who follow a specific parenting style such as attachment

parenting (Lupton, Pedersen and Thomas, 2016). There are Facebook groups for parents facing specific challenges in feeding their children, such as cow's milk protein allergy, as well as for those who have adopted specific approaches to food provisioning and parenting, such as gentle parenting and natural parenting. These days parenting is lived out online as well as in the home.

Online means of communication have given rise to a participatory culture. Where once there were media producers and media consumers, now those who were once consumers are now generating content for YouTube, as well as blogging and contributing to online forums. In this participatory culture "...fans and other consumers are invited to actively participate in the creation and circulation of new content." (Jenkins, 2006, p.290). This participation is aided by the affordances of technology such as smartphones with cameras and internet access as well as the affordances of online platforms that facilitate content creation, sharing and interactivity (Lupton, 2018).

This participatory culture is seen in online realms related to food and parenting. Food amateurs and professionals coexist on the likes of blogs (Lewis, 2020) and on YouTube, celebrity chefs such as Jamie Oliver vie for attention alongside amateur cooks and their 'how to' cook videos (Lupton, 2020). In parenting, mothers have become bloggers and Instagram users to the point where content creation becomes a career (Germic, Eckert and Vultee, 2021).

The highly participatory nature of online information has enabled the rise of the 'ordinary expert' in which amateurs, those who do not have professional knowledge, share their know-how about food through the likes of food videos (Lewis, 2020) and blogs. This know-how is derived from their experiences in their own kitchens at home. The 21st century has also seen the development of the parent-parenting expert (Hardyment, 2007) who shares their learned know-how with others. Sometimes, these two elements of food expert and parenting expert come together. When social media monitoring company Brandwidth analysed the words in the Twitter biographies of food bloggers and vloggers, they found the word 'mom' to be prominent (Joyce, 2017). The development of 'ordinary experts' are seen in relation to other subject matter online too, such as science, where "...the people formerly known as audiences..." (Fahy and Nisbet, 2011, p.782) are adding their lay expertise and knowledge to the voices of scientists.

1.7 The approach to this research

The research undertaken within this PhD focuses on family homes in the UK, exploring how activities in the home related to food lead to interaction on social media and how online interaction shapes food-related activities in the home. Family homes were selected as a focus for this research given the relatively high levels of food waste in this household type.

The determinants of food waste are influenced by the household type, with specific factors leading to food waste in family homes. These factors are explored in greater detail in Chapter 2 but include attempts by parents to feed children healthy food not aligning with children's tastes (Charles and Kerr, 1988) as well as a wariness about the safety of food provided to children and stricter adherence to food labels (Terpestra et al., 2005; Cox and Downing, 2007).

Given that the factors that cause food waste are specific to household type, it is useful for any communication activities aimed at reducing waste to be targeted at a specific household type. However, the approach in most current food waste reduction campaigns is to take a more generalised approach that includes all household types. This is somewhat surprising given that characterising and understanding specific audiences is an important principle in marketing efforts aimed at changing behaviour (Newton et al., 2013) as well as science communication (Schäfer and Metag, 2021).

In addition to the causes of food waste being specific to household type, a common finding in food waste research is that the amount of food thrown away in a household is influenced *all* activities in the home related to food, from meal planning and shopping, to food storage in the home, preparation and then consumption (Quested, Marsh, Stunell and Parry, 2013). So when considering the interaction between in-home food activities and online activities, all stages of the 'domestic food process', from planning to consumption, are within the scope of this research (Figure 1.1).
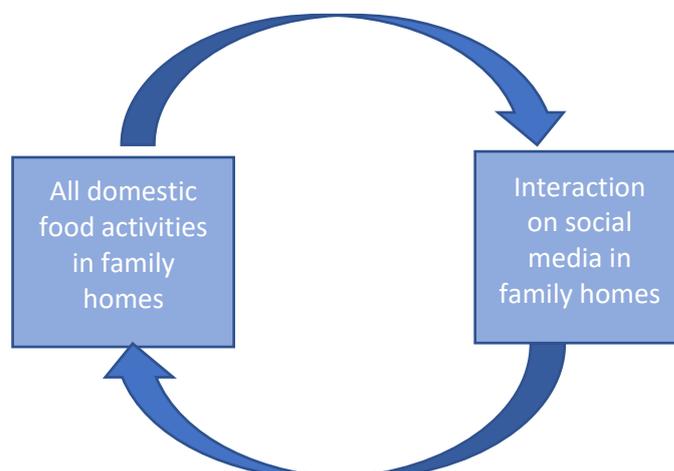
Figure 1.1 The approach in this PhD is to consider how domestic food activities lead to social media use and how interaction and information on social media shape food activities in the home.

Food conduct in the home is complex and informed by several priorities including nutrition, food safety and health. In family homes, parents seek to provide their children 'good food' which is healthy and nutritionally balanced (Bava, Jaeger and Park, 2008). In terms of food safety, as parents seek to protect their children, this can lead to them being risk averse in the food they give to their children (Cox and Downing, 2007). Food conduct is informed by normative prescriptions of the correct way to do things (Warde, 2016). Given the complexities of decisions around food, all of which may potentially have a bearing on food waste, the research conducted here involves a broad exploration of food in the family home, including nutrition and food safety, and the interrelations with social media use. This will provide a richer understanding of these interrelations than would otherwise be the case.

In seeking to explore the interrelations between activities in family homes related to food and online interactions, the research within this PhD has been conducted in two phases:

Phase 1: An analysis of threads on the parenting forum Mumsnet Talk that relate to food. This has enabled an exploration of the types of domestic food practices discussed on the forum, the nature of the conversations there and how they may shape in-home food behaviours.

Phase 2: Interviews with parents in the UK who use social media in relation to food. This builds on the insights provided in Phase 1 to provide a richer understanding of how parents use social media in relation to food. This includes how they use different social media and what factors influence whether or not they use guidance from social media to inform what happens in their homes in relation to food.

The two phases are described in detail in Chapter 4.

1.8 Theory within this research

The theory most commonly employed in food waste research is the Theory of Planned behaviour Ajzen, 1991). The shortcomings of this theory when researching food waste are outlined in detail in Chapter 2, a principle one being that intentions to reduce food waste

do not always manifest themselves in actual reductions (Hebrok and Boks, 2017). The theoretical lens through which the interactions between food and social media are considered in this research is Social Practice Theory. This reflects a growing body of research that seeks to understand food conduct and other forms of consumption through a theoretical lens that does not focus on individual intentions (Halkier and Jensen, 2011; Evans, 2011).

There is no single, unified practice theory; instead there is a range of writings by theorists who employ a 'practice approach' (Postill, 2010). The central unit of analysis in practice theories is a practice which has been defined as a "…a routinized type of behaviour." (Reckwitz, 2002, p.249). Individuals are said to act as 'carriers' of practice (Ropke, 2009).

Practice theory is employed in this research as food practices are repeated and routinized activities (Warde, 2016). It also enables the social context in which food practices take place and the social norms relating to food to be considered (Halkier and Jensen, 2011). Finally, practice theories enable us to explore the interconnections between different practices to be considered (ibid). These include interconnections between different food practices such as planning, shopping, cooking and eating as well as between food practices and the other practices that make up daily life, such as working and parenting (Halkier, 2020). Social media practices can also be considered within this constellation of interconnected practices.

There have been calls for a practice theory approach to media analysis use, most notably by Couldry (2010), on the grounds that it enables us to see how media use is integrated into other practices. So, for example watching a football match may be seen as part of the practice of being a football fan, or if watching in a public space, part of a practice of group solidarity (ibid). However, in this research, social media use is viewed as a distinct practice (rather than part of another) as this enables us to view the connections between social media use and food practices and the ways in which they shape one another.

Chapter 3 provides a description of the origins of Social Practice Theories, the formulations of practice theory employed in this research as well as a further discussion of food practices, social media practices and parenting as a practice.

1.9 Aim and objectives

The overall aim of this research is to explore how parents navigate domestic food practices using interactions on online social media platforms and the implications of this for future food waste reduction campaigns.

This broad approach of considering the interrelationship between domestic food activities and interaction on social media can be broken down into a series of research objectives:

RO1. Investigate how parents' domestic food activities and food provisioning priorities influence their social media practices.

RO2. Explore how different information sources are employed by parents to navigate domestic food practices, including the affordances in practice of different online social media platforms.

RO3. Investigate what determines the extent to which information sourced online influences domestic food practices, including the roles of trust and community in social media platforms.

RO4. Consider how insights into how information from social media shapes what happens in the home in relation to food may be used to inform future domestic food waste reduction campaigns.

1.10 The gap in knowledge

The approach taken in this research is to explore the interconnections between domestic food practices in family homes and the social media practices of parents. This will enable us to investigate how social media shapes domestic food practices as parents seek to adapt and negotiate these practices given the interconnections with other practices that make up daily life.

Chapter 2 provides a review of the existing literature on food waste and social media use by parents, as well as other relevant research. It highlights how there is limited research on social media use by parents in relation to food (notably exceptions being Curney and Wilkinson, 2016 and Fraser et al., 2021). The research in this PhD is this first to take an expansive view, mapping the connected domestic food practices in family homes and exploring the interconnections between these and social media practices. This is important given that all domestic food practices ultimately influence food waste levels. The research in this PhD is also the first to consider how domestic food practices and online practices are interlinked and what shapes these linkages, such as what online information does and does not influence domestic food practices and why.

1.11 Conclusion – contributions of this research

The research in this PhD seeks to contribute to food waste reduction policy and the implementation of communication campaigns aimed at reducing domestic food waste. It will do this by providing insights into how social media shapes domestic food practices. More specifically, this research:

- o Provides a map of the intersecting food-related practices in family homes.
- o Reveals the mechanisms by which social media practices influence domestic food practices and characterises the nature of the communication within these mechanisms.
- o Shows how parents navigate food provisioning practices given the constraints imposed by other practices that make up daily life and the role of social media in this process.
- o Provides insights into how parents use interactions on social media to negotiate prescriptions of good food in family homes on TV and in institutionally-derived information (such as parenting leaflets) as well as official food safety guidance.

This research is of broader relevance. As Tania Lewis states in the introduction to her book, *Digital Food*: "The culinary realm I suggest offers a particularly generative space through which to understand the complex evolution and impact of the digital on our everyday lives…" (Lewis, 2020, p.4). This research also aims to make theoretical contributions to understandings of how everyday practices and online practices intersect, mutually shaping one another, and the processes or mechanisms through which they are connected.

Chapter 2 – Literature review

2.1 Introduction

This chapter provides a description of existing research in relation to the interconnected areas of food (including food waste), family and media discourse. In doing so, it provides a justification for the focus of this research and its theoretical approach as well as an insight into the gaps in knowledge it seeks to address.

While this study is not seeking to add to the large volume of research literature that already exists on what causes of food waste, the insights from existing literature help us to understand and characterise the problem at hand and so is important to consider in this study. Previous food waste research has informed the approach to this study, including the focus on family homes and the decision to include all domestic food behaviours, from writing shopping lists and doing the shopping to cooking and mealtimes, within its scope.

Given the focus on family homes in this study, the insights existing research provides us into why food gets wasted in this type of household is explored in this chapter. Related to this, research into food, family and parenting also provides important context.

The different theoretical approaches to researching domestic food waste are also reviewed in this chapter. While this research is focused on the connections between social media use and what happens in family homes in relation to food rather than food waste specifically, it is still useful to consider the main theoretical approaches to food waste and their strengths and weaknesses. This allows a more detailed justification for the use of practice theory in this research than was possible in the introduction. Following on from this, the insights into food waste provided by Social Practice Theory are also outlined in this chapter.

Since the research being conducted here is exploring the use of social media in relation to food by parents, it is also important to understand what existing research tells us about this. This chapter highlights that existing research into this specific domain is limited. However related areas of research, the use of media discourse by parents and the use of media discourse in relation to food, are described in this review.

Figure 2.1 provides an overview of the main themes of this literature review. While food waste in family homes and the use of social media in relation to food by parents are central themes within this study and therefore in this literature review, the review also considers closely interrelated areas of existing research.

At the end of each section of this chapter, a brief summary is provided, highlighting how the literature has informed the approach to this research and any relevant gaps in knowledge.
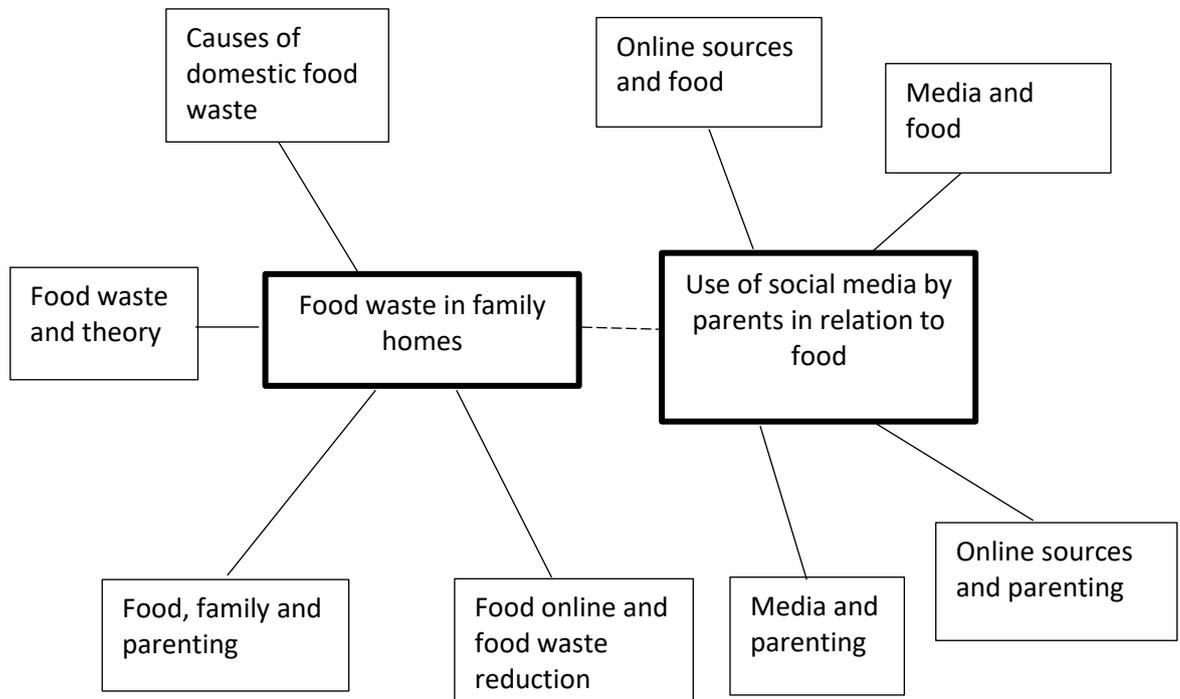
Figure 2.1 Overview of the main themes of the existing literature reviewed in this chapter. Food waste in family homes and the use of social media by parents in relation to food are identified as central themes and important related themes are also highlighted.

2.2 Food and the family

The synthesis of the literature in this section provides important context for this study by characterising food provisioning in family homes and food provisioning's connection to parenting. Some of the literature that has informed this overview was focused on families (eg. Charles and Kerr, 1988; Halkier, 2016b) while some was not (eg. Evans 2011; Halkier 2016a). Several of the studies used to inform this overview do not describe the socio-economic backgrounds of their participants. But where differences in findings among different social classes are highlighted in the literature, these are mentioned.

2.2.1 Priorities for food provisioning in family homes

The exploration of the literature has revealed several priorities for food provisioning among parents:

Providing 'proper food'

Parents want to feed their children 'proper food' which is generally taken to mean food cooked from scratch with fresh, healthy ingredients (Evans, 2011; Charles and Kerr, 1988). Providing healthy, nourishing food and a variety of foods is associated with being a 'good provider' in the home (Graham-Rowe, Jessop and Sparks, 2014). Typically, the good provider role is one principally adopted by the mother and providing proper food is considered important in maintaining the family's health (Charles and Kerr, 1988).

'Proper food' does not encompass frozen food (Evans, 2011). In part, this may be down to the nature of frozen convenience foods. One parent in Evans's research commented that she did not want to buy food that is "pumped so full of crap that it never goes off" (Evans, 2011, p.436), a likely reference to preservatives and that she: "…wouldn't give that [frozen food] to my family as it isn't food" (Evans, 2011, p.436). 'Proper food' also does not encompass convenience, ready-made foods (Charles and Kerr, 1988), take-away foods or processed foods (Halkier, 2016a). Proper food includes food provided for weaning that is made from scratch rather than bought in a jar (Brembeck and Fuentes, 2017).

Parents may classify foods and meals as 'good' or 'bad' (Halkier, 2016b), with good food generally defined as being healthy. More specifically it encompasses fruit, food that is low in sugar and meals that are nutritionally balanced (Bava, Jaeger and Park, 2008).

Parents' understandings of the correct way to provide food for the family lead them to purchase fresh ingredients, such as vegetables, and prepare cooked-from-scratch meals in advance, so they can be stored and reheated at a time when they will be consumed but less time is available for preparation. This might involve cooking large amounts of a meal specifically to consume at a different time or on numerous occasions (Evans, 2011), what is known as batch cooking. Or cooking more than is required at one mealtime, so the leftovers can be consumed at another time, saving time for time-pressured parents (Cappellini, 2009). These approaches to family food provisioning extend to weaning foods as well as foods for older children (Bembeck and Fuentes, 2017).

Plessz and Gojard (2015) suggest that the consumption of fresh rather than processed vegetables may be influenced by social class to some degree. In their study that involved French participants, they found those with above median incomes and the highest education levels consumed larger amounts of fresh vegetables.

Providing plenty of food

As well as providing the right food, exiting research on domestic food behaviours that includes family households among its subjects highlights how being a 'good provider' may involve buying and cooking too much food – over portioning meals to ensure that children have plenty to eat (Exodus, 2006 and Graham-Rowe, Jessop and Sparks, 2014). Buying more food than will be consumed when there are children in the house, is not something that is confined to the UK. Studies in other countries, such as the Netherlands, have found this to be the case too (Terpstra et al., 2005). Ensuring these is plenty of food for family members may involve providing back-up foods in case a healthy meal is rejected (Evans, 2012).

Providing plentiful food and food cooked from scratch is not just the preserve of middle-class families, it has also been found in low-income households (Porpino, Parente and Wansink, 2015).

A variety of foods

Eating properly may also entail eating a variety of foods (Halkier, 2016a), encompassing different ethnic cuisines (Evans, 2012). This priority for variety may manifest itself as the provision of a wide repertoire of meals over time, encompassing aesthetically pleasing, tasty and exotic meals (Bava, Jaeger and Park, 2008) as well as creativity and experimentation drawing on resources such as cookbooks (DeVault, 1991).

Charles and Kerr (1988) considered 'food ideologies' within family homes – beliefs and attitudes that inform domestic food provisioning. At the time of their research, meat was often a central aspect of this ideology; typically part of a meal that also consisted of vegetables and potatoes. While food ideologies may still be evident, the taste for the exotic may have replaced the central role that a meal of meat, veg and potatoes once played in 'proper' family meal provisioning.

Food that's safe

Domestic food provisioning also demands that food should not be 'past its best' and still safe to eat (Evans, 2011). Within young family, the desire to provide and protect exerts a strong control and encourages risk avoidance, with food being thrown away to be on the safe side (Cox and Downing, 2007). Section 2.3.6 considers the relationship between food safety and food waste.

Economy

This concern may lead to bulk buying food, so that its per unit cost is lower (Ganglebauer, Fitzpatrick and Comber, 2013), or having 'make-do' dishes such as bubble and squeak that use up leftovers (Watson and Meah, 2012). Concern for budgeting, frugality and 'thrift' (Watson and Meah, 2012) is often not an explicit priority among research participants; it is more evident as an undercurrent of frustration, such as a husband in Evans's research who says: "You could feed a family of four with the stuff she chucks out." (Evans, 2012a, p.45).

Middleton, Golley, Patterson and Coveney (2022) used a grounded theoretical approach to explore the practicalities of preparing and having a family meal as well as the decision making involved. They found that parents factored considerations such as nutrition and variety into their decisions but tended to have to prioritise practical considerations, such as preparation time and cost.

2.2.2 Family life and mealtimes

The 'family meal' is a widely held approach to family food provisioning and is as much about the opportunity for interaction as it is about the food (Knight, O'Connell and Brannen, 2014; Charles and Kerr, 1988; Brembeck and Fuentes, 2017). It is typically the cooked dinner at the end of the day, as opposed to breakfast or lunch, and involves the family sitting round a table together (Charles and Kerr, 1988). It is a practice that has transitioned between generations, something that parents remember as a child (Knight, O'Connell and Brannen, 2014). Food and mealtimes are important for the social reproduction of the family and a means to reinforce the ideology of the family (Charles and Kerr, 1988). Parents seek to encourage conversation at mealtimes; the family meal is an opportunity for the family to connect and discuss emotionally charged subjects with children in a non-confrontational way (MacDonald, Murphy and Elliot, 2018).

Research has explored what happens at family mealtime and found that it involves some level of control by the parent – there are rules for mealtimes: always at a table, always together (MacDonald, Murphy and Elliot, 2018). Parental control may also involve restricting some foods, such as crisps, and encouraging consumption of particular foods (O'Connell and Brannen, 2013).

Family mealtimes often involve eating the same thing, perhaps adapting family meals so they would be palatable to a young child (Brembeck and Fuentes, 2017). But not always, such as when a baby is provided with special food rather than spicy 'adult' food that the parents wish to continue eating (Brembeck and Fuentes, 2017).

2.2.3 – Food, mothering and intensive parenting

Women still typically have responsibility for the majority of household duties, including cooking, despite working full- or part-time (Charles and Kerr, 1988). This creates time pressures (Bava, Jaeger and Park, 2008; Knight, O'Connell and Brannen, 2014). The extent to which 'proper food' can be provided at 'proper times' is determined by the extent to which other activities, such as work and school commitments allow this (MacDonald, Murphy and Elliot, 2018).

The time pressures under which parents operate has intensified in the US, UK and beyond driven by the growth in the range of activities that fall with the scope of parenting that were previously not part of the task, a phenomenon referred to as 'intensive parenting' (Faircloth, 2014). Responsibility for these additional activities, such as running each child to several clubs in a week, are almost always undertaken by the mother (Faircloth, 2014), leading Hays to coin the term 'intensive motherhood' (Hays, 1996).

Within intensive parenting, "the methods of appropriate child rearing are construed as child-centred, expert-guided, emotionally absorbing, labor [sic] intensive and financially expensive." (Hays, 1996, p.8). Parents are responsible for mitigating or eliminating risks and ensuring their child develops well. Mealtimes, stories and playing are expected to be safe and optimal for the child's development (Faircloth, 2014). This requires a certain skillset, a level of expertise about children and their care (Faircloth, 2014). A diverse range of activities are encompassed within intensive parenting, including food provisioning (ibid.). It is "...the normative standard, culturally and politically, by which mothering practices and arrangements are evaluated." (Arendell, 2000, p.1195).

> The ideas [of intensive parenting] are certainly not followed in practice by every mother, but they are, implicitly or explicitly, understood as the *proper*, approach to the raising of a child by the majority of mothers. (Hayes, 1996, p.9).

In relation to food, failure to meet the demands of providing 'proper' nutritious food, as prescribed by intensive parenting, perhaps due to the limited repertoire of foods a child is prepared to eat, can result in feelings of anxiety and shame (Charles and Kerr, 1988).

DeVault (1991) found different expectations of family food provisioning in different classes of household, with women in working class families having developed a standard repertoire of meals they cooked for their families whereas women in professional households sought

to provide an evolving variety of meals drawing on 'cooking discourse', recipe books, magazines and newspaper features, to inform their provisioning.

> These women [living in professional households] subordinated their own preferences to produce a version of family that imitates images from the 'best' textual sources, ideals that they share with others of their class and that come to serve as markers of success. (DeVault, 1991).

For women in households with less income, providing food that is good for the family as a priority may be subordinated by the cost of food (Charles and Kerr, 1988). Women in low-income households may struggle to provide 'proper meals' and be unable to do so, in spite of a desire to do so (Charles and Kerr, 1988). Women in professional households learn attitudes towards food of seeking variety and exotic flavours as well as treating cooking as a hobby because they are shared in social circles (DeVault, 1991).

A mother's approaches to food provisioning can be shaped by their own experiences as a child. MacDonald, Murphy and Elliot (2018) found that one mum did not wish to replicate her experience of her father dictating what was eaten at mealtimes in accordance with his own preferences. Instead, she allowed her children to have choice over the food eaten. Experiences of being forced to complete a meal before leaving the table, or being allowed to eat a desert form vivid memories for some parents who may resist adopting such approaches with their own children (Knight, O'Connell and Brannen, 2014).

A mother's own relationship with food can shape her concept of good provisioning in relation to her children. Memories of overeating unhealthy foods, such as ice cream, can lead to strict controls on the consumption of these foods (Knight, O'Connell and Brannen, 2014). Or experiences of parents being 'obsessed' with healthy eating can lead to mum trying to be relaxed about what her children eat (ibid.).

Grandparents may not exert the same control over food in terms of providing healthy food – being more lenient with treats and investing more time in food preparation as an act of care and love (MacDonald, Murphy and Elliot, 2018; Charles and Kerr, 1988). There may also be inter-generational differences in conceptions of what constitutes 'proper food' (Knight, O'Connell and Brannen, 2014). Grandparents may cater to children's tastes as a way to make their time with them special (ibid.).

2.2.4 Domestic food practices and the COVID-19 pandemic

Practices related to food and eating changed during the COVID-19 pandemic due to lockdown restrictions and work from home recommendations which left more time for family mealtimes (Hammons and Robart, 2021). Families were eating together more often during a lockdown and parents were less concerned about the ease of preparation of food than compared with before the lockdown (Snuggs and McGregor, 2021).

During the pandemic lockdowns, looking at households collectively rather than just family homes, the frequency of food shopping reduced but overall food purchases increased, particularly of longer life products such as tinned and frozen vegetables, pasta and rice (Roberts and Downing, 2020). There were reductions in purchases of salad packs, pre-cut vegetables and ready meals (Roberts and Downing, 2020).

There is evidence of reduced domestic food waste during the pandemic, due to increases in meal planning, food preserving and the use of leftovers due to concerns about food shortages as well as attempts avoid visiting supermarkets as frequently (Babbitt, Babbitt and Oehman, 2021; Rodgers et. al., 2021). In the UK specifically, there is evidence of more pre-shop planning, such as checking cupboards, more home freezing and more batch cooking and using-up leftovers as well as a reduction in self-reported food waste (Roberts and Downing, 2020). Households with children in the home were among the household types most likely to report a reduction in food waste during the pandemic lockdowns (Roberts and Downing, 2020).

2.2.5 Summary

This synthesis of existing literature has characterised parents' priorities in relation to food, which are providing 'proper food', plenty of food, a variety of food and food that is safe. It has also made the connection between food and today's demands of intensive parenting and mothering. This provides important context for this study investigating the relationship between family food and social media. While parents' food provisioning priorities and conceptions of good parenting may be influenced by socio-economic factors, the limited description of participants' socio-economic backgrounds in relevant research has limited the degree to which differences can be described.

2.3 Causes of food waste in the home

2.3.1 Immediate causes of food waste and food waste types

Section 2.3 starts by giving a broad overview of domestic food waste research before looking at food waste in specific household types, including family homes. Broadly, two approaches to measuring domestic food waste have been employed in studies: collection and analysis by a third party or measuring and recording by households (Langley et al., 2007). Food waste research has often involved attempting to determine relationships between these measures of waste levels and socio-demographic, behavioural and attitudinal factors (Koivupuro et al. 2012). Other research has simply sought to measure the amount of domestic food waste (Langley et al., 2007).

Comparisons between studies that measure food waste volumes can be challenging because of the different methods employed to quantify food waste volumes and different components of foods being included as waste in different studies, such as peel and bones being included in some studies and not others (Koivupuro et al. 2012).

Questionnaires, interviews and food waste diaries kept by research participants are common approaches to researching the causes of waste (Hebrok and Boks, 2017). More recently, technology such as the 'fridgecam' has been deployed to help with research by keeping track of what is purchased and consumed (Ganglebauer, Fitzpatrick and Comber, 2013).

Neff, Spiker and Truant (2015) found nearly three-quarters of their survey participants in the US reported that they discard less food than the average American. In total, 73% of these participants also indicated they invest a great deal or a fair amount of effort into minimising the food they throw away. Similarly in the UK, in a survey commissioned by WRAP, 43% of respondents recorded their food waste as 'hardly any' or 'none' (Cox and Downing, 2007). While food waste in people's homes is a problem shared by many countries, domestic food waste has been studied to a particularly large degree in the UK (Porpino, Parente and Wansink, 2015).

There are several factors that can lead to food waste that sit at the surface level. Quested, Ingle and Parry (2013) found through their kitchen diary research that 47% of avoidable food waste was thrown away because it was not used on time, either having gone off while being stored or having passed the date on the packaging. A further 31% was wasted because the research participant cooked, prepared or served too much. Of the rest of the

food that was thrown away, some was not consumed due to personal preferences, such as food purchased and not liked, and accidents such as food dropped on the floor.

Fresh fruit, vegetables and salad account for over a quarter of avoidable food and drink waste in the UK (Quested, Ingle, and Parry, 2013). In the same research, meat and fish contributed to 8% of total waste and bakery waste, including bread, a similar amount (ibid.). Similarly, Cox and Downing (2007) found 30% of their participants said they wasted a 'significant amount' of fruit and vegetables, the highest proportion of participants saying they wasted a 'significant amount' of any foodstuffs. The next highest were breads and cakes (ibid.). So the shelf life of food is a contributing factor to the likelihood that it will be disposed of.

All of these factors that lead to food waste, such as food not being eaten before its use-by date and foods with a short shelf-life being the ones to be most likely to be thrown away, are immediate practical causes of food waste that in many instances will be underpinned by underlying factors.

2.3.2 Interlinked domestic food provisioning behaviours and waste

Existing research evidences how food waste levels in a household are dependent on people's actions in relation to several interlinked behaviours in domestic food provisioning – the planning, shopping, storing, cooking and consumption of food (Quested, Marsh, Stunell and Parry, 2013; Romani et al., 2018). This means that food waste should not be considered on its own as a discrete behaviour. To get a clear picture of what leads to domestic food waste, studies need to encompass all domestic food activities.

Hebrok and Heidenstrøm (2019), though interviews with participants and observations of what food was in the fridge, freezers and cupboards describe factors throughout the domestic food provisioning process that influence food waste, including:

- Planning – attempts to plan food purchasing and provisioning over a longer term, such as a week, can reduce the flexibility of food provisioning, leading to waste.
- Shopping - buying ingredients for specific meals when shopping can lead to waste as unused parts of those ingredients are often not put to alternative uses.
- Storage - food stored at the back of the fridge or in a drawer, so less visible, is often wasted.

- Cooking the right amount can be challenging as it is hard to assess how much individual household members will consume on a particular day.
- Consumption – the nature of a mealtime influences the amount of food generated. Evening meals and those where others are present tend to produce more waste.

Waste and Resources Action Programme (WRAP) has tracked several domestic food activities throughout this domestic food provisioning process to give an indication of behaviour change over time *(*Quested, Marsh, Stunell and Parry, 2013*)*. It has also determined specific factors that may influence these behaviours. So for example, planning meals in advance is influenced by whether there is good communication within a household and time available to plan (ibid.). WRAP's research has found positive correlations between planning meals in advance, checking food levels before shopping and making a shopping list (ibid.).

2.3.3 Income and food waste

At a global level, as a nation's income increases, the diet of its population shifts from starch staples to foodstuffs with a shorter shelf life, resulting in increased waste (Parfitt, Barthel and Macnaughton, 2010). In affluent countries, food is available in relative abundance and so is relatively cheap, at least for many members of society, and this reduces the value placed on food (Hebrok and Boks, 2017). Secondi, Principato and Laureti (2015) found the highest levels of food waste in Europe in the richest and most developed countries.

There is conflicting evidence on how household income influences food waste. In their study of Norwegian consumers, Melbye, Onozaka and Hansen (2017) found no relationship between annual household income and attitudes towards wasting food, but their study did not include households considered to have low income by international standards. Koivupuro et al. (2012) found no correlation between household income and food waste in their study of Finnish households. Whereas in their study of Australian consumers, Baker, Fear and Denniss (2009) found that higher household incomes were associated with higher levels of food waste.

There is also evidence of high levels of food waste in lower income households. In their study of low-income households in Brazil, Porpino, Parente and Wansink (2015) found that strategies adopted by low-income families to save money, such as buying food in bulk, resulted in higher food waste levels. Cox and Downing (2007) in research on UK consumers, found those in the lower social classes of C2, D and E were more likely to say their food

waste was high than those in A,B and C1 classes; although the amount of food wasted was measured by self-reporting and so likely to be of variable accuracy. Koivupuro et al. (2012) in their study of Finnish households found those who did not use 'buy one get one free' offers and other discounted food tended to waste more – they suggest that those who do buy these offers value food more and so waste less.

2.3.4   Food waste in different types of household

Many food waste studies take national populations as a whole rather than looking at specific household types. Nevertheless, there is evidence that different household types waste food to different degrees and for different reasons. Given the focus on food in family homes in this study, existing research that has provided insights into the causes of food waste in family homes is considered separately in section 2.3.5 below.

While the overall amount of food waste is higher the more people there are in a household, the increase is not proportional; a four-person household does not waste four times the amount of a single-person household (Quested, Ingle and Parry, 2013). An individual living in a one-person household, wastes more per person than other household types (Quested, Ingle, and Parry, 2013; Koivupuro et al. 2012; Baker, Fear and Denniss, 2009). Food is often packaged in larger quantities or can be purchased cheaper in larger quantities, making it more challenging for individuals living alone to buy the right amount (Brook Lynhurst, 2008; Arsand and Parry, 2017; Baker, Fear and Denniss, 2009; Graham-Rowe, Jessop and Sparks, 2014). Recipes also tend to be for groups of people rather than individuals (Quested, 2013).

The over 65s, on average, waste 25% less food than the rest of the population in the UK when household size is controlled for (Quested, Marsh, Stunell Parry, 2013). Based on their research and other studies by WRAP, Quested, Marsh, Stunell, Parry suggest that lower levels of food waste among older people is not borne out of a concern for the environment. "…it appears that the over 65 age group is more likely to hold the view that wasting food is just wrong, and that this attitude may extend to 'wastefulness' in general." (Quested, Marsh, Stunell Parry, 2013, p.47). They speculate this may be connected with rationing during the Second World War and education relating to cooking and food management in the home. The lower levels of food waste among older people is not confined to the UK, it has been found elsewhere too such as The Netherlands (Terpestra et al., 2005) and in other European countries (Secondi, Principato and Laureti, 2015). Melbye, Onozaka and Hansen

(2017) found Norwegian older survey respondents had a more negative attitude towards food waste.

In younger consumers, and those not in a long-term relationship, lifestyle influences waste levels with sudden changes in plans due to new social opportunities leading to some waste as food purchased previously from supermarkets is left unconsumed (Ganglebauer, Fitzpatrick and Comber, 2013; Comber et al. 2013). Food waste is higher among those who eat a relatively high proportion of take-aways and convenience foods (Mallinson, Russell and Barker, 2016). Secondi, Principato and Laureti (2015) found those living in urban areas across Europe waste more food than those living in rural areas.

2.3.5 Food waste in family homes

The existing research demonstrates that households with children produce more food waste than those without children. Quested, Ingle and Parry (2013) provide figures for waste collected by local authorities in the UK with and without children. In households with three occupants including one child, 230kg of food is wasted per household per year compared with 210kg in households with three adults. In households with four occupants, 260kg of food were wasted per household per year in households with and without children. Gillick and Quested (2018) found the average family with children in the UK to waste 270kg of food compared with 180kg for the average household.

Similarly Parizeau, von Massow and Martin (2015) found that families with children produced more food waste and more types of food waste than other households. Cox and Downing (2007) found 40% of households with one or more children were self-declared high food wasters compared with 25% of those with no children.

Higher levels of waste in family households is not confined to the UK. An OECD report into household behaviour and food based on data from 12,000 households in 11 countries including Australia, Canada, France, Israel and Japan, found overall food waste to be higher in households with children under 5 years old (Millock, 2014). In her policy recommendations, the author suggests information campaigns aimed at reducing food waste should focus on this household type *(*ibid.).

Factors leading to food waste in family homes

Parents' desire to feed children 'proper food' can clash with children's eating preferences, which traditionally encompasses 'children's food' such as chips and fishfingers (Charles and Kerr, 1988), resulting in waste. The most direct consequence of this is that food is left on

children's plates because they are unhappy with the way it tastes (Cox and Downing, 2007). Almost half of Cox and Downing's (2007) interviewees with young children (47%) said they waste at least some food left on the plate after a meal compared to 32% of households in general. A higher proportion of families with children (27%) said they throw food away because they are trying to buy more fresh produce compared with households overall (23%). Mavrakis (2014) describes how families leave ample fruit in a fruit bowl to encourage consumption, but this often spoils as it is just not eaten. The desire to play out this good provider role is in conflict with the desire to reduce waste and so a potential barrier to food waste minimisation efforts (Graham-Rowe, Jessop and Sparks, 2014).

Research conducted by Exodus on behalf of WRAP (2007) demonstrated that in more than a fifth (23%) of households with children, different meals are prepared for different individuals each day. This has the potential to increase waste due to multiple different meals requiring different ingredients that may be partially used. Busy lifestyles in homes with children can make food provisioning planning difficult and limit time to take stock of food in the home (Hebrok and Boks, 2017). In older children, their social lives can lead to food waste in that they can often change their minds at the last minute about eating at home (Visschers, Wickli and Siegrist, 2016).

2.3.6 Food safety and food waste

The recent British relationship with food is somewhat framed by the 'food scares' that punctuated the 1980s – periods of 'acute collective anxiety' of invisible chemical hazards in food and food-borne pathogens (Milne, 2012). This led to date labels shifting from primarily being seen by consumers as an indicator of food quality, to indicating food safety (Milne, 2012). Consumers in European countries find food labels confusing and food items passing 'best before' dates can be a trigger for disposal (Hebrok and Heidenstrøm, 2019). Hebrok and Heidenstrøm (2019) suggest innovations, such as the Mimica Touch food label that becomes bumpy when food inside the packaging as spoilt, rather than carrying a pre-defined use-by date, could help to reduce waste.

Consumer campaigns have been focused on encouraging consumers to adopt food practices that reduce the risk of illness, such as complying with expiry date labelling (Melbye, Onozaka and Hansen, 2017). For example, the NHS's Eat Well webpages include advice on food storage and preparation aimed at reducing the risk of food poisoning (NHS,

2020). This pulls domestic food provisioning behaviours in a different direction to efforts to reduce food waste (Watson and Meah, 2012).

Households vary in their approaches to judging whether food is still fit for consumption – some sticking stringently to date labels, others using olfactory cues and others visual (Neff et al., 2015; Evans, 2011; Watson and Meah, 2012) and others using a mixture of both (Waitt and Phillips, 2016; Watson and Meah, 2012; Heidenstrøm and Hebrok, 2021). Hebrok and Heidenstrøm (2019) draw a distinction between institutionalised knowledge and rules (such as written information from the authorities and date labels) and know-how – sensory evaluations and previous experiences with similar foods.

While some households may employ some flexibility when it comes to whether food labels are adhered to, parents of young children read and act on the food safety labelling on packaging more often than older people (Terpestra et al., 2005; Cox and Downing, 2007). The concern for food safety may mean adhering to 'best before' dates rather than 'use-by' dates (Blitchfeldt, Mikkelsen and Gram, 2015). Blitchfeldt, Mikkelsen and Gram (2015) discuss the role the media has played in generating fears of food risks and how for some, food that has passed the 'best before' date has become 'dirty' and inedible. Parents pay close attention to the quality of food and do not give it to children if there is any doubt, but parents are less strict when it comes to themselves (Terpestra et al., 2005). Cox and Downing (2007) found the most commonly cited factor leading to food being thrown away when looking at households as a whole was food going past its use by or best before date, indicating the importance afforded to food labelling in disposal decisions. Consumers are most sensitive to labels with fresh meat and fish (ibid.). UK food retailers including Waitrose, Tesco and Marks & Spencer have taken steps to address this issue by removing best-before dates from fresh food products, including fruit and vegetables (Butler, 2022).

For some, the risk of getting ill from eating food that has gone off is related to the inconvenience of being ill, such as missing time at work during a busy period (Graham-Rowe, Jessop and Sparks, 2014). Such considerations make these individuals more risk averse and likely to abide by use-by dates (ibid.)

2.3.6   Food waste and supermarkets

Some householders state that some food goes to waste because it only lasts for a short period of time, or it is poor quality in terms of taste or texture (Graham-Rowe, Jessop and

Sparks, 2014). Some householders state that offers in supermarkets encourage them to over-purchase foods, resulting in waste (Ibid.).

2.3.8 Food waste and concern for the environment

Concerns about the amount of food wasted in a household tend to relate more to the money wasted than the impact on the environment or the social consequences of food waste (Watson and Meah, 2012; Cox and Downing, 2007; Stancu, Haugaard and Lähteenmäki, 2016). Other studies have found the wasted money associated with wasted food as being significant to consumers (Ganglebauer, Fitzpatrick and Comber, 2013).

The apparent lack of concern about the environmental impact of wasted food may stem from a belief that food waste does not have negative environmental consequences, in part because food decays and degrades naturally (Graham-Rowe, Jessop and Sparks, 2014; Lyndhurst, 2007 and Neff, Spiker and Truant, 2015; Cox and Downing, 2007) and a lack of a connection made in consumers' minds between food disposal and the resources required to grow, package and transport food (Watson and Meah, 2012). People may have become disconnected from food because they have less knowledge about where and how it was grown than previous generations (Dowler et al., 2010).

While Melbye, Onozaka and Hansen (2017) found that respondents to their survey of Norwegian residents who had high levels of environmental concern had more negative attitudes towards wasting food, it is unclear whether these attitudes would manifest themselves as lower waste levels given findings elsewhere of an 'intention/attitude behaviour gap' (see section 2.4).

When considering this from the perspective of motivations to reduce household food waste, rather than concerns about existing waste levels, saving money has been highlighted as the main motivational factor in the UK (Quested *et al.*, 2013; Graham-Rowe, Jessop and Sparks, 2014) and in the US (Neff, Spiker and Truant, 2015) and Australia (Baker, Fear and Denniss, 2009). A desire to reduce the impact on the environment and food shortages elsewhere were the lowest ranked motivations in research the UK (Quested *et al.*, 2013) and the US (Neff, Spiker and Truant, 2015) and these were also less common motivations in Australia (Baker, Fear and Denniss, 2009). When it comes to the environment, consumers are more concerned about packaging than the food inside it (Cox and Downing, 2007).

2.3.9 Food waste and home-grown produce

There is some evidence that food grown at home is less likely to be wasted because of the time and effort put into growing and harvesting it (Ganglebauer, Fitzpatrick and Comber, 2013). Growing food in the garden also provides a means to preserve its freshness by not harvesting it until it is needed (ibid.).

2.3.10 Food and freezing

Many consumers in the UK are uncertain about what food is suitable for freezing and when it can be frozen as well as how long foods can be stored in the freezer (Maxey and Oliver, 2010). For example, a common practice is to only freeze foods on the day of purchase, in contrast to Food Standards Agency advice that food can be frozen up to the 'use by' date (ibid.).

2.3.11 Food waste and food waste bins

There is some evidence that the act of sorting food waste for a municipal food waste disposal system leads to a reduction in food waste as it makes the amount of food being wasted more obvious (Miliute-Plepiene and Plepys, 2015). However, after a review of several studies looking at the effect of a household food waste collection on food waste levels, Foley and Hilton (2011) conclude that there is little evidence that the overall amount of waste generated in a household reduces with food waste sorting. While the amount of food waste collected within household food waste collection systems has been found to reduce over time, this may be due to reduced compliance, or food waste being diverted into composting (ibid.). While disposing of food waste in food bins and composting are preferable to food waste being sent to landfill, it is still second best to food waste itself being reduced due to the environmental costs of food production, transport and storage.

2.3.12 Summary

This section has characterised the nature of the food waste problem and provides a justification of key decisions within this research. The existing literature highlights how domestic food waste cannot be considered as a discrete behaviour. Levels of waste are ultimately dependent on all activities that form part of domestic food provisioning, from food planning and shopping to cooking, eating and mealtimes. The extent to which they are done (in the case of food planning) and how they are done ultimately determine how much food is thrown away. It is because of this that this research is focused on all domestic food behaviours and social media use by parents rather than being limited to food disposal.

While many domestic food waste studies encompass all household types, some this research does provide shafts of light, revealing important differences in not only food waste levels in households of different characteristics, but also some differences in why it takes place. The relatively high levels of food waste in households that include children is the impetus for the focus on family homes in this research. An important factor behind food waste in family homes is the clash between parents' priorities to feed children healthy food and children's food tastes. A concern for the safety of food provided to children and the consequent reliance on food date labels to inform decisions also leads to food waste.

2.4 Food waste and Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is a common theoretical lens employed in empirical food waste research (Schanes, Dobering and Gözet, 2018). It states that an individual's intentions lead to behaviour and an individual's intentions are themselves determined by their attitude towards that behaviour, their subjective norms (the perceived social pressure to perform a particular action) and the amount of control over that behaviour they perceive themselves to have, their perceived behavioural control (Ajzen, 1991). This is illustrated in Figure 2.2.
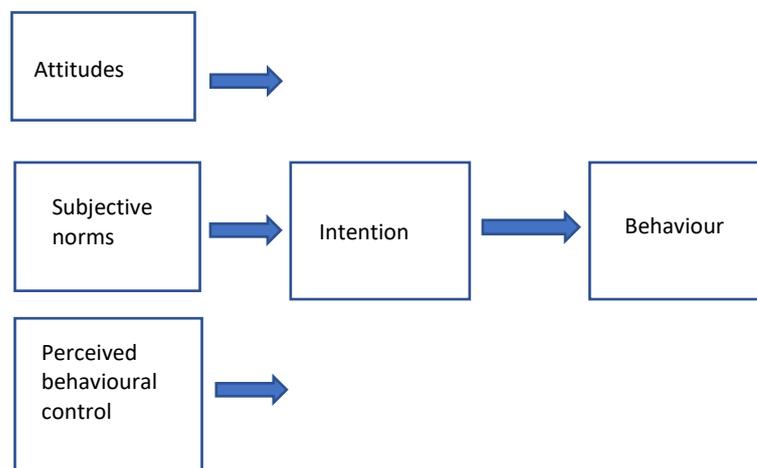
Figure 2.2. The Theory of Planned Behaviour suggests that behaviours are the result of intentions, which are themselves informed by attitudes, subjective norms and perceived behavioural control

Some domestic food waste studies that do not explicitly employ the Theory of Planned Behaviour still take the stance that attitudes lead to food waste behaviour and seek to understand what influences consumer attitudes (Melbye, Onozaka and Hansen, 2017) so that food waste reduction interventions can be planned. While such a 'motivations lead to

consumption' perspective (Keller and Halkier, 2014) approach is widely employed in research into domestic food waste, empirical research has presented a somewhat mixed picture of the role of attitudes and intentions in relation to food waste on food waste on behaviour.

Visschers, Wickli and Siegrist (2016) found that intention to reduce waste was correlated with the amount of waste and that: "Overall, our findings showed that TPB can explain the amount of food waste in households very well." (Visschers, Wickli and Siegrist, 2016, p.72). One of the attractions of TPB is that additional factors that may influence behaviour in a given context can be bolted on to the basic theoretical framework (Hargreaves, 2011). Visschers, Wickli and Siegrist (2016) found that the good provider identity was an important additional factor in explaining food waste behaviour, but the total amount of food waste in a household was not significantly related to attitudes to food waste.

Stancu, Haugaard and Lahteenmaki (2016) found that stated intentions to reduce food waste had a weak effect on levels of food waste, with shopping and leftovers reuse routines as well as perceived behavioural control having more of an influence. They conclude that food waste behaviour does not appear to be "…under strong volitional control". (Stancu, Haugaard and Lahteenmaki, 2016, p.14). Similarly, Stefan et al (2013) found that levels of waste in households were determined more by food provisioning routines, such as shopping, than an intention not to waste food. In an OECD report into domestic food waste, the extent of agreement with a statement about the importance of food waste as a problem among participants in a survey had no relationship with domestic food waste levels (Millock, 2014).

Russell et al. (2017) sought to add emotions in relation to food waste and habits to the Theory of Planned Behaviour in an attempt to develop a conceptual model of food waste. They used past food waste behaviour as an indicator of food waste habits and found a significant positive relationship between habits and current behaviour. They also found, however, that while higher stated negative emotions towards food waste resulted in an increase in intentions to reduce waste, subsequent behaviour was the reverse; those with higher stated negative emotions towards food waste tended to waste more.

The mismatch between intentions to reduce food waste and actual waste levels has been described as the intention or attitude behaviour gap (Schanes, Dobering and Gözet, 2018). It has also been found in other pro-environment food-related behaviours, such as purchasing sustainable dairy products (Vermier and Verbeke, 2006) and other

environment-related behaviours (Schanes, Dobernig and Gozet, 2018). The intention-behaviour gap appears to be present in relation to food behaviour, even when a connection is made between food and the environment. A report for the Science Museum Group in the UK, based on interviews, focus groups and surveys with participants in the UK, Brazil and India, describes a 'value-action gap', in all countries in relation to food waste, said to be a: "…tension between knowing about some food sustainability issues, and yet not feeling able, informed or motivated enough to take effective action." (Flow Associates, 2021, p.6). In Flow Associates' study, in the UK it was among the families who participated where there was the biggest disconnect between concern for the environment and their food choices and a tendency to buy cheap, energy-dense foods that are less sustainable than other foods. The value-action gap is not a phenomenon confined to food waste, it has been found in other forms of environmentally-sensitive behaviour (Shove, 2010).

In their review of food waste research, Hebrok and Boks (2017) suggest one factor behind the intention behaviour gap is the lack of actual control over food waste due to the behaviour of other family members in the household. Watson and Meah (2012) state that the "…broader patterns and rhythms through which everyday life is accomplished can easily work to displace enactment of concerns to avoid food waste." (Watson and Meah, 2012, p.116). This means, say Watson and Meah, that food waste reduction campaigns aimed at raising awareness of the social and environmental impacts of food waste, attempting to change behaviour by changing attitudes to food waste in other words, are likely to be ineffective.

Statistics that show how the level of food waste has changed over time appear to bear out this concern. Since 2007, WRAP's Love Food Hate Waste campaign in the UK has aimed to raise awareness of the need to reduce food waste among food consumers, as well as providing practical tips on how to do so (WRAP, 2018). The campaign has had some success. Total household food waste in the UK was 1.4 million tonnes lower in 2018 compared with 2007, a 18% reduction (WRAP, 2020). Nevertheless, food waste has remained truculently high in the UK. Even in 2018, total household waste still stood at 6.6 million tonnes, representing 70% of total food waste post farm gate (WRAP, 2020a).

Quested, Marsh, Stunell and Parry (2013) discuss different theories that could be employed in food waste research, including the Theory of Planned Behaviour and other theories focused on individuals and their decision making, such as the Theory of Interpersonal Behaviour and describe how such theories seek to explain a single behaviour. This, in addition to the attitude-behaviour gap, presents a problem when the factors leading to

food waste are being researched. As the level of food waste is the result of several interlinked domestic food-related behaviours, theoretical approaches focused on one behaviour are not an effective means to study and explain closely interconnected behaviours. Some food waste studies employing the Theory of Planned Behaviour (eg. Stancu, Haugaard and Lahteenmaki, 2016) do consider behaviours, such as shopping and planning, influencing food waste. But they add these behaviours to a single theoretical framework that seeks to explain a single behaviour, in this case food waste decisions, rather than employing a theoretical framework that provides a clear framework for considering the interdependencies and influences of behaviours that are some way connected as they are in domestic food provisioning.

Attiq et al., (2021) used the Theory of Interpersonal Behaviour to explore the influences on intentions to reduce food waste, finding that those with higher anticipated guilt of wasting food had higher intentions to reduce waste, reuse food or recycle food. However, the study did not investigate whether intentions manifested themselves as behaviour.

2.5 Food waste and Social Practice Theory

Sociological approaches have been applied as an alternative lens through which to view food waste in research (eg. Evans 2011; Evans, 2012a; Cappellini, 2009; Cappellini and Parsons, 2012). In part, this is an attempt to overcome the problem with individual, psychology-orientated theoretical approaches such as the Theory of Planned Behaviour that work on the basis that intentions and attitudes lead to behaviour.

Within the sociological approaches to understanding food waste, Social Practice Theory is most commonly used theory. The origins of and implications of using practice in research is explored fully in Chapter 3. In this chapter, the intention is to describe how it has been applied in domestic food waste research and in other strands of research that have sought to understand what takes place in the home in relation to food.

Rather than ascribe an individual's behaviours to their intentions and attitudes, practice theory recognises that an individual's actions, or 'practices' as they are known, are influenced by socially prescribed ways of doing things (Schanes, Dobernig and Gozet, 2018); the wider socially-defined 'rules', that prescribe correct way of doing things. At the same time, practice theory recognises the influence that routine and habit have in the performance of practices – the unreflexive way in which day to day activities may be performed (Halkier, 2016). They also recognise individual agency in how practices are

performed, such that the interplay between agency and social structure can be explored (Delormier, Frohlich and Potvin, 2009).

By focusing on practices, rather than individual choices and decisions, it enables researchers to explore the complexities of how practices are performed, including the wider social factors, such as social change, that shape these performances (Halkier and Jensen, 2011). Practice theories also recognise that individuals carry out multiple different practices (Reckwitz, 2002; Warde, 2005 and Halkier and Jensen, 2011) and that these different practices shape one another in different ways. This means the effects and interdependences of multiple different practices can be considered, in other words providing an insight into how the complexities of everyday life shape practices (Halkier and Jensen, 2011; Keller and Halkier, 2014; Mollander, 2011). It is these factors that have led to a growth in the use of practice theoretical approaches to understand food waste as well as domestic food practices more broadly (Keller and Halkier, 2014); so not just in relation to food waste.

In the section that follows, the perspective that literature drawing on sociological approaches to considering food and food waste are outlined. This highlights the importance of considering socio-cultural processes that shape what happens in the home in relation to food as well as the interconnections between different practices that make up daily life.

2.5.1 Insights into food waste from practice theory

Southerton and Yates (2015) outline six competing socio-cultural demands that shape what happens in the home in relation to food: food safety and health, variety and plenty, care, convenience, economy and extravagance and indulgence. This list, drawn together by Southerton and Yates by reviewing the literature on food consumption and food waste is similar to the priorities for food provisioning among parents described in Section 2.2.1. The differences being that the literature does not highlight extravagance and indulgence as a priority among parents and parents have the priority of providing food cooked from scratch. Within section 2.2.1 there was no reference to the priorities of parents listed as being culturally prescribed. But these priorities are widely found in research into parents' food provisioning, indicating that they have been adopted as socially-prescribed demands of providing food in family homes, at least among middle-class parents.

Literature on domestic food waste, say Southerton and Yates (2015), is dominated by accounts describing it being a problem centred on consumers as individuals. This leads to

food waste reduction campaigns aimed at changing attitudes and know-how. But this ignores the socio-cultural context in which domestic food practices sit that shapes what is the proper way to provide food in family homes.

While Southerton and Yates (2015) looked at the social context of food provisioning by exploring the literature, other research into food waste informed by Social Practice Theory sets out to investigate the everyday goings on in relation to food in people's homes. Ethnographic approaches such as shop-a-longs and observations of cooking, mealtimes and food clear-outs that allow the researcher to see food practices as they happen (Comber et al., 2013; Evans 2011, 2012a, 2012b) as well as 'fridge rummages' (Heidenstrøm and Hebrok, 2021).

This research, which enables researchers to see how the everyday practices that make up daily life influence one another, shows that food waste results from individuals negotiating the complex and contradictory demands of everyday life (Hebrok and Boks, 2017; Evans, 2011; Evans, 2012a; Ganglebauer, Fitzpatrick and Comber, 2013). Time pressures imposed a number of different practices that make up day-to-day life stand in the way of the effective performance of food practices, resulting in waste.

Food management at home is still largely the responsibility of women who must do that on top of their work and caring responsibilities for children leading to waste due to a lack of control over the amount of food in stock and consumption (Heidenstrøm and Hebroks, 2021). Healthy foods such as vegetables bought to use in a healthy meal may go unused because of a lack of time to prepare meals that contain them (Ganglebauer, Fitzpatrick and Comber, 2013). For parents, other responsibilities such as attending events at school, can stand in the way of using up fresh ingredients (Evans, 2011; Watson and Meah, 2012), or work and leisure time may stand in the way of looking in the fridge before going shopping to check what is and what is not needed and writing shopping lists (Ganglebauer, Fitzpatrick and Comber, 2013). Working away from home can make it challenging to keep track of what fresh ingredients are available in the fridge and reduce the time available to use up fresh ingredients by making something from scratch (Evans, 2011; Evans, 2012a). Collectively, this means that food waste arises due to what Evans eloquently describes as a "…mismatch between the rhythms of everyday life and the temporalities of food." (Evans, 2012a, p.51).

Turning to the temporalities of food, the socially-prescribed demand of providing 'proper food', including fresh fruits and vegetables, exacerbates the potential for food waste due to

the time pressures of everyday life given that this food tends to be perishable (Evans, 2011; 2012a).While a freezer offers householders the promise of coping with the "compression and fragmentation of time" (Shove and Southerton, 2000, p.315) in today's family households through the convenience of being able to extend the period over which is stored, this often does not fit with the demands of providing 'proper food' to family members within the household (Evans, 2011). In short, frozen food is not seen as 'proper food'.

Schatzki (1996) distinguished between integrative and dispersed practices. Integrative practices are distinct activities such as cooking and shopping, whereas dispersed practices are those which may straddle several activities, such as describing or being creative. Ganglebauer, Fitzpatrick and Comber (2013) found that the dispersed practice of 'living on a tight budget' can shape the integrative practice of shopping, leading to the purchase of larger packages of food that are more economical and some of this bulk bought produce may go unused. Ganglebauer, Fitzpatrick and Comber (2013) make practical suggestions as to how to reduce food waste using technology based on their practice-theory informed research, such as making fridgecam images available to individuals when shopping to inform what they do and do not buy.

Fuentes, Cegrell and Vesterinen (2021) found the demands of the multiple integrative practices that make up working life stymied the attempt to reduce food waste using an app that allowed cafes, restaurants and shops to sell unused food that would otherwise go to waste to individuals. The limited coverage of restaurants and food shops in the Swedish food sharing app meant that the geographical availability of surplus food sometimes did not match with participants' everyday commitments and routines. However, Devaney and Davies (2016) found attempts to reduce food waste that fitted well with existing practices, such as 'triage boxes' for food in the fridge that made it quick and easy to identify food that was about to go out of date, helped individuals reduce their food waste.

Other factors causing food waste described in practice theory-informed research

While the socially-prescribed demand of providing 'proper' food and time constraints presented by the multiple practices that make up everyday life cause food waste, practice theory-informed research has highlighted other factors:

Food *routines and waste*

Research into food-related practices demonstrates they can sometimes be unreflexive and the result of habit when people continue to be in the same situation (Warde, 2016; Comber et al., 2013). This is the case for all practices that form part of domestic food provisioning. For example, the day to go shopping may be influenced by work and leisure routines (Comber et al., 2013).

The types of meals eaten in a house are often highly routinized, with the same, limited repertoire of meals being cooked each week and therefore few opportunities to use up partially-used ingredients (Evans 2011 and 2012a). As shopping practices are often highly routinised, with the same foodstuffs being purchased each week, this means that some staple foodstuffs, such as carrots, may be thrown away simply because a newer packet of this food has been purchased at the supermarket (Evans, 2011). In part, these routines are borne out of the tastes of other members of the household to the one doing the cooking and the limited range of meals this encompasses (Evans, 2012a).

Eating practices of other family members

Whilst eating properly may entail eating a variety of foods, encompassing different ethnic cuisines, whether or not that gets eaten depends on the eating preferences of others in the household, the children and spouse, and this can lead to waste (Evans, 2012). Children may not eat, or eat very little of the fresh ingredients, such as salad and peppers, that are the demands of healthy food provisioning in the family home and so purchased (Comber et al., 2013). How much each of these other family members consumes in any given day may also vary, potentially leading to waste when less is eaten (Ganglebauer, Fitzpatrick and Comber, 2013).

Concerns about food safety

Maintaining food safety and avoiding risk often takes precedence over avoiding waste in families (Evans, 2011). Some foodstuffs are considered highly risky, such as meat and dairy, whilst others are deemed to pose a lower risk, such as onions and spices (ibid.).

Reusing leftovers and the complexities of everyday life

Reusing leftovers is a way to save time and work in all domestic food provisioning practices, from the planning, to cooking and even the washing up (Cappellini, 2009; Waitt and Phillips, 2014). It is also a way to reduce food waste. Strategies to using up leftover ingredients may entail transforming these ingredients into a new meal, such as leftover

roast chicken used in a risotto (Cappellini, 2009). Cappellini and Parsons (2012) describe the practice of using up leftover ingredients as a 'thrift practice'.

Regular meals that use up leftovers, such as a Monday risotto night, may have developed into routines that fit within the rhythms of everyday life (Watson and Meah, 2012). However, leftovers are not permitted at mealtimes considered important within the family, such as Sunday lunch and birthdays (Cappellini, 2009) or when there are visitors (Cappellini and Parsons, 2012). Leftovers are more likely to be used in ordinary weekday meals such as cold meat from a Sunday roast being used in a Monday lunchtime sandwich (ibid.).

Leftovers are not distributed evenly within households. Parents may consume leftovers themselves, packing them in a work lunchbox, or cooking them in an omelette or stir-fry when eating alone rather than giving them to children – an act of sacrifice and love (Cappellini, 2009; Comber et al., 2013). To give children re-cooked leftovers would run counter to the demands of providing new meals as an act of care (Evans, 2012b). An obvious question is the distinction between batch cooking, a practice widely adopted by parents and reheating leftover meals, since both involve reheating something cooked at another time. While this has not been explored in empirical research, it does imply that partially consumed meals have somehow been polluted by their first use (Evans, 2012b), whereas batch cooked foods are still pristine, proper food that has been suspended as such by freezing.

The limited repertoire of meals other household members are prepared to eat can limit opportunities to serve up leftovers (Evans, 2012a; Cappellini, 2009). In some instances, the mother may consume leftovers that would not meet the tastes of children, sacrificing her own tastes (Cappellini and Parsons, 2012). While householders may seek to use up leftovers, the complexities of everyday life may also prevent this happening all the time (Cappellini and Parsons, 2012), competing for time and mental space.

2.5.2 Food waste disposal practices

Throwing away or 'wasting food' is associated with feelings of guilt (Evans, 2011; Watson and Meah, 2012; Ganglebauer, Fitzpatrick and Comber, 2013). This dislike of food waste is often borne out of concerns about wasting money and bad household management, such as a lack of planning (Evans, 2011; Blitchfeldt, Mikkelsen and Gram, 2015), but not exclusively so. Some research participants have described wider ethical concerns such as "…food waste making them think of 'the starving children in Africa.'" (Blitchfeldt, Mikkelsen

and Gram, 2015, p.94). Food waste happens despite practitioners not wishing it to happen (Blitchfeldt, Mikkelsen and Gram, 2015).

Storing partially used ingredients or meals in case they might be used later but then throwing them away when they become spoiled is employed as a means to avoid the guilt of disposing of food (Evans, 2011; Evans, 2012a; Blitchfeldt, Mikkelsen and Gram, 2015; Heidenstrøm and Hebrok, 2021). This may involve placing unused foods, such as rice left over from a takeaway meal, in the fridge until they have decayed to the point where they are no longer 'excess food' and have become inedible, bona fide waste that can be thrown in the bin with a relatively clear conscience (Evans, 2012b). However, food that has decayed beyond consumption and disposed of does not just end up in the bin after being held in the fridge to reduce feelings of guilt. Sometimes it is simply forgotten about and overlooked accidentally (Waitt and Phillips, 2016).

Blitchfeldt, Mikkelsen and Gram (2015) found that some of their interviewees were conscious of the lifecycle of food and did feel guilt associated with the environmental impact of food waste. Whereas for others, disposal of food was a "necessary evil" to avoid risks associated with food and be the kind of person who eats fresh food (Lamont and Molnár, 2002).

2.5.3 Summary

The literature reviewed in the preceding section (2.4) looking at the use of individual, cognitive theories to investigate the causes of food waste such as the Theory of Planned Behaviour (TPB) and this section (2.5), looking at the use of Social Practice Theory to understand food waste, have informed the theoretical approach to this research.

Section 2.4 highlighted how research using TPB has provided some useful insights, such as the influence of perceived behavioural control on levels of household food waste. However, TPB has some significant shortcomings when used in food waste research. Firstly, studies have highlighted how food waste levels are not determined by intentions or attitudes to food waste itself. Secondly, TPB is focused on explaining single behaviours, whereas there is substantial research evidence that food waste levels are influenced by actions in all the different behaviours that form part of domestic food provisioning, including planning, shopping and cooking.

Social Practice Theory has provided an alternative lens to explore food waste. It shifts attention from individuals to practices, recognising that they are shaped by socio-cultural factors and enables the 'messiness' of the numerous different practices that make up daily

life to be explored. These theoretical affordances have presented compelling reasons to use practice theory in this study.

The review of existing food waste research that uses practice theory has highlighted the challenge presented to efforts to reduce food waste by the social-cultural demands on food provisioning which exert such a powerful control over the right way to provide food. In family homes, among other things, the right type of food is 'proper food', cooked from scratch with fresh ingredients. Not only is this food more perishable, but it may also not align with children's taste in food, both factors leading to waste. Practice-theory informed research also highlights how the competing time pressures presented by the many practices that form part of daily family life, the messiness of everyday life, can lead to waste.

2.6 Food practices and Social Practice Theory

Stepping back from food waste, it is useful to consider the picture of family food provisioning research that uses a practice theory lens given that this study is exploring the connections between all domestic food practices and social media use.

While the time pressures presented by non-food related practices that make up daily, family life can lead to food waste, these can also lead to challenges in providing 'proper food'. Going to work may prevent parents, typically mothers, from being able to cook from scratch (Knight, O'Connell and Brannen, 2014). What is accepted as being a 'proper meal' may be adapted based on the challenges and limitations presented by the demands of other practices, such as time, legitimising adaptations such as the provision of pre-made foods or ingredients (Halkier, 2016a). In part, this negotiation is partially facilitated by the blurred boundary around what constitutes cooking from scratch (Halkier, 2016a). As Halkier (2016a, p.117) put it: "Cooking practices are dominantly organised according to do-abilities."

Bava, Jaeger and Park (2008) explored how women, many of them with children, meet the demands of food provisioning given the constraints imposed by other practices and found the use of certain convenience ingredients, such as stir-fry sauces and meal base powders, being employed as a means to meet the demands of cooking from scratch while under time pressure. So there is some negotiation of what 'proper food' is. Older women in the study adopted practices that enabled them to meet the demands of food provisioning while having considerable responsibilities, using timetables and the application of skill in

preparing a 'good meal' quickly (Bava, Jaeger and Park, 2008). Whereas younger women sometimes lacked confidence in cooking and self-perceived culinary know-how (ibid.).

Some parents use frozen foods, bulk-bought foods and ready meals as a means to provide food in a flexible way in a busy household (Comber et al., 2013). Comber et al.'s (2013) participants come from a working-class area, an indication that these cultural demands may differ between social classes.

The eating practices of others in the household may influence the extent to which the demands of food provisioning practices are met. For example, Brembeck and Fuentes (2017) found the eating preferences of children influenced the extent to which weaning foods made from scratch where consumed.

Failure to meet the demand of providing proper food may be seen as a sign of failure by a parent. Following one of his accompanied shopping trips, Evans (2011, p.434) explains how single mum Ceri says that she feels like a "first rate failure" when filling her trolley with frozen chips, fish fingers, pizzas and pies, adding that: "…she feels like one of those people doing it all wrong on the Jamie Oliver show." Food provisioning in the family has an emotional component.

An important study to consider within the context of this research project is Molander and Hartmann (2018) as it explores the connections between emotions, mothering and food provisioning, including the role that emotions play in shaping practice performances. Molander and Hartmann describe how emotions are 'of' practices, forming part of a practice's teleoaffective structure (explained more fully in Chapter 3) and so part of the collective experience of performing that practice. Emotions, they say, are related to the desired outcomes of a practice performance, such that if the outcomes are not met, the practitioner experiences negative emotions (or positive if performed well). This means that while emotions are 'of' practices, they can also be experienced by practitioners. Molander and Hartmann describe mothering as an integrated practice that:

> …involves several different projects and tasks, which radiate into various
> activities like cooking, fostering, entertaining, and cuddling which are partly
> shaped and directed by mothering. (Molander and Hartmann, 2018, p. 375).

This study of mothering and food provisioning highlights how practices can be connected through shared goals and emotions. Molander and Hartmann (2018) describe how food provisioning practices are adapted by mothers when confronted with a challenge that stands in the way of 'intensive mothering', which when it comes to food provisioning

demands food cooked from scratch. These adaptations include buying high quality frozen meatballs that could be a cooked when a mother was too ill to cook food from scratch. Or mothers adopted approximations to food cooked from scratch, such as making broccoli soup using frozen broccoli and bouillon cubes. What is termed 'good enough' mothering is highlighted in this and other research into mothering and parenting e.g. Molander (2017); Carrigan and Szmigin, (2006).

Practice change, adaption and negotiation is a theme in the literature exploring food provisioning and parenting. Molander (2017) considers how mothering and food practices are dynamic and shaped by intertwined practices that make up daily life such as leisure, studying and going to work. She finds that some more experienced 'journeymen' practitioners are able to adapt their practices using their own know-how. Mothers also draw upon mediated institutional discourses, such as TV programmes, magazines and websites, to increase their know-how in relation to practices such as food budgeting. Certain challenges, such as a child having a food allergy, can shift the mother from experienced journeyman to 'apprentice' with less know-how to be able to adapt their practices.

Thomas and Epp (2019) focused on new parents and their early adoption of parenting practices, exploring how they envision parenting practices before becoming parents, then enact practices as new parents before reconfiguring practices when the realities of performing practices them fail to match with the 'script' provided by social practices at a cultural level. O'Neill et al. (2019) describe 'fractures' in food practices when otherwise rigid ways of doing things change because a new circumstance presents itself, such as retirement or having children. Or the meanings associated with food change, such as after reading about the environmental impacts of food production in a book. They consider how fractures may be used to encourage the adoption of more sustainable food practices. O'Neill et al. (2019) discuss how communities of practice, or 'sharing spaces', such as co-housing arrangements, may offer a means of stimulating fractures in practices. In these communities, meanings associated with food can change and know-how picked up that enables change. While they describe in-person sharing spaces, they do not consider online spaces. The authors also describe how 'system builders', or innovators, create the right infrastructure for change through the likes of food festivals and foraging walks.

To summarise, existing literature in relation to parenting and food provisioning considers how practices are adapted and negotiated because they intersect with other practices and circumstances change. It shows how, far from being fixed, parenting and food practices are

dynamic and adapted due to the time pressures presented by other practices and other circumstances such as growing children and children developing food allergies.

2.6.1 Summary

The literature reviewed in this section has provided important context for this research in terms of what research employing practice theory tells us about food provisioning in family homes. It highlights that some of the same challenges that lead to food waste, the time limitations presented by the numerous practices that make up daily life and the food tastes of children are also what frustrate efforts to feed children proper food. It means that they are two sides of the same problem.

Parents adapt their practice performances and negotiate the demands of food provisioning using partially made ingredients, such as sauces and frozen ingredients so they are still providing a form of proper food provisioning in spite of the time constraints. Molander and Hartmann (2018) looked at the role of emotions in shaping practice performances, in some cases encouraging changes and adaptations to practice so food provisioning and parenting are 'good enough'.

Some of the literature highlighted in this section described how parents use media discourse, such as on TV, on websites and in books to provide know-how in relation to food and how this may also change the meanings associated with food.

2.7 The media and parenting

This section looks at existing research into how parenting is discussed in media discourse, with a focus on online contexts. This, and the section that follows on the media and food, help to identify the gap in knowledge this research seeks to address. The previous sections have highlighted how parents adapt and negotiate food and parenting practices given challenges such as time constraints and the actions of their children. These sections will look at what existing research shows about the role social media plays in this process of negotiation.

2.7.1 Parenting, the media and expertise

> A vast industry of childcare advice has arisen. Bookshop shelves groan under the weight of warring theories about the best way to bring up baby, guides for fathers, grandmothers and even aunts … Parents spill out intimate details of conflict in the kitchen and crises in the bedroom in magazine columns, blogs

and internet forums. Information overload is turning parenthood into a
nightmare of anxiety and stress. (Hardyment, 2007, p.283).

From baby and beyond, parents have become the target for information and advice about how best to bring up their child. Today's parents are also able to provide their own opinions and experiences via social media, blogs and online forums.

Lee (2014) outlines the shifting relationship in the US and UK and other countries such as Australia between parents and sources of expertise about what they should do and how they should do it. From the late nineteenth century, 'folk' or 'tacit' parenting knowledge was called into question and a reliance upon expert guidance, supported by 'proper science', encouraged. Since then, the extent to which mothering instincts were considered an appropriate guide for mothering practices has varied over time within the expert advice given (Lee, 2014).

Hardyment (2007) describes the development of the parent-parenting expert in the 21st century – parents, some of them celebrities, who describe their own parenting experiences and provide advice. There has also been a growth of brands of parenting training, such as Positive Parenting. The growth of the 21st century self-styled parenting expert "…suggests that 'parenting' can be understood as the acquisition of a set of skills or theories about which the purported expert is 'expert'…" (Lee, 2014, p.65). Effective parenting is conducted by acquiring and implementing a set of skills, pushing instinct into the sidelines (Lee, 2014). A central tenet of the expert advice is parental determinism – that what parents do is of central importance to the child's future health and wellbeing (Lee, 2014).

2.7.2 Online information, apps and parenting

In a survey of Australian women who were pregnant or had given birth to at least one child in the past three months, half reported using at least one parenting app (Lupton and Pedersen, 2016). 35% to get diet and nutrition information about their child and 34% to track and monitor their child's feeding habits. There was little evidence that parents checked where information on the app came from.

A survey of pregnant women at German hospitals showed 50% of them sought information online and 22% used pregnancy health smartphone apps (Wallwiener et al., 2016). However, a survey of low-income pregnant women in the US showed that interpersonal sources, family and health professionals, were the most common sources of pregnancy-

related information, while the media and internet were the least used sources (Song, et al., 2013).

Health-related advice is a common use of online sources during pregnancy and children's early years as well as to seek guidance on the upbringing of their children and whether their child's behaviour is 'normal' (Plantin and Daneback, 2009; Bernhardt and Felter, 2004). Mothers find information that is specific to their stage of pregnancy or development stage of their child the most useful rather than more generic information (Bernhardt and Felter, 2004). Access to unlimited information instantaneously and 24/7 and anonymity are other attractions of parenting information online as is the ability to access a large number of opinions to establish whether there is a consensus (Moon et al., 2019). Different forms of social media afford anonymity to varying degrees. On Facebook, participants are not anonymous and Chalken and Andersen (2017) found that while parents valued this platform for the way it enabled them to exchange health and social information, they were also wary of the loss of privacy sharing information and pictures presented. They categorised Facebook users according to their approach to privacy, ranging from 'advanced-active' users who had integrated Facebook into their everyday life to a great extent, were group administrators and more likely to be outspoken, to the 'closed-protective' users who were very privacy conscious and so posted rarely.

As well as exploring popular topics for online searches and conversations by parents, research on parents' use of online sources has also explored the accuracy of information provided to parents and pointing to inaccuracies in information and guidance presented (e.g. Pandolfini, Impicciatore and Bonati, 2000; Impicciatore et al., 1997). Parents are sceptical of information they read online, particularly when that relates to health conditions their children have (Lewis, Gundwardena, El Saadawi, 2005), and particularly when it appears on websites that sell baby-related products (Bernhardt and Felter, 2004). Health professionals are trusted sources of health-related information and other parents the most trusted source of parenting information (ibid.). The most trusted sources of information online are those of official authorities, those with a professional layout, understandable writing, appropriate citations as well as whether information is consistent across different sources (ibid.). A previous good experience with a specific source of information is also an indication of trustworthiness (Moon et al., 2019). Parents consider information from Facebook groups and blogs for parents as trustworthy because it is written by mothers perceived to be just like them (Moon et al., 2019).

While there is a growing body of research exploring the nature of information parents source online, how they use social media and related issues such as trust and privacy online, these studies often lack a clear theoretical lens through which to view social media use. Bernhardt and Felter (2004) did not describe their theoretical approach and Moon et al. (2019) used grounded theory.

2.7.3 How and why online parenting forums are used

Parenting websites have been in existence since the 1990s and continue to be popular with parents (Lupton, Pedersen and Thomas, 2016). Many feature information as well as opportunities for parents to chat via discussion boards or forums (Lupton, Pedersen and Thomas, 2016). Research into the use and perceptions of parenting forums by parents considers the role of forums in parenting as a whole, rather than food-related practices specifically (eg. Madge and O'Connor, 2006, and Chen et. al., 2014).

Parents use parenting forms as a source of knowledge as well as emotional and social support (Chen et.al., 2014; Madge and O'Connor, 2006). Drenta and Moren-Cross (2005) described two forms of support – emotional and instrumental, instrumental being where practical information from professional sources and anecdotal experience, is provided. This support provides empowerment to make informed decisions (Madge and O'Connor, 2006). Brady and Guerin (2010) found three quarters of the threads (discussions) on the Irish parenting forum they analysed contained personal experience.

Johnson (2015) describes 'intimate mothering publics' through which expectant and new mothers can gather experiential and practical support through face to face and online support groups. Sometimes the support is rendered online simply through the posts of others in which they relate their own everyday experiences (Brady and Guerin, 2010). The experiential knowledge and practical advice provide access to new information, but are also a means to work with or against parenting guidance from other sources; in some instances working against dominant discourses (Johnson, 2015).

> This kind of expertise helps women to filter different forms of knowledge in order to negotiate, react to or against, or supplement pre-existing medical and lay advice of information. In this way, access to intimate mothering publics allows women to develop their own patchwork problem-solving approach to pregnancy and mothering (Johnson, 2015, p.247)

In other words, parenting forums provide parents with a means to negotiate the socially-prescribed way of doing things. Parenting websites recognise the expertise of parents and

so may "consolidate themselves against the medical establishment." (Brady and Guerin, p.23).

The anonymity of the forums online, given that mothers typically use pseudonyms, provides a space for them to investigate topics that might appear taboo and learn which parenting practices are appropriate (Johnson, 2014) as well as speaking candidly without fear of embarrassment (Brady and Guerin, 2010), or criticise members of their family (Lupton, Pedersen and Thomas, 2016). It can free mothers from the judgement they feel they may get from health professionals because of their questions (Madge and O'Connor, 2006).

Forums also allow mothers to seek advice from a more heterogenous group of women than would be feasible in their own 'real life' network (Drenta and Moren-Cross, 2005). They are exposed to different perspectives and afforded the opportunity try out new styles of parenting.

Community building and protection is also found on parenting forums in which members may react against anyone perceived to be violating the group's norms (Drenta and Moren-Cross, 2005). Pederson and Smithson (2013) found that on Mumsnet, while many found posts to be supportive, some found the sometimes aggressive style of some posters uncomfortable.

While advice and support are motivations to use Mumsnet, entertainment is also a factor; users value the opportunity to chat with others and enjoy the 'am I being unreasonable' posts (Pederson and Smithson, 2013).

2.7.4 Conceptions of good parenting on forums

Madge and O'Connor (2006) found that traditional stereotypes of mothering and gender roles persisted on the UK parenting forum they studied in which the mother has the principal responsibility for caring for the child, there is a nuclear family structure and the mother is happy with her role. However, Pedersen and Lupton (2018) found Mumsnet to be a place where mothers could share negative emotions about different aspects of motherhood, such as in relation to their frustrations with a child. Others expressed how they were behaving in a way they didn't associate with 'proper' mothering, such as having lost their temper with their child. Some sought to establish what was normal to feel or do in a certain situation. So the forum provides a place in which to 'confess' to not meeting the demands of 'proper parenting' and receive reassurance about not doing so, while at the same time test the boundaries of what is acceptable.

Forums provide mothers with agency in the production of knowledge, through their sharing of learned knowledge and experience, rather than knowledge 'trickling down' from institutions and coming from conventional experts (Madge and O'Connor, 2006). Online conversations become part of 'sanctioned knowledge' (Madge and O'Connor, 2006).

Forums can be "…both liberating and constraining to women…" (Madge and O'Connor, 2006, p.214). They are a place where traditional conceptions of 'proper parenting' and mothering are reproduced, but also a place to confess to not meeting expectations, test the boundaries of what is acceptable and co-construct knowledge.

2.7.5 Summary

Research on the use of online sources, including parenting forums, by parents has tended to be focused on the use of these resources for parenting in general rather than in relation to specific areas of parenting, such as food provisioning. Where studies have looked at online media resource use in relation to a specific subject by parents, it has tended to be about medical issues.

Existing research indicates the rise in prominence of the parent parenting expert and the value placed on experiential knowledge found in online sources; knowledge that relates specifically to a parent's own situation, such as the age of their child.

Traditional parenting stereotypes are reinforced on online parenting forums. While at the same time, forums – due to the anonymity they afford – provide a place to confess to not meeting the demands of 'proper parenting' and test the boundaries of what is acceptable. In this way, online forums provide a way to navigate the demands of parenting, both practically and emotionally.

2.8 The media and food

This section explores existing research looking at how media discourse informs domestic food practices, including how parents use media discourse in relation to food.

2.8.1 The media mix and food practices

Bookshops, libraries, newsagents, TV programmes provide instruction on food-related practices that include either explicit or implicit normative prescriptions of the correct way of doing things in relation to food (Warde, 2016). Today's parents are exposed to magazines, lifestyle sections in newspapers, TV shows and webpages that advocate cooking home-made, healthy, meals from scratch (Halkier, 2016a, Halkier, 2016b). TV food

celebrities now compete for attention with serious amateurs and ordinary experts on YouTube food advice channels, food blogs and Instagram (Lewis and Phillipov, 2018). Food is an area of consumption where the mix of media sources and genres is particularly high (Halkier, 2013). "Such texts contribute to the articulation and clarification of standards, often through commentary on the elements of successful performance." (Warde, 2016, p.84).

Professional writers and organisations such as government ministries, food companies and voluntary associations formed by enthusiasts promote a specific form of food-related practice (Warde, 2016). They specify the correct way of doing things either explicitly or implicitly. The codification of the correct way to perform food related practices is an "expert process" (Warde, 2016, p.94) that provides explicit instructions on how to do things and leads to a wisdom that accumulates over time about how best to do things (Warde, 2016).

Cookbooks, recipes from friends, magazines and the internet are used as a source of inspiration that enables practitioners to meet the demands of these codified ways of doing things (Halkier, 2016a). In other words, these texts both codify how practices are correctly performed and act as a resource providing instruction on how to perform them.

Halkier (2016b) describes how in the media related to food, practitioners are held responsible for challenges such as climate, health and risk and encouraged to adapt their practices accordingly.

> These kinds of normative discourses appear across different types of media food genres, from recipe resources and marketing framing, over television and lifestyle magazine entertainment, to social media posting and interaction – and not just in the genre of public communication campaigns (Halkier, 2016b, p.149).

Hallows (2016) describes the growth of campaigning food TV programmes in Britain and elsewhere, such as *Jamie's Ministry of Food* and *Jamie's School Diners,* in which a celebrity chef seeks to 'make-over' the cooking practices of parents, often working-class women, who are seen as having unhealthy food practices and lacking knowledge. The shows involve teaching mothers 'appropriate' cooking skills; the 'right way' of proving food in family homes involves providing home-cooked meals using healthy, fresh ingredients. Women who don't adopt the middle-class cooking dispositions are seen as settling for convenience rather than care (Hallows, 2016).

Within this media soup and the normative descriptions of what 'good' family food provisioning described within it, individuals adapt and negotiate their own way of meeting the demands practice while at the same time meeting the demands of other practices (Halkier, 2016b; Halkier, 2009). Providing healthy food is considered the 'proper' way to provide food in a family home, but it can be seen as in conflict with other demands of provisioning, such as providing a tasty meal (Halkier, 2016b). Media discourses around frugal family living may also impact food provisioning, through the implementation of tight budgets that constrain and shape which foods are bought (Molander, 2017).

The demands of cooking from scratch seen in media representations of family provisioning may be associated by time-pressed practitioners as 'unrealistic cooking' demanding negotiation, so that the demands of provisioning can be met while allowing time for other demands to be met (Halkier, 2016b).

Keller and Halkier (2014) explored how mothers 'positioned' their shopping practices (often for food) in relation to media discourses. In some instances, the media discourse, such as supermarket discount leaflets posted through letterboxes, were seen as supporting existing practices of shopping frugally. Whereas in others, media discourses, such as ones around saving money and others about boosting the economy, were seen as conflicting making it challenging to relate these to a stable set of practices (such as whether to grow vegetables at home or buy them from a supermarket).

Kirkwood (2018) sought to understand how different forms of media are used in Australian homes, finding that different media are employed in different ways. Food magazines and cookbooks offer the opportunity to flick through the pages in search of inspiration, whereas online searches offer the ability to find recipes for specific meals that someone may have had in mind, so both digital and non-digital sources may be used depending on the requirement at the time (ibid.). Cooking TV shows and YouTube videos offer the ability to learn how to cook recipes, by watching others create them (ibid.).

Different individuals may have different 'media spaces' relating to food depending on their food-related interests, such as conceptions of cooking and food as fun or food as a source of health and fitness (Klitgaard Povlsen, 2016). For example, one participant in Klitgaard Povlsen's research, a mum of two children, used official websites giving food and health advice, apps that give ideas on healthy meals and subscribed to print fitness magazines. She also posted daily on Facebook on the themes of health and fitness as well as writing a

blog. 'Googling' in relation to food is commonplace, but no-one 'just googles'; instead their online searches are directed towards their 'media space' (ibid.).

Online platforms are not just a source of information. Social media such as blogs and photo sharing sites, are also a means by which to share ideas, experiences with others in written form and in photos (Hu, Manikonda and Kambhampati, 2014).

2.8.2 Food online and food practices

Increasingly these days, food shopping takes place online. This enables people to check their stocks of food as they shop at home (Hebrok and Heidenstrøm, 2019). Websites, blogs, social media and online forums are also used as a source of information and inspiration in relation to food.

Lewis (2020) describes a rise in 'ordinary experts' on online platforms in relation to managing everyday life. Food is no exception and there has been a growth of 'ordinary people' providing advice and demonstrating expertise in food and cooking on platforms such as YouTube. This leads to a blurred line between amateurs and professionals (ibid.).

There has also been a transformation in what are regarded as legitimate sources of information with which to provide advice. Food bloggers employ scientific knowledge in their posts, but expertise in food safety is also derived from their own personal experiences which are a central feature of what they write (Brombin et al., 2021). Brombin et al. (2021) found food bloggers reinforce the 'correct' way of food provisioning in family homes, raising concerns about frozen and pre-cooked food in terms of high concentrations of preservatives and chemical additives they were presumed to contain. Homemade food, rather than industrially produced food, is considered to be of better quality and pose lower risk (ibid.).

Blogging and the use of social media platforms such as Instagram in relation to food provide an opportunity to feel part of a community, a community that includes those with shared experience (Kirkwood, 2008; Watson, Morgan and Hemmington, 2008). Considerable research effort has been focused on the online practices of 'foodies'; their sharing of recipes, restaurant reviews and blogs (eg. Rousseau, 2012; Vásquez and Chik, 2015 and Klitgaard Povlsen, 2016). But the online practices of everyday food consumers, including parents, has been explored to a much lesser degree.

However, there is some research specific to parents. In a survey distributed to mothers on Facebook support groups, Curney and Wilkinson (2016) found them to use a variety of information sources in relation to picky eating, including a pediatrician (18%), websites, (18%) and online forums (14%). The mothers were concerned about their child's lack of nutrition, poorly balanced diet and the effect of this on their children's growth.

The use of online forums in relation to food and children has scarcely been researched. However, Fraser et al., (2021) analysed parents' posts on Reddit about their children's fussy eating to explore their concerns and the support they are seeking. They found fussy eating to be a source of considerable anxiety among parents who were concerned about the nutritional adequacy of what their children were eating but at the same time they wanted their child to 'eat something' to enable their growth. Parents were seeking experiential knowledge in how to manage their child's refusal to eat foods and the inadequate intake of food in sufficient perceived quality or quantity. They also sought ideas on recipes and meal ideas as well as emotional support and reassurance about the actions they had taken.

Fuentes and Brembeck (2017) found web-based marketing of weaning products to emphasise how they enabled mothers to ensure the healthy development of their babies, what they describe as the 'medical frame', while also reducing the burden on mothers and being convenient, the 'convenience frame'. Fuentes and Brembeck (2017) describe how the medical frame draws on images for the good, knowledgeable mother who operates according to the latest scientific knowledge. Whereas the convenience frame fits ideals of the busy working mum. They describe this frame as a "…subversion of the ideal of intensive mothering in favour of less demanding mothering ideals." (Fuentes and Brembeck 2017, p.170).

2.8.3 Food online and food waste reduction

A handful of studies have used experimental interventions to see how effective food waste reduction interventions using social media are. Others have looked at the effectiveness of existing initiatives that involve digital aspects, such as social media content. But as highlighted by Hou et al. (2022), who undertook a literature review as part of their study into the potential use of social media in food waste reduction campaigns, there is a lack of research.

The digitization of communication has enabled new forms of food campaigning and activism to emerge (Lewis, 2018), termed digital food activism (Schneider et al., 2018). Some of this involves providing new means of accessing information, such as a barcode

scanning app that allows consumers to find out about the origins of food, or the OLIO app that enables neighbours to share photos of unused food in case others can find use for it (Lewis, 2018). Interactive means of online story telling, such as *A Five-Step Plan to Feed the World* by National Geographic, and ethical shopping websites have provided new means to raise the visibility of food issues (Lewis, 2018).

Young et al. (2017) worked with a UK supermarket retailer to test a Facebook campaign aimed at reducing food waste in which Facebook users were encouraged to share recipes that used up leftovers. They compared this with the effectiveness of an article in the store's magazine and an e-newsletter. Those who saw the social media information campaign did not reduce their self-reported food waste any more than those who saw the other information campaigns and a control group, who did not see any of the campaigns.

Friedlander and Riedy (2018) in their study of the international Meat Free Week (MFW) campaign online looking at the spread of messages through social networks employ 'agenda-melding theory'. In this theory: "…individuals who are seen as experts or authorities can play an influential role in a social media community or collection of communities." (Friedland and Riedy, 2018, p.231). Agenda melding involves a push/pull two-way process in which individuals incorporate interests and causes into pre-existing group agendas (ibid.). In MFW, social media users in Australia and the UK were found to adopt certain aspects of the MFW messaging to appeal to their followers; melding the overall messaging to their own interests, such as a user who tweeted about the health benefits of going meat free to appeal to their health-interested audience. Celebrities were trusted and seen as credible, particularly when the messages around MFW aligned with their existing values.

Sutinen and Närvänen (2022) explored discourse on a range of platforms including Twitter, Instagram and online forums during Finnish Food Waste Week in 2018 and found individuals, commercial companies and non-profit organisations such as government institutions and NGOs contributing to the discussion. Rather than look at the contributions of specific actors, as Friedlander and Riedy (2018) did, they identified three types of discourses: 'explanations' of what food waste is and what's known about it, 'exhibition' of what's already been done or currently happening to address the problem and 'appeals', outlining changes that are needed to reduce food waste.

The effectiveness of apps that enable more sustainable purchasing of food or the gamification of food waste reduction has been the subject of a handful of studies. Samsoe

and Fuentes (2021) investigated the use of food apps that enable more sustainable domestic food provisioning practices, such as a food box scheme in which ingredients and recipes for set meals are delivered. They found that the extent to which these apps are adopted and maintained is determined by the extent to which the new app-related practices mesh with other practices, such whether deliveries take place outside of working hours and when not dropping children off at clubs. Samsoe and Fuentes (2021) say the apps also needed to have 'meaning', such as the Karma app that enables people to purchase food from places such as restaurants that is about to expire, having meaning as a source of quality food at a reduced price. Rau and Hogberg (2021) found the extent to which the Karma food surplus purchasing app was used depended on whether people could be in the right place at the right time to pick up food given the demands of other practices, such as working.

Heidenstrøm and Hebrok (2021) found that although online food shopping and food box schemes have the potential to switch food consumption to more sustainable forms through factors such as better meal planning and portioning, they are not achieving that potential due to the existence of barriers. These barriers include too much food being delivered in the food boxes and delivery charges that encourage people to order large volumes of food in one go. Convenience, saving money and reducing the mental load of providing proper meals were motivations to use online food shopping and food box schemes (ibid.). Heidenstrøm and Hebrok recommend that digital technology for food provisioning is co-designed with consumers so its use integrates more effectively with existing practices and that its design acknowledges the interrelatedness of food provisioning practices, so not considering food acquisition on its own.

Wharton et al. (2021) found that a short-term food waste education campaign that connected to relevant values and issues such as home finances and environmental impact was successful in reducing waste levels. The most effective interventions were videos that included people demonstrating recipes and a podcast that included descriptions of strategies to reduce food waste. In a Canadian study, reported in Soma, Li and Maclaren (2020) and Soma, Li and Maclaren (2021), an intervention that gamified food waste reduction resulted in participants throwing away less edible food than before the intervention as well as being more aware of food waste. The game involved a trivia quiz about food waste as a problem and techniques to reduce food waste in the home.

Returning to Hou et al. (2022), who in addition to their literature review undertook focus groups with researchers including those with expertise in social media and food waste

reduction and make a number of recommendations. Among them are that social media platforms should be selected for use in campaigns based on their affordances, rather than popularity. They also recommend a:

> …platform-specific approach to social media intervention design that addresses the needs of target audiences, specifies behavioural outcomes and encourages meaningful and participatory engagement. (Hou et al., 2022, p.7)

Among other suggestions are to target social media campaigns at specific household types and at specific points in the domestic food 'behavioural chain' that include food planning, shopping and cooking. But they do not specific which points to target. They also suggest that the social media messaging does not always necessarily need to be directly about food waste education and should be more about: "…what valuable to the individual and/or household…" (Hou et al., 2022, p.19) given the emotional connections with food. They also advocate the use of micro-influencers, those who are influential within a specific community.

2.8.4 Summary

Media discourse about food provides descriptions of the right way to provide food in family homes, which consists of 'proper food', which is healthy and cooked from scratch. This media discourse includes traditional media, such as TV, as well as more recent arrivals such as food bloggers. Parents align with this discourse or negotiate it, based on its 'doability' given the time pressures they face.

This review of the literature has highlighted that there has been little research specifically looking at parents' use of social media in relation to food, a notable exception being Fraser et al., (2021). Much research into parents' use of social media, such as online forums, is in relation to parenting in general. This research and other studies looking at parents' use of forums and other forms of social media in relation to parenting has tended to characterise the nature of support provided there; broadly finding that it provides know-how and emotional support. This existing research highlights the importance of the experiential know-how of other parents on social media; other parents who are facing the same circumstances and challenges.

Parenting forums reinforce normative descriptions of the correct way to be a mother. While at the same time, a small number of studies have also highlighted how online forums enable parents to negotiate existing medical advice and negotiate the socially-prescribed ways of doing things as a parent.

Existing research into the use of digital means, including social media, to reduce food waste is limited with a focus on looking at the effectiveness of specific interventions, such as food sharing apps. This research has highlighted that these interventions need to mesh with existing practices to be maintained, enabling their use to fit around other commitments in the day.

2.9 Key insights for this research

Rather than provide a comprehensive overview of all the literature reviewed in this chapter, this section will draw together key strands of the insights from the existing literature that have shaped this research and highlight the gaps in knowledge it seeks to address.

The causes of food waste have been researched extensively, particularly in the UK. This research shows that relatively high levels of waste take place in family households and the causes of food waste are different in different types of household. Food waste cannot be considered as a discrete behaviour as the amount of food that is wasted in a house is determined by all food provisioning activities within the home. So this research includes all food provisioning practices within family homes within its scope.

Social Practice Theory provides a means to explore how practice performances are shaped by socially prescribed way of doing things and how the different practices that form part of daily life shape one another. In the context of food waste research, parents seek to meet the socially prescribed ways of food provisioning in family homes. However, the time pressures of everyday life and fussy eating by children can stand in the way of parents achieving these goals and lead to food waste. Within this research, practice theory will provide a theoretical lens through which to view different food practices, social media use and the other practices that are part of everyday life and influence what happens in the home in relation to food.

Molander and Hartmann (2018) connected the goals and emotions of parenting, and intensive parenting, in particular with the goals and emotions of food provisioning. This and other research has demonstrated how as well as seeking to meet the demands of food provisioning, parents negotiate parenting and food provisioning practices, so they are 'good enough' – including just enough of making food from scratch for example.

Studies looking at parents' use of social media, including online forums, has showed that it provides a source of know-how about parenting as well as emotional support. Most of this existing research has looked at parenting overall. Where research has looked at how

parents find out about specific subject matter online, it has tended to be medical guidance. The existing research on parenting forums has provided some limited insights into how it allows parents to negotiate socially prescribed parenting practices, such as how children are disciplined.

Parents' use of social media in relation to food has been underexplored in the literature. While existing studies that have looked at how parents negotiate food provisioning practices has mentioned that parents use media discourse, this has purely been referred to as a source of know-how without being characterised further.

In particular, no exiting studies have looked at the interaction between everyday 'offline' practices, such as food provisioning, and social media practices – the reciprocal relationship between the two. How what happens in the home in relation to food shapes what happens on social media and how what happens on social media shapes what takes place in the home. This research seeks to address that and by doing so, it will contribute to theoretical understandings of the interrelationships between offline and online practices.

By exploring the mechanisms connecting offline domestic food practices and online practices, this research will seek provide a more granular characterisation of the nature of the information and support provided through social media to parents about food than previous research. This will include exploring how online information and support enables parents to meet the demands of family food provisioning and negotiate the socially prescribed ways of doing things. Also what determines the extent to which information online shapes domestic food practices. By doing these things, this research seeks to inform future food waste reduction campaigns.

Chapter 3– Theoretical framework

3.1 Introduction

In Chapter 2, different theoretical approaches to food and food waste research were outlined and Social Practice Theory was highlighted as the theoretical approach that will be used in this research. In that chapter, the shortcomings of psychological theoretical approaches such as the Theory of Planned Behaviour when looking at food waste were highlighted. A key one of these being the intention or attitude behaviour gap (Schanes, Dobering and Gözet, 2018; Stancu, Haugaard and Lahteenmaki, 2016; Hebrok and Boks, 2017), a disconnect between people's attitudes and intentions and their behaviour.

Some of the affordances of a practice theory approach to this research were also outlined in Chapter 2. Firstly, practice theories place an emphasis on how the socially-prescribed ways of family food provisioning shape performances of practice. Also, that practice theories allow us to consider the interactions between the numerous different practices. In this research, the interactions in focus are between the different domestic food practices, between these and the wider constellation of practices that make up daily life and between all of these and social media use.

In providing this justification for the use of practice theory in this research in Chapter 2, some of the characteristics of this theoretical lens were described. This chapter provides a more in-depth description of this theoretical approach, including its origins and the different formulations of practice theory that have been developed by theorists.

The chapter goes on to consider the collection of practices that form food provisioning in family homes and the wider constellation of practices that make up a parent's life that may have a bearing on domestic food practices. Finally, how media use, including online parenting forums and other forms of social media, may be integrated into a practice theory informed approach to research is outlined, including the concept of 'affordances in practice.'

3.2 Origins and description of Social Practice Theory

3.2.1 Fundamental concepts in practice theory

Social theories consider the relationship between individuals and society and therefore between "…human action and social structure" (Elliot, 2009, p.11). At one extreme of social theories are individualist theories focused on individuals, treating society as a sum of

individuals. On the other are structuralist theories that hold that social systems and structures determine the actions of individuals (Ropke, 2009); in other words, individuals are bearers of wider social processes (Elliot, 2014). Practice theories are an attempt to reconcile the two perspectives, such that the actions of individual actors are shaped by society but individuals also have agency – they have control over their actions.

Social Practice Theories are underpinned by the work of sociologists and philosophers. British sociologists Anthony Giddens and French sociologist Pierre Bourdieu have been particularly influential. They sought to tread a middle ground between individualism and structuralism; breaking the individual/society dualism (Elliott, 2014). In other words:

> …they wished to liberate agency – the human ability to act upon and change the world – from the constrictions of structuralist and systemic models while avoiding the trap of methodological individualism (Postill, 2010, p.6-7).

Giddens was seeking to avoid thinking of 'structure' and 'agency' by describing the 'duality of structure'. He stated that structure is both "…the medium and outcome it recursively organises." (Giddens, 1984, p.374). So social structures influence practices, but social structures are themselves created by the combined practices of many individuals.

Central to Giddens' approach is the concept of structuration, which he developed in *The Constitution of Society* (1984). Elliot (2014, p.146) describes Gidden's concept of structuration, which he says describes: "…the production of habitual practices as simultaneously the force of systemic structures and the individual accomplishments of agents." These systemic structures are themselves the result of the collective actions of agents. This means that the central unit of analysis are those actions, the practices.

> The basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time (Giddens 1984, p.2)

Giddens says these practices, or social action, are governed by 'rules', much like language. Sometimes these rules are explicit, such as the rules related to driving a car. Other times they are implicit, they are "…the 'taken for granted' knowledge of society." (Elliot, 2014, p.147). However, Giddens recognises that people apply the rules of actions differently. "Rules at once serve to shape social doing and action and also contain the possibility of acting otherwise." (Elliot, 2014, p147). These rules are derived from the social structures.

Routines and rules are important to how social actions take place. "…for Giddens, they both enable and guide the practical conduct of social life." (Elliot, 2014, p.151). In many instances, we may not be able to formulate the detail of the rules that govern social life, but we have a knowledge of what they are, so we know 'how to go on' as Giddens says. So in short, actors are able to describe and explain some aspects of what they do. But other aspects are guided by an intuitive understanding of what to do; what the rules and ways of doing things are.

Giddens describes how in modern life, reflexivity, in which people reflect upon what they do, is increasingly taking place.

> The reflexivity of modern social life consists of the fact that social practices are constantly examined and re-formed in the light of incoming information about those very practices, thus constitutively altering their character. (Giddens, 1990, p.38).

Reflexivity by both individuals and institutions is defined by Giddens as the constant use of knowledge to inform and update practices (Kaspersen, 2000). This may include for example consumer research by a business in the food industry, or an individual watching a cooking programme. Advances in media and information technologies have led to increased reflexivity (Elliot, 2014). As Elliot (2014) describes it "…our social eyes have dramatically expanded." (Elliot, 2014, p.154). We can instantly see something happening on the other side of the world and incorporate this new knowledge into how we act.

Bourdieu similarly considered the actions of individuals as being under the influence of social structures, while at the same time as being under individual control. Individuals are said to have have a "semi-conscious reflexiveness" (Elliot, 2014, p.165) while at the same time exhibiting 'habitus', "systems of durable, transposable dispositions" (Bourdieu, 1977, p.72). These dispositions are derived from social systems and mean that individuals know what the right way of doing something is, but they can still adapt what they do within these dispositions. Bourdieu also describes the various 'fields' in which people operate, such as educational and economic, which have their own structuring forces. Fields are defined as "specialist domains of practice (such as art, photography, sociology) with their own 'logic'". (Postill, 2010, p.7).

A more recent, second wave of practice theory (Postill, 2010) has attempted to define more rigorously what a practice is and how practices are formed. These more recent explorations of practice theory move the theory from broad conceptualisations to more

concrete descriptions of 'practice' is as well as how practices are formed and reproduced. This has enabled empirical research to employ practice theory as a lens through which to view a specific practice or practices.

Within these more recent descriptions of practice theory, there is not considered to be a single 'practice theory' (Halkier and Jensen, 2011; Keller and Halkier, 2014), just a range of writings by individuals "…who adopt a loosely defined 'practice approach'." (Postill, 2010, p.6). They do, however, have several factors in common, which stay true to the ideas of the sociologists and philosophers such as Giddens and Bourdieu. A central distinction of practice theories is that they tread a middle ground between 'homo economicus' and 'homo sociologicus', the former explaining people's actions as being the result of individual intentions and ends and the latter explaining actions as being the result of norms, a collective understanding of how things should be done (Reckwitz, 2002). They also enable us to consider the roles of habit and reflexivity in practices.

According to sociologist Theodor Schatzki, who is pivotal in the contemporary practice turn, a practice can be defined as "…a temporally and spatially dispersed nexus of doings and sayings." Schatzki expands on what he means by a nexus, a bringing together:

> To say the doings and sayings forming a practice constitute a nexus is to say that they are linked in certain ways. Three major avenues of linkage are involved: 1. through understandings, for example, of what to say and do; 2. through explicit rules, principles, precepts and instructions; and 3. through what I call 'teleoaffective structures' embracing "…ends, projects, tasks, purposes, beliefs, emotions and moods (Schatzki, 1996, p89).

A practice includes what people do as well as what people say in relation to any given activity, such as asking a spouse to take the meat out of the freezer and then cooking it (Halkier, 2016). Different conceptualisations of practice theory by different theorists have formulated these elements slightly differently to emphasise different factors that may influence practices (see section 3.3 for more on this).

Schatzki had two conceptions of practice; practice as an entity and practice as performance.

> Individuals face practices-as-entities as these are formed historically as a collective achievement; and though their own practices-as performance, individuals reproduce and transform the entities over time. Individuals thus act as 'carriers' of practice (Ropke, 2009).

In other words, individuals adopt pre-exiting ways of doing things; they act as 'carriers' of practices (Reckwitz, 2002; Ropke, 2009). They adopt the routinized patterns of behaviour and also routinized mental activities associated with them – the desires, emotions, aims and the know-how (Reckwitz, 2002). It means that these patterns of behaviour and mental activities are characteristics of the practice, not the individual who carries the practice (Halkier, 2016). Individuals can recognise a practice because it is regularly performed and this means there must be some form of social interaction so individuals can watch or hear how a practice is performed (Halkier, 2016).

It is through the adoption of practices by individuals that they are sustained as an entity. Individuals may reproduce how these practices have been performed in the past, but they might also adapt and change these practices. This opens up questions relevant to food waste research and environmental issues in general around how practices as entities are sustained and how they might change over time (Shove, 2010). This recursive relationship between individual performances and social practices (Southerton and Yates, 2015) enables us to explore the roles of individual agency and social structure. Practices shape performances and are themselves reproduced and sustained through repeated performances; yet performances can be adapted and innovated (Southerton and Yates, 2015), potentially leading to practices – the socially prescribed way of doing things – changing over time.

3.2.2 How practices change and bundles of practices

A criticism levelled at practice theory is that by describing individuals as 'carriers of practice' it implies that they play a passive role, mindlessly following pre-defined ways of doing things in a routinized way and incapable of thinking what they do and how they do it. However, Reckwitz (2002) describes individual actors within practice theory as:

> …neither autonomous nor the judgemental dopes who conform to norms. They understand the world and themselves, and use know-how and motivational knowledge, according to the particular practice (Reckwitz, 2002, p. 256).

As 'carriers' of practice, it might also be taken to imply that all individuals perform practices in identical ways. But an individual's performance of practice may depend on numerous factors including their past experience, learning, the resources at their disposal (Warde, 2005); so different individuals have different competencies and capabilities in relation to specific practices. One consequence of this is that this

creates individual differences in how practices are performed and therefore the seeds of constant change: "…we can differentiate on the basis of the potential contributions of agents to the reproduction and development of the practice." (Warde, 2005, p.138). As practices change an individual's performances of practice may change as they adapt in accordance with this new way of doing things. Or an individual's circumstances may change, such as moving in with a new partner (Halkier 2016), leading to a new way of performing a practice. "Individuals then have personal trajectories within practices and, once enrolled, subsequent immersion in a practice often has features of a career." (Warde, 2005, p.145).

An individual's performance of a practice may change as they move along in their practice 'career', acquiring new knowledge and reflecting on how a practice should be performed. "…intentionality is also seen in a processional perspective rather than as relating specific motivations to specific actions." (Ropke, 2009, p.2491). So it is in this continuous flow, rather than in relation to specific acts, that people may reflect on their actions and change what they do. These changes may come about when individuals are confronted with circumstances that prompt a shift from an established routine; "…everyday crises of routines" (Reckwitz, 2002, p.255) or in response to new information. In terms of family food provisioning, a mother child transitioning from one developmental stage to another, such as from a diet exclusively of milk to weaning, may prompt a 'crisis of routine'.

Each individual carries out numerous practices and while there are likely to be similarities between individuals in terms of the repertoire of practices they perform, they are the "…unique crossing point of practices…" (Reckwitz, 2002, p. 256). This means that the performance of one specific practice by one individual may be influenced by their own unique collection of other practices that might provide opportunities, but also constraints, such as the amount of time with which a practice can be performed.

Practice theory enables us to consider how media, whether it is traditional media such as TV and newspapers as well as New Media, such as online social forums, shape practices. Media can be considered as a resource for practices (Keller and Halkier, 2014). Over time, individuals may reflect on their own performance of practice and change and adapt based on what they have seen in the media.

3.3 Two broad formulations of practice theory

More recent formulations of practice theory describe different 'elements' that come together as a practice is performed. While all formulations subscribe to the principles of practice theory, they differ in how these elements are defined, foregrounding different aspects of practices.

Mollander and Hartman (2018) describe two strands of practice theory in consumer research, the 'Wittgensteinian perspective' and the 'three elements model'. According to Schatzki's description of Wittgenstein's writings, he conceived of the mind as "…a collection of ways things stand and are going [for an individual] that are *expressed* by bodily doings and sayings." (Schatzki, 1996, p.23). Here Wittgenstein makes the connection between mental states and what we do and say.

Wittgensteinian approaches to practice theory therefore emphasise the connection between mind and the 'doings and sayings' of practices. Schatzki, who uses a Wittgensteinian approach to practice theory and whose elements of practice were stated in section 3.2.1, includes 'teleoaffective structures' in his elements of practice that foreground the mental and emotional aspects of a practice.

In the 'three elements model', materials, competencies and meanings come together in the performance of a practice (Shove, Pantzar and Watson, 2012). Shove, Pantzar and Watson, 2012 define these elements as:

> *Materials* – including things, technologies, tangible physical entities, and the stuff of which objects are made; *Competencies* – which encompass skill, know-how and technique and; *Meanings* – in which we include symbolic meanings, ideas and aspirations (Shove, Pantzar and Watson, 2012, p14).

Such an approach has been criticised on the grounds that it obscures the connection between practices and emotions (Molander and Hartman, 2018). Shove et al. (2012) describe meaning in a way that appears to sidestep the influence of emotions and instead focus on something else.

> Our next simplifying move is to collapse what Reckwitz [who uses the Wittginsteinian approach] describes as mental activities, emotion and motivational knowledge into one broad element of 'meaning', a term we use to represent the social and symbolic significance of participation at any one moment (Shove et al. 2012, p.23).

In part, these difference in emphasis may reflect the differences in the focus of the associated empirical research of the various writers. Shove's research focuses on the trajectories of practices (Keller and Halkier, 2014), such as driving a car and how is has changed as a practice over time as car technology has changed. In which case, the influences of materials on practice as technology develops are likely to be particularly significant. Whereas other empirical research which considers practices at a given moment in time can benefit from a foregrounding of the emotional aspects of practices. A pertinent example here is Molander and Hartmann's (2018) empirical research on mothering and cooking which employed Schatzki's teleoaffective structures in the analysis. It considered how the emotions associated with mothering and food provisioning led to practices being sustained or adapted.

The forms of practice theory employed in this research are outlined in Chapter 4, the Methodology.

3.4 The bundle of food provisioning practices, negotiation and shared elements

Practices are grouped together in closely connected 'bundles' in which each practice influences another (Shove, Pantzar and Watson, 2012). The various practices that form part of domestic food provisioning - food planning, shopping, food storage, cooking, eating and food disposal - are linked, forming a deeply entangled bundle. So for example, whether or not an individual writes a shopping list shapes how shopping is performed as a practice, which shapes how cooking is done and so on.

A wider constellation of practices that make up family life, including working, leisure and parenting also influence and shape domestic food practices (Halkier and Jensen, 2011; Keller and Halkier, 2014), competing for time and placing limitations on what is feasible. They may also have conflicting demands, such as the demands of buying healthy, fresh food competing with the demands of family budgeting practices.

> When practitioners attempt to coordinate different practices, the expectations and conventions of performing each practice can challenge each other. This is because the different practices are not necessarily organised by understandings, procedures and engagements that fit together across practices (Halkier, 2016, p.31).

Whilst individuals are 'carriers of practice' (Ropke, 2009), adopting and reproducing practices, they are still capable of reflexivity and are able to adapt how practices are performed based on new information as well as to try to meet the demands of one practice

while also meeting the demands of or responding to the limitations (such as time) presented by another. This therefore requires some navigation of different practices and negotiation between the demands of different practices (Halkier, 2016). So while an individual is a carrier of practice they also have agency (Halkier, 2016). The degree of agency may be dependent on their experience or "trajectory in time" (Halkier, 2016, p.36). So, for example, the degree to which a practitioner is still able to cook food from scratch when faced with time pressures due to work practices is dependent on their understandings, or know-how, of cooking practices. Those who are more experienced, with greater know-how may be able to adapt their practices to a greater degree than those who are less experienced (Bava, Jaeger and Park, 2008).

Drawing on existing literature on food provisioning and food waste, a bundle of food provisioning practices can be identified as well as a wider constellation of practices that are connected with this bundle (Figure 3.1). A constellation is another term given by Hui, Schatzki and Shove (2017) to a collection of practices that are connected in some way. Within this research, constellation refers to the wider collection of practices that can be seen as sitting around and shaping the tightly entangled bundle of food provisioning practices.

More specifically in terms of how Figure 3.1 was derived, existing research on food waste (e.g. Quested, Marsh, Stunell and Parry, 2013 and Hebrok and Heidenstrøm, 2019) highlights distinct food provisioning practices that are closely connected, or entangled. How one food provisioning practice is performed has an influence on how others are performed. Molander and Hartmann (2018) make the connection between food provisioning practices and mothering, describing how adopting the socially-prescribed ideal of 'intensive mothering' includes cooking from scratch, but also shapes other practices such as food planning and shopping. While other research (eg. Bava, Jaeger and Park, 2008; Molander, 2017) has considered how food provisioning practices are adapted due to time limitations presented by other practices that make up daily life, such as going to work and leisure time. The practices highlighted in Figure 3.1 are not an exhaustive list. It is an illustrative sample of food provisioning practices and other interconnected practices.
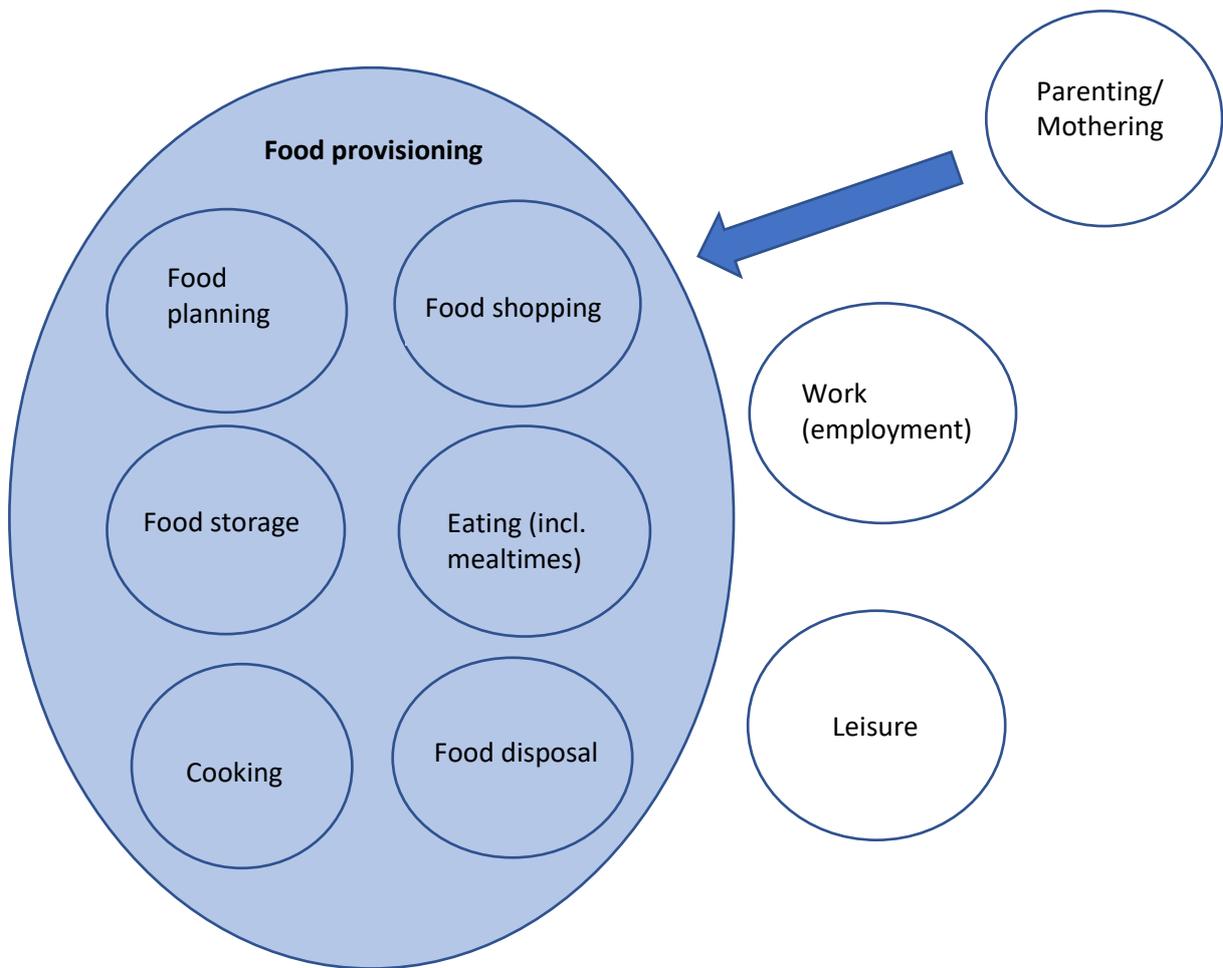
Figure 3.1. Based on existing research into food provisioning and food waste, a closely entangled bundle of food provisioning practices can be identified as well as other practices that shape how food provisioning is done, such as mothering and going to work.

Shove, Pantzar and Watson (2012) describe how practices are connected. In some instances, the connection is through co-dependence. In food provisioning, the different practices are highly co-dependent due to the material connection throughout the practices of food provisioning in terms of food that is planned, bought, stored, cooked eaten and thrown away. This means that what happens with food in one practice shapes what happens in the others. Shove, Pantzar and Watson (2012) also highlight how elements may be shared between practices, connecting those practices. In the context of food provisioning, parenting and food provisioning practices have shared meanings which Molander and Hartmann (2018, p.375) describe as: "…attentive love which aims to equip a child well for life."

3.5 Parenting as a practice

Parenting has scarcely been considered in research using Social Practice Theory as a framework. More often, theories are employed that are relevant to a specific domain of

parenting, such as theories of child development and education. However, much like Halkier (2016) and Molander (2011) in this research, parenting is conceptualised a practice and like Molander and Hartman (2018) mothering is considered as a practice.

In common with all practices, parenting has its own right way of doing things and standards by which it can be assessed by the practitioner and others. Generally, in western societies, being a good parent involves what has been termed 'intensive parenting' and 'intensive motherhood'. In this form of parenting or motherhood, Hays (1996) says: "…the methods of appropriate child rearing are construed as child-centred, expert guided, emotionally absorbing, labor intensive and financially expensive." (Hays, 1996, p.8). Mothers are thought of as accountable for their children's wellbeing (Molander and Hartman, 2018).

While parenting and mothering can be considered as a practice in its own right, parenting and mothering manifest themselves through a plethora of individual practices, such as reading to a child, helping with homework, playing a game or cooking a meal (Molander and Hartman, 2018). The meaning or teleoaffective structure that forms part of the umbrella practice of parenting, or what Molander (2011) termed a 'meta-practice', attentive love, permeates the other practices that are connected with parenting and shape what is an appropriate performance of these practices. In this way, cooking from scratch, which requires a considerable investment of time, may be considered as part of wider intensive parenting or mothering practices. Sub-practices such as cooking make more vague ideals of parenting more concrete. For example, in Molander's (2011) study of single mums, everyday dinner practices materialised the ideals of mothering.

3.6 Media use and practices

Keller and Halkier (2014) identify a lack of a practice theory conceptualisation of media discourse and how they influence practices: "…how media discourses are used by consumers as practitioners within the complexities of their everyday lives." (Keller and Halkier, 2014, p.39). Their solution is to see media discourses as symbolic resources for practices, shaping: "…the ways in which consumption activities are performed and negotiated among practitioners (Keller and Halkier, 2014, p. 39). They describe how each of the elements of practice (using Warde's (2005) description of understandings, procedures and engagement) can be informed by media discourse. Couldry adopts a similar approach, foregrounding the practices informed by media discourses rather than the media discourses themselves. "…media consumption or audiencing can only be understood as part as part of a practice which is not itself 'about' media…" (Couldry, 2004, p.125).

Halkier (2013) also states that practice theories are under-developed in their conceptualisation of social interaction; relevant to this study given its focus on social media. Within practice theory, social interaction is considered to be part of the collective organisation of practices. Practices are performed in front or, together with and in relation to others and it is though this that people can learn and recognise practices (Halkier, 2013). However, social interaction is not conceptualised in the practice theory literature on consumption (Halkier, 2013).

While practitioners are seen as 'carriers of practice' who often carry out practices in a routinised way, practice theory also allows for practitioners to have agency and the performance of practices to adapt and change over time on the basis of new information, some of which may come from media discourses. This means that media discourses, and changes in media discourses over time, can affect the trajectories of practices (Halkier, 2016b). In areas of challenged food consumption, such as the environmental impact of food, the risks presented by food and the health benefits of certain foodstuffs, the media can shape and define what are the appropriate ways to perform practices (Halkier, 2016b). Media discourse shapes what is the socially prescribed 'correct' way to do things. In terms of food provisioning in family homes, this may involve cooking from scratch using fresh ingredients, or avoiding risk in relation to food safety.

3.6.1 Media discourse in this research

These days, people may draw upon multiple different forms of media to inform their food-related practices. This may include traditional media, such as TV cooking programmes and recipe books, but also New Media such as blogs, social media and online forums. It is important to avoid considering all 'media discourse' from all different sources collectively, as an homogenous force shaping practices. The complexities of today's media landscape means that there will be differences between different sources in terms of their prescriptions of 'good' domestic food provisioning. Within this research, differences between prescriptions of family food provisioning on social media compared with other forms of media will be considered.

Just like Keller and Halkier (2014), in this research social media discourse will be conceptualised as a resource for practice, considering how it might inform the different elements of domestic food provisioning practices. However, social media use by parents will also be considered as a practice in its own right, looking at how the different elements of social media practice inform practice performances. These two approaches are not

inconsistent. Considering social media use as a resource for food provisioning practices allows us to consider how social media use informs and shapes those practices. Whereas considering social media as a practice enables us to explore how and why it is used.

3.7 Affordances in practice of online media

In seeking to better understand how parents navigate and negotiate practices using an online forum and other forms of social media, it is useful to consider what the different forms of social media enable – what it allows parents to do in relation to domestic food provisioning. What online platforms enable is commonly viewed through their affordances – the properties of an online platform that encourage certain types of practice (Boyd, 2014). Here practice is referring to what people do online.

Boyd (2014) outlines four affordances of social media:

> Persistence: the durability of online expressions and content; visibility: the potential audience who can bear witness; spreadability: the ease with which content can be shared; and searchability: the ability to find content. (Boyd, 2014, p. 11)

Costa (2018) argues that while affordances are often described as if they are "…stable properties of a platform" (Costa, 2018, p. 3643), emphasising what the architecture of the platform enables from a technical perspective, affordances are only meaningful when situated within the other, sometimes offline, practices they relate to. As Costa (2018) put it: "…users actively appropriate and adapt digital technologies to better reflect their own goals and lives." (Costa, 2018, p.3649).

This perspective may mean that certain technical affordances provided by online platforms are particularly important because of what they enable in other practices, whereas as other technical affordances may be irrelevant because they do not facilitate or enable something within other practices. Costa (2018) developed the concept of 'affordances in practice', which she defines as "…the enactment of platform properties by specific users within social and cultural contexts." (Costa, 2018, p. 3651). By mentioning social and cultural contexts, this draws attention to a consideration of what the technical capabilities of a platform, such as a specific form of social media, enable in the practices the social media content relates to.

This research employs Costa's (2018) concept of affordances in practice to help explore how parents use the online parenting forum, Mumsnet Talk, and other forms of social media to navigate and negotiate domestic food practices in family homes.

Chapter 4 – Methodology

4.1 Introduction

This chapter describes the two phases of research undertaken to meet the aim of this study of exploring how parents navigate domestic food practices using social media and how understanding this can inform future food waste reduction campaigns. Those two phases are an analysis of the interactions on the Mumsnet Talk online parenting forum in relation to food (Phase 1) and interviews with parents who use social media in relation to domestic food provisioning (Phase 2).

In the descriptions of Phase 1 and Phase 2 of the research that follow, justifications will be provided for decisions taken throughout the research process, including the choice of parenting forum analysis and interviews as research techniques and why they were selected over alternatives. Two forms of practice theory are employed as an analytical lens in this research; Shove's elements of practice were used in Phase 1 and Schatzki's elements in Phase 2. The reasoning behind this change in theoretical approach is described below.

In this chapter, ethical considerations associated with the research techniques used will be discussed. In research that involves human subjects, informed consent, the distinction between private and public information and the anonymity of participants are important principles (Pfeil and Zaphiris, 2009). Studies using online discussion forums present specific practical questions in relation to these principles (Seale et al., 2010). For example, can discussions on online forums be considered as being in the public domain? Ethical questions such as this are considered within this chapter, including the approaches taken in this research to address ethical challenges.

The interviews with parents that form part of this research were conducted between August and October 2020. During the months preceding the interviews, between March and May 2020, the UK had been placed into a lockdown due to the COVID-19 pandemic. Daily life was also far from normal during the interview period, with working from home encouraged from September 2020 and a three-tier system of restrictions introduced in October 2020. A national lockdown was introduced on 5 November 2020, soon after the interviews were completed. The pandemic and resulting government restrictions disrupted day-to-day routines, including those related to food and mealtimes. The implications of this are discussed in this chapter.

This research has been undertaken from a critical realist epistemological and ontological perspective. This means that positivist markers of quality, such as reliability and replicability, do not apply (Schwartz-Shea and Yanow, 2012). But there are still criteria for good quality research that can be applied to interpretivist studies such as this. Applying these criteria mean that research is more likely to be trusted, and in the case of this research, more likely to be used to inform future food waste reduction campaigns. What these criteria are and how they have been applied to this research is considered in the final section of this chapter.

4.2 Epistemology

Ontologically, critical realism accepts there is a real social world that we can attempt to understand (Fletcher, 2017). Yet we only experience aspects of it and those experiences are subject to our interpretation. Critical realists describe reality at three levels; the empirical level where events are experienced or observed and understood by interpretation, the actual level in which events occur whether they are experienced or not and the real level, where causal mechanisms cause events to occur (Fletcher, 2017; McEvoy and Richards, 2006; Wynn and Williams, 2012). These causal mechanisms can only be understood through our experiences and observations of events, so at the empirical level (Fletcher, 2017).

In terms of epistemology, critical realists accept that we can attempt to access this reality, yet "…the way we perceive facts, particularly in the social realm, depends partly upon our beliefs and expectations." (Bunge, 1993, p.231). It is this subjective and contextual interpretation of reality that made a critical realist ontological and epistemological perspective attractive to this researcher. In this research we are understanding what people do in relation to food and social media through their dialogue online and in what they say during an interview. So it is their perspective and their experience based on their own context. This discourse is also subject to interpretation by the researcher. A critical realist perspective allows us to acknowledge that while there is a reality that can be researched, any knowledge produced offers a limited view of reality, is subjective (Watkins, 1994) and also relates to a specific context. This helps to shape our approach to the research as well as helping to confine the applicability of any findings. This study of social phenomena and the subjective interpretations by both the researcher and participants contrasts with the study of natural phenomena which exist independently of our conceptions of them (Mingers, 2004).

Given the confined and contextual view of reality we can view, the outcome of research undertaken from a critical realist epistemological perspective cannot be to make generalisations, or laws (McEvoy and Richards, 2006). However, critical realism is an attractive philosophical approach to this research since it acknowledges the presence of causal mechanisms that generate phenomena (Wynn and Williams, 2012). These causal mechanisms cannot be seen directly, but they can be explored through empirical research and the development of theory (McEvoy and Richards, 2006; Wynn and Williams, 2012). These causal mechanisms may take into account complex social, environmental, organisational factors as well as those relating to information technology (Wynn and Williams, 2012). In this research, understanding the causal mechanisms behind discourse on social media in relation to food can help us understand the relationship between domestic food practices in family homes and social media use to a greater extent, which may then inform future food waste reduction campaigns and food waste policy.

4.2.1 Implications of critical realism for this research

Critical realism provides a methodological framework rather than defining a specific set of methods that can be used in research (Fletcher, 2017; Wynn and Williams, 2012). The aim of a critical realist approach to research is to characterise mechanisms behind phenomena. Given that these mechanisms cannot be directly observed, we must infer their existence based on observable experiences of research participants (Wynn and Williams, 2012; McEvoy and Richards, 2006).

A critical realist approach to research requires a detailed description of events that relate to the subject matter as looking at specific events in detail, including what happened, how it happened and what else was happening at the time, helps with the identification of causal mechanisms. It is what Wynn and Williams (2012, p.798), describe as the: "…aggregation of minute actions to highlight higher level factors…". In both the forum and the interviews, this will involve exploring what was happening in the home in relation to food before a parent turned to social media in addition to any circumstances that surrounded these events. This aggregation of minute actions will also involve obtaining detailed accounts of the use of social media itself, as well as what happened in the home in relation to food after social media use. Having as complete a picture as possible helps to elucidate underlying mechanisms (Zachariadis, Scott and Barrett, 2013). While the analysis of the Mumsnet Talk forum will provide some insights into these things, the interviews will

help to add detail to what happens before, during and after social media use by parents in relation to food.

A rich description of events is also important for understanding the structural factors and context that shape the causal mechanisms the research seeks to identify (Wynn and Williams, 2012) given that critical realism holds that the real world works as a multi-dimensional open system (McEvoy and Richard, 2006). These structural and contextual factors may include social and physical factors as well as symbolic entities (ibid). In the analysis of forum posts, it will be important to understand the context that surrounded the posts as much as possible; what was happening in the home related to food as well as wider contextual factors – other aspects of daily life that may have a bearing on what happened. Similarly, the interview questions need to enable participants to provide in-depth accounts of food-related activities in the home and associated social media use, including the contextual factors that surround them.

To enable these structural and contextual factors to be taken into account, it is important to have a clear understanding of who the research participants are; both the forum users (see section 4.3.2) and the interviewees (see section 4.4.6). This is because the research participants' place in society and their day-to-day activities may all play a part in the mechanisms being identified. The extent to which structural and contextual factors play a part in the mechanisms limits the extent to which the findings from this research can be applied to other household types. This means that any practical suggestions on how domestic food waste reduction campaigns should be implemented and policy recommendations will relate to family homes that are similar to those of the forum users and interviewees, particularly in terms of socio-economic background given that approaches to food provisioning depends on the socio-economic status of the family home (Charles and Kerr, 1988).

Given the focus on finding causal mechanisms, a central feature of a critical realist informed approach to research is one of retroduction. Retroduction is defined by Mingers (2004, p.94) as: "…where we take some unexplained phenomenon and propose hypothetical mechanisms that, if they existed, would generate or cause that which is to be explained." Retroduction requires inference (Wynn and Williams, 2012) and interpretation on the part of the researcher.

As researchers, we bring our own perspectives and experiences to the investigation of social phenomena. A complete detachment from research subjects is not possible as a

researcher (Ackroyd and Karlsson, 2014). This means that researcher reflexivity, consideration of their own relation to the subject of research and its participants, is important given the role of inference and interpretation in retroduction. Section 4.5.4 provides a reflexive account of this researcher's relation to the research topic and study participants.

Understanding causal mechanisms that explain phenomena that can be observed can be done by drawing upon existing theory as well as the development of theory (O'Mahoney and Vincent, 2014). A review of existing literature in an area of research can help to distinguish theories by the degree to which they offer a realistic view of the phenomena (ibid). Sections 2.4 and 2.5 of Chapter 2 provide a description of the main theoretical approaches employed in existing research into domestic food waste as well as a justification for the use of Social Practice Theory in this study. In this research, practice theory is used as an analytical lens through which to characterise the mechanisms linking domestic food practices and social media practices as well as developing theory that describes these mechanisms.

4.3 Research Phase 1: Parenting Forum Analysis

Phase I of this research involved an analysis of posts taken from the Talk forum of the Mumsnet website that related to food. This phase sought to provide an initial exploration of how parents' domestic food practices influence their social media practices (RO1), how online forums are used by parents to navigate domestic food practices (partially addressing RO2) and what determines the extent to which information sourced online influences domestic food practices (RO3).

An online parenting forum was studied in this research mainly because of the popularity of online forums with parents. Mumsnet's forum, Talk, receives over six million monthly unique visitors (Pedersen and Lupton, 2018). This section starts with a description of the data collection and coding of data collected from the Mumsnet Talk forum. The advantages and disadvantages of forums as a research tool are then considered followed by a discussion of the ethical considerations relating to online forums in research.

Discussions on the forum are themed, with the Feed the World theme including conversations or 'threads' on food and recipes, infant feeding, vegan diets and weaning. Conversations about food were collected from this theme.

4.3.1 Forum data collection and coding

Collection of the forum thread sample

Forum conversations or 'threads' were collected from the Food/Recipes area within the Feed the World section of the Mumsnet Talk forum. Forum posts were captured using NCapture, a web browser extension that allows PDFs to be created of webpages. This software was used as it creates an exact copy of a forum thread, including all the text within posts as well as any visual aspects of posts, including emojis and photographs. Emojis and photos were recorded as they may form an important aspect of the communication by parents on Mumsnet Talk, providing insights into how they navigate domestic food practices using the forum.

An initial exploration of the contents of the threads in the Feed the World section of Mumsnet Talk took place before any threads were captured to determine whether inclusion and exclusion criteria needed to be employed when threads were being captured. Based on this exploration, a short list of exclusion criteria was developed:

- Threads that did not relate to domestic food provisioning, such as requests for restaurant recommendations.
- Mumsnet promotional marketing posts.
- Threads that related to making alcoholic drinks, such as sloe gin, and so could not be considered family food provisioning.

Given that food waste is the results of what happens at all stages of food provisioning, from planning, shopping and storing food to cooking and eating (Quested, Marsh, Stunell and Parry, 2013) threads relating to all these practices were captured. Threads that related to kitchen equipment, including what to buy and how to use it, were included since they relate to how family food is provided. Threads that just included a question or statement that did not receive a reply from other forum users were rare. But they were included within the data as they would still provide an insight into parents' use of the forum in relation to food.

An expansive approach was taken to the selection of posts in this exploratory phase of the research as this would provide an insight into what's going on inside family homes and outside home, such as in supermarkets, in relation to food and how the forum is used in relation to these things.

In total, 101 forum threads posted in a five-month period from 23/2/18 to 27/7/18 were collected, working in chronological order. A decision was taken to stop collecting posts when it was felt by the researcher that data saturation had been reached (Bowen, 2008). Data saturation is somewhat nebulous to identify in practice (ibid) and involves a subjective decision by the researcher. In this research, data collection stopped when an analysis of further forum posts was not revealing new themes of posts in terms of the nature of questions being asked or in-home situations being described.

Forum post code development

Given that a critical realist approach to research seeks to describe underlying mechanisms behind social phenomena, existing theory can provide a useful analytical framework (O'Mahoney and Vincent, 2014) and was used to develop the codes. The codes were developed in an iterative process as my understanding of the interactions on the forum and of relevant theory developed. An initial codebook developed during November and December of 2017 was informed by the Theory of Planned Behaviour, given that this is the theory that has been used extensively in domestic food waste research. At this time, the focus of the exploration of the posts was on understanding the factors that lead to food waste in parents' homes.

However, during the initial exploratory coding using the software Nvivo and subsequent data analysis, it became clear that it would be interesting to explore the recursive relationship between domestic food practices and forum use; what is taking place in the home that led to forum use and how forum use may shape domestic food practices. This is what Marres (2017) describes as researching society and the technology, the digital practices, given the interlinkages between the two. Further familiarisation with the domestic food waste literature also demonstrated the analytical affordances of using Social Practice Theory rather than the Theory of Planned Behaviour when seeking to understand domestic food practices (sections 2.4 and 2.5 in Chapter 2 covers this in more detail). As a result of the initial analysis of the data and exploration of the existing literature, during the summer of 2018, new codes were developed. All of the codes are listed in Appendix 1. The new codes were informed by practice theory and were developed to enable an exploration several things that related to the research objectives:

- What was happening in the home that led to forum use (RO1).
- How the forum was being used in relation to family food provisioning, such as the nature of the questions being asked at the start of a thread (RO2).

- What determines the extent to which information provided in the forum influences domestic food practices, such as indications that information is trusted (RO3).

This code development initially used a deductive approach (Bradley, Curry and Devers (2007) using food waste literature and Shove et al.'s (2012) elements of practice as an organising framework. Codes were created for the practices of food shopping, storage, cooking eating and disposal. Any posts relating to planning for shopping, such as meal planning and writing shopping lists, were to be included in the shopping codes. These codes, relating to the different food provisioning practices, were created as parent nodes within Nvivo. These were subdivided into child nodes relating to Shove, Pantzar and Watson's (2012) three elements: materials, competencies and meanings.

Shove et al.'s (2012) elements of practice were used to inform the coding and analysis of the discussions on the Mumsnet Talk online forum because its elements are clearly and distinctly defined, making them straightforward to operationalise when data is being coded. It also provided a useful conceptualisation of the theory for what was the first, somewhat exploratory, analysis given that the elements encompass the 'materials' that are employed in domestic food practices (such as kitchen equipment), individuals' 'competencies', or know-how, of food provisioning practices as well as the meanings they associate with these practices. This allowed for a broad theoretical net to be cast over the data when exploring the relationship between domestic food practices and use of the online forum by parents.

Some codes were also developed inductively. This involved reading a sample of 40 forum threads again. Table 1 shows the codes developed from the inductive process as well as a brief explanation of why these posts were created. This inductive approach enabled ideas and concepts to emerge from the data (Bradley, Curry and Devers (2007) in what was still a relatively early stage of the research. The development of these codes was iterative, as the first codebook developed included too many codes. This meant it was difficult to remember all of the codes, increasing the likelihood that text relevant to some codes would be missed during the coding process. The large number of posts initially created also meant that so little data was being coded in some codes that the subsequent analysis of this fragmented data would be challenging.

To understand how social media are used by individuals, it is important to not just focus on the text but also the visual aspects of communication, as these are important

communicative tools (Pearce et al., 2020). On Mumsnet Talk, users are able to post photographs and emojis. During the inductive phase of code development, the decision was taken to code photographs within the relevant food practice code or codes. So for example a photograph of a foodstuff a parent was concerned about the safety of, was coded under food storage and food disposal competencies to allow the use of photographs in relation to those domestic food practices to be explored. Forum posts that included emojis were also coded within the relevant food practice code for the same reason. Emojis are graphic symbols of faces and other things such as animals and plants as opposed to emoticons, which are representations of facial expressions built from punctuation marks and other standard symbols on a computer keyboard (Bai et al., 2019).

Emojis are visual means of communication that may have multiple different meanings depending on the way they are used (Highfield and Leaver, 2016). Emojis may be used to convey someone's state of mind as well as conveying underlying beliefs and ideologies (Danesi, 2017). This presents a challenge for researchers, in that it requires interpretation. In view of this, a code was created for posts with emojis, regardless of the domestic food practice they related to, to facilitate the interpretation of them by enabling comparisons of their use by different forum users and in posts about different subject matter. When presenting results that include emojis, the emojis will be included to provide transparency in their interpretation.

Table 4.1. Codes that were added to the codebook during the inductive phase of code development and the reason for their inclusion as well as the research objectives the codes relate to.

Parent code/node	Child codes/nodes	Reason for inclusion and relevant research objective
Evidence of forum posts influencing domestic food practices	None	To explore the extent to which ideas and advice provided in the forum then shape domestic food practices – relevant to RO2 and RO3.
Evidence of one domestic food practice influencing another	None	To investigate the connections between domestic food practices to help form a picture of these interlinkages and between food practices and forum use – relevant to RO1.
Nature of question asked	• Seeking advice • Seeking information	The questions provide an indication of what is going

	• Seeking inspiration • Seeking reassurance	on in the home that leads to forum use and how the forum is being used – relevant to RO1 and RO2.
Indications of trust by forum contributors	• Advice is contested • Explicit indication of trust	To get insights into whether forum posters trusted ideas and advice they were provided with on the forum and whether different forum posters questioned guidance and ideas within a thread – relevant to RO3.
Sources of credibility in posts	• Advice given without evidence • Anecdotal evidence provided • Conversation between participants • External source eg. book or weblink • Forum poster's credibility	To explore whether ideas and advice were evidenced in any way and if so how – relevant to RO3. In terms of anecdotal evidence this may be a reference to a particular way of doing things by a parent and the outcome of this course of action. Alternatively support for a course of action may be provided during an interaction between participants, an external source of information may be referred to or a forum poster may evidence their own credibility, such as their own professional expertise or experience.
Concern for food waste	None	To see whether any forum posts mentioned a concern for food waste and if so, whether the source of the concern was stated, relevant to RO1.
Time influencing practices	None	To investigate the extent to which the availability of time shapes domestic food practices and the non-food practices that cause time limitations, relevant to RO1.
Uses emoji	None	To explore how this non-text form of communication is used by

		parents on the forum, relevant to RO2 and RO3.

The coding process

Once the codebook was developed, all the posts in the 101 threads captured were coded. Forum threads start with a question posted by a parent, or a statement relating to a situation in the home that has prompted a request for advice or ideas. This is followed by further text from the original poster that describes the request in more detail including, in some instances, providing further details circumstances that surround the request. Other forum users then post their comments.

Coding was initially conducted just using the questions and supporting text that started a thread. This was to provide one Nvivo file that just explored what was going on in the home in relation to food that prompted forum use to make the analysis of this more straightforward in relation to RO1. In a second Nvivo file, all of the contents of each thread were coded, including the questions/statements that started a thread as well as the responses to an initial question or statement. This was to enable an exploration of how the forum is used by parents to navigate domestic food practices (RO2) and what determined the extent to which information was used to inform domestic food practices (RO3).

An important consideration was the unit of analysis in the text being studied – the size of the text 'chunk' that was to be coded. In analyses of online discussion forums, approaches range from coding individual sentences to taking an entire message as the unit (De Wever *et al*., 2006; Pfeil and Zaphiris, 2009). The approach taken within this research, informed by the exploratory coding to develop the codes, was to employ a flexible approach to the amount of the text coded. This enabled the unit of analysis to be determined by meaning: an idea, description, explanation or piece of advice, was coded whether that was within a sentence or series of sentences. This flexibility overcomes the danger that information constructed in several sentences may be lost if single-sentence coding was used and the risk that several ideas captured within a single post would be lost if whole posts were the unit (Pfeil and Zaphiris, 2010). In practice, the coded text ranged from one to a small number of sentences.

The coding was only conducted by the researcher and there was no coding by another individual to check for inter-coder reliability. A key argument for approaches involving multiple coders is to determine the reliability of the data and potentially its replicability (De Wever *et al*., 2006). However, the critical realist epistemology of this research recognises

the subjectivity of the interpretation of data by the researcher. This subjectivity means agreement in interpretation between researchers is not feasible. This does not mean, however, that the research cannot still be rigorous and of good quality. Section 4.5 describes characteristics of good quality in interpretive research and how these characteristics have been applied in this study, including researcher reflexivity.

4.3.2 A description of Mumsnet's users

A survey of Mumsnet users found that 97% of respondents were mothers, 0.2% fathers, 1.6% were other carers including grandmothers and 1.4% were not parents or carers (Pedersen and Smithson, 2013). In the same survey, 75% of respondents were aged between 31 and 50 and the majority of Mumsnet users had children as opposed to being pregnant or trying to conceive (ibid). Only 21% of respondents identified themselves as full time stay-at-home mothers and the rest worked at least part time inside or outside of the home (ibid.). A survey conducted by Mumsnet and published in 2009, cited by Pederson and Smithson (2013), found that 74% of respondents had a household income higher than the national average. In the same survey, 34% of respondents had a university degree, 27% had a postgraduate qualification and 14% were undertaking postgraduate studies (ibid). In short, it is predominantly middle-class mothers who use Mumsnet (Pedersen, 2020) and they are predominantly UK-based (Matley, 2020).

The context and experiences of these middle-class mothers, including their working lives and the social pressures to provide food in a certain way, will limit the applicability of the findings and suggestions for future food waste reduction campaigns.

4.3.3 Strengths and weaknesses of forums in research

Some studies that gather data from online forums use forums as a means to understand the knowledge, beliefs and behaviours of those using them in relation to an offline activity. In other words, the research does not relate to the forum itself, the forum is just used a means to access discussions about something else. This type of research covers an eclectic mix of subject matter, ranging from an investigation into the effectiveness of cannabis as a treatment for ADHD (Mitchell et al., 2016) to views on the risks of indoor tanning among tanning bed users (Carcioppolo *et al.*, 2014).

Other research seeks to understand the role a forum plays in a particular aspect of social life and how effective it is at doing that. Numerous studies look at forums as tools for education and considerable research has been conducted into the merits of forums for those suffering from various health conditions, including the accuracy of the information

provided there. Research into parents' use of online forums has similarly explored either parents' views on specific aspects of parenting or how parents use the forum in relation to various aspects of parenting. As outlined below, this research falls into both categories and this has consequences for the advantages and disadvantages of an online forum as a research tool.

Strengths of online forums in research

The critical realist approach to this research and its focus on understanding the underlying mechanisms behind phenomena means that it is important to explore what was happening in the home prior to parents turning to the forum and other events in their day-to-day lives, such as going to work or doing the school run, that may influence their food practices and forum use. The posts on the forum by parents often provide descriptions of their food practices and the wider practices that make up daily life. As food practices relating to children are subject to many cultural demands (Southerton and Yates, 2015), this means that approaches to researching domestic food practices that involve interaction between researcher and participants, such as interviews and questionnaires (e.g. Hebrok and Boks, 2017) as well as shop-a-longs and researchers watching food practices in the home (e.g. Comber et al., 2013; Evans 2011, 2012a, 2012b) may be subject to social desirability bias (Roxas and Lindsay, 2012).

Online communication, such as through forums, may provide a way to access more realistic accounts of domestic food practices. Seale *et al.,* (2010, p.595) state: "…internet communications might change the factors that in face-to-face situations result in a particular performance of an idealised self, or 'front'". Parents using the Mumsnet Talk forum use pseudonyms and so are posting anonymously, potentially reducing the tendency to provide socially desirable descriptions of their domestic food practices. Existing studies have highlighted how anonymous online communications can encourage honesty and openness (Brady and Guerin, 2010).

The accessibility of the research data on the Mumsnet Talk forum is another advantage. Other social media where parents may discuss food, Facebook and WhatsApp, have closed groups in which only those accepted to the group can read discussions. However, the discussions on Mumsnet Talk are visible online to anyone. The analysis of online forum posts also has the potential to yield large volumes of data in short periods of time given that old posts are retained on forums and so provide cumulative record of views and exchanges (Seale *et al.,* 2010).

Weaknesses of online forums in research

Given the recognition of the roles that structural and contextual factors play in shaping the causal mechanisms that research seeks to identify using a critical realist approach (Wynn and Williams, 2012), it is important to understand who the research participants are and the situations that prompted forum use. However, forum users post anonymously on Mumsnet Talk, so the biographical information that can be gleaned from posts is limited. Also, the amount of detail provided about the situations that prompted forum use is variable, with little detail provided at the start of some threads.

Wherever offline contextual factors that prompted forum use were described in a thread, this data was coded. Existing research providing a broad characterisation of Mumsnet users (described in section 4.3.2), means that structural factors that may shape domestic food practices and define the limitations in the applicability of the research can be inferred.

4.3.4 Ethics and forums

Ethical approval for the forum research was provided by the University of the West of England's Faculty of Health and Applied Sciences ethics committee. In common with other studies that have used posts on online parenting forums as their subject matter (eg. Brady and Guerin, 2010, and Pederson and Smithson, 2013) the Mumsnet administration team was contacted prior to data collection for consent for data to be collected from their website and this was provided on 4 September 2017.

When sourcing research data from online sources, the extent to which the data derived can be considered in the public domain is an important consideration and those posting in private online locations will have a much greater expectation of privacy (British Psychological Society, 2021). Anyone online is able to read posts on the Mumsnet Talk forum. It is not a closed group and there is no requirement to register to view posts. So Mumsnet Talk posts can be considered as being in the public domain. However, careful consideration is still required around the important questions of informed consent of research participants (Pfeil and Zaphiris, 2010) and the anonymity of participants when data is being reported.

On the Mumsnet Talk forum, providing informed consent for participants (forum users) would be challenging given that posts are anonymous, with posters using a pseudonym. If posts were made on the forum by the researcher to describe how posts are being analysed, not everyone would necessarily see the posts (Sugiura, Wiles and Pope, 2016) given the volume of posts on the forum and the fact that some posters may stop using the forum

after making contributions. But technical challenges are not a justification for not providing informed consent.

Other researchers who have studied discussions on online forums have taken the view that informed consent is not required of forum contributors if the posts are in the public domain (Seale *et al*., 2010) and that is the approach taken here after careful thought. Mumsnet Talk's privacy policy makes it clear to users that their posts are in the public domain (Mumsnet, 2022d). The subject matter of the posts, focused on domestic food practices, is not highly personal or sensitive. In this research, steps were also taken to ensure the anonymity of forum contributors.

There are ambiguities in what can be considered private and public when using online data (British Psychological Society, 2021; Seale *et al*., 2010). Those operating in open public spaces online may still expect some degree of privacy online (Markham and Buchanan et al, 2012). Therefore, steps have been taken within this research to preserve the privacy and dignity of forum contributors, in keeping with British Psychological Society guidelines for the use of online data (ibid). Forum contributors on Mumsnet Talk use pseudonyms that they choose themselves. While this affords some degree of anonymity, during the coding process, the pseudonym adopted by each forum poster whose contributions were coded was replaced with a numerical value assigned to that individual. This step was taken to provide further reassurance that forum posters could not be identifiable when comments by an individual are being reported in the research. A record of these pseudonyms and the numerical code they were assigned was stored securely.

When reporting research, it is also important to ensure that identifying details are removed from the data being presented. Identifying data may include idiosyncratic details of someone's lives (Saunders, Kitzinger, and Kitzinger, 2015). So careful consideration was given to the content of any forum posts presented in the research findings to ensure that details within the post, such as the names of children or other identifying information circumstantial information, was removed. Removing identifying information included considering the cumulative effect of different personal details being provided in different excerpts or descriptions of forum posts, which may collectively identify an individual or family if included in any research findings.

Finally, posts contributed in the month prior to the data being collected were excluded from the research data, giving forum posters time to delete content they were not happy with on reflection.

4.4 Research Phase 2: Interviews with Parents

Following the forum analysis, online interviews were conducted with 21 parents who use social media in relation to their domestic food practices. Several of the participants used online forums in relation to food. This enabled an exploration of their domestic food practices and forum practices that built upon the findings from the forum data, including the structural and contextual factors shaping these practices. The forum sometimes offered a limited view of situations that led to forum use and of forum participants and their day-to-day lives, and the interviews provided an opportunity to explore these things in more detail. A sample of 21 interviewees was considered sufficient because this phase of data collection, given a critical realist perspective, is seeking to explore underlying mechanisms rather than attempting to generate data purporting to be representative of a specific population.

Parents use numerous social media platforms in relation to domestic food practices. Studying multiple platforms helps the researcher to understand how platforms are used in relation to a specific subject matter (Pearce et al., 2020; Rogers, 2017). In this research, parents who use different social media platforms in relation to food were sought as interviewees to enable comparisons to be made between the affordances of different platforms in relation to food practices. In some instances, individual parents used more than one platform, facilitating such comparisons.

This section of the chapter starts with a description of how interviewees were recruited, how the interview questions were developed and how the data generated was coded. A justification for the use of online interviews in this research is then provided, before considering the limitations of interviews. The ethical considerations of interviews in this research are also discussed.

4.4.1 Interviewee recruitment and description of the interviewees

Interviewee recruitment

Interviewees were recruited by posting requests for interviewees on Mumsnet Talk, on my own Twitter account as well as though Facebook groups that were for parents. Some of these posts were on Facebook groups not related to food, such as ones devoted to ideas for activities with children and one was related to natural parenting, a particular parenting style. A work colleague who is a parent and member of several parenting Facebook groups, including one devoted to natural parenting and to children's sleep, also posted requests for

interviewees on my behalf. I also sent a request for interviewees to a group for parents at my university.

The requests for volunteers stated that interviewees were being sought who used online parenting forums or other forms of social media in relation to food in their homes. This request did not state that the research was ultimately aimed at finding ways to inform food waste campaign out of a concern that it may lead interviewees to provide answers about their domestic food practices they believe to be in line with social norms, introducing social desirability bias. The interview questions did not ask about food waste, but where waste was mentioned in the participants' responses this was included within the research data.

Facebook groups for parents that were specifically about food, such as approaches to feeding and food-related issues, such as allergies, were not used during the interviewee recruitment process. This decision was taken out of a concern that recruiting through specific food-related Facebook groups may introduce a bias into the sample of participants as many participants may be recruited through one group and have joined it with a specific approach to feeding or food-related challenge in mind. However, some interviewees, recruited from elsewhere, did mention using food-specific parenting groups on Facebook and their use of these groups was included within the data as it will help to address the research objectives.

The recruitment of participants was initially a slow process. However, once some participants had been interviewed, snowball sampling became feasible in which Facebook group members who volunteered to be interviewed alerted their friends, who also volunteered.

Who the interviewees were

Table 4.2 provides an overview of who the 21 interviewees were. All potential interviewees who volunteered were interviewed as they used social media in relation to food provisioning for their family. All were parents who lived in the UK and most had young children at the time of the interview; 18 of the interviewees had at least one child aged 5 or under. All but one of the interviewees were female and all but one was working; 11 interviewees were working full time and 9 part time. The parent who was not working was a part-time student. All but one of the partners of the interviewees were working. The interviewees and their partners who were working all had skilled jobs.

All but one of the interviewees were using or had previously used more than one social media platform in relation to food. Those on Facebook were signed up to groups defined by

their family circumstances, such as having twins, challenges they faced in relation to parenting or food provisioning, such as having a child with cows' milk protein allergy (CMPA), the approach they had adopted to feeding their child, such as using baby-led weaning, or ethos to parenting, such as 'gentle parenting'. One parent was a member of a Facebook group for parents of children in a school class and another mentioned a group called Family Lockdown Tips and Ideas. Those on Instagram followed the accounts of individuals such as the Joe Wicks Wean in 15 account and sr-nutrition, run by baby and child nutritionist Charlotte Stirling-Reed.

Former as well as current social media use has been included in table 4.2 because even if parents did not use a particular form of social media at the time of the interview, they were still able to describe how they had used it. Once parents were interviewed, they were assigned a number that is used in any reporting of data as part of the anonymisation process.

Table 4.2. Characteristics of the 21 parents who were interviewed for this research. The parent number is the number the parent was allocated in the anonymisation process.

Parent number	Children	Job (FT/PT)	Partner's job FT/PT	Location	Social media currently or previously used in relation to food
0063	Son, 7 and twins (boy and girl) aged 5	University academic (PT)	Operations Director (FT)	Lancashire	Facebook and Instagram
0064	Daughter, 1	University academic (FT)	Financial manager (FT)	Bristol	Facebook, WhatsApp and Instagram
0065	Son, 1	University administration (FT)	IT (FT)	Bristol	Facebook, Instagram, Pinterest, BBC Good Food Website
0066	Daughter, 5, daughter	Nurse (FT)	Paramedic (FT)	Liverpool	Facebook, Mumsnet Talk forum

	3 and son, 7 months				
0067	Daughter, 11 and twin girls who are 9	Works in PR (FT)	Sales director (FT)	Surrey	Facebook, Mumsnet Talk, Netmums and Pinterest, book (The Silver Spoon), Google search
0068	Daughter 3, son 16 months	Marketing manager (PT)	Nuclear engineer (FT)	Gloucestershire	Facebook, baby-led weaning cookbook
0069	Son, 2	University administration (PT)	Electrical engineer (FT)	Bristol	Mumsnet Talk, Instagram, Facebook, WhatsApp, Google search, BBC Good Food and Healthy Little Foodies website
0070	Daughter, 4 and son, 6	Stay at home mum and part-time student.	IT/Technical manager (FT)	Bristol	Facebook, WhatsApp, book (My Child Won't Eat), parenting website Aha Parenting.
0071	Daughter, 8 and son 4	University academic (FT)	Quantity surveyor (FT)	Bristol	Facebook, website Crying Over Spilled Milk, WhatsApp, Google searches.
0072	Daughter, 2	University academic (PT – 4 days a week)	Software engineer (FT)	Bristol	BabyCentre forum, Google search
0073	Twin girls, 4	Mortgage Underwriter (PT)	Customer services	Bristol	Facebook, book Baby-Led

			manager (FT)		Weaning. Google search
0074	Son, 3 and son 1	Marketing and branding consultant (PT)	Scientist (FT)	Liverpool	Facebook, WhatsApp, Mumsnet Talk, KellyMom website, Slow Cooker Recipes App, Baby Led Weaning Slow Cook Recipes book, Annabel Karmel recipe book
0075	Son, 10 and daughter, 7	University administration (PT)	IT project manager (FT)	Bristol	Facebook, Mumsnet Talk, Google search, Great British Bake Off on TV, BBC Good Food Website
0076	Son, 2	University academic (FT)	Stay at home mum (had previously been PT accounts assistant).	Newcastle	Facebook, Mumsnet Talk, general cooking books, Google search.
0077	Daughter, 11 months	Account manager (PT) Was on maternity leave at time of interview	Compliance analyst (FT)	Hertfordshire	Facebook, Mumsnet, Netmums and Health Unlocked forum, three baby-led weaning apps, including one for 30-

					minute recipes and another for slow cooked recipes, baby-led weaning book, Joe Wicks cook book and general recipe books.
0078	Son, 3 and son 1	Vicar, (FT)	Data analyst (FT)	Liverpool	Facebook, WhatsApp, Instagram. Google search
0079	Daughter, 5 and son 1	University administration (FT)	School teacher (FT)	Bristol	Instagram, Facebook, WhatsApp
0080	Son, 12	University administration (FT)	Telecoms engineer (FT)	Bristol	Netmums and Mumsnet forums, Google search. Annabel Karmel cookbook
0081	Daughter, 1	University academic (FT)	Financial services (FT)	Bristol	Facebook, Pinterest, Annabel Karmel cooking book
0082	Daughter, 3 and son, 11 months	Trades union official (FT). On maternity leave at time of interview	Primary school teacher (FT)	Liverpool	Facebook, WhatsApp, Instagram, Google search, BBC Good Food website, general cook books.
0083	Daughter, 21 months	School HR adviser (PT)	Software developer (FT)	Cambridgeshire	Facebook, Facebook Messenger, Mumsnet Talk,

					Netmums and Google search, baby recipe books including baby-led weaning book.

Table 4.3 shows the number of parents who used different social media platforms in relation to domestic food practices as well as books, TV and general Google searches. If parents used more than one form of a different medium, such as more than one Facebook group or parenting forum, this was counted once for that platform to give an indication of the extent to which different platforms are used in relation to food. The most commonly used form of online social media among the interviewees in relation to food was Facebook, followed by an online parenting forum. Twitter was not used at all.

Table 4.3. Number of interviewees who currently or previously used specific social media platforms in relation to domestic food practices and other sources such as TV and books.

Social media platform	Number of interviewees who use or used source
Online parenting forum	10
Facebook	19
Facebook Messenger	1
Instagram	7
Twitter	0
WhatsApp	8
Pinterest	3
Apps	2
Website	7
TV	1
Google search	11
Books	11

4.4.2 Conducting and coding the interviews

The interviews were conducted using a list of pre-prepared questions and prompts (see Appendix 2) and the approach was semi-structured, allowing further questions to be added during the interview for points to be clarified or to encourage more in-depth answers that

were relevant to the research questions. The prompts were questions that appeared beneath an initial question and were asked to elicit more detailed responses from participants. This approach, with main questions and follow-on questions or prompts, was an attempt to add structure to the interview so it would flow and interviewees would feel at ease, as well as participants providing detailed accounts of what happened in relation to food and social media in their homes. The interviews were conducted online using Microsoft Teams and were recorded. The recordings were then transcribed and these transcriptions were subsequently coded using Nvivo.

Development of the interview questions

The interview questions and prompts were developed following a provisional analysis of the forum data to allow gaps in the data in relation to the research objectives to be filled and interesting themes from the forum data to be expanded upon. Once the list of interview questions and prompts were developed, they were pilot tested using three interviews. During the pilot testing, interviewees found the questions clear and the questions provided answers that helped to address the research objectives and so no changes were made to the list of questions. The interviews provided opportunities to build upon the forum data in relation to research objectives 1-3:

RO1: The interview questions encouraged detailed descriptions of parents' domestic food practices and the situations that led to use of social media. Parents were also asked to describe their priorities in relation to food.

RO2: The interview questions encouraged detailed descriptions of parents' use of online forums (where they used forums) and other forms of social media in relation to food.

RO3: Interviewees were asked to explain what determines whether or not information from social media is used to inform their domestic food practices and who and what is trusted.

A critical realist perspective, with its focus on understanding the mechanisms that underpin phenomena, encourages the use of interview questions that are informed by theory (Smith and Elger, 2014). Also, given that within practice theory, practices are shaped by contextual and structural factors and these are part of the 'mechanisms' shaping practices, it is important to use interviews to understand these factors. This involves having a clear understanding of who the interviewees are as well as the contextual factors that shape what happens in relation to food in the home. In this research, this involved getting rich descriptions from participants about their domestic food practices and the interconnecting

factors that shaped them, such as other practices in their day-to-day lives. This also involved parents describing their priorities in relation to the food and their family and whether they felt there were external expectations of what parents should be feeding their children. If so, where these expectations come from. These latter questions were exploring whether the interviewees had a sense of the socially prescribed way of doing things and where this came from.

Given that within practice theory, individuals are seen as 'carriers' of practices (Reckwitz, 2002; Ropke, 2009) and mental activities, such as the desires and aims, are a quality of a practice (Reckwitz, 2002) rather than individuals, this may not seem consistent with asking parents about their priorities in relation to food. However, in the same way that a practice theory approach is not inconsistent with individuals experiencing emotions in relation to practices (Molander and Hartmann, 2018), individuals can still have a sense of their priorities and what they are looking to achieve in practice performances.

Several of the interview questions included prompts designed to elicit more detailed descriptions of food practice performances and what else was happening at the time; what the parent was experiencing as well as the reasoning behind their actions. These prompts, included in the question list in Appendix 2, were used to varying degrees during interviews depending on how expansive the interviewee was initially. These prompts helped with a challenge identified by Hitchings (2011) in using interviews when seeking to understand practices, that interviewees can sometimes be reticent to talk about the minutiae of what may seem like mundane everyday practices. But these are important to elucidate to help form ideas on underlying mechanisms.

Hitchings (2011, p.62) describes how Giddens discusses 'critical situations': "…as moments when otherwise routine actions are brought abruptly into consciousness by realising they are out of step with the wider social scene." Interviews provide a means to ask participants about such critical situations which may happen infrequently and so would be less likely to be seen using observational techniques. These critical situations provide an opportunity to explore food practices and social media use at moments when practices may need to be adapted. If they are particularly significant moments in time, they are also likely to be relatively easy for participants to recall. To enable participants to describe these critical situations, during the interview, the parents were asked to describe a time when they had asked a question on an online forum, Facebook group or another form of social media and provide details of what was happening in their home at the time.

Coding and analysis

The codebook for the interview questions was developed to allow the coding to build on the findings of the forum data and fill any gaps in the data in relation to the research objectives (see Appendix 3). This included codes relation to parents' priorities in relation to food, the nature of external expectations on parents in relation to food and the sources of these expectations. The codes also captured parents' detailed descriptions of their mealtime practices. Parent codes were created for each of the social media platforms parents used, with sibling codes related what parents may get from the discourse on the platform - advice, inspiration and emotional support. These codes were based on the findings from the forum analysis.

Codes were created relating to how parents determine whether they will use advice or inspiration they read on social media and how they determine what they trust, something that could only be explored in a limited way using the forum data given that it's not possible to see what happens after parents have read posts. The interviews provided an opportunity to ask parents what, if anything, happened after they had read social media posts. There were also codes relating to food waste (relating to the nature of parents' concern about it and their efforts to reduce it) as this had come up during some the interviews.

The codebook was pilot tested using transcriptions of five of the interviews. Based on this pilot coding, one new parent code was developed – why parents used or did not use a form of social media in relation to food. Other changes involved adding sibling codes beneath existing parent codes to enable that theme to be explored in more detail. The final interview codebook in Appendix 3 includes the prompts noted during the pilot testing to help implement the codes. Once the final codebook was developed, all interview transcriptions, including those coded during the pilot stage, were coded. All of the coding took place in Nvivo and, in line with the forum coding and the critical realist epistemology of this research, there were no checks for inter-coder reliability.

4.4.3 Interviews and coronavirus lockdown

This research period included significant changes and disruption to family life due to the coronavirus pandemic. Some of the interviewees and their partners were working from home at the time of the interviews and had experienced prolonged periods of home schooling their children. This impacted domestic food practices as well as other interconnected practices, such as going to work.

Investigating the effects of the coronavirus pandemic on domestic food practices and the use of social media is not a focus of this research and so it is not explored in detail in the results. Nevertheless, it is important to acknowledge the impact that the changes in daily life brought about by the pandemic will have had on family life, including food practices, before and during the interview period. Some of the changes during the pandemic, such as increased working from home, are likely to continue to some extent after the pandemic (Felstead and Reuschke, 2021). The influence of the pandemic will also not prevent an exploration of the underlying mechanisms behind parents' use of social media in relation to food.

Interview prompts were used that asked parents whether their domestic food practices had changed during the pandemic. During the interviews, parents often described how their lives, both in relation to food and in other areas, had changed because of the pandemic without being prompted. To help explore the effects of the pandemic on domestic food practices and other practices (such as going to work) that fall within the scope of this research, a code was created in the interview codebook to capture any changes in practice due to the pandemic.

4.4.4 Why online interviews were used in this research

Doing interviews

Many research methods commonly used in studies of food practices and food waste, including home visits that involve watching domestic food practices and shop-a-longs, were considered while the research method was being developed. But in the end, interviews were settled upon as the best approach given the focus of the research.

Researchers who use Social Practice Theory to inform their research have avoided interviews as a research method, instead opting for approaches that enable the researcher to watch practice performances as they happen, on the understanding that practices are habituated and so challenging for research participants to describe and discuss (Hitchings, 2011). However, Hitchings (2011) makes the case for the compatibility of interviews with a practice theory, describing how Bourdieu allows some scope for improvisation in practices that are conscious and so must be reportable. Although more recent versions of practice theory, including those of Schatzki, portray individuals as carriers of practice, with goals and emotions belonging to practice this is not incompatible with practitioners being able to adapt their practices and discuss the goals and emotions associated with practices.

This research seeks to explore the interconnections between different food practices, between food practices and social media use and other connected practices in parents' daily lives. Interviews provide a means to explore these interconnections between practices with participants. They are a means to get an aerial view of daily life, including the food provisioning and social media practices that take place within it, in ways that research techniques that involve observing specific practice performances, may not. If planned and conducted carefully, interviews also provide a means to explore the detail of these practices, the ways of doing things and the structural and contextual factors that shape practices.

Zachariadis, Scott and Barrett (2013) describe the benefits of using a mixed methods approach to critical realist research, including how inferences from one type of research can be used to inform the questions in another type and ultimately help elucidate underlying mechanisms. Conducting the interviews after the forum analysis enabled questions posed in the interviews to be informed by a provisional analysis of the forum data. Conducting interviews also compensated for the weakness of the forum data, in terms of providing a detailed understanding of who the research participants were and the situations that prompted social media use as well as how social media discourse had subsequently informed domestic food practices.

Doing interviews online

The interviews were conducted online partly for practical reasons. The interviews took place between August and November 2020, a period of time when there were coronavirus restrictions, including local lockdowns and working from home was encouraged. This made face-to-face research techniques challenging. The interview participants were also based all over the country, so travelling to all of the participants would also have been difficult.

Building a rapport with research participants is important for generating rich, detailed accounts (Braun and Clarke, 2013). This is one area where my career as a journalist (over 20 years) and the extensive experience it has provided in conducting interviews remotely helped. Given all these factors the decision was taken to conduct the interviews online using Microsoft Teams.

4.4.5 Limitations of interviews

While Hitchings (2011) makes the case for using interviews in a practice theory informed approach to research, it must be acknowledged that research participants may not reflect on day-to-day food practices that have become habitual. In his description of a research

project that involved interviews, Hitchings (2011) also describes participants' initial surprise at being asked about the detail of apparently mundane everyday activities. These challenges have the potential to limit the detail participants are willing and able to share about everyday food provisioning and social media activities, as well as their ability to reflect on why they undertake certain activities.

During the interviews, efforts were made to put participants at ease and acknowledge that details about the minutiae of food, social media and other interconnected practices were important to this research and of interest to the researcher. Zooming in on moments where parents had engaged with social media, often at times when parents were facing considerable food-related challenges such as a child's refusal to eat certain foods or the discovery of a food allergy, meant that parents were being invited to recall moments that were emotionally charged and so vivid in their memories. This made it easier for them to recall the details of what happened.

4.4.6 Ethics and interviews

Ethical approval was provided for the interviews within UWE Bristol's ethics approval process. The reporting of the interviews is anonymous, with each participant assigned a numerical code that will be used in the reporting of results rather than their name. Any detail provided by the participants during their interview that may enable them or a member of their family to be identified has been removed from the data when it is being reported.

Whilst the subject matter of the interviews is not of an inherently sensitive nature, there is the potential for some parents to be concerned that their food-related practices run counter to social norms, in terms of healthy eating and minimising food waste. During the course of the interviews, some participants also provided personal information about their own anxieties in relation to food and how this may have informed their food practices. This emphasises the need to ensure that data reported is anonymous. Also, any data that was more sensitive in nature is only reported in the research findings when it helped to inform the analysis. In many instances, this was not the case.

4.5 Research quality

Positivist markers of research quality, such as reliability and replicability, do not apply to studies with a critical realist ontology and epistemology such as this (Schwartz-Shea and Yanow, 2012). This is because these quality markers are only relevant if it is accepted that the social world is a stable entity that can be measured and that the researcher can work in

such a way that they will not 'contaminate' the results (ibid.) and this is not the case with critical realism.

Rejecting a positivist perspective and its associated quality markers means that certain potential approaches to research design are not appropriate here. A case in point is coding by more than one researcher followed by tests of intercoder reliability, as this approach is based on the assumption that two or more researchers can consistently reach the same interpretations of data. Interpretivist research approaches accept that differences in interpretations by researchers are inevitable and attempts to eliminate differences should not be made.

The approaches suggested to enhance research quality in interpretivist research are aimed at enabling researchers to check their own sense-making, such that claims made in the research can be regarded as trustworthy (Schwartz-Shea and Yanow, 2012). The overall trustworthiness of interpretivist research is not only a factor by which other researchers may judge work, but also other actors such as policymakers (Schwartz-Shea, 2006). This means that trustworthiness is important to this research as it is how the rigour of the research may be judged in its own right, as well as the extent to which this research can be used to inform food waste reduction campaigns and policy.

Many different factors that enhance research quality in interpretivist research have been suggested. These can be applied to different degrees in different studies depending on the data collection methods used (Schwartz-Shea and Yanow, 2012). At the same time, while different quality criteria for interpretivist research have been drawn together by different authors, the criteria are often overlapping, making clear distinctions difficult. The quality criteria discussed in the subsections below of thick description of the data, transparency in the analysis and reflexivity, as well as the further checks on researcher sensemaking, are those drawn from existing literature that are most applicable to this research.

4.5.1 Thick description of the data

Thick description of the research data involves a description of the detail of an event or interaction that forms part of a process being researched such that the researcher's interpretation is supported by sufficient detail as to evidence that interpretation (Schwartz-Shea, 2006; O'Connor and Joffe, 2020). In both the forum analysis and interview analysis, excerpts of forum posts and excerpts of interview transcription have been be quoted in sufficient length and volume to enable the reader to see how the analysis has been derived. In addition, the circumstances that prompt forum use (in the case of the Mumsnet

Talk data) or interaction with a forum or other form of social media (in the case of the interview data) have been described, similarly enabling the reader to determine how the analysis has been formed.

In the presentation of the Mumsnet Talk forum data, the thick description of data has involved a description or inclusion in the results of any visual aspects of the posts that informed part of the analysis, specifically any photos and emojis. In the presentation of the interview data, any relevant incidents that took place during the interviews that informed the analysis have been described. During the transcription of the interviews, any lengthy pauses by interviewees before responding to a question, or moments when they laughed, were recorded in case these moments would inform the analysis. As the interviews took place on Microsoft Teams, occasionally interviewees showed the researcher something on screen that was relevant to what they were describing. Notes were taken during the interviews to record occurrences of this. If these incidents informed the analysis, they were described in the results.

4.5.2 Transparency

Transparency encompasses both the research processes (Schwartz-Shea, 2006) and the processes of analysis (O'Connor and Joffe, 2020). In a practical sense, it involves outlining the research processes in detail and the methods of analysis. This chapter has attempted to do both of these things. Transparency in interpretivist research cannot be seen as a measure of the dependability or objectivity of research, since these factors are not consistent with interpretivist research (Schwartz-Shea, 2006). Instead, it is a means to enable those reviewing the research to see the connections between decisions and actions taken and the analysis presented. It is also a means for the researcher to check their own sensemaking during the research process. Checks on sensemaking are important during interpretivist research as it enables a more nuanced understanding of the research topic, rather than seeking to find 'the answer' (Schwartz-Shea and Yanow, 2012).

Section 4.3.1 outlined the change in the focus of the research during the course of the PhD, with a shift from using insights from posts on Mumsnet Talk to investigate the factors that lead to food waste in family homes, to an exploration of the recursive relationship between domestic food practices and social media use. There was also a change in the theoretical lens in the research, with a change from the Theory of Planned Behaviour to Social Practice Theory. Both of these changes took place following checks by the researcher on his sensemaking during the research.

The change to look at the recursive relationship between domestic food practices and social media use took place after exploratory coding and analysis of the forum data and reflection on the insights the data could provide. What became clear is that these forum posts provided insights into what was taking place in the home prior to forum use, but also the ways in which discourse on the forum may be used to shape the performance of food provisioning practices.

In terms of the move to using practice theory, this change took place following an exploration of the existing food waste research. Consideration of this literature, as the researcher's familiarity with it grew, showed that while Theory of Planned Behaviour may be the theoretical approach most often employed in studies of domestic food waste, it does have its limitations as a means to explore domestic food waste (described in Section 2.4) whereas a relatively small body of food waste research using practice theory showed the analytical affordances of this theory. Section 2.5 describes the affordances of practice theory; allowing an exploration of the wider social factors that shape food practices as well as the interlinkages between different food practices and between food practices and the wider constellation of practices that form part of daily life – including social media.

So as the PhD has progressed, by learning more from the existing literature and from the data in this research, something that happened in tandem, reflection has enabled the focus of and approach to the research to change. In practical terms, this required a re-coding of Mumsnet Talk forum data. The researcher also needed to develop an understanding of Social Practice Theory and how it can be operationalised in research. The changes were made in the hope of providing a richer analysis that will be more effective at informing domestic food waste reduction campaigns.

4.5.3 Further checks on researcher sensemaking

Member checking, in which the researcher checks their interpretation of data and analysis with research participants, is an approach to research quality that is commonly suggested (e.g. Schwartz-Shea, 2006; Schwartz-Shea and Yanow, 2012). However, this presents some practical problems as well as an apparent inconsistency with critical realist research (Braun and Clarke, 2013).

The anonymity of posts on the Mumsnet Talk forum means that it would not have been possible to go back to the original posters in the 101 threads captured from 23/2/18 to 27/7/18 to check interpretations of posts or the analysis derived from them. While member checking with the interviewees would have been more feasible in a practical

sense, this process assumes there is a singular truth that can be accessed through the co-operation of researcher and participant (Braun and Clare, 2013). The critical realist epistemology of this research and its acknowledgement of how a researchers' perspectives may shape the research outcomes means that member checking is not appropriate. The researcher and participants may have differing perspectives on the analysis and these do not need to be resolved.

However, there were other ways that during this research, the researcher checked his sensemaking - challenging and questioning initial interpretations of data. While the research for this PhD was being undertaken, it was presented at conferences. Questions asked after conference presentations provided a useful means to check initial interpretations of data. For example, after one such presentation in which insights from the Mumsnet Talk forum analysis was presented, a member of the audience asked whether there is any indication in the posts that guidance provided had been used by those who asked the question. This led to the inclusion of the code 'Evidence of forum posts influencing practices' (see Appendix 1) in a subsequent iteration of the forum post codebook.

Lincoln and Guba (1985) recommend 'peer debriefing' during research, in which a colleague critiques a preliminary analysis. In this research, regular meetings with the research supervisors and the process of PhD progression reviews provided a means for other researchers to question initial interpretations of data, prompting reappraisal and further justification of the analysis.

4.5.4 Reflexivity

A critical realist epistemology acknowledges that the production of knowledge is subject to the researchers' own perspectives and interpretations and so demands reflexivity on the part of the researcher. "Reflexivity can be defined as thoughtful, conscious self-awareness." (Finlay, 2002b, p.532). It is through reflexivity that we can consider how our values, interests and perspectives shape our research (Braun and Clarke, 2013), influencing all stages of the research process from the planning and collection of data through to the analysis and presentation of findings.

Researcher reflexivity requires consideration of both subjective and intersubjective aspects (Finlay 2002a and Finlay 2002b). In other words, consideration of how the researchers' own experiences and perspectives may shape the research as well as how the researcher's

interactions with research participants shape the research process and any insights from it (Finlay, 2002a).

Reflexivity, when it is explicit within a research study, can help to "…enhance the trustworthiness, transparency and accountability…" (Finlay, 2002a, p.211) of the research and is a crucial part of establishing research quality in interpretivist studies. A critical realist epistemology means that reflexivity is not an attempt to eliminate 'researcher bias', since it recognises that knowledge creation will always be somewhat subjective. Instead, reflexivity can make the researcher's influence clear and highlight opportunities that may arise from the researcher's connection with the subject matter, or their independence (Finlay, 2002b).

Reflexivity in this research

Throughout the research process, I have tried to consider how my own situation and experiences have shaped what I have done. I am a father, living in a home with two children, aged 13 and 16 at the time of writing. There is no doubt that my situation has inspired the focus of this research, through my interest in food safety and food waste in our household (see section 1.2 in Chapter 1). This section considers some of the ways I have tried to take my own experiences and insights into account throughout the research process. An important aspect of reflexivity is the researcher's insider and outsider positions (Le Gallais, 2008). A researcher can have both an insider and outsider perspective within the same study when they share some characteristics with their research participants and not others (Braun and Clarke, 2013).

Literature review

Given that a literature review involves finding, interpreting and reporting existing literature, there is the potential for a researcher's own perspectives to influence the process (McGhee, Marland and Atkinson, 2007). When conducting the literature review, the notes I took included my own reflections on what I was reading, including questioning whether my own perspectives as a father living in a family home were influencing my thinking. A particular point of reflection was whether my thinking on Social Practice Theory, which de-individualises the food waste problem and shifts the blame from the consumer (Evans, 2011), was an attractive and convenient interpretation at least in part because we as a household have struggled to reduce our food waste.

Ultimately it is difficult to truly unpack the influence we may have had on the research given that the influence is complex and ambiguous (Finlay, 2002b). However, other studies,

notably Hebrok and Bok's (2017) review of food waste research, recognise the limited success of food waste reduction campaigns aimed at shifting attitudes as well as the rise of sociological approaches to considering food waste.

Forum analysis

In some respects, I am an insider when compared with participants on the Mumsnet Talk forum in that I am a parent, living in a family home with an interest in the food my children eat. Like the majority of Mumsnet users we also live within a middle-class household in which the mother works outside of the home, part time in our case. However, I am an outsider in the sense that I am a father rather than a mother and the majority of Mumsnet Talk forum users are mums (Pedersen and Smithson, 2013). I also don't use a parenting forum, or any other form of social media, in relation to food.

I have tried to be aware of my perspective on the analysis of forum data and made notes on my perspectives when analysing the coded data. My experiences in a family home, with day-to-day life similar to those of many Mumsnet users, means that I am familiar with many of the challenges and situations described in forum posts. This familiarity may have helped with interpretations of what was being described in posts. However, I also needed to take care not to make assumptions about what was being described or subconsciously try to fill in any gaps based on my own experiences. For example, young children eating only a limited repertoire of foods, a fairly common experience of parents on Mumsnet that prompted a lot of questions and comments, can be down to many factors which may be different to those of my own children.

Interviews

My insider and outsider status when compared with the parents I interviewed was similar to those on Mumsnet Talk, including that the majority of interviewees were mothers. Only one was a father. Given that interviews are a social interaction, there is some level of co-creation of knowledge between the interviewer and interviewee (Mann, 2016). This means that when conducting interviews, intersubjective reflexivity is particularly important.

Before doing the interviews, I was mindful of the social pressures parents face in relation to how they look after their children and the food they provide to them. I was also conscious of the potential for there to be an apparent power imbalance between myself as a researcher and my interviewees (Finlay, 2002a), with myself being seen as an expert in food and children. I decided that during the interviews, I would introduce myself by describing my university affiliation but also that I am a dad of two children. The intention

was to build some level of rapport and trust with participants, given the importance of this in qualitative research (Braun and Clarke, 2013).

During the interview, where it felt relevant, I also described my own experiences and uncertainties in relation to food provisioning and parenting, such as discussing the challenges we have faced deciding how much computer gaming is 'too much' with one of the interviewees, a mum of a teenage son. Where the topic of food waste arose during an interview, where relevant, I described how we had similarly found it challenging to reduce it. The approach was to show common ground and mention similarities in experience to elicit open and honest responses to questions from participants, without myself as the researcher offering any interpretation of what was happening.

The parents I interviewed were open about their experiences and emotions, which provided rich data to draw upon. It is not possible to say whether the interviewees would have responded to the questions any differently had the interviewer been another mother.

When analysing the coded interview data, my notes included my reflections on what I was seeing. Here, as with the forum analysis, I tried not to make assumptions about situations based on my experiences. However, as with the forum analysis, my insider perspective made the situations and experiences described in the interviews familiar. My experience as a parent helped me to see the 'big picture' of family life, the many aspects to being a parent inside and outside of the kitchen.

Chapter 5 – Results: forum analysis

5.1 Introduction

This chapter provides an analysis of Mumsnet Talk forum posts relating to food captured between 23/2/18 and 27/7/18. Existing research has provided insights into the connections between different domestic food practices and how food disposal cannot be considered as a discrete act. The amount of food thrown away in a household is dependent not only on food disposal practices, but also other steps within the food provisioning process, such as meal planning, shopping and cooking (Quested, Marsh, Stunell and Parry, 2013). The analysis in this chapter and Chapter 6 considers all food related practices, as all are relevant to food waste. This chapter starts by using the forum posts to map the different food-related practices as well as any other practices that interconnect to form a complex or bundle of practices (Shove et al., 2012).

This chapter also explores the nature of the connections between food practices, forum use and other practices by seeking to characterise the processes that link them. This will provide insights into how food practices and forum use as well as other practices shape one another. In contrast to Keller and Halkier (2014), who consider media discourse as a resource for practice, forum use is considered as a practice in its own right in this research. This will enable the nature of the forum use to be explored; how different types of forum interaction, such as different types of questions asked, as well as different timings of forum use in relation to other practices, shape the processes of linkage between practices.

The three elements model by Shove, Pantzar and Watson (2012) is used in the analysis in this chapter. The broad nature of these elements, encapsulating things and technology (materials), skill and know-how (competencies) and ideas and aspirations (meanings) will allow an initial exploration of the nature of connections between practices, including the connections between elements.

5.2 Mapping the intersecting food and non-food practices in parents' homes

The questions parents ask on the Mumsnet Talk forum provide an insight into the connections between different domestic food practices and between food practices and the wider constellation of practices that make up family life and forum use. When parents write a question on Mumsnet Talk, they also write further explanatory text and this provides insights into the connections between practices.

Figure 5.1 shows the domestic food practices and elements of practice questions asked in the Food/Recipes area of the 'Feed the World' section of the Mumsnet Talk forum related to in the 101 threads captured from 23/2/18 to 27/7/18. Some questions posted on the forum and the explanatory text written by parents related to more than one food-related practice and/or more than one element of practice and so were coded more than once. This is also indicative of the connections between food-related practices; changes to one can lead to changes in another.

Figure 5.1 shows that few of the questions asked on Mumsnet Talk by parents directly related to food disposal. Eating and shopping also prompted relatively few questions. The largest number of questions were about the storage of food and cooking. With both of these practices, by far the largest number of questions related to competencies; know-how about to do something, or ideas on how to implement a practice. Materials-related questions were about equipment employed when a practice is performed and meanings related to the emotions and motivations associated with that practice.
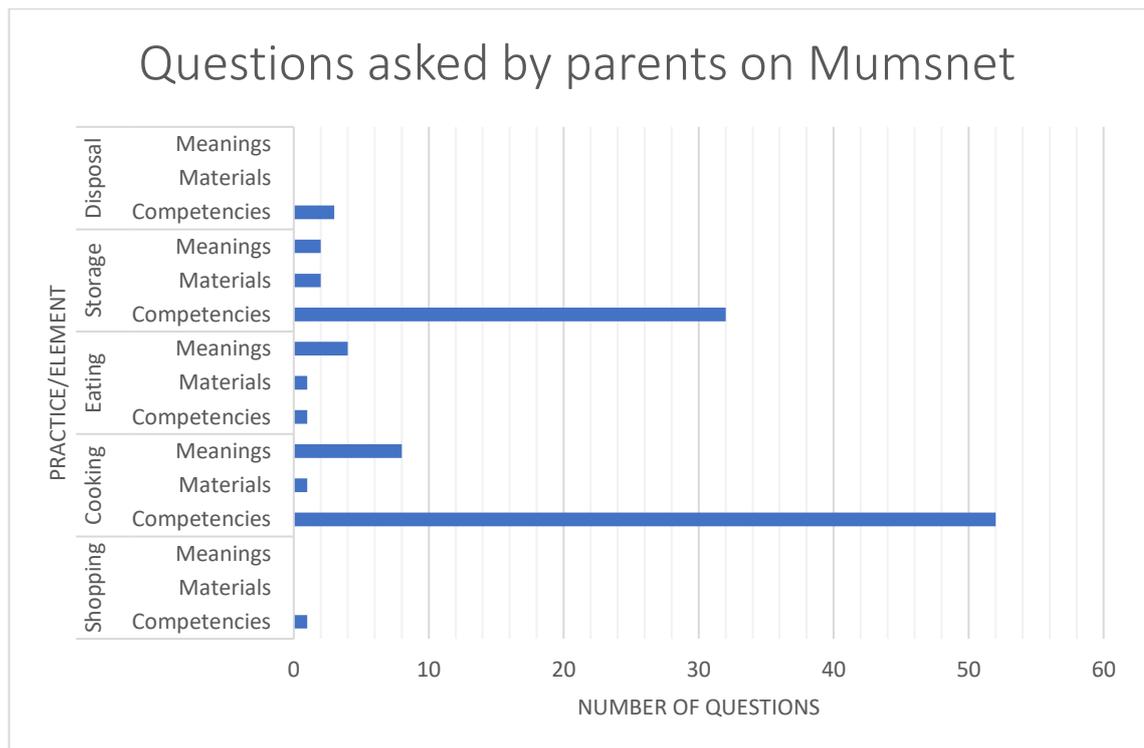
Figure 5.1. Food-related questions asked by parents on Mumsnet Talk between 23/2/18 to 27/7/18 coded by practice and element within the practice.

5.2.1 Forum questions about cooking practices

Questions inspired by cooking practices prompted the largest number of questions on Mumsnet Talk forum, with 52 questions coded as relating to cooking competencies between 23/2/18 and 27/7/18. Figure 5.2 shows what prompted these questions.
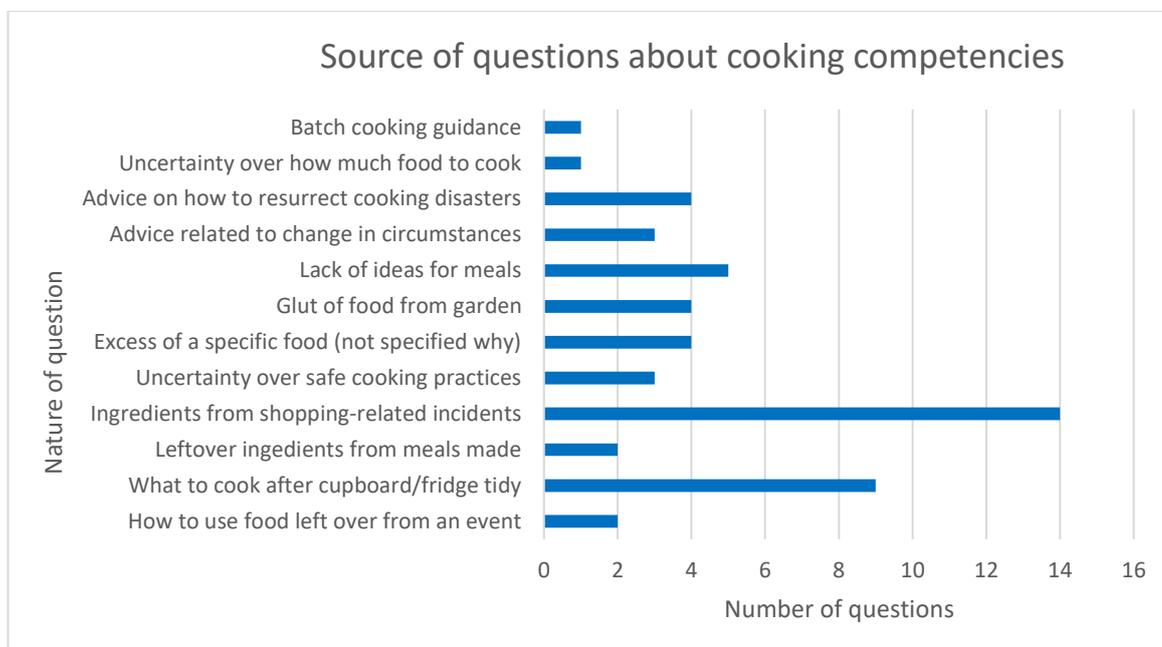
Figure 5.2. Nature of questions on the Mumsnet Talk forum that were related to cooking competencies.

Shopping-related incidents were the most common cause of requests for what to cook, prompting 12 questions. Parents described how they had purchased certain foods because they were on offer in a shop, or just on impulse. Parent 0004 said she went shopping without a shopping list or weekly plan and was looking for ideas on what to do with a whole chicken she had bought. Online orders also resulted in accidental purchases, such as parent 0010 who said she had accidentally bought seabass (although how this accidental purchase came about is unclear) and parent 0002 bought an "…accidental bumper bag of bananas." This indicates that food planning, writing a shopping list, shopping, whether online or in a supermarket, cooking practices and forum use are interconnected practices, forming a bundle of interrelated online and offline practices that shape each other. Buying food that is on offer also indicates a link to wider household budgeting practices.

Nine parents described how they were having a clear-out of cupboards or their freezer having accumulated food over time, such as parent 0084 who had five tins of butterbeans in her kitchen cupboards and parent 0085, who had found "….an awful lot of mince" in the

freezer. These parents were looking for ideas on what to cook to use up these foods, showing the linkages between food storage practices and cooking. Gardening practices also link with coooking practices with parents asking for what to cook with a glut of a certain food from their garden, such as parent 0121, who has a glut of blackcurrents and parent 0112, whose mint had "gone crazy" in her garden.

Several of the parents who turned to the forum said they were struggling for ideas for meals to cook, describing how their children were fussy eaters, such as parent 0086 who said her 16-month-old son had recently become a fussy eater. Here a child's eating practices are intersecting with cooking practices and forum use.

In some instances, parents were asking for cooking ideas due to imminent changes in their circumstances that would leave them with less time for food provisioning practices. For example, parent 0087 was looking of ideas for meals that could be batch cooked and then frozen because she was returning to work full time after maternity leave. Parent 0047 wanted ideas for 'make ahead meals' that could be prepared from scratch and frozen and then simply heated after the birth of her second son. Parent 0043 was facing a similar situation. Other questions about cooking indicated a lack of time but did not specify why, such as parent 0089 who wanted ideas for meals she could cook on a Saturday and frozen or refrigerated so they could be used over the following days. Batch cooking, in which large amounts of a specific food are made and then stored for use in more than one meal in the future, can be considered a practice in it's own right, distinct from cooking for a specific meal. Schatzki (1996) suggests a number of criteria for what can be described as a practice, including that people share words about the activity that allow its identification and that performances are mutually intelligible among people exposed to the same activity and batch cooking meets these requirements.

In common with other research, the discussions on Mumsnet Talk about domestic food provisioning illustrate how individuals are a crossing point of practices (Reckwitz, 2002). In this instance, the crossing point of several food practices and also the wider constellation of practices that make up daily life, such as working and parenting. This has also been found in other research (eg. Halkier and Jensen, 2011; Keller and Halkier, 2014). However, this research also highlights how parents use the Mumsnet Talk forum as part of this connected bundle of practices, gaining insights into how to cook and store food when faced with time limitations due to going to work and parenting.

5.2.2 Forum questions about food storage practices

There were 32 questions about how to store food, coded as food storage competencies, in the Mumsnet Talk threads captured from 23/2/18 to 27/7/18. Figure 5.3 shows that the largest number of questions (11) coded as relating to food storage competencies were about whether a foodstuff could be frozen and seven questions were asking whether it was safe to eat food that had been stored in the fridge. A relatively small number of questions (4) were about whether it was okay to eat food that had gone out of date.
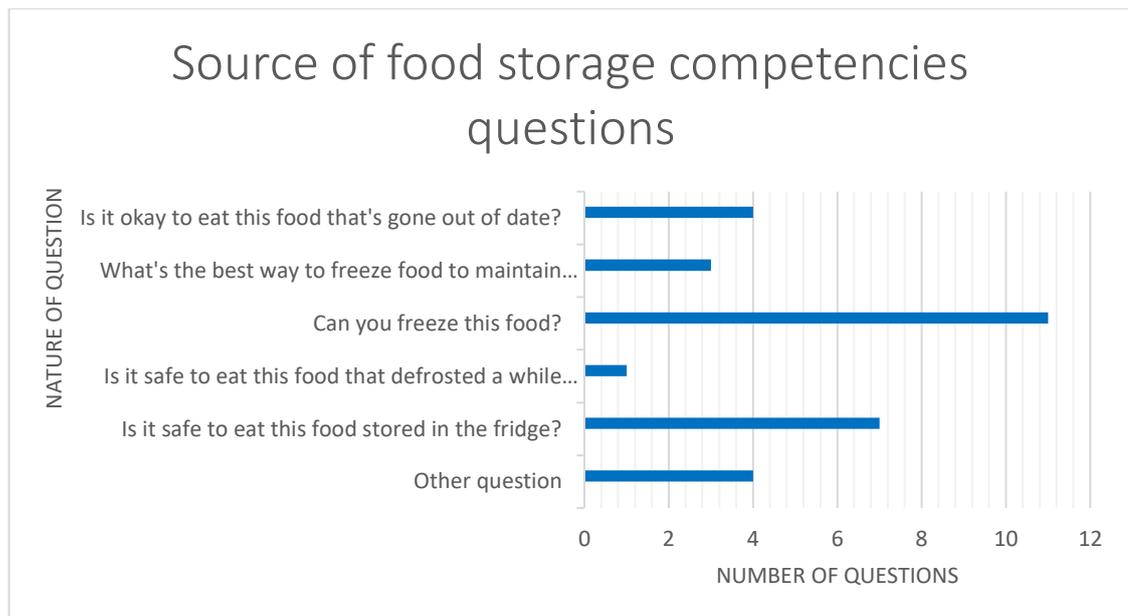
Figure 5.3. The nature of questions about food storage competencies on Mumsnet Talk captured between 23/2/18 and 27/7/18.

Looking at the questions about whether specific foods could be frozen, six of these questions were prompted by a wish to batch cook food, either for a child or a forthcoming social event, and then freeze it for when it was required. Here the freezer is acting as a means to cope with the "compression and fragmentation of time" (Shove and Southerton, 2000, p.315) given the demands of non-food practices. These questions were about whether batch cooked food would retain its nutritional value or quality in terms of texture, or how to defrost and reheat the frozen food. This demonstrates the connection between different food practices. It also demonstrates the connections between food practices and wider parenting practice which aims to equip "…a child well for life." (Molander and Hartmann, 2018, p.375) as well as socialising and forum use.

Many of the questions about whether food stored in the fridge would be safe to eat related to foods that had been made from scratch and so were without a manufacturer's shelf life

guidance when ingredients were combined. For example, parent 0031 was asking whether certain foods she had prepared, such as cous cous salad and quinoa sweet potatoes, would last for a week so she could prepare meals for the whole week to help manage her time as she was returning to work. Parent 0005 asked how long roasted chicken, made on a Sunday, presumably when she had more time, would last for as she wanted to use it in wraps for her son's school lunch. Here food storage practices are interconncted with cooking practices, going to work and forum use as well as a wider parenting practice of ensuring the family's safety; to 'provide and protect' (Lyndhurst, 2007).

Some parents described buying food on offer in a supermarket, presenting questions about how to store the food that had either been bought unexpectedly or in bulk. Parent 0120 said she bought meat in bulk from the butchers and vegetables from Aldi when they were on 'super six', a discount promotion. She asked whether other parents vaccum seal their food to preserve its quality prior to freezing and had seen a vacuum sealer on Amazon for a "decent price". This demonstrates a linkage between shopping, household budgeting, food storage and, potentially vacuum sealing – there is no indication as to whether the vacuum sealer is bought.

5.2.3 Forum questions about food disposal

Only three Mumsnet Talk forum posts from 23/2/18 to 27/7/18 that were captured were coded as relating to food disposal. All three questions were coded under competencies and were about whether food was safe to eat or would need to be thrown away. Parent 0020 uploaded a photo of a packet of mince and asked whether it was safe to eat saying it had a: "slight ding on the packaging" and although it was still within its use by date she was concerned about its colour, saying: "I don't want to take any risks as I'm currently pregnant!". In line with other research, this illustrates how some householders use date labels as well as visual and olfactory cues to make food safety judgements (Waitt and Phillips, 2016; Watson and Meah, 2012; Heidenstrøm and Hebrok, 2021). It also indicates the linkages between food provisioning, parenting and forum use.

Parent 0024 described how she had taken chicken out of the freezer the previous day, didn't use it the next day and wanted to know whether it would still be safe to consume. She said: "I can't remember how long it keeps after defrosting and don't want to poison the family!". This also indicates the connection between parenting, being a good mother, food provisioning and forum use, with an aspiration of parenting practices, protecting the family, being shared with food provisioning practices. Parent 0097 asked whether a dish prepared

the day before and left out overnight would still be safe to reheat and eat given that it contained chicken.

5.2.4 Forum questions about eating

Only five Mumsnet Talk forum posts from 23/2/18 to 27/7/18 were coded as relating to eating. Two of the parents described their child's fussy eating and turned to the forum looking for reassurance or ideas on what to feed their child. One of the parents, parent 0058, described her child as "…thriving so much…and actually a bit overweight," indicating the linkage between food provisioning and parenting in terms of ensuring the child's healthy development. Parent 0018 described how she was finding mealtimes "…extremely stressful…" as she does not know what to feed her children who are fussy with food, indicating a connection between the children's eating practices and family mealtimes.

5.2.5 Map of the interconnecting food practices and other practices in the constellation

The analysis of the Mumsnet Talk forum posts about food in the preceding sections provided insights into the family food provisioning, social media and other practices that form part of daily life that are connected. Figure 5.4 illustrates the interconnections between food practices and the wider practices that make up daily life, including working, parenting and household budgeting practices, as well as forum use. The posts on Mumsnet Talk illustrate how closely the different domestic food practices are connected, as well as the connection with forum use. For example, shopping without a list can lead to unexpected food purchases, calling for ideas on the forum on what to cook with what has been bought.

Figure 5.4 maps the interconnected practices based on the forum post analysis. The lines in the figure are illustrative, to indicate practice connections. However, the lines do not indicate that two practices linked are the only connections these practices have with others. The forum analysis indicates individual practices are connected with several others. Food provisioning, parenting, forum use and other practices that form part of daily life form a complex web of linkages. While parenting may be conceptualised as a single practice, as in Molander and Hartmann (2018), in Figure 5.4 parenting is split into several distinct practices with their own goals. This is to illustrate how different aspects of parenting connect with domestic food practices and other interconnected practices.

Shove, Panzar and Watson (2012) describe how some practices have a competitive relationship, competing for time and attention. This is the case with some of the practices that make up daily life, such as going to work and socialising, which compete for time with food provisioning practices. Providing care for a child, such as a new baby, also competes for time with food provisioning practices. The nature of linkages between other practices are different. For example, the parenting practices of protecting the family and ensuring children's healthy development shape how food provisioning is done properly.

Some practices have a collaborative relationship (Shove, Panzar and Watson, 2012), in which one practice enables the performance of another. Forum use appears to have such a relationship with domestic food practices in family homes, the questions asked having an enabling effect on practices such as cooking and food storage. This enabling relates to food practices but also the other practices identified here. This includes, for example, enabling food provisioning to take place so that it allows healthy development, connected with parenting as a practice. It also enables food provisioning to take place at the same time as other practices that impose time constraints, such as going to work or caring for a new baby.
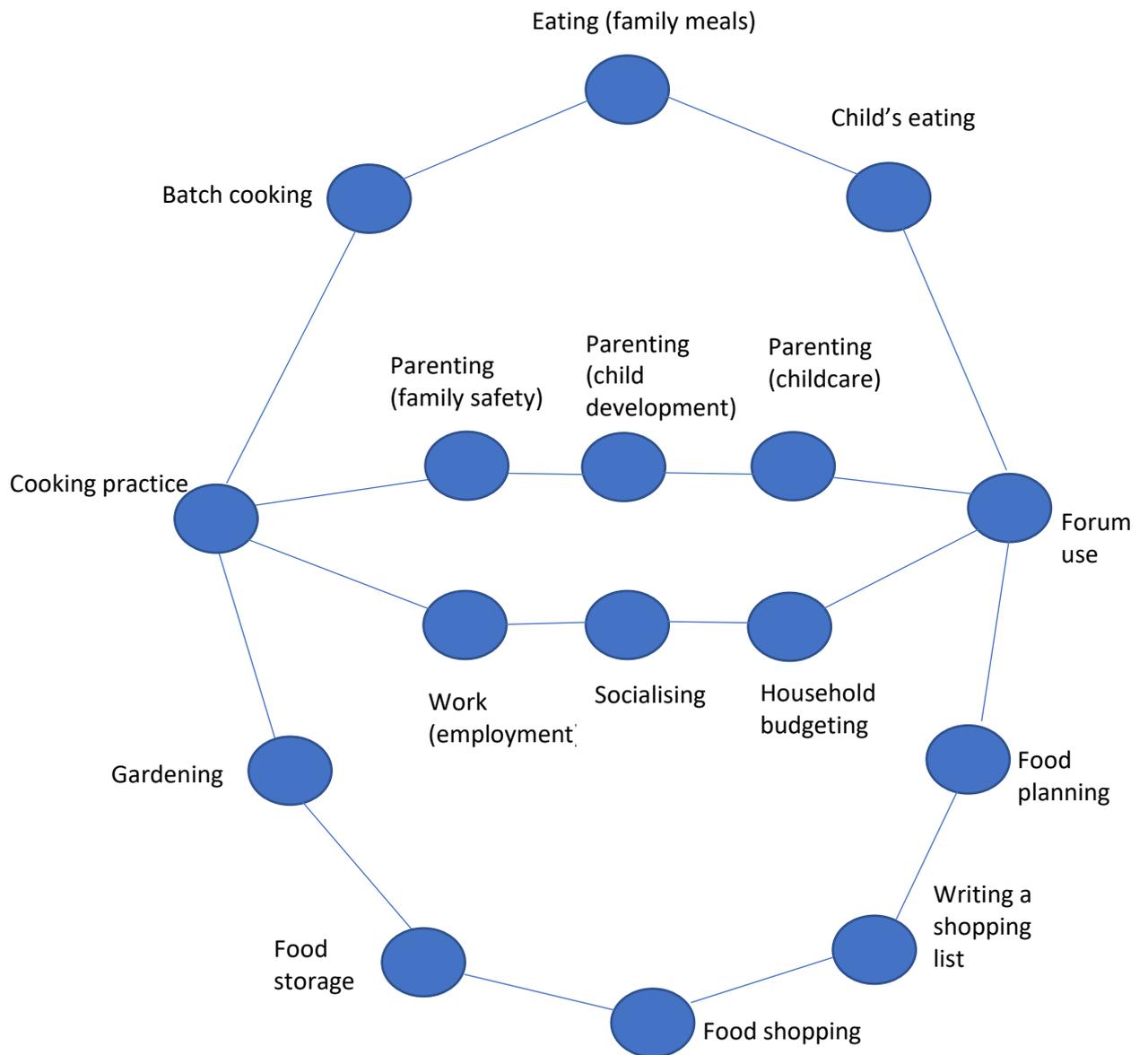
Figure 5.4. Illustrative map of the intersecting domestic food practices, parenting practices and other practices that make up daily life, including forum use.

Given the linkages between domestic food practices and forum use, the next step is a more in-depth exploration of the nature of the connections between these practices. Also, between food practices, forum use the wider constellation of practices that make up daily life.

5.3 Processes of linkage between practices

When analysing all the questions asked in all 101 threads captured on Mumsnet Talk from 23/2/18 to 27/7/18, the largest number were seeking advice, followed by those seeking inspiration and a relatively small proportion seeking reassurance (Figure 5.5). These categories were derived from an initial exploration of the forum posts and demonstrate

that parents are seeking both instrumental and emotional support (Drenta and Moren-Cross, 2005). Some questions were seeking more than one of these things at the same time. A question may have sought both reassurance and advice, for example, and so would have been counted in both categories. Some questions also related to more than one practice.
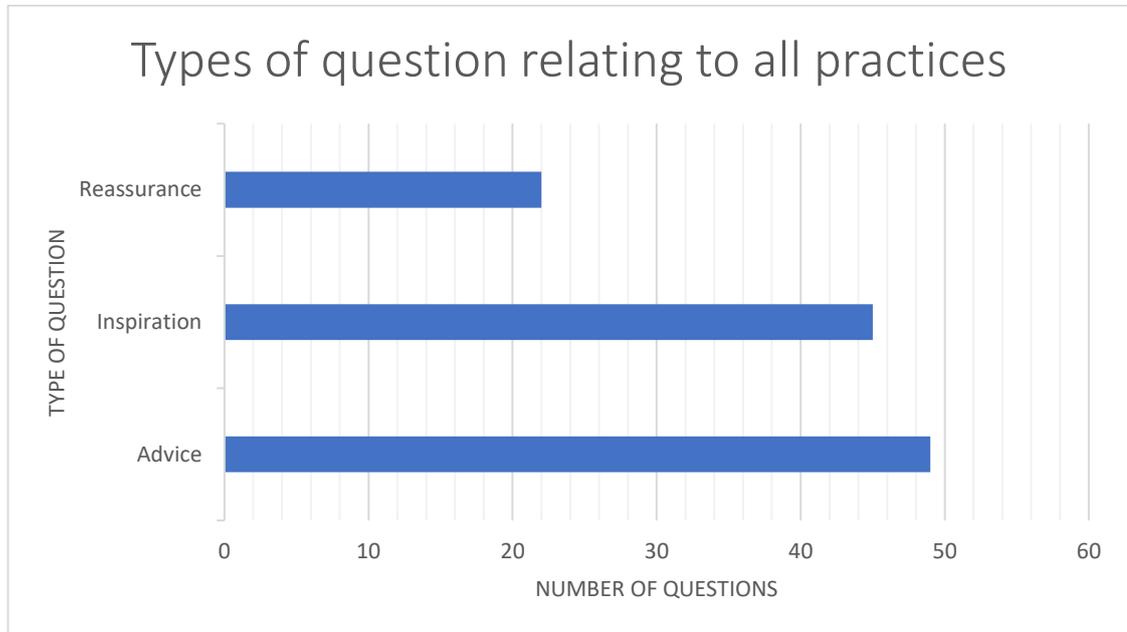
Figure 5.5 – The frequency with which different types of question were asked on Mumsnet Talk relating to all domestic food practices between 23/2/18 and 27/7/18.

These questions form connections between food provisioning practices and forum use. They provide a process of linkage between practices. In the following subsections, these processes of linkage between practices are explored and characterised to provide a more in depth insight into how domestic food practices and forum use connect.

5.3.1 Competencies and the processes of linkage

Taking the questions coded under cooking competencies, or know-how, as a whole, the largest number of questions on Mumsnet Talk were asking for inspiration of what to cook, followed by questions seeking advice (see Figure 5.6). Reassurance was only sought in a relatively small proportion of questions.
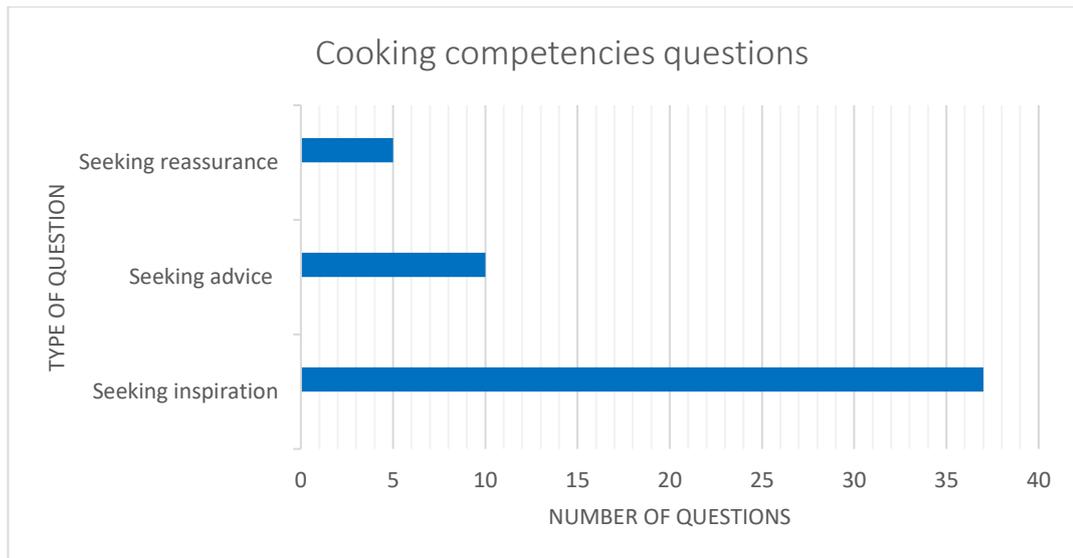
Figure 5.6 – The frequency with which different types cooking competencies questions were asked on the Mumsnet Talk forum by parents between 23/2/18 and 27/7/18.

The inspiration-related questions were requests for ideas of what to cook and were prompted by parents having too much of a particular foodstuff, such as fruit from the garden or a leftover ingredient from having made a meal. They were also prompted by accidental purchases of foods in a shop or online. Or on some occasions, parents simply lacked ideas as to what to cook. In all instances, parents were seeking to meet the culturally prescribed demand of practice of providing 'proper food', food cooked from scratch with healthy ingredients (Evans, 2011; Charles and Kerr, 1988) even when facing time constraints imposed by other practices that make up daily life.

Process 1 – Pre-performance competence curation

Exploring the responses of parents to requests for inspiration on the forum reveals a process of *pre-performance competence curation*. Taking parent 0006 as an example, she asked for new meal ideas, explaining that she felt her family's diet is poor and that she is "…struggling to think of new foods for my meal plans and struggling to get enough veg in as well," and that she would "…love to add some variety to our diners." She said she was looking for meal ideas because she had resorted to "…buying ready meal/frozen Birds Eye chicken type meals which isn't ideal all the time," because of her lack of inspiration.

Parents responded with suggestions relating to several food provisioning practices. One responded by suggesting meal planning that involved having a different food theme per night. Other parents described websites they use for inspiration for meal ideas, such as one called Delish (parent 0122) and the BBC Good Food and Sainsbury's website (parent 0042).

Parent 0123 suggested buying a food magazine, commenting that the BBC Good Food one is good, explaining that she challenged herself to make at least two meals from it each week. Parent 0124 made meal suggestions and described how she stores the food, batch cooking a sauce or part-making a meal then freezing it ready for when it is needed, presumably on occasions when less time is available. Other parents simply provided ideas for meals to cook.

Figure 5.7 depicts this competence curation process which starts with a request for inspiration and is followed by suggestions from parents relating to the competencies, or know-how, of more than one practice, such as where to search for ideas online or offline, meal planning, cooking and storage. Given the linkages between the domestic food provisioning practices, a suggestion at one stage of the food provisioning process will then impact other practices. So a suggestion of where to search for meal ideas online also impacts food planning, which then impacts cooking. This process involves competence curation in the sense that it is bringing together know-how on the forum relating to several food provisioning practices.

The process also involves competence curation in the sense that the forum thread brings together suggestions from several parents. In figure 5.7, each connected strand of linked food practice competencies (represented by the blue dots) represents the contents of one parent's suggestions in the thread. Figure 5.7 is illustrative. In reality 13, parents responded to parent 0006's request for meal ideas and so many more strands of linked food practice competencies could have been shown. The forum interaction by the parent who asked the question is represented by the orange dot at the top of Figure 5.7. The green dots at the bottom of the figure show the food provisioning competencies of the parent who asked the question that are informed by this process of competence curation. This process takes place before the parent who asked the question has performed the practices that it informs; hence it is pre-practice competence curation.
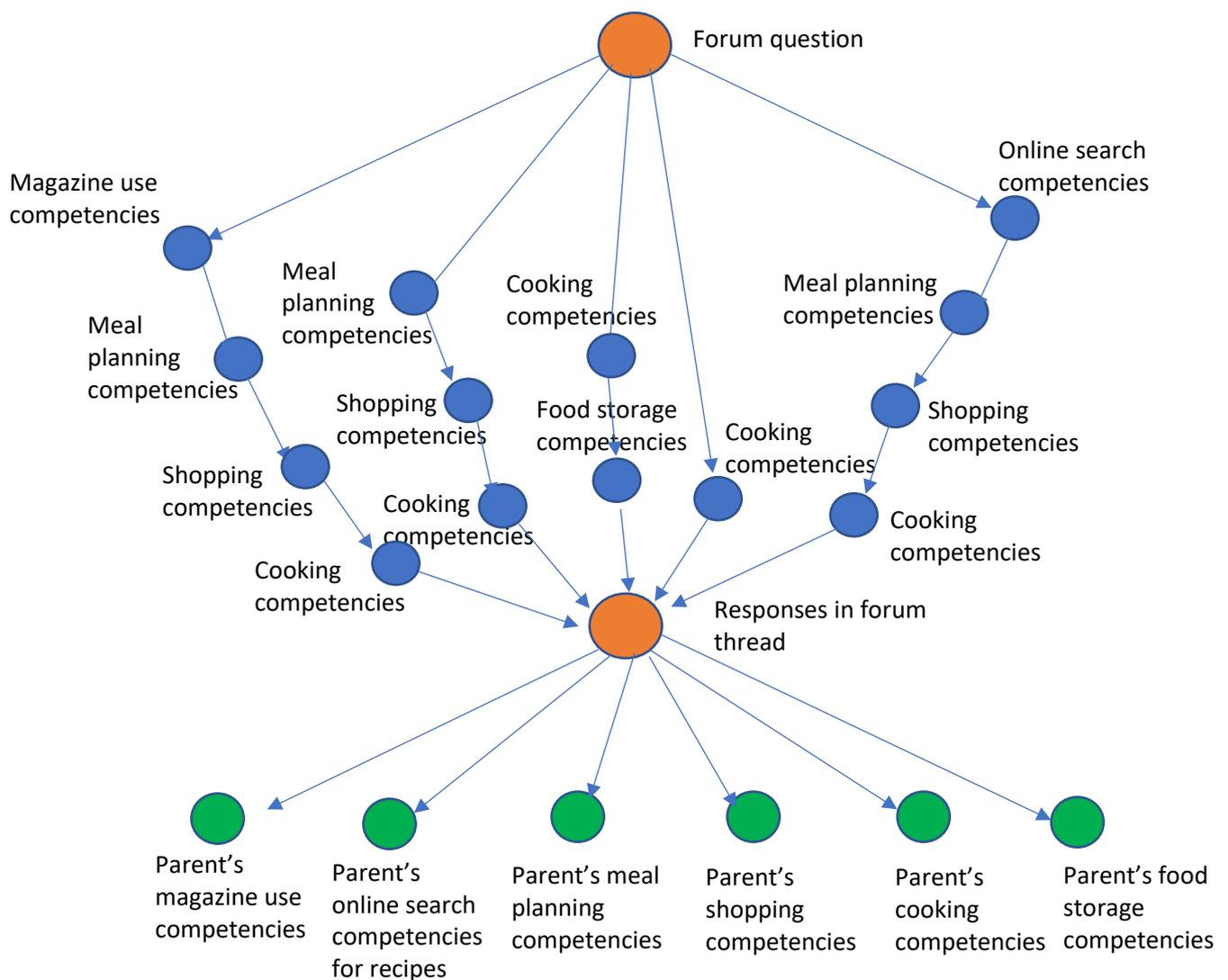
Figure 5.7. The process of competence curation on the Mumsnet Talk forum that starts with a request for inspiration and prompts responses from several parents, relating to more than one food provisioning practice.

Existing studies into parents' use of online forums has shown they are used as a source of knowledge (Chen et.al., 2014; Madge and O'Connor, 2006) and Drenta and Moren-Cross (2005) found that forums provide know-how from a heterogeneous group of women. However, the analysis conducted here provides a more granular insight into how the forum informs offline practices through the process of competence curation connecting domestic food practices to forum use. Within the process of competence curation, not only does the forum provide access know-how from several individuals, it also draws together know-how about several interconnected food provisioning practices.

Within this process of competence curation, the suggestions help parents meet the demands of offline food provisioning practices, such as providing proper food (cooked from scratch) and a variety of food. Analysing other threads to the one started by parent 0006 who was looking for inspiration for meal ideas, it shows that competence curation can enable parents to meet the demands of food provisioning practices while facing constraints imposed by other practices, such as a lack of time or a child's fussy eating. For example, parent 0043 posted a question on Mumsnet Talk asking for freezer friendly meals, explaining that she was expecting her third child and so would have less time for meal preparation and that one of her children was a fussy eater. Other parents responded with experiential know-how, describing meals that fit the food preferences of parent 0043's child, what they cook and freeze for later to manage their time and also how they implement recipes online, such as parent 0114 describing how she part makes a BBC Good Food website recipe before freezing it. In common with other studies on online forums (eg. Johnson, 2015 and Brady and Guerin, 2010) and on food blogs (Brombin et al., 2021), know-how provided on the Mumsnet Talk form in relation to food is experiential.

When parent 0101 asked for meal ideas to add variety to their repertoire of meals, parents responded with their meal plans for the week. Parent 0101 replied, saying: "Wow, that's impressive. How on Earth do you find time to cook all of that???!" Parents provided descriptions of what they do relating to several practices that help them manage time, such as cooking meals that don't take long, all the family eating the same food each mealtime rather than having to prepare different meals and batch cooking and freezing meals. Know-how is curated from several parents and in relation to several interlinked practices.

Process 2 – Mid-performance competence curation

Exploring the responses by parents on Mumsnet Talk to requests for advice reveals another process connecting domestic food practices and forum use – *mid-performance competence curation.* Several of the questions on the forum requested know-how about cooking in response to a made-from-scratch recipe going wrong, such as parent 0014 who was making lemon drizzle cake but forgot to add the drizzle and parent 0015 who had undercooked her mashed potato as she was in a rush.

The responses to these questions provide descriptive guidance that can be followed, for example parent 0125, to help mitigate disaster with the lemon drizzle cake suggests: "If the cake is cool, you could warm up the drizzle a bit and that should work." These descriptions of practice are specific to cooking practices, but different parents may provide different

advice. This process takes place once the parent asking the question has started a cooking practice performance and the know-how is specific to the situation described.

Figure 5.8 provides a representation of this process of mid-performance competence curation that starts with a performance of practice by a parent, such as cooking a lemon drizzle cake. This prompts a question on the forum, leading to responses by several other parents relating to cooking competencies. These responses feed into the cooking know-how, or competencies, of the parent who asked the question. The orange dots show how the forum is integrated into this process. Comments in the forum threads indicate that advice provided to parents is used. For example, parent 0125, who requested advice about the lemon drizzle cake, responded to say: "Just wanted to write back that we had the cake today and it was delicious, so your advice worked!"
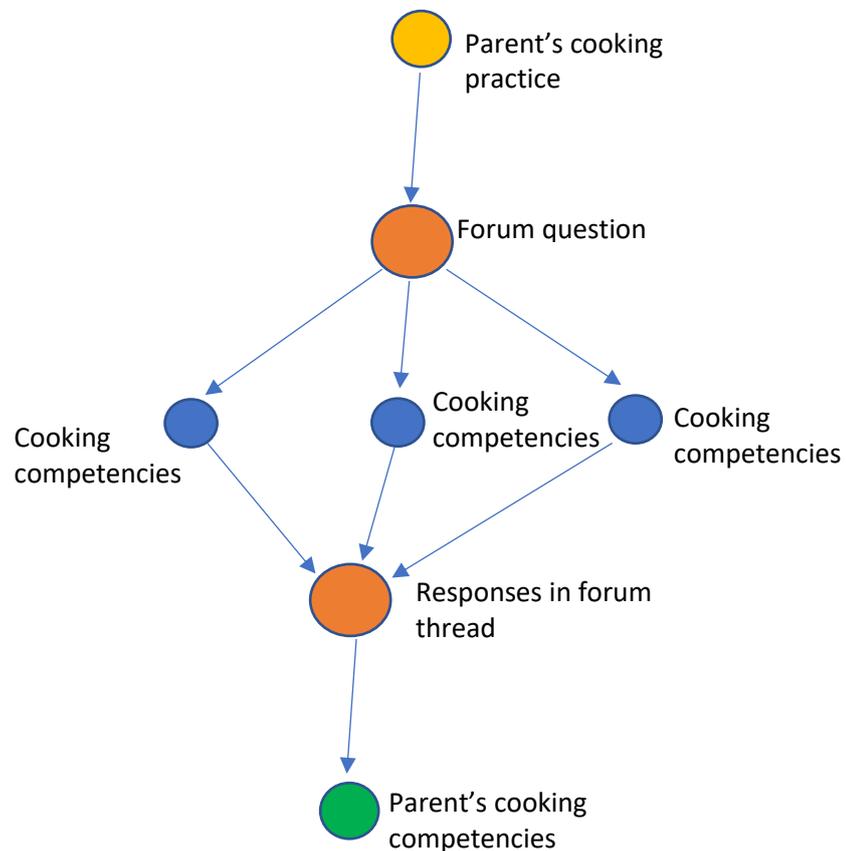
Figure 5.8. The process of mid-practice competence curation in which a parent asks a question part way through a cooking practice performance that prompts responses relating to that practice from several parents.

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Process 3 – Competence contesting

Three of the questions coded under cooking competencies on the Talk forum were requests for food safety advice in terms of whether it was safe to reheat meat for a second time, in one case pork (parent 0127) and in another case chicken (parent 0034). The other question related to whether it was safe to keep pulled pork warm in advance of a party (parent 0126). In all of these questions, the parent asking the question is seeking to meet the demand of practice of providing food that is safe. One of these questions (the question asked by parent 0127) generated only one response. But the other questions prompted several responses and these responses provided different, sometimes contradictory, perspectives from different individuals.

For example, when parent 0034 asked for advice on whether it was safe to reheat chicken twice, some parents said that it would be safe and others said it would not. Some parents simply stated what they would or would not do, while others drew on experience and said that they have done this, or something similar, in the past such as parent 0128 who said: "I reheat and reheat…you'll be fine." Two parents commented that their advice to reheat the chicken was against 'official advice'. Only one forum post providing advice about food safety included a weblink to an external source of information, a website named Eatbydate.com written by "contributors from the kitchen and classroom communities" that gives guidance on how long different foods last. In the process of competence contesting, when know-how is being provided relating to food safety, this know-how is largely experiential.

Figure 5.9 represents this process of competence contesting, with a question asking for advice on the Talk forum prompting contradictory guidance from different parents. In the case of parent 0034, she decides that she will reheat the chicken, saying: "Thanks Mumsnetters, I think I will risk a bowl for myself tomorrow." In this process, the question is asked on the forum before the performance of domestic food practice it relates to.
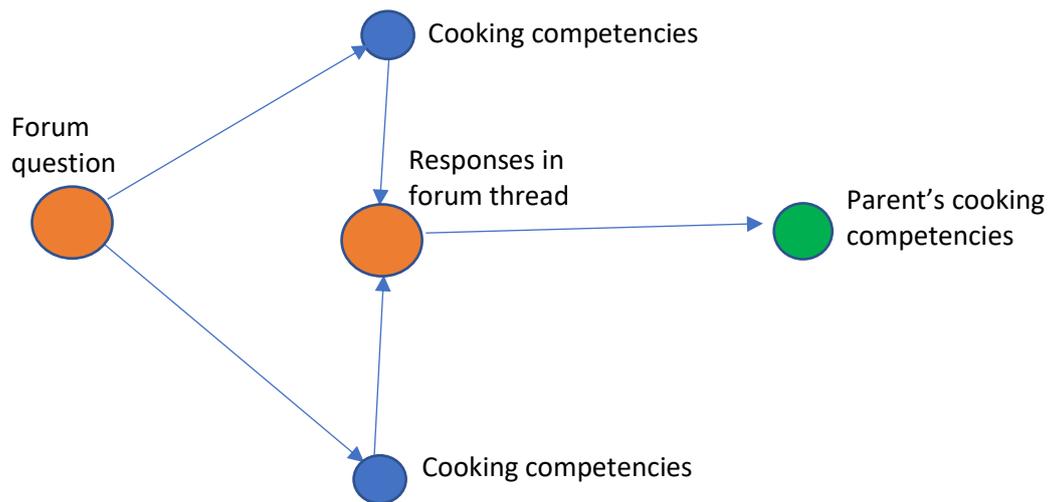
Figure 5.9. The process of competence contesting in which a question on the forum prompts responses contradictory guidance from different parents, which are brought together in a single forum thread.

5.3.2 Materials and the processes of linkage

Only four questions on the Mumsnet Talk forum in the 101 threads captured from 23/2/18 to 27/7/18 were coded as relating to materials used in the cooking, storage and eating of food. For example, two threads about food storage included posts relating to the use of materials – in one case a freezer and freezer bags and in another the use of a vacuum sealer before freezing. While these posts have been coded under materials, they relate to the know-how, or competencies in the use of these materials.

When parent 0031 explained she was going back to work and so wanted advice on how long specific meals she had cooked from scratch would last in the fridge, two parents (0030 and 0114) provided guidance on fridge storage times. One of these parents (0030) also described how she would use her freezer "…for this kind of stuff" saying she would put single portions of meals in a freezer bag and flatten it out to save space after the parent who asked the initial question explained that her freezer was full. So while some guidance on the forum simply relates to the performance of a practice involving one 'material', a fridge, other guidance provides know-how about the use of different materials, such as a freezer and freezer bags. In all instances, the parents are seeking to meet the demands of providing food cooked from scratch and food that is safe, typically when facing time constraints. So while some forum threads have been coded under materials because they explicitly mention kitchen appliances or other food-related materials, such as freezer bags,

the process of pre-performance competence curation is taking place (as the questions are asked before a food practice is performed) described in section 5.3.1.

5.3.3 Meanings and the processes of linkage

Several of the threads on Mumsnet Talk captured between 23/2/18 and 27/7/18 indicate the 'meanings' associated with food provisioning in family homes; the ideas, aspirations and emotions of family food provisioning practices. The analysis of the forum posts also shows how these food provisioning meanings are entangled with the meanings of parenting and the meanings of forum use. The processes of linkage involving meanings lead to a closely entangled bundle, consisting of food provisioning practices, parenting practices and online forum practice. The meanings associated with food provisioning are often evident in requests for reassurance parents make on the Talk forum about current or intended food provisioning practices.

As figure 5.10 shows, while there were 22 requests for reassurance on the forum, 17 of these had been coded as relating to food storage competencies and five have been coded as relating to cooking competencies.
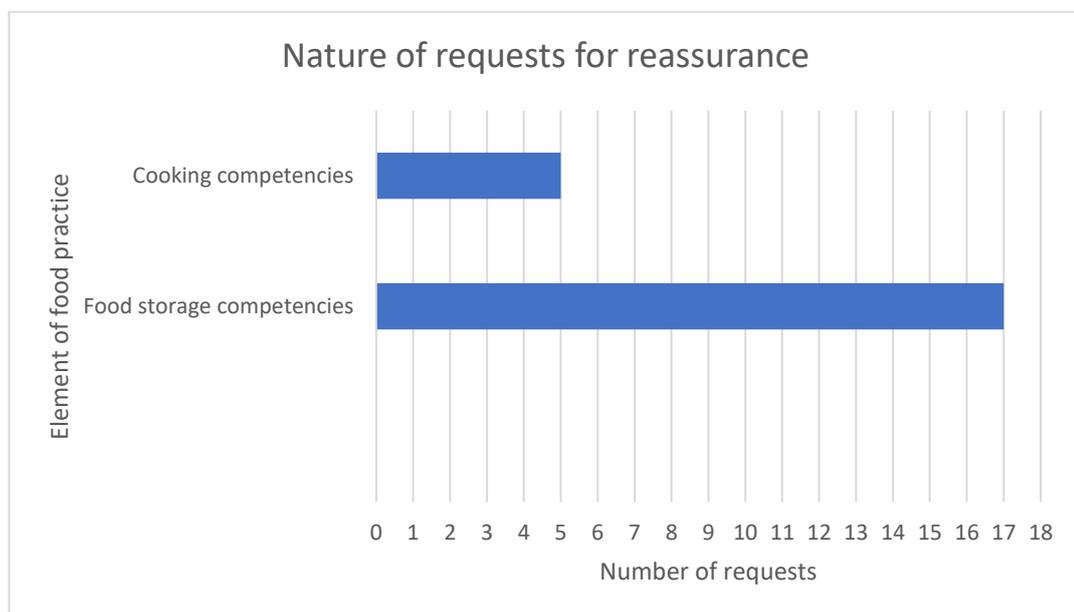
Figure 5.10. The elements of domestic food practices that the requests for reassurance on the Mumsnet Talk forum in threads captured between 23/2/18 and 27/7/18 related to.

The requests for reassurance relating to food storage competencies were borne out of concerns about food safety, so whether intended food provisioning practice performance would present a health risk. For example, parent 0016 wanted reassurance that 5-day-old bean stew stored in the fridge would be safe for herself and her husband to eat and parent 0050 wanted reassurance that tarts cooked for a family gathering would be safe to eat. These parents were seeking to provide food that is safe, even when presented with time constraints by other practices that form part of daily life. Parent 0016 mentions that she had been unable to eat the stew before because she had: "Been out every night this week so haven't had the chance." Parent 0050 was batch cooking for a family gathering the following month, so cooking in bulk well in advance of the event.

Southerton and Yates (2015) describe providing food that is safe as one of the socio-cultural demands of domestic food provisioning. While it may be socially prescribed, it forms part of the aspirations or goals of food provisioning, the meanings of family food provisioning using Shove, Pantzar and Watson's (2012) elements of practice. So here the forum is being used as means to align intended performances of food provisioning practices with the meanings of food provisioning, the reassurance providing that alignment.

Process 4 – Within-practice meaning alignment

The process of *within-practice meaning alignment* can be illustrated by the example of parent 0129, who asked other Talk forum users whether if she cooked pasta pesto in the morning and cooled it in the fridge for her son to take to school, it would be safe for him to eat at lunchtime. This pre-practice post prompted responses providing reassurance as well as guidance, such as parent 0130, who said: "Pasta can be made and then eaten safely for days, nothing to worry about." There were also posts which just provided guidance, such as parent 0131, who wrote: "Put an ice pack in the lunchbox."

Figure 5.11 shows how food provisioning and forum use are connected through the process of within-practice meaning alignment. The request for reassurance on the forum leads to reassurance that the intended food provisioning practice performance will be safe; in other words that the intended course of action is aligned with the aspirations or goals of food provisioning, the meanings. Some know-how provided on the forum, such as parent 0130's statement that pasta can be eaten safely for days, also leads to reassurance. The request for reassurance also leads to guidance or know-how on how to adapt a practice (by using

an ice pack) to ensure the practice performance is aligned with the goal or meaning. The responses in the forum thread feed into the parent's food storage competencies and meanings, indicated by the green dots in Figure 5.11. The link between food storage competencies and meanings indicates that some of the reassurance is provided through know-how.

During this process of within-practice meaning alignment, some of the know-how provided advocates continuing with the intended performance of food provisioning practice and other know-how advocates adapting the practice.
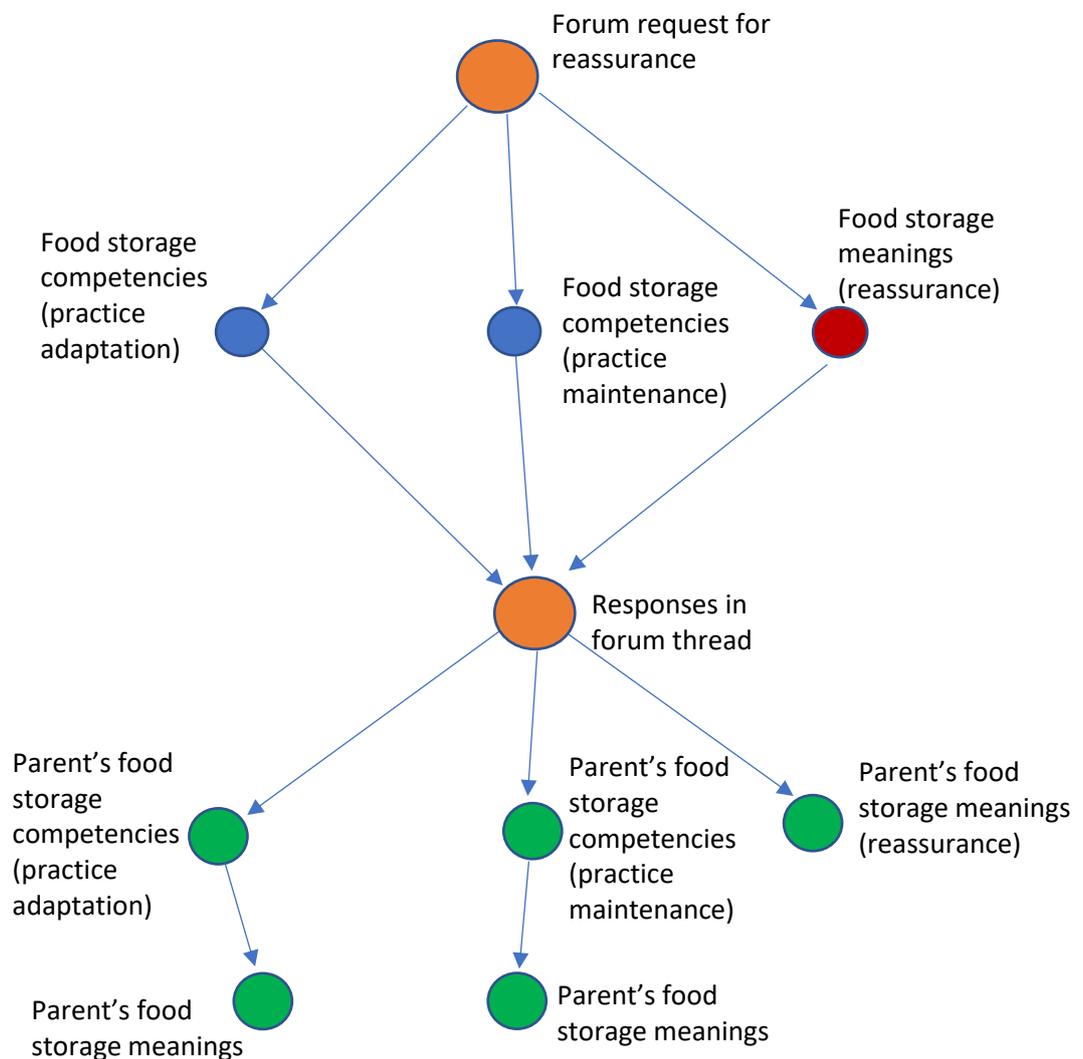
Figure 5.11. The process of within-practice meaning alignment in which a request for reassurance on the forum prompts responses providing direct reassurance as well as know-how that provides reassurance.

Two of the posts relating to cooking competencies were requests for reassurance about their child's diet, with parent 0058 concerned about her daughter's vegetarian diet and parent 0038 concerned her 4-year-old son was not eating enough. These threads involve a process of meaning adaptation which starts with a request for reassurance and in which parents' parenting aspirations may be adapted, albeit subtly, in the light of comments they read on the forum thread.

Process 5 – Multiple-practice meaning alignment

When parent 0038 asks for reassurance about how much her son was eating, she describes how frequently he eats as well as his height and weight. The request for reassurance takes place when performances of practice have taken place, both relating to food provisioning and the parenting practice of monitoring the child's development. She also describes how worried she is about the volume of food being eaten saying: "My 11 month old (sic) eats more than he does, honestly."

Parents responded to parent 0038 with explicit reassurance about the volume of food her son was eating as well as their shared experience, having children who only eat a similar amount. Questions are also posted in the thread relating to the monitoring of the son's wider health (parenting competencies), such as parent 0039's post: "Does he have energy to run around? Have you checked his BMI?"

Parent 0038, who posted the request for reassurance, then comments: "I will definitely keep an eye on his weight. I agree that maybe he is eating a normal amount and I'm expecting too much. He has so much energy." She also comments: "Glad to see I'm not the only one who worries about this sometimes." The goal relating to the volume of food the child should be eating is adapted.

This thread demonstrates the close connection between the food provisioning goal of providing a child with sufficient food and parenting goal of ensuring the child's healthy development. Figure 5.12 illustrates the process of multiple-practice meaning alignment. Parent 0038's request for reassurance relates to food provisioning (the volume of food) and parenting (the child's height and weight). The reassurance provided relates to both food provisioning and parenting as practices; reassurance being provided that the practice performances are aligned with the goals, or meanings of these practices.

Figure 5.12, illustrates how some direct reassurance is provided about the amount of food the child is eating (the solid line leading to food provisioning meanings) and some

reassurance is through shared experience (the dotted line). Know-how is also provided relating to parenting and monitoring the child's development. This adds to the parent's parenting know how (the green dot) as well as providing reassurance that their food provisioning and parenting practice performances are aligned with the respective goals, or meanings. As with Process 4, some guidance advocates maintaining existing practice performances and some other guidance advocates adapting parenting practices, with new ways to monitor the child is being fed a healthy diet - checking his BMI and how active he is.
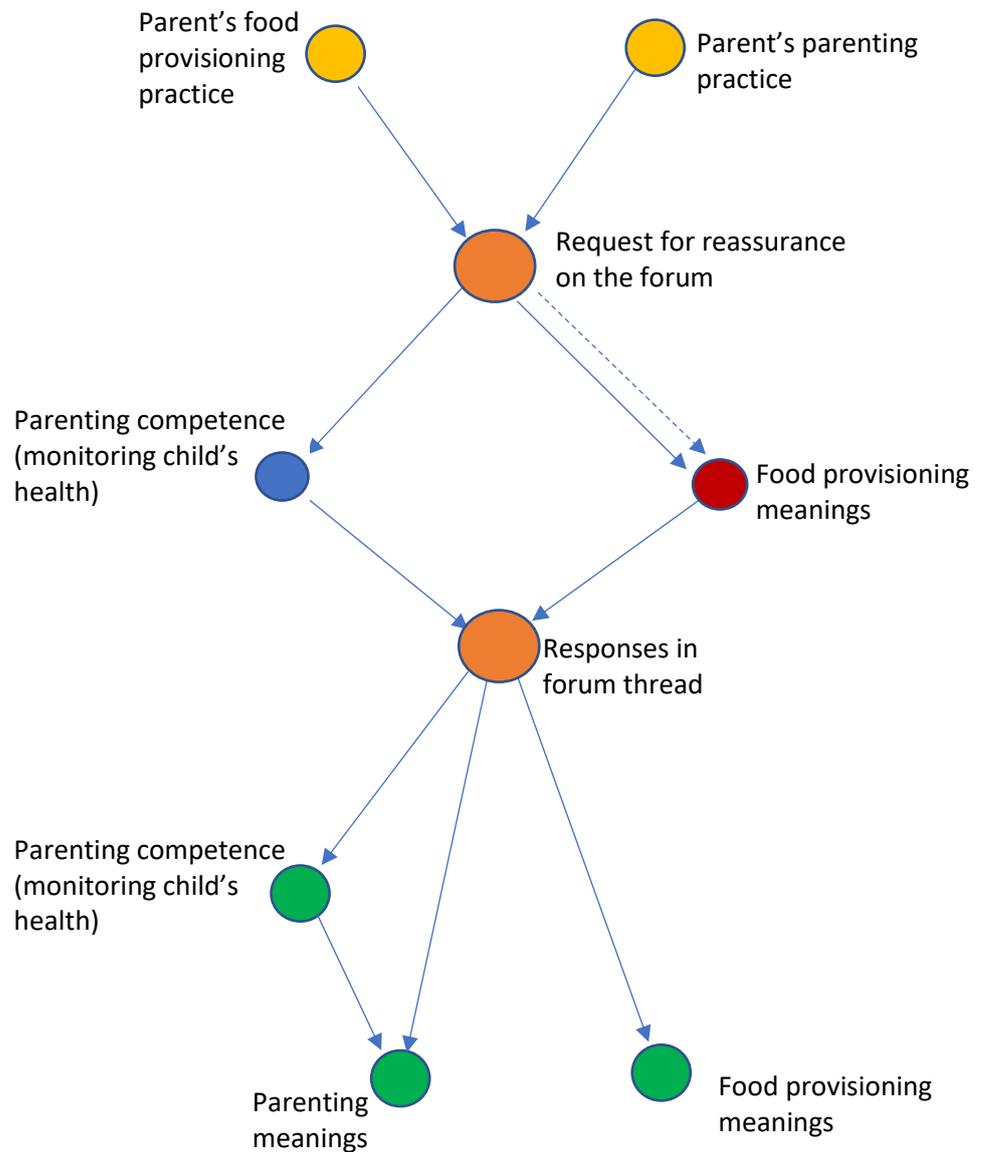
Figure 5.12. The process of multiple-practice meaning alignment in which a request for reassurance leads to reassurance that practice performances are aligned with the goals (meanings) of food provisioning and parenting practices.

In another thread, parent 0058 asks for feedback on her 4-year-old daughter's vegetarian diet, providing a detailed description of the food she eats in a typical day and describing her daughter as a "vegetarian fussy eater 4.5 year old" (sic). Other parents are critical of the diet in the thread, suggesting that she reduces the sugar intake and increases the protein and vegetables. Some are also critical of the autonomy her daughter has over the food she eats, parent 0061 says: "Five-year-olds don't dictate what's for dinner." Initially parent 0058 responds to the criticism and questions by saying: "…I can't force foods down her throat." But later in the thread, indicates a change of approach: "I think I have allowed her to get away with this behaviour unfortunately. I feel terrible about it and think I just thought things would change naturally, but not so." Later in the same post she asks: "Is it a case of tough love now? She is always hungry and I know it's the protein thing."

The thread shows the connections between food provisioning practices and parenting and the emotional resonance that these practices have when the results of practice performances are seen to be out of line with the aspirations, or meanings, of these practices. While emotions are a quality of practices, they are also experienced by individual practitioners (Molander and Hartmann, 2018). While Molander and Hartmann (2018) described how food practices changed after parents experienced negative emotions during their assessments of previous performances of practice, the forum analysis demonstrates the role the Talk forum plays in this. It provides a means to adapt food and parenting practices so they are more in line with the aspirations of these practices.

Other research has described the emotional support provided by parents on online forums (Chen et.al., 2014; Madge and O'Connor, 2006; Drenta and Moren-Cross, 2005) and the confrontational style of some discussions (Pederson and Smithson, 2013). The analysis here has characterised that emotional support, demonstrating that it takes the form of direct reassurance, reassurance though shared experience and reassurance through know-how. Some of this know-how encourages the maintenance of existing ways of performing food and parenting practices. Whereas other know-how encourages adaptations to practice performances so they are aligned with food provisioning and parenting meanings. In the case of parent 0058, that relates to the freedom of choice her daughter has in relation to food and a switch to a parenting approach of "tough love".

5.3.4 Processes on the forum and food waste

Several questions posted on the Mumsnet Talk forum between 23/2/18 to 27/7/18 indicated that at least some of the parents on the forum have adopted food provisioning practices that include avoiding food waste as a goal. Attempts to avoid food waste are often not explicit in the questions, but it is implied.

Many questions coded under cooking competencies were requests for ideas of how to use up specific foodstuffs, such as leftover ingredients from food that had been made from scratch, a glut of vegetables or fruit from the garden or food that had just not been eaten, such as parent 0099 who had: "A dozen very ripe bananas?!" and parent 0100 who had six stale chocolate chip brioches. These requests for ideas leads to Process 1, competence curation, described in section 5.3.1, in which suggestions for what to cook in a thread are made by several parents and included know-how related to several practices.

Existing research indicates that some food waste takes place in family homes because children are reluctant to eat the 'proper food' parents wish to provide them with (Charles and Kerr, 1988; Cox and Downing, 2007). Parents turn to the Mumsnet Talk forum seeking advice on what to feed their children who are fussy eaters. For example, parent 0018 and parent 0043 requested ideas for what to feed their children who were fussy, prompting lots of suggestions from parents based on experiential know-how in keeping with their children's food preferences. This is also Process 1, competence curation. Here the food provisioning practices of the parents who asked for advice were out of keeping with the demands of family food provisioning, in terms of providing plenty of healthy food, due to the amount the children were eating. They were using the forum as a source of know-how to realign their practice performances with practice demands. So while these threads were not overtly about preventing food being thrown away, here the competence curation process would still reduce food waste by providing children with food they will eat rather than leave in their plates.

Attempts to avoid waste are implicit in the requests for advice on how to resurrect cooking disasters, which leads to Process 2 described in section 5.3.1. In mid-performance competence curation, advice is provided by other parents during a cooking practice performance that is not going well, providing know-how that should make the food edible rather than it ending up in the bin.

In these ways, Processes 1 and 2 provide a means to avoid wasting food while also performing practices in a way that it is consistent with food provisioning meanings within

family homes, such as proving fresh food cooked from scratch, plenty of food and, due to the range of suggestions made through the competence curation process, a rich varied diet.

Existing research indicates that parents are often cautious about the food they give to their children from a safety perspective. They are more likely to adhere to food packaging labelling and demonstrate concern about the quality of the food (Terpestra et al., 2005; Cox and Downing, 2007). The forum posts reflect the meanings associated with food related to food safety through the questions about whether specific foods would be safe to eat and whether intended approaches to and durations of food storage would be safe. Process 3, competence contesting outlined in section 5.3.1 has implications for food waste through the guidance provided on whether food is safe to eat. On the fourm, in the competence contesting process, the advice is often experiential and anecdotal, based on other parents' know-how from experiences in their own kitchens rather than institutionally-provided food safety guidance. Similarly, Process 4, within-practice meaning alignment, where the requests for reassurance relate to food storage and safety, as parent 0129's request relating to the storage of pasta pesto for her son did, this will impact the performance of food disposal practices and so food waste levels. As in Process 3, the guidance from other parents in such a thread is anecdotal and experiential.

5.4 Nature of the discourse on the forum and the processes of linkage

In this section, the characteristics of the interactions on the Mumsnet Talk forum are explored. The characteristics considered include both the content of forum posts and other aspects. The characteristics of the forum interactions are shaped by the way the forum is structured, with initial questions and comments by parents being followed by responses from other parents. But there are other factors that shape the forum interactions, such as the speed with which parents can interact with one another. It is the technical affordances of the Talk forum that shape the nature of the interactions that take place there and ultimately these interactions enable the processes of linkage described in section 5.3 connecting food, parenting and forum practices to take place.

5.4.1 Experiential knowledge and the processes of linkage

In the forum posts captured between 23/2/18 and 27/7/18, 24 (59%) of the forum threads which started with a request for advice, 40 (89%) of the threads where inspiration was requested and eight (40%) of the threads requesting reassurance included posts from other parents that described their personal experience. Experiential posts were counted as those

that included a description of a particular activity (including comments such as such as "We've done it…), or an opinion being provided about an activity (such as "This is my favourite recipe."). This echoes the finding of Brady and Guerin (2010) that experiential knowledge is an important aspect of the support provided on parenting forums.

The requests for inspiration lead to the process of competence curation (Process 1) in which know-how about several food provisioning competences from several parents is brought together in a single forum thread. Given that 89% of threads where inspiration was requested include experiential information, it is an important part of this process. The experiential guidance provided in response to requests for inspiration take the form of descriptions of tried and tested recipes or tried and tested ways of storing food and tried and tested ways of cooking, such as batch cooking. They are ways of providing proper food, food cooked from scratch, that have worked given similar challenges such as a child's fussy eating or limited time. For example, parent 0112 suggested variations on a roast diner for a child who won't eat mixed-up food based on her experiences with her son, saying: "He lived on this as a child for a couple of years."

Many of the threads requesting inspiration for meal ideas (Process 1 – competence curation) contain links to other websites and mention recipe books, supermarket magazines and apps. The websites linked to or mentioned include to those of traditional media, such as cooking magazines, as well as recipe websites (such as thekitchn.com), food bloggers such as Jack Monroe, TV presenters' websites, food manufacturers' websites and a Facebook channel. However, even where weblinks are included in a post, experiential guidance is often provided about these sources that indicates the know-how these sources provide enables performances of food provisioning practices that are in keeping with practice demands while facing constraints, such as the food tastes of children and limited time. For example, when parent 0113 suggests the Nosh For Busy Mums and Dads cookbook, she describes the recipes in it as: "Less salty than Jamie's Ministry. More likely to be eaten by kids. Totally easy to follow. Good for batch cooking. I haven't found one [recipe] I can't cook yet (I'm a terrible cook!)." Similarly, parent 0014 provided a link to a BBC Good Food recipe for "speedy sausage Bolognese" that she batch cooks.

Requests for reassurance led to processes 4 and 5 outlined above, within- and between-practice meaning alignment. In meaning alignment, parents are asking for reassurance whether intended performances of practice are in keeping with the aspirations of food provisioning practices, such as providing sufficient food. Sometimes, there is no indication as to how the reassurance provided is informed. For example, when parent 0009 asked for

reassurance that she was providing enough food for a children's party, parent 0133 said: "Plenty!" However, some reassurance is provided through shared experience. When parent 0038 asked for reassurance about how much her son was eating, as she was concerned he wasn't eating enough, parent 0109 describes a similar experience with her son and how she worried about it less than she once did. Links or references to other sources of information are not provided in response to requests for reassurance.

Many of the posts requesting advice relate to safe food practices and Process 3, competence contesting, in which different guidance is provided within a thread by different parents. Sometimes parents provide guidance without an indication of what informed that guidance. For example, when parent 0016 asks whether it would be safe to eat a 5-day-old stew stored in the fridge, parent 0134 simply writes: "I would". However, some of the advice provided in Process 3 is experiential and anecdotal. For example, when parent 0111 is providing guidance on whether a curry stored in the fridge overnight would be safe to eat, she writes: "my [sic]- mil [mother-in-law] leaves her curries on the kitchen table for up to a week at a time. she [sic] hasn't died of food poisoning yet…". Similarly, when parent 0030 was providing guidance on how long chicken and fish would stay safe to eat when stored in the fridge, experiential rather than knowledge gleaned from other sources informs that advice, saying: "Nothing scientific about this btw, just what I tend to do and it's not killed me yet."

Only one forum post providing food safety advice within Process 3, competence contesting, included a weblink to an external source of information, a website named Eatbydate.com written by "contributors from the kitchen and classroom communities" that gives guidance on how long different foods last. Another post, by parent 0111, makes reference to a fridge manufacturer's instructions in a discussion about whether it is safe to but hot food in the fridge.

5.4.2 Volume of responses and the processes of linkage

In the forum posts captured between 23/2/18 and 27/7/18, questions seeking advice generated a mean of 4.94 responses (SD= 5.58) and requests for reassurance generated a mean of 4.2 responses (SD=4.97). However, posts requesting inspiration generated the largest number of responses, a mean of 11.23 responses (SD = 9.44). This means that in Process 1, competence curation, which starts with a request for inspiration, parents are provided with a wide range of options, generally from several different parents. In some instances, the same parent provided more than one response to the same request for

inspiration, with each response counted. This curated know-how appears to be a more manageable volume for some parents than search results generated when googling for meal ideas. At the end of her initial post requesting meal ideas, parent 0043 said: "I've tried googling but I'm a bit overwhelmed!".

5.4.3 Speed of responses and the processes of linkage

Each forum post includes the date and time it was posted, making it possible to determine the length of time that elapsed between the initial question or request for ideas or reassurance and the first response. Nineteen forum threads between 23/2/18 and 27/7/18 started with a request for inspiration on how to use fresh ingredients – Process 1, competence curation. Removing an outlier of one initial response to a fresh ingredient related question which took 7 hours 2 minutes, the average response time to a post asking for inspiration on how to use fresh ingredients was 12.57 mins (SD = 18.4 mins). So while the initial response time is quite variable, it is also fast.

5.5.4 Emojis and the process of linkage

Parents on the Mumsnet Talk form are able to use emojis within their posts. Emojis perform an immediate communicative function of conveying emotion (Jaeger and Ares, 2017), such as embarrassment or surprise, depending on the facial expression used. When parent 0046 provided a recipe for cheese and vegetable muffins in response to a request for inspiration for freezable lunches, she wrote: "My DS [son] likes them though and its currently the only veg he eats!! 😳 ". The blushing, embarrassed emoji provides a means to acknowledge that what is described is not in keeping with the family food provisioning aspiration of providing a variety of healthy foods. Similarly, in the text accompanying a request for ideas for healthy meals, parent 0018 writes: "But I have to do chips for ds and pasta for dd 😵 ", an acknowledgement that the description of food provisioning is not in keeping with conceptions of family mealtimes involving eating the same thing (Brembeck and Fuentes, 2017). Existing research has highlighted how parenting forums provide a space for parents to be open and candid about their experiences (Brady and Guerin, 2010). In the context of family food provisioning, the emojis may provide a means for parents to indicate to others that they know the 'correct' way to provide food, even if what actually happens in their homes falls short of the socially prescribed ideals of family food provisioning. In this way, emojis may provide a means to encourage discourse, both questions asked and know-how shared, strengthening processes such as competence curation.

5.5 Chapter summary

The analysis of Mumsnet Talk forum posts has provided an insight into the linkages between domestic food practices, parenting practices, forum use as a practice as well as the wider practices that make up daily life. They form an entangled network in which performances of once practice influence another and where there are shared aspirations, or meanings, that thread through practices.

The chapter has also identified processes of linkage between practices connecting forum use with food provisioning and other practices. The processes take place before, during or after food provisioning practice performances and involving requests for advice, inspiration or reassurance being made on the forum. The processes described here are unlikely to be an exhaustive list, but illustrate some of the ways how food, parenting and forum practices intersect. While individual processes have been outlined in this chapter, they are not mutually exclusive. So, for example, a request for reassurance about a child's diet, may involve aspects of process 5, meaning adaptation and process 1, competence curation, in the same thread. The processes have been described in the way they have in this chapter for analytical clarity.

The advice, inspiration and reassurance provided on the forum often relates to more than one food provisioning practice within a single thread. Depending on the process, the forum posts relate to know-how, or competencies, of practice or the aspirations, the meanings associated with a practice. Or in some instances both. The meanings associated with food provisioning, are connected to wider parenting meanings associated with the healthy development of the child. The forum discourse reflects this, with guidance related to food provisioning and parenting practices. It means that parenting meanings thread through parenting, food provisioning and into the discourse on the forum, so parenting practice performances.

In the process of competence curation, know-how is provided about several practices from several parents that enables parents to meet the socially-prescribed aspirations of food provisioning in family homes, such as providing proper food cooked from scratch and a variety of foods, when facing time limitations presented by the wider constellation of practices that make up daily life, such as going to work or looking after a baby. It also enables parents to meet the socially prescribed demands of family food provisioning, when facing time constraints.

The characteristics of the forum interactions, such as the speed and number of responses, plays a role in the processes of linkage. Experiential know-how is important in several processes, particularly in competence curation which starts with requests for inspiration. Here it means that know-how is provided that is consistent with the socially prescribed demands of food provisioning practices, while managing challenges such as time limitations and children's fussy eating. That experiential know-how is also provided in competence curation where links to information external to the forum are provided, such as recipe websites that provide meals children will actually eat and food that can be batch cooked.

Experiential know-how also plays a role in Process 3, competence contesting, where parents provide food safety guidance based on their experience of previous performances of food provisioning practice that have not resulted in someone falling ill. Parents sometimes mention that the guidance they provide may contradict "official advice".

Several of the processes outlined in this chapter have clear implications for efforts to reduce food waste. The know-how provided on the forum provides a means to use up left-over food, a glut of certain foodstuffs and resurrect cooking disasters as they happen. They also provide a means to increase the likelihood that children will eat the healthy, cooked from scratch food put in front of them rather than it ending up in the bin. In this latter scenario, although parents may be seeking to adapt their practices so their children eat plenty of food, this will also reduce food waste.

5.6 Next steps

The analysis of posts on the Mumsnet Talk online forum has provided insights into the processes linking food, parenting and forum practices and how the forum helps parents navigate food and parenting practices. However, the interviews conducted with parents who use social media in relation to their domestic food practices will provide some important further insights. These will be considered in relation to the research objectives. The analysis of the interviews uses Schatzki's (1996) elements of practice as a theoretical lens rather than Shove, Pantzar and Watson's (2012) elements. The reason behind this change is also explained in this section.

5.6.1 How the interviews can help address the research objectives

Each of the objectives are re-stated below, with a description of the further insights the interviews with parents will provide in relation to them:

RO1. Investigate how parents' domestic food activities and food provisioning priorities influence their social media practices.

The forum analysis has provided some insights into the nature of the domestic food practices that prompt forum use and how the aspirations, or meanings, that form part of parenting and food provisioning practices shape forum use. The interviews with parents will provider richer accounts of what was happening in the home before parents turned to social media. It will also enable an exploration of how parents' food provisioning priorities are informed; where the aspirations that form part of food provisioning practices come from.

RO2. Explore how different information sources are employed by parents to navigate domestic food practices, including the affordances in practice of different online social media platforms.

The forum analysis has enabled an exploration of how parents navigate domestic food practices using the Mumsnet Talk Forum. But the parents interviewed for this research use several forms of social media, allowing comparisons to be made between different platforms in terms of how they enable food provisioning practices to be navigated. The forum analysis demonstrated how the technical affordances of the forum enable the processes of linkage to take place and, in so doing, the forum discourse may shape offline food and parenting practices. However, the interviews provide an opportunity to ask parents exactly how social media shaped their offline practices, providing a clearer insight into the affordances in practice of social media. It will also be possible to make comparisons between the affordances in practice of different social media platforms.

RO3. Investigate what determines the extent to which information sourced online influences domestic food practices, including the roles of trust and community in social media platforms.

While some parents on Mumsnet Talk mentioned they had used specific guidance provided on the forum to inform their food practices, the interviews provided an opportunity to ask parents about what determines whether guidance provided on social media is adopted in their kitchens as well as what and who they trust.

RO4. Consider how insights into how information from social media shapes what happens in the home in relation to food may be used to inform future domestic food waste reduction campaigns.

The analysis of forum posts has demonstrated how the between-parent interaction that takes place on the Mumsnet Talk forum has the potential to reduce the amount of food thrown away. However, an exploration of how other forms of social media inform domestic food practices and what determines whether or not social media discourse changes in-home practices will provide further insights that may inform future food waste reduction campaigns.

5.6.2 A shift in the theoretical lens

In the forum analysis within this chapter, Shove, Pantzar and Watson's (2012) elements of practice provided a broad theoretical net to cast over the data. However, the 'materials' of shopping, cooking, eating and disposing of food rarely featured in the discussions (threads) on the Mumsnet online parenting forum. Where materials of food provisioning were mentioned within threads, parents were seeking know-how about the effective use of kitchen equipment, such as fridges. It's not to say that materials are not important within food provisioning practices. Kitchen equipment such as cookers, fridges and the food itself, are clearly central to food provisioning. But when seeking to understand how parents navigate domestic food practices using social media, other elements of practice appear to be more salient.

Some forum discussions indicated that parents were using this online space to navigate the 'rules' of food storage, to use Schatzki's (1996) elements, such as storage instructions on food labels and use-by dates on packaging. What was particularly interesting was how parents responding to questions about these 'rules' employed their own experiential know-how, rather than institutionally provided guidance, to inform their advice. Shove, Pantzar and Watson's (2012) elements of practice do not provide as clear distinction between written instructions and guidance and learned know-how as Schatzki's conception of practice theory does, with its separate 'understandings' and 'rules'.

The forum analysis also demonstrates the emotions linked to domestic food provisioning for parents, such as the frustration and anxiety generated by the demands of providing food for children when confronted with challenges, such as children's refusal to eat healthy food, cooked from scratch and the time pressures presented by busy lives. Schatzki's conceptualisation of practice theory, with its teleoaffective structures foregrounding the emotional aspects of practices, is therefore an attractive analytical lens through which to view food provisioning by parents. It also provides a clear distinction between the teleology, the goals and purposes of practices, and the affect, the emotions associated with

a practice. As in Molander and Hartmann (2018), having a theoretical apparatus that allows an exploration of the connection between practice goals and emotions and how they shape practices should provide some interesting insights. In contrast to Molander and Hartmann (2018), who were looking at food and parenting practices, this research adds social media into the mix.

It is due to these factors that Schatzki's (1996) conceptualisation of practice theory was used to inform both the development of the interview questions as well as the analysis of responses that appears in Chapter 6. While Schatzki developed a later formulation of the elements of practice that included four elements rather than three (Schatzki, 2012), the earlier 1996 conceptualisation is employed here because it is more straightforward to operationalise in empirical research.

Chapter 6 – Analysis of interviews

6.1 Introduction

The analysis of posts on the Mumsnet Talk forum in Chapter 5 showed how online forum use is entangled with domestic food practices and parenting practices and the wider constellation of practices that make up daily life. It also allowed several processes involving forum use, such as competence curation and meaning alignment, to be described. Chapter 6 builds on this by using interviews conducted with parents who use social media to provide further insights into these processes of linkage between practices and allow new ones to be illuminated.

The interviews with parents enabled an exploration of what took place in interviewees' homes before specific instances of social media use, how these parents used social media in relation to family food and what determined whether or they used the information they read. As the interviewees were asked about all forums of social media use in relation to food, not just online forum use, this provides insights into how the nature of the different communities and different technical affordances of these different platforms influence how social media use shapes domestic food practices.

The chapter starts by using the interviews to characterise the teleoaffective structure of family food provisioning, in particular the food provisioning goals. Where practice theory suggests that these goals are socially prescribed, we then consider the sources of these goals and how they are reinforced.

The affordances in practice of different forms of social media are considered in relation to how they curate know-how or 'understandings' of family food provisioning. Different forms of understandings curation (or competence curation as it was known in Chapter 5) on different social media platforms are described, enabling a taxonomy of understandings curation to be developed. The chapter then moves on to characterise the process of teleoaffective alignment (or meanings alignment as it was known in Chapter 5) to a greater degree than was possible in the previous chapter.

During the interviews, parents described occasions when they followed the experiential advice of other parents on social media rather than the formalised guidance on healthy diets and safe food practices on institutional websites, such as those of the NHS, and from health professionals - the rules of practice. So how parents use social media discourse to navigate the rules of food provisioning is considered here.

Finally, the chapter considers what determines the extent to which information on social media shapes domestic food practices. Among other things, this analysis demonstrates the insights that a practice theory informed approach to analysis can provide into how individuals interpret online information online, including who and what they trust.

6.2 Sources of food provisioning teleoaffective structure

Given the importance of the teleoaffective structure of food provisioning practices in connecting these practices to one another as well as other practices, including online forum use, the starting point of this chapter is to characterise the teleoaffective structure of food provisioning practices using the interviews. Teleoaffective linkages between food provisioning and other practices are also explored. In other words the analysis considers where the teleology, the goals and ends, of practices and affect, the emotions (Molander and Hartman, 2018) are shared between practices. Finally, the sources of food provisioning goals in family homes are explored.

6.2.1 Teleoaffective structure of food provisioning and interlinked practices

When asked in the interviews to describe their goals in relation to the food they gave to their children, the parents had strikingly similar aspirations - a varied diet of healthy, nutritious meals that were made from scratch, similar to findings from other studies (eg. Evans, 2011 and Charles and Kerr, 1998). Eating together, as a family, was also described as being a goal, similar to findings elsewhere (eg. Knight, O'Connell and Brannen, 2014; Charles and Kerr, 1988; Brembeck and Fuentes, 2017).

However, as the interviewees described their goals, they also described the compromises and work-arounds, the 'good enough' parenting (Molander and Hartman, 2018; Molander, 2017), that takes place given the time limitations presented by other practices in daily life and the food preferences of the children. Typical of that was parent 0071, who said:

> "[The goal is that] we're all eating together and I like to eat healthily. We tend to eat more healthily on a Sunday. I'll do a roast dinner and they eat that. [Her son] will mostly eat vegetables. It's those sorts of dinners where you prepare them properly from scratch. When we're in a rush when they have got home from school, they're just like 'feed me now!' kind of hungry. So then it's not real…it's freezer food like chicken nuggets, waffles, baked beans or peas or sweetcorn, or pasta, which isn't too bad you know. I try to get together a combo of carbs, protein, veg of some description."

For this parent, the goal of eating healthily is not always possible, but a compromise is arrived at, whereby a healthy, cooked from scratch meals is provided on a Sunday, when there are fewer time pressures from the other practices that make up daily life. During the week, a negotiated position is found where food is provided that can be cooked quickly; weighing up the goal of providing proper food, with food that the children like, such as nuggets, similar to the findings of Halkier, 2016b.

Parents described food provisioning goals linked to wider aspirations that form part of parenting practices, such as enabling their child's healthy development. Providing food to enable healthy development is a teleological thread that runs through and connects food provisioning and parenting practices. For example, parent 0066, described how ensuring her children were eating enough protein was a goal and that: "I try and say to them [her children] that it's going to give them big muscles." For parent 0063, her food provisioning goals, the teleology, were connected with sports practices: "My husband and I are both quite sporty. We do quite a lot of exercise. So I've got a reasonable understanding of diet and nutrition."

When the interviews with parents took place, between August and October 2020, several parents described the changes to family life the UK lockdown had brought about, the lockdown having been introduced on 23 March 2020. Parents, such as parent 0075, described how meals at lunchtimes, during the working day, could be eaten together as a family because the children and both parents were at home. The lockdown also brought about changes to other food related practices, such as parent 0081, who started writing shopping lists and parent 0079, who had started writing a plan of each meal the family would eat each week. Food-related practices changed during the lockdown, when performances of the non-food practices they intersect with in daily life, such as travelling to work, changed or stopped entirely.

6.2.2 Social and cultural sources of the family food teleology

This section considers the aspects of the social and cultural context from where the demands of food provisioning practices may be derived (Southerton and Yates, 2015). The interviews also provided some insight into how the demands of family food provisioning practices have changed during the lifetime of the interviewees. The socially-prescribed demands define what the appropriate goals, or teleology, of food and parenting practices are and so shape practices performances.

In chapter 5, forum use was a considered as a practice in its own right, enabling an exploration of the processes connecting forum use to food and other practices. However, in this section it is useful to consider media use as a resource for other practices (Keller and Halkier, 2014) and in particular how it informs the teleoaffective structure of food provisioning practices in family homes. This provides important context to the exploration later in this chapter of how parents use social media to negotiate idealised representations of family food provisioning.

The analysis in this section demonstrates how social media itself is a source of these idealised food provisioning goals and how these goals are often connected with parenting goals, indicative of the shared teleology between practices. When asked about the sources of expectations, or goals, of food provisioning, parents often described more than one source. It would be impossible to untangle the effect of a single source, given that parents are exposed to many forms of food media (Halkier, 2016b). However, it is still useful to explore the sources of food teleology parents described.

Traditional media and 'official sources'

When asked about the sources of expectations about family food provisioning, parent 0071 mentioned traditional media. "Yeah, so there's loads in magazines and TV on what is healthy food and how to eat at the dinner table and you know it ranges from like Jamie Oliver to This Morning." This echoes the findings of other studies that have shown that conceptions of 'proper', healthy, food provisioning in family homes is derived from discourse in traditional media (Evans, 2011; Hallows, 2016; Halkier, 2016b). Parent 0071 also mentioned literature aimed at parents from institutional sources, such as the NHS, that defined food provisioning goals which she linked to wider parenting practices and being a "good parent", indicative of the shared food provisioning and parenting teleology: "… everyone's read a parenting book or you know there's NHS leaflets on it as well about healthy food for toddlers. There's a leaflet you get when they are about 18 months or something. So, all the parents know that you've got to do this to be a good parent, and if you don't then, you know, you're a bit of a lax or scally parent."

Other parents described institutionally derived information as a source of the goals of what a family meal should consist of. Parent 0069 mentioned leaflets handed out by her health visitor as well as online institutional resources: "…when we were weaning [son's name], a lot of the pictures on the Start for Life NHS website were of these really boring looking meals. So like plain steamed piece of fish, two new potatoes and some plain carrots. We

thought, is that us? Is that our life now? So for us the expectation was that your child has a very boring, simple meal that you would not feed to guests." For this parent, the food provisioning goals exemplified on the NHS website were not in keeping their food provisioning goals before having a child, or when there are visitors in the house.

Other parents online

When asked about the source of expectations, or goals, of what to feed children, rather than traditional media or official literature, far more parents said the expectations came from other parents, including other parents online. The descriptions by other parents of fresh, healthy, home-cooked meals they have provided for children and questions asked on social media set or reinforced the expectations around family food provisioning. Parent 0083 said:

> "…certainly on the Facebook groups that I'm in, they are full of parents who have cooked their own foods. The questions are never, 'Oh, does anyone have any opinions on Annabel Karmel ready meals versus Cow and Gate' or whatever. They're all questions about people wanting recipes to cook themselves or does this food look like it's chopped up correctly?"

Parent 0078 described her experience on a WhatsApp group formed by parents who met at a new mums' club:

> "…I don't know whether it's direct pressure but there's quite a lot of competition about how many vegetables your child was eating as a measure of how well they were doing. I don't know whether it's explicit, but I definitely think it's swilling around in the background of conversations that you end up having."

Parent 0074 described how social media perpetuated food provisioning goals of cooking from scratch and that these could be unrealistic representations that do not reflect the compromises that have to be made due to time limitations presented by non-food provisioning practices. She said of Facebook and Instagram: "You see these super women who pretend like they can do it all and then you think, should I be doing that? Crap!"

As well as the reinforcement of food provisioning goals being through descriptions of practice performances by other parents, sometimes the reinforcement on social media is explicit, in the form of comments by parents about what others were providing for their children. Alongside advice and support, online parenting forums can be a place for 'lively

debate' and confrontational language (Pedersen and Smithson, 2013). For example, parent 0078 described her experiences on Facebook groups and forums:

> "I found on quite a lot of the Facebook groups and online forums, there's quite a lot of strong opinions … about exactly what you were feeding to your children. I had someone having a go at me because I fed my eight-month-old custard once because it has sugar in it. And you think okay, but he's not eating custard all day every day, you know, I'm sure it's fine."

Two interviewees described how on Instagram, a social media platform where the posts are focused on photographs shared by users, pictures shared of food provided for children created an expectation that food would be aesthetically pleasing. Parent 0069 explained how she encountered Instagram when researching how to feed her child: "I came across the world of Instagram where all the food, even from first weaning foods, looks beautiful and I just know that nothing that I prepare for [son's name] is at that level of beautiful."

The excerpts from the interviews demonstrate that as well as social media being a source of emotional and social support to parents (Chen et.al., 2014; Madge and O'Connor, 2006), the platforms are also a place where what is the right type of food and the right way to prepare it, are reinforced and perpetuated; sometimes explicitly and other times implicitly through descriptions of food provisioning performances that are in keeping with the normative goals. These food provisioning goals are often connected with parenting goals, a shared teleology between these closely connected practices. The descriptions or examples of food provisioning on social media were sometimes considered unrealistic by the interviewees.

Other parents offline

Some parents described trips out with other parents as a place the goal of providing healthy, home-made food were reinforced. Parent 0063 said:

> "…I do remember feeling when they were babies, that, you know, you didn't go out and give them a [food] pouch and a puree. You opened a pot. I grew up in a fairly working-class family but I suppose you'd say I am fairly middle class now. And you did, you all sat around and you all opened up your Tupperware pots and you prepared things and you had hummus."

Like parent 0063, parent 0071 suggested that the expectations around food provisioning is a middle-class phenomenon, with food provisioning goals linked with parenting goals.

> "There's a real class judgement around food, I think particularly with middle-class parents. This need to show that you can provide for your kids and provide good food and you're being good, educated parents are providing them, you know excellent food choices and so on and you know about what's healthy and you're going to feed them that."

Differences in culture

Two parents indicated that national culture influenced the food provisioning goals in family homes. Parent 0070 said that her husband is Swedish and so encourages the inclusion of hams and cooked meats in their diet. Parent 0067 said her Italian background influenced the way she provides food. "I'm half Italian so for that side of culture, it's everybody's still in Italy, sits down and eats together."

Parent 0074, who had grown up in America, described the cultural differences between the US and UK.

> "Yeah, I think in America, the expectation is that a lot of things are pre-made in the toddler isle [of a supermarket]. You just kind of buy them and that's what you give to the kids. Whereas here, I feel like it's very different, there's a lot of pressure to, erm, I guess, cook all of your food from scratch."

She suggested the difference was due to mums in the US having less time than their contemporaries in the UK as they have to return to work sooner after the birth of a child. Parent 0074 said: "So I would definitely say it's different here, probably also because of the maternity culture. You know, in America women are back to work after three months."

6.2.3 Changing demands of food provisioning in families

Some of the parents interviewed indicated that the goals of family food provisioning have changed over time. Parent 0069 said: "My parents are both busy, busy teachers. I ate a lot of ready meals. And I knew that I didn't want that for my family, so I go in as opposite direction as I can." Parent 0070 had a similar experience: "I grew up and I had chocolate sandwich spread with a packet of crisps. I never had fruit. I'm just very determined that my kids are not gonna grow up like that." The change in the demands of food provisioning in family homes between generations may be a reflection of a wider change in the demands of parenting practices towards intensive parenting that is labour intensive (Hayes, 1996). Making food from scratch takes up more time than preparing a ready meal.

Several parents said they do not go to their parents, or even older siblings, for advice about food and their children because the correct or proper way of doing things had changed. Parent 0077 said: "…I trust my family but we come from different generations, so we do things differently and I might not get, you know, the advice that I would need from family."

6.3 Parents' concern about food waste

The interviews with parents explored all their food-related practices, given that they can all ultimately influence food waste. However, several interviewees said they were concerned about the amount of food thrown away in their household. A common sentiment was that wasted food was a waste of money, echoing findings of other research (eg. Watson and Meah, 2012; Cox and Downing, 2007; Ganglebauer, Fitzpatrick and Comber, 2013). Some parents mentioned inequalities in the availability of food as their source of concern in relation to food waste. When parent 0067 was asked why, on occasions she had thrown away food, it was a source of concern, she said:

> "It's just that I knew it was a big waste of money, and it just felt bad because especially, I don't want to sound too… but there was a huge thing about people using food banks, erm, even… I live in Surrey, which is obviously really wealthy county, but the reports on usage of food banks, erm it's really, really increased so steeply."

Parent 0070 also described her food waste as problematic in the light of food inequalities: "I guess it's because it's food going to waste and I think because we've told our kids that there are other kids who don't have enough food." For parent 0079, it was more of a general feeling that waste is wrong. "I just feel like… I can't bear to see food wasted. I don't know what it is…". Similarly parent 0073 said: "I don't like waste. I'm not very good at wasteful things, I don't like it. That really upsets me a bit."

A concern for the environmental implications of wasted food were less evident in the interviews than the wasted money, also echoing findings elsewhere (eg. Watson and Meah, 2012 and Cox and Downing, 2007). Parent 0070 said: "…when you think about the lifecycle of the food as well, I know were going slightly off topic here, but it goes straight in the food bin." Parent 0075 mentioned the single-use plastics used as packaging in her daughter's packed lunch which was returning home each day largely uneaten.

6.4 Affordances in practice, understandings curation and teleoaffective alignment

This section provides new insights into Process 1 in Chapter 5, competence curation, as well as Process 4, meaning alignment. Or, using Schatzki's (1996) elements of practice, understandings curation and teleoaffective alignment. It does this by exploring how the technical affordances of different social media platforms enable the curation of understandings, facilitating practice change, as well as teleoaffective alignment. These are what can be considered affordances in practice (Costa, 2018). This section also considers how different social media platforms, due to their different technical affordances, provide different forms of understandings curation. Finally, it looks at when parents' social media use take place in relation to other practices.

6.4.1 Mumsnet Talk, the curation of understandings over time and teleoaffective alignment

Parent 0069 described how she would use Google to search Mumsnet by including 'Mumsnet' in the search term when she was really concerned about something food-related:

> "I google my Mumsnet question when I'm really worried about something. So with [son's name], I worry about how much he eats. And so I've asked the history annals of Mumsnet 'is it normal for my toddler to be able to eat a full adult sized portion?' 'Is it normal for my toddler to eat his breakfast, and then want another breakfast?' 'My toddler weighs this much, is that normal?' And just seeing the stream of mums who have the same problem, erm, or who have ideas to tackle it has been really reassuring."

Parent 0069 described how, when she Google searched her questions, she would find that the same question had been asked in Mumsnet several times over the past 10 years. "That's something I find reassuring to know, that it's not just a problem that people are having this year, it's one that keeps happening." She explained that she was looking for a mixture of reassurance and practical advice.

> "Sometimes it's just reassurance. With my toddler's obsessed with food, I was looking for things that people have tried because what I've discovered with parenting is there's a million techniques with any problem that you have, so just looking for different things I can try to see which one sticks."

She said that she tried one suggestion she read which was to get her son involved with the preparation of the food and another, to make sure her son knew when the next meal would be.

The questions parent 0069 typed into google, asking whether her son's behaviour in relation to food is normal, are a request for reassurance. But it also enabled her to read suggestions from other parents in threads on how her performances of different practices could be adapted. Although the suggestions were not aimed at her specifically, as they were originally typed in response to someone else's question, they were still relevant to her own experience.

This process starts after performances of practice; performances in which she feels her child is eating too much. So the Googling is prompted by assessments of previous performances of practice. The negative emotions experienced by parent 0069 are connected with food provisioning and wider parenting practices, evident in her question about her son's weight and a concern that her food provisioning practices are out of keeping with food provisioning and parenting goals.

Figure 6.1 shows this process that involves understandings curation and teleoaffective alignment. It starts with assessments of previous food provisioning and parenting practice performances, leading to questions on Google that provide previous Mumsnet threads from several years about the same issue in the search results. The guidance in those threads relates to cooking understandings. At the same time, some reassurance is provided by virtue of previous questions about the same problem, shared experience with forum users. It means that through the shared experience with other parents, she is provided with reassurance that she is not the only one facing the situation – she is not failing as a parent because her son has a large appetite. So her food provisioning and parenting practice performances are in line with the food provisioning and parenting teleology.
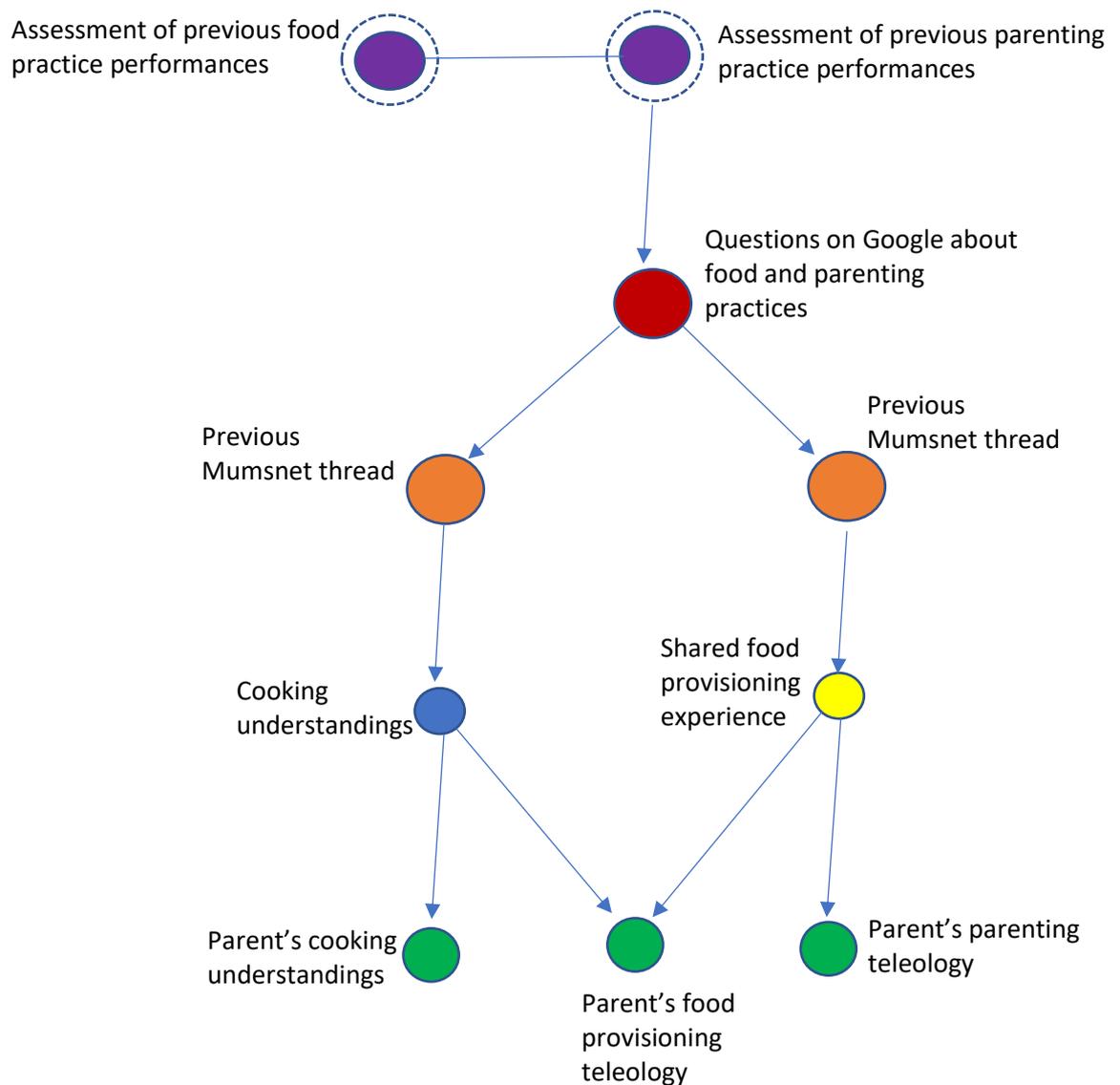
Figure 6.1. The processes of understanding curation and teleoaffective alignment that starts with a post-practice performance assessments that lead to Google searches, providing Mumsnet Talk threads from several years about similar food-related issues in the search results.

As with competence curation identified in Chapter 5, this curation of understandings on the forum brings together understandings from different parents and relating to different practices. But in addition, the Google search brings together know-how provided by other parents over the past 10 years. The technical ability, or affordance, of targeted online searches and the technical affordance of the Mumsnet Talk forum, which stores threads written over many years, provide this affordance in practice of curated food and parenting competencies as well as the affordance of teleoaffective alignment. This provides parent

0069 with know-how about meeting her food provisioning and parenting goals as well as some reassurance that she is already doing this, at least to some degree.

Other parents described Googling for ideas on Mumsnet Talk in a similar way when faced with a challenge. This includes parent 0067, who Googled for advice when one of her daughters was not eating food from a spoon when she was being weaned, leading to a concern that she was not eating enough. She said: "You don't necessarily get food experts for children that come up [when you do a Google search]. It does tend to be these forums. She described typing a question into a forum thread about weaning: "I probably just asked what eventually worked. Then I didn't have to scroll through absolutely everything." The technical affordance of being able to type a question into the forum and interact with other parents, provided parent 0067 with access to experiential know-how on feeding her daughter. It meant that she saved time, both by not having to scroll through lots of guidance and, perhaps more significantly, by getting quick access to know-how about a tried and tested feeding technique without having to use trial and error herself.

6.4.2 Other social media platforms and other forms of understandings curation

Facebook, problem-focused understanding curation and teleoaffective alignment

Parent 0071 said she joined a Facebook group for parents of children with cow's milk protein allergy after her son was diagnosed with the condition. She described the impact this had.

> "I think when I first went on [to the Facebook group] I cried it because it's just like this recognition of like, oh, God you know, someone else's experiencing this too. And it's not just me and I'm not a failure. And other people have solved it. You know, everyone chips in on the community, try this, try this. Have a look at this and it's like oh, finally, help."

Just like parent 0069, parent 0071 looked online following assessments of previous performances of practice that were causing her anxiety. She was then provided with know-how that would enable changes in food-provisioning practice and also reassurance, including in her abilities as a parent – that she was not a failure. Her son's condition isn't down to her performances of food provisioning and parenting practices. However here, those curated understandings are specific to the challenge she has encountered, her son's allergy. The technical affordance of Facebook, that enables groups of parents with a shared problem to form an online community, that provided the affordance in practice of focused, curated know-how and some reassurance about her food and parenting practices.

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Parent 0071 described herself as a "lurker" on the Facebook group, mainly looking at the suggestions of others and only occasionally posting a question. She said she would mainly look at Facebook late in the evening: "I do most of my research on my phone at, say, 9pm when I'm slumped on the sofa watching TV, dual screening. [I] just keep scrolling. You can access all the Facebook groups from one platform on your phone." For parent 0071, a working mum, as she can access Facebook on her phone, she is able to fit time on the platform among the other practices that make up daily life. Being able to access all the groups from one platform, helping to save time.

Parent 0071 was not alone among the interviewees in finding Facebook groups for parents of children with specific food-related issues. For example, parent 0066 was a member of two Facebook groups, one for children with a cows' milk protein allergy and another group called Mealtime Hostages, which describes itself as a group for parents who have children with Selective Eating Disorder or Avoidant Restrictive Food Intake Disorder. Parent 0070 said she was on two Facebook groups related to food allergies. She described the broad range of perspectives the Facebook group brought together when she asked a question – broader that is feasible offline: "It's just interesting to get a broad range of opinions without having to stand at the school gate and do a survey."

Facebook, teleology-led understanding curation and teleoaffective alignment

In addition to joining groups for parents with a shared problem, some parents joined Facebook groups which have the same approach to feeding their children, or same approach to parenting. The same goals or teleology, in other words. Parent 0076 said he was a member of a vegan baby-led weaning group and an evidenced based baby-led weaning group. He described the sorts of information he was looking for on these groups: "What types of things people are feeding their babies, specifically vegan children was one thing." He also mentioned:

> "Then there were worries about preparation of food, so cutting things up
> appropriately, or serving them appropriately. I suppose seeing examples of
> other children looking healthy on that sort of diet [vegan] and hearing about
> other people's difficulties."

The competence curation is specific to the goals parent 0076 had adopted for providing food for his son, a vegan diet and baby-led weaning, an approach to weaning that involves weaning a child with chopped-up solid food rather than purees. When asked to describe what he was looking for in those examples of other children looking healthy, he described

looking for certain characteristics in photos of children on vegan diets: "I suppose probably happy, rosy cheeked and carrying a bit of weight." He was looking for reassurance that a vegan diet in children was consistent and aligned with a wider parenting teleology of enabling a child to develop healthily.

Parent 0076 was the only one to use a vegan Facebook group. But several other parents, including 0063, 0064, 0068 and 0077, used baby led weaning Facebook groups. Several parents described using Facebook groups in relation to food that had a specific approach to parenting, that would similarly have its own goals. This included parent 0077 who used a gentle parenting Facebook group and parents 0070, 0071 and 0081 who used a natural parenting group. Natural parenting is defined as "…a parenting style geared towards the individual child's unique personality, which is thought to result in the best possible care for the infant." (Schon and Silven, 2007, p.103).

For parent 0081, the ideas provided on the natural parenting group she belonged to helped her meet the demands of feeding young children proper food, or a "decent meal" as she described it, when facing the time constraints imposed by work-related practices and other parenting practices that were part of her life. She said: "How do I juggle cooking a decent meal with going to work, doing the school run."

Parent 0063 used a Facebook group of children's cookery author Annabel Karmel and a baby-led weaning group for food ideas to meet the goals of feeding children a healthy diet of proper food, while at the same time providing food that met the goals for adult food of being exotic. She described how she wanted ideas for "…what food can I cook that I can give to a two-year-old or a three-year-old but that my husband will enjoy when he comes home from work when he's used to eating spicy curries."

Some of the help provided to parent 0063 as she sought to meet these goals of food provisioning was ideas from other parents on how they adapted recipes they cooked before they had children, so the meals would now be suitable for young children, such as reducing the amount of salt. She said: "Just ideas for how I could take what I normally cook and make it more child friendly."

Some parents described using Facebook groups at times of transition, such as a child's progression from one feeding stage to another. For example, parent 0064, asked questions on a baby-led weaning group when her daughter was not eating solid food when she first tried giving it to her when she was 11 months old. She said: "I mean, I'm a first-time parent, so all this is new for me. I just wanted to check, is this normal, is anyone else in the same

situation?" This is similar to O'Neill et al.'s (2019) 'fractures' in food practices, moments where routinized ways of doing things are upset. Where O'Neill et al. (2019) were concerned with in-person communities of practice, or sharing spaces, where know-how that enables practice change can be shared, this research demonstrates the role that online sharing spaces can provide; particularly where they provide a means for communities with shared food provisioning and parenting goals to interact.

WhatsApp and trusted understanding curation

What sets WhatsApp apart from the other forms of online social media considered here is that groups on this platform are formed by parents who had met offline, such as at an anti-natal course (parent 0064), a weaning class at a children's centre (parent 0078), or at a place of work (parent 0070). Several parents described how they would trust advice provided by their friends on WhatsApp, because they also knew them offline. For example, parent 0069, asked for advice in her WhatsApp group on milk substitutes for her son who has lactose intolerance. She said:

> So, I will go to the WhatsApp group because they're my friends. It's a step above that Facebook connection where it's like, 'oh I vaguely know you'. The Whatsapp group, it's a very limited number of women that I know really well. Particularly with the milk question… so my friend, my neighbour [neighbour's name], she gave her milk allergy babies only barista milk. And I know that she wouldn't give her babies anything that wasn't, you know, particularly brilliant.

The technical affordance of WhatsApp, of connecting parents who know one another offline, provides an affordance in practice that the curated know-how is trusted. The fact that the parents met offline, in groups such as anti-natal courses, also meant that the ideas and advice they were sharing was timely; relevant to children of a specific age and developmental stage as well as transitions taking place, such as a return to work. Parent 0082 said mums on her group were sharing recipe ideas that were: "…really easy, really quick because most people are back at work now…", so curating ideas that enabled them to make food from scratch when faced with time constraints. Parent 0078 described how on a WhatsApp group formed by a group of mums who met at a children's centre, ideas for slow cooker recipes were shared when they were returning to work. Parent 0070 also said the WhatsApp group came in useful during the transition back to work: "It's mostly mums on there really. It's good to read about their feelings on whether it's returning to work, or how do you cope with children who are crying at [nursery] drop off."

Instagram and teleology and photo-led understandings curation

Instagram was mainly used by parents as a source of inspiration for food to cook for their families. When the interviewees described how they used Instagram, they described following the accounts of people whose cooking was in keeping with their food provisioning goals and wider parenting goals, related to the healthy development of their child. They also described using hashtag searches for meal ideas in keeping with their goals. Parent 0069 said she followed the Joe Wicks Wean in 15 account and one called SR Nutrition, run by a child nutritionist. She said she also used a hashtag, baby-led weaning to search for ideas. Parent 0079 described how she searched for weaning hashtags and ideas for a variety of meals that would provide different vitamins "…and then maybe sort of brain food or something like that…", an indication of how food provisioning and parenting (developmental) goals are interlinked. Parent 0078 said she looked for ideas for foods that she could make, food cooked from scratch, and then freeze for later, such as savoury muffins or omelettes – meeting the goal of healthy food provisioning while also going to work.

Parent 0063, who described herself as interested in health and exercise, said she followed: "Mums that are healthy, interested in exercise." She described looking for recipes that were in keeping with her own and her husband's healthy diet but could also be adapted to accommodate the children and "what they need."

The technical affordance of being able to follow other users and search using hashtags provides an affordance in practice of finding ideas for meals to cook, understandings curation, that are in keeping with the teleology of different interconnected practices, whether it is food provisioning for children, parenting practices and food provisioning for parents themselves. For parent 0063, these goals also intersect with intersecting practices, related to her health and fitness.

Instagram is a visual social media platform in which users scroll through photos and click on images they find appealing. Parents described how they found the photos a useful way to find plates of food that were visually appealing. Parent 0069, described what she was looking for in the photos:

> "It's largely what that plate of food looks like and that doesn't mean it's the most beautiful looking thing. But to me it looks really appealing and it looks like something that we will all enjoy. Then I'll look in the comments and look to

see who's made it, any recipe tweaks. And if it's a photo accompanied by a
quick video of how they made it, I'm even more likely to try it."

Parent 0069 said that if a meal caught her eye on Instagram, the ingredients would go on her shopping list. The technical affordance of scrolling through photos on Instagram, provides an affordance in practice of finding meal ideas that are in keeping with goals of providing food that's visually appealing and that meets the tastes of others, so their eating practices. The description of how parent 0069 uses Instagram shows how the posts she reads inform several practices – food planning, shopping and cooking. The technical affordance of videos on Instagram provides user-friendly know-how relating to cooking practices. The ability of other users to comment on recipes and modifications they made provides further additions to the curated know-how provided.

Taken together, the descriptions by parents of how they use Instagram, show how the understandings curated relate to different practices and are in keeping with family food provisioning teleology as well as goals of other practices, the adults' own food consumption, parenting practices and exercise. The know-how also enables food to be provided in keeping with the goals of food the provisioning practices they have adopted when facing time restrictions from other practices.

6.4.3 Taxonomy of understandings curation on social media platforms

The descriptions of how parents use different forms of social media shows that they enable know-how about food provisioning and parenting to be brought together in different ways. These different ways are different versions of the process of competence curation described in Chapter 5, or understandings curation to use Schatzki's (1996) elements. Table 6.1 below provides a taxonomy of different forms of understandings curation on different social media platforms that have been identified in this chapter. The different forms are enabled by the different technical affordances of the platforms. These provide access to different types of know-how and interaction with different groups of parents, providing different affordances in practice.

Table 6.1 is not an exhaustive list of technical affordances and affordances in practice when parents use different forms of social media in relation to food. But it provides a useful insight into the different forms of understandings curation that take place. Sometimes, different technical affordances combine to bring about an affordance in practice. For example, parent 0069's questions about her son's large appetite were addressed due to the combined technical affordances of being able to search for Mumsnet Talk threads using

Google and the retention of historic threads on the forum.

The understandings curation described here spans different interconnected food practices as well as parenting practices. The know-how provided recognises the time limitations presented by the constellation of practices that make up daily life, such as going to work. During the interviews, some parents, such as parents 0069 and 0066, described social events being cancelled due to lockdowns during the pandemic. However for many interviewees, their partners continued to work through the lockdown and there were home schooling responsibilities, so their daily lives were still busy and involved committing time to multiple practices that competed with food provisioning.

As well as different forms of understanding curation, the interviews with parents highlight the process of teleoaffective alignment involving different social media platforms. The shared experience of seeing other parents who have encountered the same food-provisioning problem provides reassurance that a parent's performances of food provisioning practices are not out of step with food provisioning and parenting goals. Just because their child is eating a lot (parent 0069) or their child has a food allergy (parent 0071) they are not providing food in the wrong way and are not a bad parent or "a failure", as parent 0071 said. Know-how provided by other parents with the same food provisioning challenge, or the same approach to parenting, also provides reassurance; as does seeing photos of children looking healthy in the case of Parent 0076, who was feeding his son a vegan diet. Through shared experience and the provision of know-how on social media, there is both within- and multiple-practice teleoaffective alignment.

The use of social media by parents is sometimes prompted by the negative emotions they experience when assessing the outcomes of previous practice performances which are seen to be out of step with food provisioning and parenting goals. Chapter 5 highlighted the role that the Mumsnet Talk forum plays in practice change, building on Molander and Hartmann's (2018) insights into parents' emotions and practice change. The interviews with parents have highlighted the role that other social media play in practice change too.

Table 6.1. Taxonomy competence curation brought about by the different technical affordances of different social media platforms as well as teleoaffective alignment

Social media type	Technical affordances	Affordances in practice	Process type
Online forum (Mumsnet Talk)	Threads searchable using search engine Google	- Access to a large amount of know-how specific to the challenge encountered. - Access to know-how about different practices that have a shared goal. - Access to similar experiences of other parents over time	Curation of understandings over time and teleoaffective alignment
	Historic threads are stored		
	Ability to ask questions of other parents on the forum	- Access to tried and tested experiential knowledge	Understandings curation and teleoaffective alignment
Facebook	Ability to join groups of parents with a similar food-related problem, such as a child's allergy or a child eating a limited range of foods.	- Access to know-how that is specific to a problem - Access to the shared experience of other parents with the same problem	Problem-focused understandings curation and teleoaffective alignment
	Ability to join groups of parents with the same approach to feeding their children and/or parenting.	- Access to know-how that is appropriate to the adopted approach to feeding child and/or parenting	Teleology-led understanding curation
	Sharing of photos by other parents in the group	- Reassurance that adopted approach to feeding child was in keeping	Teleoloaffective alignment

			with parenting teleology
WhatsApp	Online connection between parents who know one another offline	- Access to trusted know-how	Trusted understanding curation
		- Access to know-how that is relevant to circumstance, including transitions that affect food-related practices - such as returning to work	Contextually relevant and timely understanding curation (in keeping with the limitations presented by other practices that make up daily life)
Instagram	Ability to follow other users whose family food provisioning/parenting/adult health goals are the same	- Access to know-how that is in keeping with family food provisioning/ parenting/adult health teleology	Teleology-led understandings curation
	Hashtag searches for food ideas in keeping with food provisioning and/or parenting goals		
	Ability to scroll through photos	- Access to know-how (ideas) that is in keeping with food provisioning goals	Teleology-led understandings curation
		- Access to know-how (ideas) that are in keeping with the eating preferences of others	Contextually relevant understanding curation (in keeping with the limitations presented by the eating practices of others)
	Ability for other parents to comment on recipe ideas	- Access to tried and tested know-how about family food provisioning	Contextually relevant understandings curation

The interviews provide insights into social media use as a practice. They demonstrate how food provisioning and parenting teleology thread through online practices. Parents' use of social media is shaped by their goals of providing their food to their children that will

enable their healthy development. They use their understandings of social media, including its technical affordances, as they seek to meet those goals, for example seeking out Facebook groups that align with their food provisioning or parenting goals or the challenges they are facing.

The descriptions by parents of how they use social media shows how the technical affordances of these platforms enable social media use to fit into the mix of other practices that make up daily life. For example, when parent 0067 asked other Mumsnet Talk users "what eventually worked" when she wanted her child to eat from a spoon, using the technical affordance of being able to interact with other forum members, it meant she did not have to scroll through lots of threads to find a solution, saving time. Whereas for parent 0071, the technical affordance of being able to access all her Facebook groups on her phone saved time. Being able to use her phone also enabled her to search Facebook for advice at the same time as watching TV, when she had finished her working day.

6.5 Negotiating the socially-prescribed food teleology

In the processes described earlier, while parents may not always succeed, they were looking to provide their children with a healthy diet of fresh food made from scratch. In other words, they were seeking to provide food in keeping with the socially-prescribed ways of doing things. However, that was not always the case. On some occasions, they adopted an adapted version of food provisioning and social media played a part in this.

Process 6 – teleoaffective negotiation

Sometimes the goal of feeding children healthy food, including vegetables, cooked from scratch was not attainable. Parent 0080 described how she had struggled with her son's fussy eating. He was 12 at the time of the interview. When asked what was most important to her with the food she fed her son, she said:

> "That he'll eat it because I have wasted so much food now. I've gone through many years of trying new things, of trying to hide vegetables, for him to just leave it. So you get to the point where like, I'm wasting a lot of food here. So I stick with what I know he'll eat. And to be honest, working full time … I just don't have the time anymore to spend unfortunately."

When asked what bothered her most about the wasted food, she said it was the wasted time that she had put into it. She described the sorts of things he would eat for the evening meal:

"Depending on how much time I've got it could be fishfingers, mashed potatoes and beans. Every day he has to have either beans or peas. Mushy peas out of a tin because he won't eat anything else. It could be sausages and mashed potatoes and beans or mashed potatoes and peas. We both like steak, so I'm like 'wahey something that we can both eat'. Salmon, he likes salmon. But it might be that he has chips with it, whereas I'll have a salad. He loves eggs and bacon. I dread to think what his insides are like."

Parent 0080 described how she felt the pressures to feed her son healthy food came from other mums she knew and recipe books for meals for young children. She described how she would type a question into Google, looking for ideas for what she could feed her son, when she was upset.

"Normally when I get to the point where I'm doing that [Googling questions] it's because I've really upset myself or got really angry about something - about the fact that he's not eating food or like 'oh my god he's gonna get… I don't know stomach cancer when he gets older. I'm very solutions orientated, so I have to work things out and my way of working things out is to Google something. It might be like right okay, I have to do something. Let's find something positive. Okay, how do I hide vegetables in a tomato sauce?"

Using Molander and Hartman's teleoaffective episodes (2018), parent 0080 is both assessing previous performances of food practice that haven't gone well and anticipating future outcomes that run counter to the parenting teleology of enabling healthy development. Parent 0080 said that when she Googled, threads contributed to by parents with similar concerns on Mumsnet and Netmums would be at the top of the search results. She described how she found the posts in the threads useful because they were from: "…people with lived experience rather than preaching at me, this is what you should do." She added:

"There is this definite stigma to having children who eat unhealthily, as if you've done something wrong. Or you haven't bothered. Whereas the mums on there [the parenting forums] are posting those questions because they do really care about what their kids eat and are looking for answers. There's a difference between being told you have to make your child eat healthy and here are some suggestions to go 'Oh my god I've tried everything. I feel like a terrible mother, what can I try next?"

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Just as other research has shown, failure to meet the socially prescribed demand of providing proper, healthy, food (Charles and Kerr, 1988), part of the family food provisioning teleology, results in feelings of anxiety or guilt (Evans, 2011). During the interview, parent 0080 said she lost sleep over her son's diet. Just like the parents in Molander and Hartman's (2018) research, when facing a lack of time due to the other practices that make up daily life and the limited repertoire of meals her son will eat, parent 0080 adapts her cooking practices, cooking food her son will eat, including an adapted version of 'proper food', such as tinned rather than fresh peas.

However, the interview with parent 0080 also provides an insight into the role the online parenting forums play when adapting cooking practices as part of 'good enough mothering' (Molander and Hartman, 2018; Molander, 2017; Carrigan and Szmigin, 2006). The shared experience with other parents of being unable to encourage a child to eat what is socially prescribed proper food provides some solace. Googling for and reading online forum posts also reconciles what she described as her son's unhealthy diet with the parenting teleology of caring. Searching for answers in forum posts is an act of care, an attempt to do something to help her child's development in the face of his refusal to eat healthily. Care runs as a teleoaffective thread through parenting, food provisioning and online practices.

Figure 6.2 shows the process of teleological negotiation that involves the parent adopting a negotiated version of the socially prescribed way of food provisioning in family homes. Searching on Google and reading online forum posts provides parent 0080 with access to other parents with the shared experience, reducing the emotional toll of providing her son a diet that is not in keeping with the socially-prescribed family food provisioning goal of providing fresh food, cooked from scratch. The act of searching online and reading forum posts is also a means to reconcile the 'good enough' food provisioning of fishfingers, mashed potatoes and beans she has adopted with being a good parent; it is an act of care. As parent 0080 put it: "…the mums on there [the parenting forums] are posting those questions because they do really care about what their kids eat…". Using social media acts as a teleological substitute for not meeting the socially-prescribed food provisioning goal; it is a means to still be a good, caring parent.
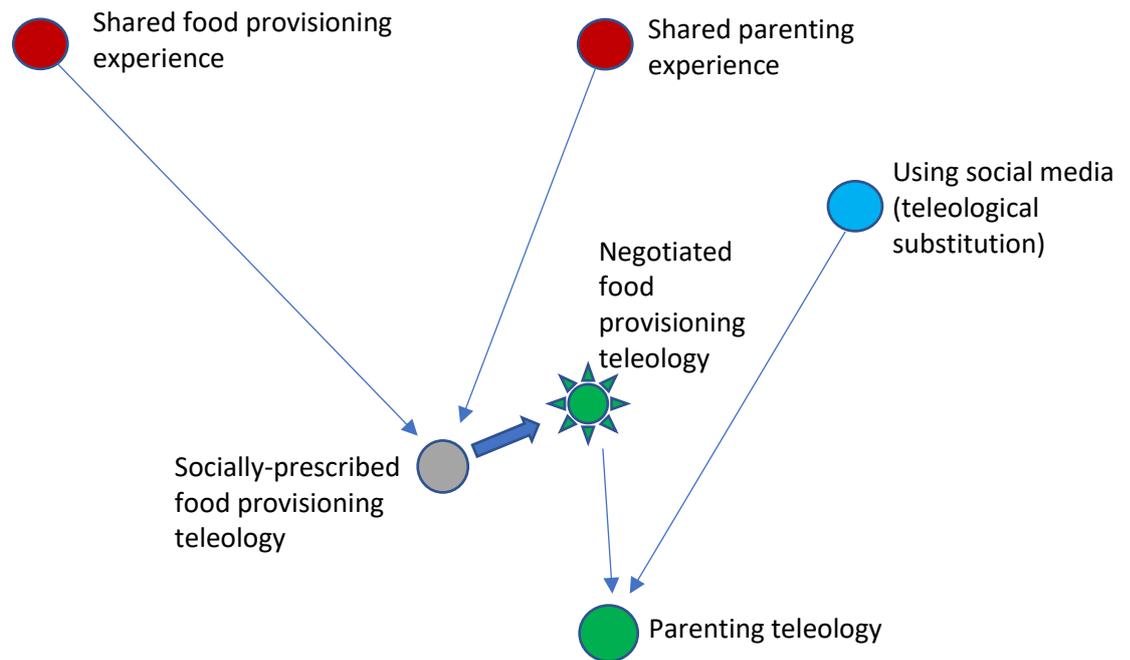
Figure 6.2. The process of negotiating the socially-prescribed food provisioning teleology in which the 'good enough' food provisioning is reconciled with being a good parent through the shared experience of other parents and the acts of Googling and reading forum posts.

The process of teleological negotiation outlined in Figure 6.2 is a simplified version of what is a complex use of social media by parent 0080. To some degree, she was seeking to meet the socially-prescribed way of food provisioning in family homes by doing things such as trying to hide vegetables in tomato sauce. However, her Googling and forum use did provide a means to reconcile her negotiated food provisioning with being a good parent.

Parent 0080 was not alone with online social media forming part of how the socially-prescribed food provisioning teleology was negotiated. Parent 0081 contrasted the generic guidance she had been provided with on an online course about healthy child nutrition run by a charity, which she described as "…very generic, it's very much this is what it should be," with the more realistic view provided on the Facebook groups she was on about feeding fussy children. She said of the Facebook groups: "They are a lot more realistic about what life is like with kids than someone sat writing advice."

Parent 0072 described how she used the online forum of the BabyCenter parenting website to find workable versions of meals. She said:

"You read a lot of articles and you see like the best-case scenario, or what
people think you should be doing. But in reality, it's all well and good saying
like you should be feeding your children this and that but if they won't eat it,
then that's not helpful. So I think it kind of gives a more real view of like what's
going on, and more kind of creative ideas of, you know, getting around
things."

Parents provide food according to its 'do-ability' which may run counter to idealised
representations in the media (Halkier, 2016a). At the same time, online forums provide
space to be open about the experiences of parenting (Brady and Guerin, 2010), including in
the context of food, a "real view" of what children will eat. The interviews with parents
have provided an insight into how social media discourse acts a means to negotiate the
socially-prescribed family food provisioning goal of providing fresh food, cooked from
scratch.

6.6 Negotiating the rules of food provisioning

During the interviews, parents described occasions when they followed the experiential
advice of other parents on social media rather than the formalised guidance on healthy
diets and safe food practices on institutional websites, such as those of the NHS, and from
health professionals - the rules of practice (Schatzki, 1996).

Process 7 – negotiation of the rules of practice

Parent 0067 said she asked other parents on an online forum for their experiences of
feeding their children prawns when they were less than a year old at a time when she was
considering doing the same with one of her children. She said the official advice she read
said it is safe to give six-month-old children most foods, but she wanted to find out from
other parents what their experiences were. She said:

"Yeah, because the government advice, like from the NHS or something like
that, it's quite sort of down the line, you know, from this age it is safe to
give...[prawns]. So they are saying obviously their body should be okay for
that. But it's like, well, has anyone had any allergies from it? Just because
something is deemed safe it doesn't necessarily mean that the majority of
children actually are okay with it."

Parent 0067 said she would stick to the rules with honey:

> "My only one thing that I wouldn't have deviated from [in terms of the official guidance] was the honey thing because I know that is a year. And that's very specific that their bodies are not… I think it's botulism isn't it, there's a risk of botulism if you have honey before a year. So, things like that, I definitely wouldn't mess about with."

But she also sought out the experiences of other parents on giving children camembert cheese to eat when one of her children was under six months old when she was considering feeding it to her child. She said: "I mean, possibly a couple of weeks from being six months and wondering whether it was really bad to give that or just a guideline and it's probably okay."

Parent 0081 compared the advice on the NHS Healthy Start website with what she found on Facebook groups:

> "Even the stuff on constipation on there [the institutional websites] it's very generic and it makes assumptions that you can get these kinds of healthy foods into your child. I'm like, what do I do if I can't get her to eat these things? It's very black and white. Whereas I find the peer support is real life and they give you anecdotal advice. It's what's worked in their experience and then you can pick and choose which bits will work for you."

Parent 0076 described how he also sought experiential advice on Facebook to help with his son's fussy eating, having described goals towards food of having a balanced diet with lots of nutrients. He said:

> "I suppose ultimately what you're hoping for is someone with exactly the same problem who has overcome that and that you can sort of model yourself on which is probably harder to get from government advice which has to be quite general."

Parent 0069 said she googled for guidance on Mumsnet Talk when her 4-month-old baby would not sleep. She said:

> "And a lot of the answers were that you could try solids now. Try giving him baby porridge before bed. And a lot of the answers there were, my health visitor said I don't need to try until six months, but this is what I do. Oh yes, I do that too. Yeah. Everyone does that kind of thing."

The descriptions by parents of how they sought experiential advice from other parents to compare with and counter official guidance, shows that this sometimes happens during what Molander and Hartmann (2018) describe as the anticipating teleoaffective episode, so it informs a future performance of practice. In other instances, it takes place after assessing previous practice performances that have not gone well.

Parents sometimes follow the institutionally-provided rules of food provisioning to inform future practice performances, but in other instances they follow the experiential guidance of others. This experiential guidance is considered by parents as being grounded in the realities of feeding children, including their fussy eating. Johnson (2015) similarly showed that parents value honest experience-based guidance, in their case in relation to health issues, from other parents as opposed to what is seen as rigid guidance from institutional sources. The research here shows the role the experiential know-how of other parents on social media plays in meeting food and parenting goals, such as providing a varied diet and a healthy diet, when the more rigid and generic institutionally provided 'rules' of family food provisioning does not.

In the case of parent 0067, she used institutional or experiential guidance depending on what she considered the risk level of the food, as she sought to meet the goals of providing a variety of food at the same time as food that's safe. While Hebrok and Heidenstrøm (2019) found that their research participants used institutionalised knowledge and their own know-how and sensory evaluations as part of their food safety practices, the research here provides insights into the role that know-how from other parents on social media can play in these practices.

Figure 6.3 illustrates this process of negotiating the food provisioning rules that involves parents either using institutionally-derived rules of practice or the experiential know-how (understandings) of other parents on social media platforms to inform future practice performances and meet food provisioning goals. Several of the parents' descriptions of how they use social media in relation to food indicate that having access to the experiences of many parents through the social media platforms, a technical affordance of the social media platforms of bringing many parents together, helps them to negotiate the sometimes generic and inflexible rules of family food provisioning. Using the 'wisdom of the crowd' in this way provides the affordance in practice of meeting food provisioning goals or teleology.
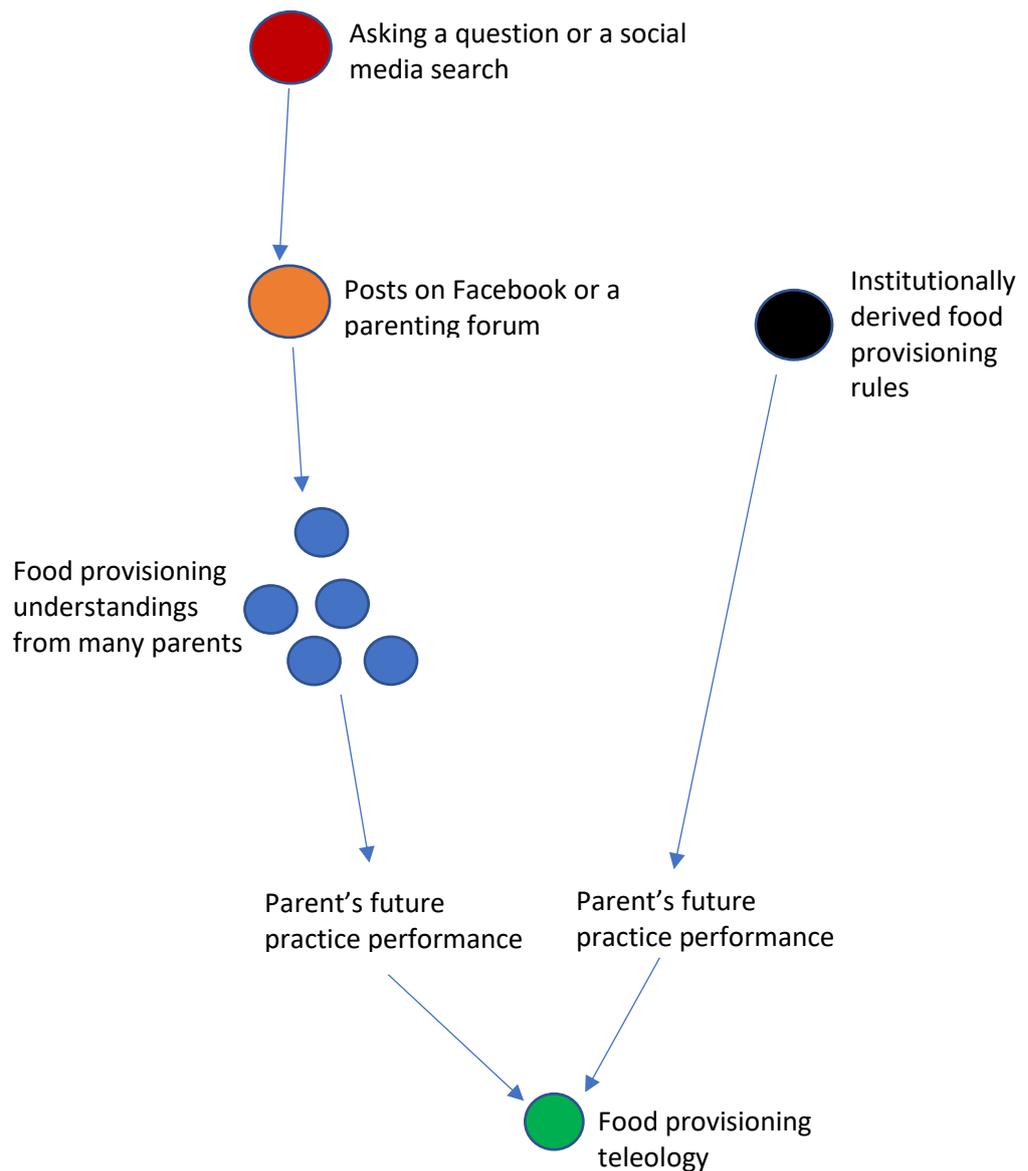
Figure 6.3. The process of negotiating the institutionally-derived rules of family food provisioning practices in which either institutional guidance, the rules of practice, or the experiential know-how of other parents are used to meet the food provisioning and parenting goals.

6.7 Factors influencing the flow of information

The processes of linkage identified in Chapters 5 and 6 involve the flow of information on social media between practitioners. In Chapter 5 (section 5.4) characteristics of the discourse on Mumsnet Talk that aid the processes of linkage were described. But not all information read on social media is used to shape food practices. During the interviews, parents were asked to explain what factors influence whether or not they use the information they read on social media platforms in relation to food. To understand what determines whether or not information on social media platforms is used by parents, it is

important to consider social media use as a practice, a practice entangled with offline practices, both food provisioning and parenting, as well as the wider constellation of practices that make up daily life such as going to work.

This section is split into two parts, one considering how understandings and the other how the teleoaffective structure of social media practice, as well as the wider complex of interlinked practices, shape the flow of information. The different forms of social media considered within this research each have their own rules, such as Mumsnet Talk's guidelines and guidelines on Facebook groups about what are appropriate topics to discuss, the 'rules' of practice (Schatzki, 1996). These were not discussed by parents when asked what influenced whether or not they would use information they had read and so are not considered in this section.

6.7.1 Understandings and the flow of information

During the interviews, parents described how they interpreted what they read on social media platforms to determine whether they used information and whether they trusted other social media users. The approaches they use is the know-how of social media practice; know-how about how to interpret information online. The interviews with parents showed how this know-how of social media use is interlinked with know-how about other practices that make up parents' lives, such as food provisioning and professional work.

Social media practice understandings

Interpretation of posts

Parents described how they interpreted the information they read on social media in relation to food to determine whether or not they would use it. For parent 0070, the length of a post was one of the factors she used to determine whether or not she used information she read on social media about food. She said: "If they've put lots of information… if they've taken the time to write a lengthy response to explain their viewpoint, that can influence it." Parent 0071 used a different characteristic of the information she read: "Erm, what I tend to go on, is if an opinion or advice or a solution comes up a lot, then that's how maybe I'll trust something more because lots of people are saying this…". Parent 0065 compared information she read online with information she had sourced from other sources when judging what information she trusted: "[I look whether it] matches up with the information I had from the children's centre and, I dunno, from my mum."

<u>Making judgements about others</u>

As well as using certain approaches to determine whether they would use information, they also described approaches to determine whether they trusted others. Some of this involved reading posts to assess the experiential know-how of other parents. Parent 0066 described how she would trust guidance from other parents on Facebook who had extensive learned knowledge from their experiences of having had several children; parents who were further along what Warde (2005) described as practice careers. She said: "If they've had other kids and they can say 'I've had four kids and each of them went through this stage and now they all love peas', I'd be like, cool, you've been there you've done it, it's fine."

Parent 0079 said she would explore whether psychologists or nutritionists she came across on social media appeared to be respected by their peers, as indicated by: "…other psychologists or nutritionists following them" and this would make them a "worthy source of information." Parent 0065 said she would look at the professionalism of profile photos on Instagram as an indication of an individual's credibility.

Facebook groups administrators, who monitor the content of posts within the group as well as posting themselves, were seen as a source of expertise by some parents. Parent 0082 said: "…if one of the administrators has commented with their advice you'd be more likely to think, oh, they've probably got more of the up-to-date advice." Parent 0076 also described "admin people" on Facebook who "I know have a lot of knowledge." Parents gave a sense of administrators acting as gate-keepers of parental and food knowledge. Parent 0076, a member of a vegan baby-led weaning group and evidence-based baby-led weaning Facebook group said: "If someone says something really radical, they will be sort of shot down. There's a couple of quite busy admin people who I have seen posts by and who I know have a lot of knowledge. They bring in nutritional dieticians and nutritional therapists to do posts occasionally."

Some parents used biographical information, where it was available on a social media platform, to determine an individual's professional credibility. On Facebook, users can provide information about their work and experience. Parent 0076 mentioned trusting "nutritional dieticians" and "nutritional therapists" who post and parent 0064 described how in a breastfeeding group, "breastfeeding consultants" sometimes replied to questions and these responses were trusted by her. On Instagram, parents also used biographical information to determine posters' expertise. Parent 0065 said: "If they called themselves

nutritionalist rather than dietician, I'm like oh, pinch of salt." Whereas parent 0079 said she followed those who described themselves as nutritionists, dieticians and child psychologists. So this know-how about social media usage is connected with know-how about professional roles, in this case what may be considered parenting know-how. Parents had different conceptions of how authoritative different roles were.

Parents' food provisioning understandings

Parents' food provisioning know-how informed whether or not social media discourse informed their domestic food practices. Parent 0063 described a change in how she made decisions about what advice she would use from Facebook as her know-how about providing food for the family grew. The further parent 0063 was along her family food provisioning practice career, the more her own understandings shaped the information she would use from Facebook. She said:

> "In the early days, I was more likely to listen to the advice because I was
> completely naïve and didn't have a clue what I was doing. But then as you get
> more confident, you kind of got a better understanding about what you feel,
> or you think of what's appropriate or what would work or wouldn't work."

Where Bernhardt and Felter (2004) found that parents valued information specific to their context to be valuable, applicability to context was also a factor for the interviewees in this research. Parents described getting to know what food others in the house would or would not eat, and so which food-related suggestions on social media would or would not work. As parent 0067 put it: "After using the forums for a little bit...I think you start to get equipped with a radar for what works for you and what doesn't." Parent 0083 also used her know-how about the eating practices of her children to determine what guidance she would or would not use:

> "When you type something like fussy eating onto Google, there's millions of
> self-help books and blogs and things. But because on Mumsnet it tends to be
> questions that have been asked, you can kind of think oh well that's kind of
> similar to what we're having, I'll have a look at that one."

Some parents said they were more likely to use advice if it conformed with their know-how about food provisioning practices, particularly when seeking reassurance in the process of teleoaffective alignment. In other words, they were looking for know-how that was consistent with their own. When asked how she determined what information she used,

parent 0070 said: "I think, if I'm honest, what I want to find is other people who agree with me." Parent 0073 had a similar approach:

> "Sometimes you just want a bit of back-up to know that that is the right thing. Other people have had similar experiences to you and it's been fine. [It] kind of backs up your initial thoughts that it's nothing to worry about."

Parents also used their parenting and food provisioning know-how to assess the know-how of other social media users and determine their credibility. For parent 0077, who used Facebook groups, it was the experiential know-how she had developed as a parent and of weaning that she would use to assess the knowledge of other parents from their replies to questions. She said:

> "I have some experience myself as well, so I have some knowledge now so it's a little bit easier. If I didn't have any, that would be a little more tricky to understand who has more knowledge than others."

Parent's know-how of non-food practices

For some parents, their know-how about using information on social media was linked to know-how from their working life or studies. Parent 0079 explained that she did a psychology degree and she trusted the advice of psychologists. Parent 0066, a nurse, said she looked for links to research studies and guidelines from The National Institute for Health and Care Excellence in social media posts as indicators of the trustworthiness of information. She said: "I am sort of research science based, so I am in a lot of those groups that are run along those lines." She said her approach led her to value information from research rather than anecdotal evidence: "So I'm more likely to trust something that is science based rather than just, 'oh well we've done it before and it didn't kill any of us'."

Parent 0072, a university healthcare researcher, also made the connection between how she determined the trustworthiness of information on online forums, on which posts are anonymous, and her professional work. She said: "I guess this is part of being a researcher, you know when there's evidence of stuff and then people are saying otherwise, it's then quite hard to take them seriously." Parent 0065 said she drew on know-how from teaching children about food as a teacher to make decisions on what she trusted.

Summary – interlinked practice understandings and the flow of information

Figure 6.4 shows the interlinked practice understandings that shape whether or not information on social media platforms is used and whether individual posters are trusted.

Some of what is used can be considered know-how, or understandings of social media use, such as looking at the consistency of certain pieces of advice, knowing who Facebook administrators are and what they do, or how to check whether other professionals are following a social media contributor. However, parents also use know-how from other interlinked practices such as food provisioning, parenting and their paid employment to determine what information is used and who is trusted.
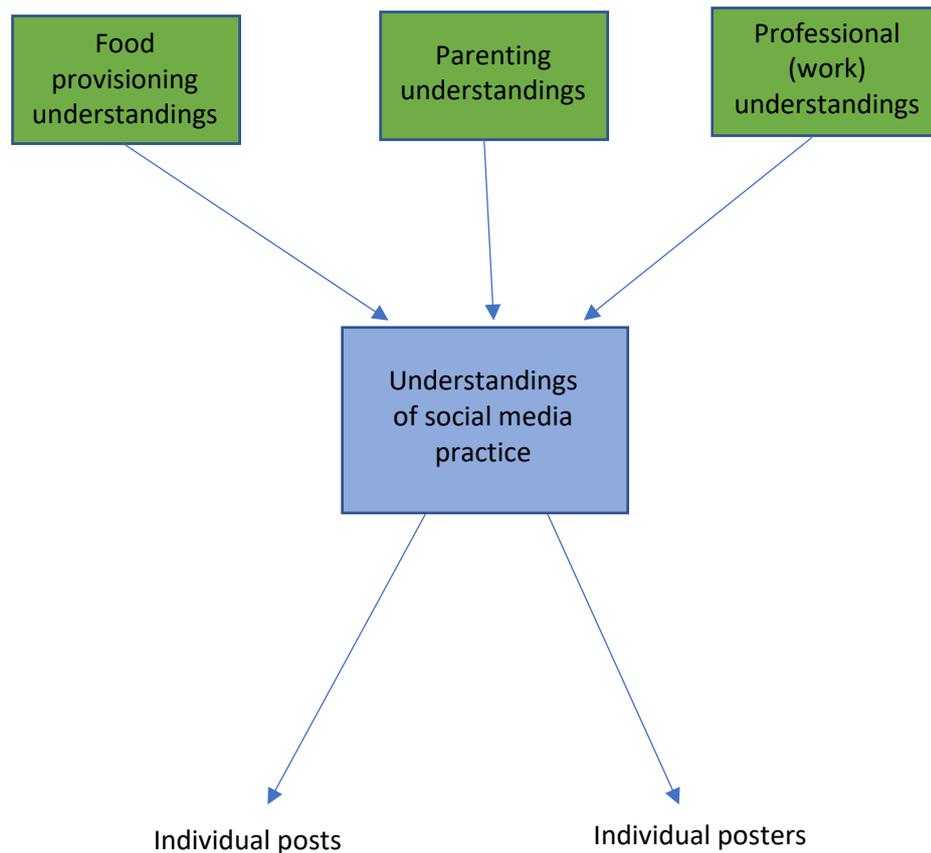
Figure 6.4. How understandings of social media practices and other interconnected practices shape whether or not information is used and who is trusted on social media.

Trust formed offline and applied in an online context

Several parents who used WhatsApp said they trusted advice they received there more than other social media platforms because they also knew these parents offline, showing the importance of 'in-person' trust on this social media platform; for example parent 0069 described how she trusted advice given on WhatsApp by her neighbour (see section 6.4). This trust among a group of friends who met online also meant parents were willing to share information and ask questions they would not be prepared to share and ask on other social media platforms. For example, parent 0064 said:

"I guess because we know them better and you have more trust with the WhatsApp group you talk about, I don't know, poo that maybe you wouldn't ask in the Facebook group. Like you put the picture of the poo and say is this normal?"

6.7.2 Teleoaffective structure and the flow of information

Posts and posters with a shared teleology

Parents described how they trusted information from other parents with the same food provisioning and parenting goals. Parent 0063 said she felt other parents on the baby-led weaning Facebook group she used shared the same food provisioning goals and the formation of good eating habits in her children:

"People part of that community you felt we were all in the same position, you were all grappling with the same things about how do I feed my kids healthy foods and what ideas can I have and how can I encourage our children to have kind of good eating habits?"

Parent 0069 followed fitness coach Joe Wicks on Instagram due to what she described as his genuine interest in family food: "So if you're someone who's got a particular interest in family food, then I'm likely to take their opinion on what food their children have liked more seriously." She contrasted this with: "If I see something on hashtag toddler food and it's just an account where someone just takes beautiful pictures of their children, and to me it feels like it lacks authenticity, I'm not likely to pay much attention to it." Here authenticity was associated with having shared family food provisioning goals.

Parent 0079 described how on WhatsApp she was able to connect with eight friends she knew well who had "similar values and views on food." In the same interview, she described how eating healthily and "…getting the vitamins in" were important and she wanted to give food to her children that would "…help their brains." For Parent 0079, it was the shared food teleology and parenting teleology, in terms of enabling their children's healthy development, with her offline friends that meant their suggestions were trusted on WhatsApp.

Parent 0077 described how she narrowed down the online sources she looked at for advice on food practices by reflecting on what she believed in, her food provisioning and parenting goals. Then seeking sources that matched these goals.

"I found I realised like I was finding a lot of conflicting information and it was really stressing me out because I was sort of losing my, my own mother instinct. Then at one point I tried to like block out the noise, because everybody has advice if you're a mum, and I tried to find my own mother instincts and what it was that I believed in. Then just follow the sources that were like aligned with that."

Having shared goals in relation to other family food provisioning practices, such as mealtimes, also influenced whether information on social media would be used. This was the case for parent 0080: "I've never wanted to be the parent that makes them [her children] eat food. I don't really agree with that. So, things [posts] like that, I would discount. I'm not into force feeding children." Sometimes the interlinked goals were not family related. Parent 0063 looked for other mums on Instagram with similar goals in relation to their own health: "…mums that are healthy, interested in exercise."

The fact that individuals select information based on their pre-existing values is not new (eg. Rerimassie et al., 2021; Brady, Segar and Sanders, 2016). In the context of parents' use of social media, Moon et al. (2019) found that parents considered information on social media to be trustworthy if it was written by mothers they perceived to be just like them. The interviews with parents provide more of an insight into the nature of the connection with others and the nature of the conformity in goals that parents are seeking when determining what information they will trust and use on social media. In the context of social media discourse about food, these shared goals are specific to family food-provisioning practices and interlinked practices such as parenting and adult health and exercise.

Posts sensitive to the emotionality of family food provisioning and parenting

Parenting is an emotionally charged experience and when considered as a practice, the emotions of parenting are connected with parenting goals and the practices entangled with parenting, including food provisioning (Molander and Hartmann, 2018). If food provisioning and parenting practices fail to match up with their interrelated goals, it takes an emotional toll on parents (ibid.). When asked to describe how they selected information to use on social media, several interviewees described avoiding the posts of others who had been confrontational to other social media users; who had judged the food provisioning practices of others or tried to dictate the correct way to provide food.

Parent 0063 said she used advice from a Facebook group because there was "no preaching" in posts. She described how she didn't like reading posts online from: "…certain people who tell you that you *must* do it like this. I'm not very good at being told I must do things in a certain way." Similarly, parent 0069 said she would consider:

> "…how kind they [someone responding to a question] have been to the original poster. If they responded really snarkily or aggressively, or if they have hijacked the post to talk about their own woes then I'm not going to take their advice."

Parent 0072 described how she would be less likely to take advice and ideas on board if someone gave their opinion too forcefully, or they had criticised someone else for doing something. "…you just kind of form an opinion of that person I guess and then that changes how you feel about their recommendation or their opinion on something." For parent 0083, who used forums and Facebook, tone was also important:

"…with their tone, sometimes if I think they are being a bit blunt, or if I'm looking through and I see comments on either Facebook or [forum] threads and I feel like the person is being mean or not very helpful and, not really nasty but just a bit judgey, next time if I see them from my impression I wouldn't take their advice because I don't feel they have been very supportive."

Parent 0076 described how he was more likely to follow advice on social media if it was a "gentle suggestion that's a slight modification to something you are already doing." Parent 0081 said she was less likely to follow advice if it was provided in a "pushy" way.

There was an implicit recognition that the realities of food provisioning in family homes sometimes does not match up with the socially-prescribed family food provisioning goals, so there was a need to be supportive and not judge. This was reflected in the description by parent 0063 of why she liked the baby-led weaning Facebook group run by author Gill Rapley, a leading proponent of this form of weaning. Parent 0063 said:

> "She was just a mum, she felt like she was navigating the same things as a new mum. She wasn't kind of a nutrition expert or a dietician expert that was kind of preaching at you, to tell you that you should be feeding your children this way, you *should* be doing this. It was like recipes that she was using."

6.7.3 Teleological mismatch and the flow of information

During the interviews, parents described how they would not post on social media about certain family food practices, or stopped using some social media platforms, because the food provisioning practices they had adopted did not match with the socially-prescribed way of providing food in family homes; the commonly-held goals of family food provisioning that other social media users had adopted. In other words, there was a mismatch between the goals of the food provisioning practices adopted by parents interviewed and the goals or teleology of other parents on the social media platforms they used. On most occasions, a parents' decision to stop posting or stop using a platform was because they recognised how their food provisioning practices were not in keeping with the goals of other users, making them feel uncomfortable. But for parent 0076, there was more direct criticism.

Parent 0076 was feeding his son a vegan diet, counter to typical food provisioning for children. He described how his experiences on Mumsnet when he had mentioned that his son had a vegan diet meant that he did not post about this subject: "So, yeah, I've been shot down before so I definitely wouldn't say anything on there about diet. Not a vegan diet." Alongside advice and support, online parenting forums can be a place for 'lively debate' and confrontational language (Pedersen and Smithson, 2013), in this case when there is a teleological mismatch between parents.

Parent 0071 struggled with breastfeeding her son, suffering frequent bouts of mastitis, and so did a mixture of breastfeeding and bottled milk. She described how she had to leave a breastfeeding Facebook group, because the negotiated breastfeeding goals she had adopted did not match the teleology of the group which involved breast feeding only. Her description of her experience on Facebook is also indicative of how food provisioning and parenting goals are interconnected:

> "I had to leave that [the breastfeeding Facebook group] because it's very Earth mama, and very like 'you are all your baby's needs, everything your baby wants, you can provide…' and it does eventually end up feeling like well if I can't provide it, I must be a rubbish mum. And so I had to leave it because it just felt, you know, I couldn't do what they were suggesting."

Parent 0074 said she would see posts on Instagram that parents within her WhatsApp group had shared and looking at these caused her a lot of anxiety, so she did not visit Instagram herself. She said:

"…I feel like all of these women are having careers and you know their playrooms probably don't look like this [moves camera around to show a messy playroom]. They're making rainbow-themed plates of food to celebrate the NHS… and like I haven't showered in four days, my house is a mess, our garden's half torn up, like you know [laughs]."

The negotiated goals she had adopted in relation to work (parent 0074 was not working at the time of the interview), food provisioning and other domestic practices such as tidying rooms, did not match the goals of parents on Instagram. So she did not use it.

Other research has highlighted how on social media, normative prescriptions of being a good mother (Madge and O'Connor, 2006) and food provisioning (Halkier, 2016b) are maintained and perpetuated. The interviews with parents highlight how if their food provisioning and parenting practices did not conform with the socially prescribed way of doing things, they withdrew from certain discussions, or withdrew from a social media platform entirely.

6.8 Chapter Summary

In Chapter 5, a series of processes of linkage between online forum use, domestic food practices and parenting practices were identified. These processes included competence curation, competence contesting and meaning alignment. It also highlighted characteristics of the forum discourse that contributed to these processes, such as the speed and number of responses to questions. Chapter 6 has built on these insights. It has provided a more granular view of some of the processes of linkage highlighted in Chapter 5 as well as highlighting two additional processes – teleoaffective negotiation and negotiation of the rules of practice. Factors influencing whether or not social media discourse informs domestic food practices have also been illuminated. The research objectives outlined in Chapter 1 are restated below and the insights provided in Chapter 6 in relation to each of these are summarised.

RO1. Investigate how parents' domestic food activities and food provisioning priorities influence their social media practices.

Parents' descriptions of how they use social media in relation to food (section 6.4) showed that social media use is often prompted by negative emotions; worries and concerns that the interconnected goals of food provisioning and parenting are not being met by existing performances of food provisioning and parenting practices. Parents turn to social media for know-how to enable them to meet those goals and receive emotional support when not

doing so. The interviews with parents have also provided insights into where the socially prescribed way of doing things in relation to family food provisioning are derived from and reinforced; the socially prescribed goals (section 6.2). These include traditional media, other parents offline as well as other parents on social media.

RO2. Explore how different information sources are employed by parents to navigate domestic food practices, including the affordances in practice of different online social media platforms.

Different forms of understandings curation on different social media platforms have been characterised (section 6.4). The taxonomy of understandings curation showed how the different technical affordances of different social media platforms enable know-how to be curated in different ways. Broadly this know-how provides an affordance in practice of enabling parents to work towards the food provisioning goals, but on different social media platforms know-how is curated relevant to specific versions of food provisioning and parenting practices parents have adopted, with their own goals. Social media also provides a means for parents to align their food provisioning and parenting practice performances with the goals of these practices, teleoaffective alignment.

The interviews have also highlighted two additional processes of linkage to those described in Chapter 5, teleoaffective negotiation and negotiation of the rules of food provisioning (sections 6.5 and 6.6). The former enables parents to navigate the socially-prescribed way to provide food in family homes and the latter to navigate the institutionally-derived prescriptions of domestic food provisioning. It means that social media is both a place where the socially-prescribed way to provide food in family homes (fresh food cooked from scratch) is reinforced and also negotiated.

RO3. Investigate what determines the extent to which information sourced online influences domestic food practices, including the roles of trust and community in social media platforms.

Parents develop their own know-how, or understandings, of how to interpret information on social media to determine whether they trust it and trust those who have written it. They also use understandings from other interconnected practices, including food provisioning practices and their paid employment to determine whether information is trusted and will be used. Parents are more likely to use information from those on social media who have adopted food provisioning practices with shared goals and who have adopted interlinked practices, such as parenting, with shared goals. Posts sensitive to the

emotionality of family food provisioning and parenting are also more likely to inform domestic food practices. A mismatch between the teleologies of the food provisioning and parenting practices adopted by interviewees and those adopted by other social media users can result in parents not engaging about specific subjects on social media or withdrawing from social media platforms altogether.

6.9 Next steps

Chapter 7 will highlight the theoretical contributions this research makes, including the gaps in existing knowledge it addresses. Chapter 8 then has a more practical focus, looking at how insights from this research can inform food waste reduction campaigns and food waste policy as well as the limitations of this study and directions for future research.

Chapter 7 – Theoretical contributions

7.1 Introduction

Existing research has provided insights how parents negotiate domestic food practices (eg. Molander and Hartmann, 2018; Bava, Jaeger and Park, 2008 and Halkier, 2016a; Evans, 2011) and how parents negotiate parenting practices (eg. Thomas and Epp, 2019) given the interconnections between different practices that make up daily life. Other research has explored how media discourse acts as a resource for food provisioning practices (eg. Keller and Halkier, 2014; Halkier, 2016b). However, theoretical conceptualisations of the relationship between domestic food practices and social media practices are somewhat limited, which is problematic given the growing use of social media by parents to inform offline practices (Plantin and Daneback, 2009), including their use of social media in relation to food.

This chapter draws on the insights provided in Chapters 5 and 6 to contribute to theoretical understandings in three areas of the existing literature that consider:

1. How media discourse acts as a resource for food provisioning and parenting practices.
2. How parents adapt and negotiate food provisioning practices.
3. How parents on social media determine what information online they will use to inform their offline practices, including how they determine what they will trust.

This chapter highlights the new theoretical insights this research provides in those three areas of existing literature. Rather than considering media discourse solely as a resource for other practices as existing practice theory-informed research into media and domestic food practices has, this research has provided new insights by exploring the recursive relationship between online and offline practices. The chapter then considers how this study extends existing literature looking at how parents negotiate food provisioning practices by adding social media use into the mix. Finally, it considers how the use of Social Practice Theory provides an alternative theoretical lens through which to explore what determines whether social media discourse shapes offline practices and who people trust online.

7.2 The reciprocal relationship between social media and offline practices

Existing conceptualisations of practice theory and research informed by practice theory acknowledges that media discourse can shape offline practices (e.g. Shove, Pantzar and

Watson, 2012; Keller and Halkier, 2014 and Keller and Halkier, 2016b; Couldry, 2004). However, Keller and Halkier (2014) highlight a lack of theoretical apparatus for conceptualising how media discourse shapes everyday practices, or a lack of "operative procedures" as they describe it (p.38). It is important to have a clear conceptualisation of how online and offline practices intersect given the degree to which media, including media in online spaces, is integrated within our lives today.

Existing conceptualisations of how media discourse shapes offline practices describes media as a resource that can be drawn upon to inform know-how (Keller and Halkier, 2014) as well as defining what is the normative or 'correct' way to perform practices such as food provisioning practices (Keller and Halkier, 2014; Halkier, 2016b). The existing research that conceptualises media discourse as a resource for practice has provided useful insights, including how individuals negotiate media discourse in relation to food, sometimes providing 'proper' food as is advocated in the media and other times providing and adapted version of it (Halkier, 2016b). It has also provided insights into how individuals position themselves and their practices in relation to media discourse (Keller and Halkier, 2014).

However, this research has sought to add to theoretical understandings of how media discourse shapes everyday practices. In the context of social media, which parents interact with rather than consuming passively, it is important to see it as a practice, rather than simply a resource. In this approach, rather than seeing media discourse simply as a symbolic resource which implies a linear relationship in which media discourse exerts its effects on how everyday practices are performed, there is a reciprocal relationship between social media and offline practices in which they are co-constructive. The nature of this relationship is characterised in this research as 'processes of linkage' connecting offline and social media practices.

7.2.1 The recursive relationship between online and offline practice performances

In Chapters 5 and 6, seven processes of linkage were described. The intention here is not to discuss each of those process in turn again, but merely highlight what those processes of linkage tell us about the recursive relationship between performances of domestic food practices and performances of social media practices.

Just as Molander and Hartmann (2018) described 'teleoaffective episodes' in the repeated performances of food provisioning practices, the processes of linkage described in this

research highlight these teleoaffective episodes but they also involve social media use. Parents use social media after assessing previous food provisioning practice performances that have not gone well and when anticipating future practice performances that may fare little better or need to adapt due to a change in circumstances, such as returning to work after maternity leave. Social media use sometimes takes place during food-provisioning practices, when parents are looking for suggestions on how to resurrect a cooking disaster. In this way, past, current and future performances of food provisioning practice inform social media practice performance. The questions posted and requests for ideas are shaped by what has previously happened in the home in relation to food, what is currently happening or what may happen in the future.

Once initiated by domestic food practices, the processes of linkage highlight different ways social media discourse informs and shapes domestic food practices, such as providing curated know-how, or understandings curation, or providing different parents' perspectives on the same question, competence or understandings contesting.

Figure 7.1 illustrates the recursive relationship between offline domestic food practice performances and performances of social media practices. What happens in the home, shapes what happens on social media; the questions asked and the requests for ideas. In turn, what happens on social media shapes domestic food practices.
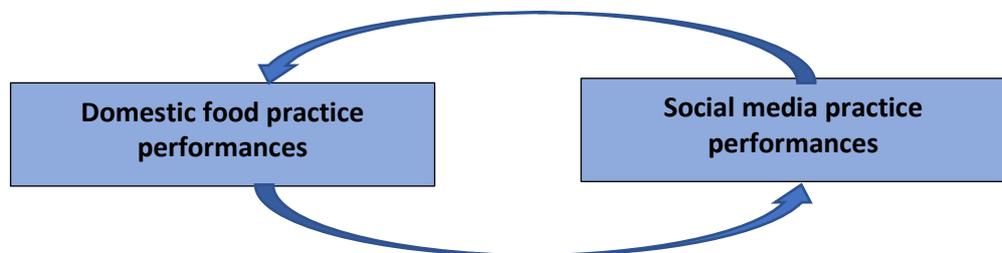
Figure 7.1. The processes of linkage described in this research have characterised the recursive relationship between domestic food practice performances and social media practice performances.

7.2.2 Teleoaffective interactions between social media and offline practices

From parent 0006 in Chapter 5 who asked for meal ideas from fellow parents on Mumsnet Talk out of a concern her family's diet was poor, to parent 0078 who used Instagram to search for ideas for foods she could cook from scratch, what parents do on social media is

shaped by the goals of food provisioning and the interconnected goals of parenting. In many instances, parents are using social media to help meet the food and parenting goals.

At the same time, when the parents interviewed for this research were asked where the expectations, or goals, of family food provisioning came from, some of them said that it came from social media. Sometimes this was through explicit suggestions from other parents on social media on what are 'correct' and 'incorrect' foods to provide children, but mostly the 'correct' way to provide food in family homes is inferred from the questions and descriptions of family food provisioning by other parents.

Taken together, this means that teleological connection between food provisioning, parenting practices and social media practices is not linear. As illustrated in Figure 7.2, the goals of domestic food practices and closely-connected goals of parenting practices shape the goals of parents' social media practices in relation to food. At the same time, the goals of food provisioning and parenting are shaped by social media discourse. Rather than seeing offline practices as informed by social media discourse, this research has highlighted how social media and offline food provisioning practices inform one another's goals or teleology.
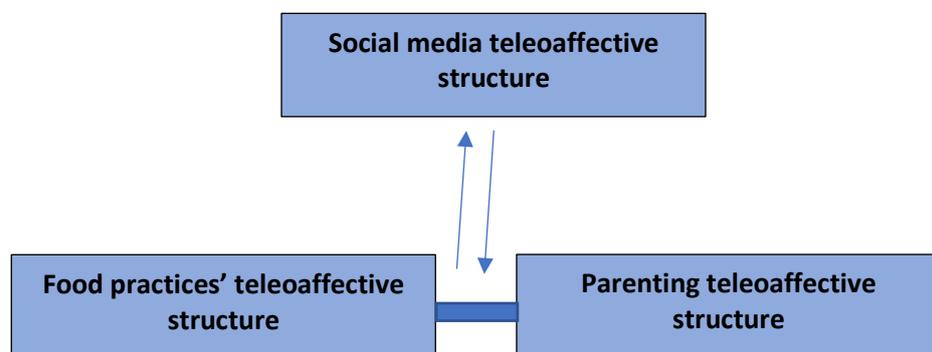
Figure 7.2 Conceptualising social media as a practice enables us to see how the teleoaffective structure of food practices, parenting practices and social media inform one another

7.3 Negotiating the media-prescribed family food provisioning goals

Existing literature that conceptualises media discourse about food as a resource for practice has considered how individuals adapt and negotiate normative descriptions of good family food practices in the media, in some instances adopting 'good enough' food provisioning (Halkier, 2016b; Halkier, 2009). The normative descriptions of family food

provisioning in the traditional media prescribe 'proper food'; fresh, healthy food, cooked from scratch (Evans, 2011; Hallows, 2016; Halkier, 2016b).

Existing research has also described the practical ways different food media are used, such as food magazines providing inspiration and online searches being used to find recipes for specific meals (Kirkwood, 2018). However, this research is the first to describe the role social media media plays in how parents negotiate the media-prescribed ways of providing food in family homes. It shows that on the one hand, social media is a means for parents to adapt their food provisioning practices so they are in keeping with the media's normative descriptions of the 'correct' way to provide food in spite of challenges, such as limited time or a child's fussy eating. On the other hand, social media is a means to resist the media-prescribed 'correct' way to provide food and adopt good enough food provisioning.

Other research has highlighted how parenting websites can provide a context in which mothers may resist dominant parenting discourses (Johnson, 2014), sometimes though their own shared expertise (Brady and Guerin, 2010). But this research has highlighted a mechanism by which parents resist dominant discourses, at least in the context of family food provisioning, teleoaffective negotiation (Process 6 in Chapter 6). In teleoaffective negotiation, the shared experience of other parents reduces the emotional impact of performances of food provisioning practices not in keeping with the media-prescribed 'correct' way of doing things. In addition, the act of using social media to find answers and ways of performing food provisioning better is an act of care, a means to still be a good mother when food provisioning is not up to scratch. Performing social media practices well, meeting the goals of social media by being a caring parent and searching for answers, acts as a teleological substitute for not meeting the food provisioning goals.

7.4 Negotiating the rules of practice

Process 7 in Chapter 6, the negotiation of the rules of practice, describes how parents sometimes used the experiential know-how of other parents on social media to inform their food provisioning practices rather than the institutionally-provided guidance on food provisioning. In the context of parenting and the use of online information rather than institutionally provided guidance, existing studies have predominantly looked at the provision of health advice. But there are parallels between the findings here and the existing research, such as how parents value know-how specific to their circumstances rather than generic institutional guidance (Bernhardt and Felter, 2004) and how on online

forums experiential guidance from other forum users is valued rather than what is seen as rigid, institutional advice (Johnson, 2015).

However, by exploring the reciprocal relationship between domestic food practices and social media practices, the research here has also illuminated the mechanism by which institutionally derived rules of food provisioning practice are negotiated by parents. In particular, it shows how food and parenting goals are threaded through the process of linkage. Parents adopt food practices based on experiential know-how derived from social media because it enables their practice performances to be in line with food and parenting goals, such as providing a variety of foods and foods that help their child to be healthy. Generic institutionally-derived food provisioning guidance that is not specific to parents' circumstances is less able to do that.

Hebrok and Heidenstrøm (2019) found their research participants to use a mixture of institutionally derived rules, such as food date labelling, and their own know-how and sensory evaluations to inform their food disposal practices. Also, that practices relating to foods considered risky, such as chicken, were more likely to be informed by date labels. Similarly, in this research, the risk levels associated with a specific food informed the approach to navigating practice rules, with practices related to riskier foods more likely to be informed by official guidance than know-how on social media. It shows how several different goals of food provisioning, including providing food that is safe and a variety of foods, shape this process of linkage.

7.5 How parents adapt and negotiate food provisioning practices

A growing body of research has used a Social Practice Theory informed approach to understand domestic food practices and how food provisioning goals are negotiated in family homes. This research has highlighted the connections between food practices and parenting (Molander and Hartmann, 2018) and between food practices and the other practices that make up daily life (Halkier, 2016a; Bava, Jaeger and Park, 2008; Comber et al., 2013). It shows how parents organise food practices according to their "do-abilities" (Halkier, 2016a, p.117), with adapted versions of 'proper food' being provided, such as using ready-made ingredients (Halkier, 2016a; Bava, Jaeger and Park, 2008; Molander and Hartmann, 2018). It also highlights how food provisioning practices and parenting are closely interconnected practices, with shared goals and emotions (Evans, 2011; Molander and Hartmann, 2018).

In the context of this body of existing research, this study adds social media practices into the bundle of interconnected practices. The teleoaffective structure that runs through food and parenting also permeates social media, shaping practice performances as parents seek to meet or negotiate food and parenting goals. So just as Molander and Hartmann (2018) described how negative emotions associated with not meeting food provisioning and parenting goals lead to changes and adaptations to food provisioning practices, this research shows the mechanisms by which social media practices are involved in this adaptation and negotiation.

Related to this, Thomas and Epp (2019) describe the constraints parents may face in their ability to adapt and negotiate their parenting practices when faced with challenges to meeting their goals, including lacking access to social and institutional resources. However, this research shows why social media is so effective as a means to adapt and negotiate food and parenting practices.

7.5.1 What makes social media effective as a means for parents to adapt their practices

Chapters 5 and 6 characterise different ways social media dialogue curates the know-how, or understandings, of family food provisioning practices. This research has described for the first time how the characteristics of the interactions among parents, when combined with the technical affordances of the social media platforms, means that social media is particularly effective at enabling parents to meet, or get closer to meeting, food provisioning goals when faced challenges. Figure 7.3 illustrates how these two factors are combined.

The know-how provided on social media recognises the challenges presented to meeting food provisioning goals by parents, such as fussy eating by children and a lack of time. When know-how is provided in relation to one challenge, it often recognises other challenges, such in Chapter 5, where parent 101 asked for inspiration for her meal plan to enable her to meet the goal of providing a variety of meals as she was lacking inspiration, the suggestions also described ways of providing food that met time limitations. The know-how curated in social media threads and posts often relates to more than one interlinked food provisioning practice, helping food provisioning goals to be met. The know-how curated on the social media posts and threads is also in keeping with the widely-held food provisioning goals; providing 'proper food', cooked from scratch in particular. In addition, the know-how on social media recognises the close entanglement between food

provisioning and parenting goals – it is in keeping with parenting goals and is provided about interlinked parenting practices.

Taken together together, these characteristics of the experiential know-how online provides insights into why 'ordinary expertise', as Lewis and Phillipov (2018) described it, in relation to family food provisioning is so valuable on social media. It addresses challenges to meeting food provisioning goals, while recognising the interconnections between the practices mapped at the start of Chapter 5.

As illustrated by Figure 7.3, the technical affordances of the social media platforms are also an integral part of why social media so effective in enabling parents to adapt their food provisioning practices. Table 6.1 in Chapter 6 provides a taxonomy of different forms of understandings curation derived from the different technical affordances of different social media platforms. These different forms of understanding curation help inform parents' food provisioning practices in different ways, by, for example, enabling know-how to be curated that relates to the specific challenge a parent is facing or curated so it is in keeping with the goals of the form of food provisioning practices a parent has adopted. This is the first research to provide a taxonomy of understandings curation on social media to show different ways social media discourse informs domestic food practices.
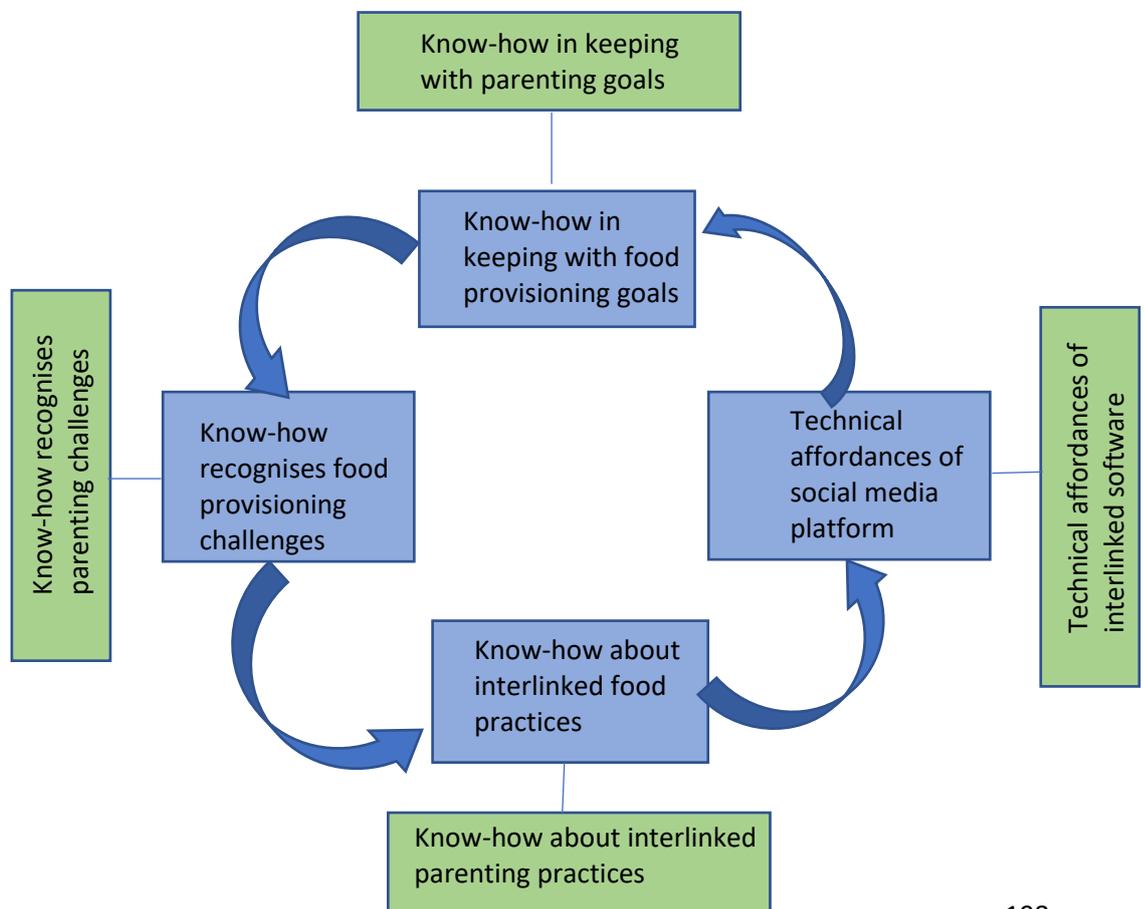
Figure 7.3. The interconnected factors that make social media effective as a means for parents to adapt their domestic food practices and work towards their food provisioning goals.

Table 6.1 in Chapter 6 made the connection between the technical affordances of social media platforms and the affordances in practice they enable. As described by Costa (2018), different technical affordances of online platforms give rise to different affordances in offline practices. This research shows how more than one technical affordance is sometimes combined to provide affordances in practice. For example, it is both the persistence of information on Mumsnet Talk and the searchability of its threads using Google that enables parents to read a large number of historic forum threads, increasing the amount of know-how they can access to inform domestic food practices.

The technical affordances of different online sources of information have been characterised in the existing literature and the technical affordances highlighted here are similar to those identified elsewhere (eg. Boyd, 2010; Treem and Leonardi, 2013), including the persistence of information, the searchability of information and the formation of connections with others. However, the affordances in practice of different online sources are less well characterised in the existing literature.

7.6 Trust and the use of online information

While the research undertaken here has explored the interactions between online and offline practices, not all information parents read online about food is used. The interviews with parents provided an opportunity to explore what determines whether or not specific guidance or ideas that appear in social media discourse shape future domestic food practice performances. The factors influencing the flow of information were described in section 6.7 of Chapter 6. This analysis highlighted several criteria that determine whether or not information is used, including whether or not the content and the posters themselves were trusted.

Existing research (eg. Bernhardt and Felter, 2004; Moon et al., 2019) has explored the criteria parents use to evaluate who and what they trust online. However, this research demonstrates the insights that can be provided when using a Social Practice Theory informed approach to investigate what determines the extent to which online discourse shapes parents' offline practices. This research has demonstrated the recursive relationship between online and offline practices. Using a practice-theoretical lens to view what determines the extent to which online information shapes offline practices is consistent

with that. It enables us to see how the offline practices interlinked with social media use shape the flow of information, in other words what information is used and what is not.

Figure 7.4 draws together the analysis in Section 6.7 and illustrates the interconnected practices and elements of practice that shape whether information on social media influences domestic food practices in family homes. While all the different elements shaping the flow of information are highlighted here, different elements shape the extent to which information is used to varying degrees in each online interaction.

The interviews with parents indicate that they develop their own know-how, or understandings, of interpreting online information, using factors such as the length of a post or the frequency with which a piece of guidance is mentioned by other individuals, as indicators of the trustworthiness of information. They also use their know-how to infer the experience and expertise of others, by using factors such as the number of children a parent says they have on social media as an indicator.

Parents also described using their understandings of domestic food practices to assess posts and the know-how of others. This food practices know-how was used to determine how well a suggestion would fit into their own home, given the eating practices of others. It appeared that the further a parent was along their practice career (Warde, 2005) the greater degree to which their food provisioning know-how acted as a filter on what information on social media was used to inform food practices. Parents' know-how from their working lives and studies also shaped their interpretation of information on social media.

The teleoaffective structures of offline practices also shaped what and who was trusted online, with parents more likely to trust posts and individuals with shared food provisioning and parenting goals. Posts sensitive to the high emotional stakes of family food provisioning and parenting, the 'affect' of the teleoaffective structure, were more likely to be used. Posts that were too prescriptive or aggressive were likely to be ignored and would not inform future practice performances.

WhatsApp stood out as a social media platform in terms of parents' assessments of the trustworthiness of information they read online. WhatsApp groups were formed by individuals know knew one another offline, such as through a baby group or work colleagues. Trust between these individuals was formed in their offline interactions and carried across into the online context.
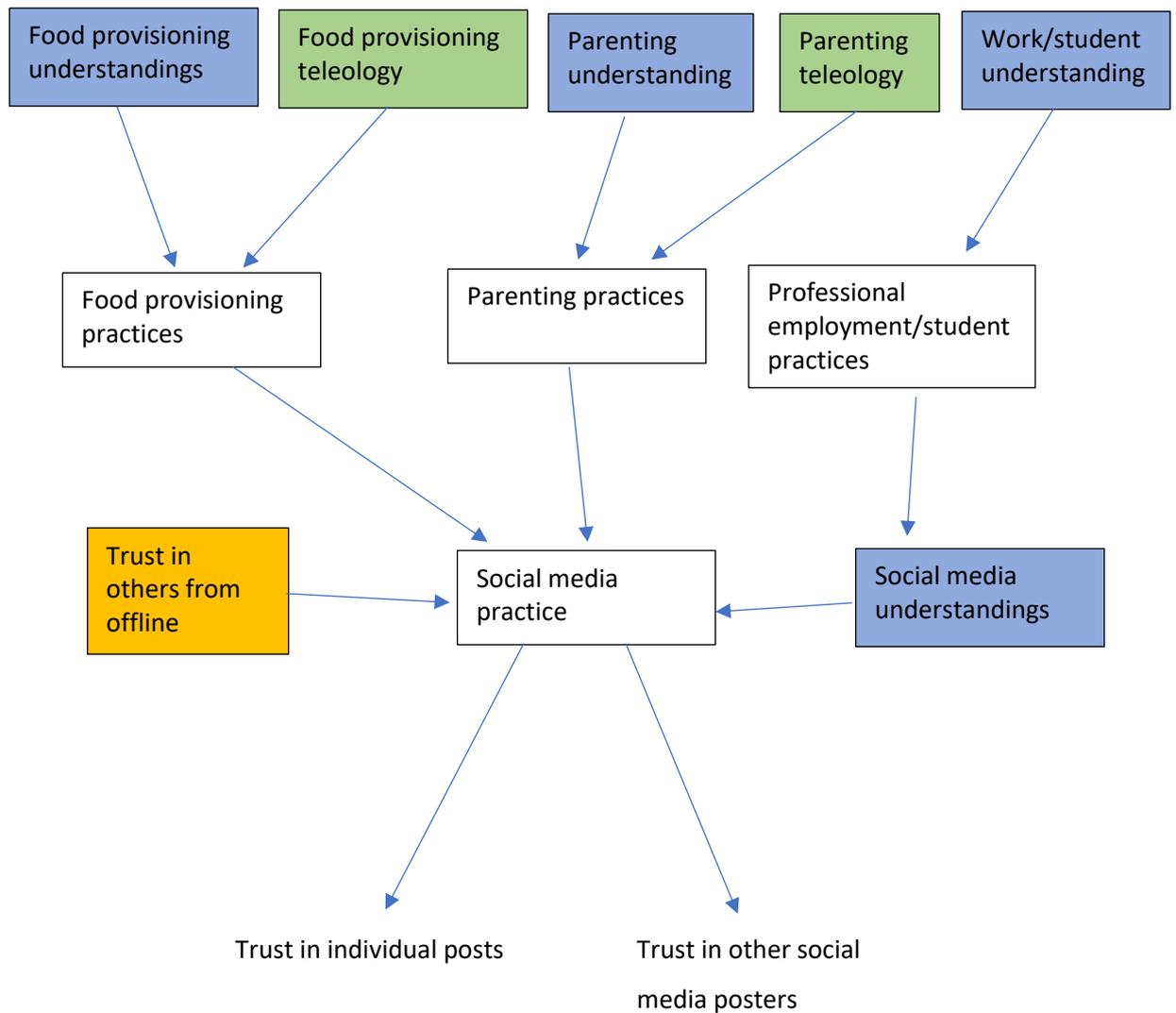
Figure 7.4. Representation of the interconnected practices and elements of practice that shape whether social media discourse about domestic food practices and other individuals on social media are trusted by parents.

The insights provided in this research have parallels with the findings of other studies, including how information is more likely to be trusted if it appears online several times (Bernhardt and Felter, 2004) and how parents consider social media discourse by other parents trustworthy if they perceive those parents to be just like them (Moon et al., 2019). Also, that the perceived intentions and the integrity of those writing online, a measure of authenticity, influences how trustworthy they are considered to be (Belsey, Lee and Pressgrove, 2021; Hendriks, Kienhues and Bromme, 2015). However, the practice theoretical approach employed in this research reframes those insights. Using whether not information is repeated online as an indicator of trustworthiness is part of the know-how, or understandings, of social media practices. Parents' sense of whether or not others were

like them was informed by whether they were considered to share food provisioning and parenting goals and whether they were facing the same challenges in reaching those goals.

The research here is also relevant to the growing body of related research into the determinants of perceptions of expertise. Perceptions of expertise have been found to be related to conventional measures such as the level of someone's training as well as broader factors such as how knowledgeable they are considered to be (Hendriks, Kienhues and Bromme, 2015). This research indicates that an individual's professional role and studies, what can be considered as interlinked practices, can influence the extent to which conventional measures of expertise are considered important. This research shows proxy measures of expertise, such as the professionalism of profile photos, are sometimes used by parents. It also shows how another social media user's learned know-how borne out of experiential knowledge, such as having had several children, may be considered as valid indicators of expertise.

The practice theory-informed approach used in this research highlights the importance of exploring what shapes the extent to which online discourse shapes offline practices in relation to narrowly defined areas of daily life rather than broad areas, such as parenting as a whole. Different realms of daily life, including different collections of practices that parenting pervades, will have different ecosystems of interconnected offline practices. This means that the factors and mechanism shaping the extent to which online discourse shapes offline practice may be different.

Chapter 8 – Conclusions and recommendations

8.1 Summary of key insights and final steps

This research is the first to characterise of the recursive relationship between domestic food practices in family homes and social media use by parents. Other research has provided insights into how parents navigate domestic food practices given the challenges and limitations presented by other practices that make up daily life (Molander and Hartmann, 2018; Halkier, 2016a; Evans, 2011). There has also been some exploration of the use of media discourse as a resource for food provisioning practice in family homes (eg. Keller and Halkier, 2014; Halkier, 2016b) along with a growing body of research into parents' use of social media, including parenting forums, in relation to parenting (eg. Madge and O'Connor, 2006; Brady and Guerin, 2010; Chen et.al., 2014; Pederson and Smithson, 2013). But this is the first research to characterise in detail how online practices and offline domestic food practices in family homes shape one another. It is only possible to understand how parents use social media in relation to food if this recursive relationship is acknowledged and understood.

The approach to this research and its use of Social Practice Theory as an analytical lens has enabled the interconnections between social media practices, domestic food practices and parenting practices to be illuminated. These practices form a tightly connected bundle. Given the high proportion of parents who go online today (Plantin and Daneback, 2009) understanding the relationship between online information and what happens in family homes is increasingly important. Exploring this recursive relationship between online and offline practices has revealed seven processes of linkage connecting them in Chapters 5 and 6.

The fact that parenting forums provide parents with advice has been found in other research (Chen et.al., 2014; Madge and O'Connor, 2006; Drenta and Moren-Cross, 2005), other research has also highlighted the importance of experiential know-how to parents (Brady and Guerin, 2010; Drenta and Moren-Cross, 2005; Johnson, 2015). However this research, by exploring the linkages between food provisioning, parenting and social media practices, has enabled a richer characterisation of this know-how, including a taxonomy of understandings curation (Table 6.1). The interviewees described how they were not able to seek this know-how from their parents, or even older siblings, given the changes that had

taken place in the 'correct' way to provide food in family homes; echoing finding elsewhere relating other parenting practices (O'Connor and Madge, 2010).

The research here has provided insights into how the practices of family food provisioning, parenting and social media are connected through shared goals and emotions, a shared teleoaffective structure. Parenting, and mothering in particular, provide a teleology that permeates and shapes food provisioning practices and social media practices. The affect, or emotions, of parenting and mothering also permeate not only domestic food practices as Molander and Hartmann (2018) described, but also social media practices.

This research highlights the complex relationship between social media and the socially-prescribed goals of food provisioning and parenting. On the one hand, social media is a means to work towards these food provisioning and parenting goals, through the various forms of understandings curation. It is also a means to align food provisioning practice performances with food provisioning and parenting goals, or navigate the socially prescribed way of doing things, through 'good enough' food provisioning and parenting. But at the same time, social media is a place from where parents derive the socially-prescribed way of family food provisioning and parenting and where it is reinforced. This research has also provided insights into how parents use the experiential know-how of other parents on social media to inform domestic food practice performances rather than the institutionally-derived prescriptions of how food provisioning in family homes should be done, the rules of practice.

The aim of this research has been to understand how insights into how parents use social media to navigate domestic food practices can inform future domestic food waste reduction campaigns. The starting point for this study was that the amount of food waste in a home is influenced by what happens in all the interlinked steps of domestic food provisioning, starting with food planning and shopping and running through food storage and cooking to disposal (Quested, Marsh, Stunell and Parry, 2013; Romani et al., 2018). This has meant that in this research, it has been important to take an expansive view of the interconnections between all domestic food practices and social media use, rather than focusing on the disposal of food as a discrete practice.

To address Research Objective 4 (RO4), in the next section of this chapter, how the insights from this study can be used to inform future domestic food waste reduction campaigns will be considered. What has become evident in this research is that while food waste arises due to the conflicting demands of different practices that make up everyday life, including

the time limitations on food practice performances presented by other practices and fussy eating by children (Hebrok and Boks, 2017; Evans, 2011 and Evans, 2012; Ganglebauer, Fitzpatrick and Comber, 2013), these are also the challenges that prevent parents reaching their food provisioning goals. How this can be used to inform food waste reduction campaigns is considered below.

This chapter then moves on to consider how insights from this research can be used to inform food policy as well as the limitations of this study and future directions for research.

8.2 Recommendations for domestic food waste reduction campaigns

Existing food waste reduction campaigns in the UK and across Europe have aimed to increase consumers' awareness of food waste and its impacts (Secondi, Principato and Laureti, 2015). However, this research adds to the growing body of literature encouraging a shift away from domestic food waste campaigns that attempt to change attitudes to food waste, given the existence of an intention or attitude behaviour gap in relation to domestic food waste (Schanes, Dobering and Gözet, 2018; Stancu, Haugaard and Lahteenmaki, 2016). What underpins the approaches to food waste reduction campaigns described below are the existing practice theory-informed insights into domestic food waste that indicate it arises due to the time pressures presented by the numerous practices that make up everyday life and the competing demands of different practices (eg. Hebrok and Boks, 2017; Evans, 2011; Evans, 2012a).

The recommendations for food waste reduction campaigns outlined below are informed by the insights from this research. It is important to recognise the limitations of the applicability of this research. The critical realist epistemology of this study recognises the insights provided are specific to their context – in this case middle-class family homes. Therefore, these recommendations apply to food waste reduction campaigns aimed at this type of household.

This section starts by describing general recommendations for domestic food waste reduction campaigns, regardless of the context in which they take place (both online and offline) before moving on the look at recommendations specific to social media campaigns. The premise of the recommendations below is to use insights into how parents use social media discourse to navigate domestic food practices to inform the approaches to future food waste reduction initiatives.

8.2.1 General recommendations for household food waste reduction campaigns

Based on the insights from this research, it is recommended that future food waste reduction campaigns should be:

1. Targeted at specific household types, recognising the goals of food provisioning and interlinked practices

Current food waste reduction campaigns such as WRAP's Love Food, Hate Waste campaign are aimed broadly, at all household types (WRAP, 2018). While this provides a means to potentially reach a large number of people, this research suggests that future domestic food waste campaigns should be targeted at specific household types. In common with other studies (Evans, 2011; Charles and Kerr, 1988), this research has highlighted how parents seek to meet the socially-prescribed demands of family food provisioning; providing fresh food, cooked from scratch. This goal of providing proper food is connected with parenting practices, which are closely entangled with food provisioning practices and the parenting goal of ensuring the healthy development of the child. Food waste reduction campaigns aimed at family homes would need to recognise the food provisioning goal of providing healthy food, cooked from scratch, given its ubiquity among middle-class parents and the extent to which it shapes food practices in the home. Other priorities may shape food provisioning practices in a similarly powerful way in other household types.

This research has shown that key factors that lead parents to turn to social media in relation to food are the challenges to meeting food provisioning goals due to a lack of time and fussy eating by children. These are also factors that lead to food waste (Hebrok and Boks, 2017; Evans, 2011; Evans, 2012; Ganglebauer, Fitzpatrick and Comber, 2013). This presents an opportunity for food waste reduction campaigns aimed at family homes. Guidance aimed at enabling parents to get closer to reaching food provisioning goals in the face of challenges, such as a lack of time and fussy eating, will also reduce food waste. Figure 8.1 illustrates the overlap between the know-how parents are seeking to help them meet their food provisioning goals in the face of challenges and how food waste may be reduced. It shows how know-how provided within food waste reduction campaigns should be in keeping with parents' food provisioning goals and it should enable parents to meet these goals in the face of challenges, in doing so helping to reduce food waste.

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                    ┌─────────────────────┐
                    │  Guidance recognises │
                    │    parents' food     │
                    │  provisioning goals  │
                    └─────────────────────┘
   ┌──────────────────────┐      ┌──────────────────────────┐
   │   Guidance enables   │      │  Guidance addresses key  │
   │ challenges to meeting │ ───► │ challenges that lead to food │
   │ family food provisioning │  │  waste, a lack of time and   │
   │    goals to be met   │      │   children's fussy eating    │
   └──────────────────────┘      └──────────────────────────┘
```
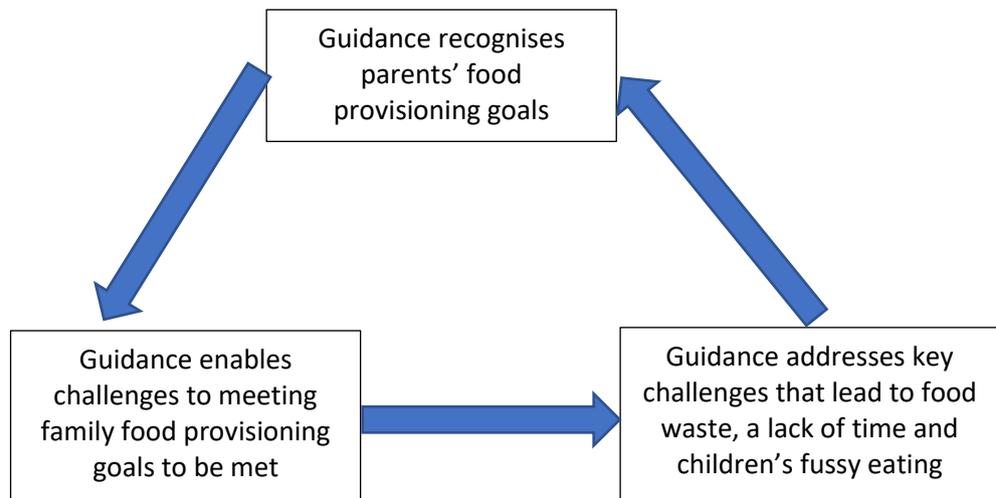
Figure 8.1. Illustration of how future food waste reduction campaigns could help parents meet their goals in relation to family food provisioning at the same time as reducing food waste.

2. Recognise that domestic food practices and the other practices that make up daily life intersect

This research has mapped the different domestic food practices and wider constellation of practices that make up daily life that intersect with food practices (section 5.2). The discourse on social media that informs parents' domestic food practices recognises these intersecting practices. For example, in Process 1, competence curation, know-how is provided enabling parents to work towards food provisioning goals that relates to several cooking practices. Equally it recognises the time limitations presented by other practices such as going to work, providing work-arounds such as batch cooking meals and then freezing them. If know-how provided within food waste reduction campaigns similarly recognises the interconnections between food provisioning practices and the wider constellation of practices that make up daily life, it is more likely to be implemented.

3. Provide peer-to-peer experiential know-how between parents on food provisioning practices

In Chapter 5, Section 5.4 characterised the nature of the discourse on Mumsnet Talk and considered the implications of this in relation to the processes of linkage that had been identified. It demonstrated the important role that experiential know-how plays as parents navigate domestic food practices. It was in the requests for inspiration where a particularly high proportion of threads provided experiential know-how (89%). This experiential know-

how has two important connected characteristics. Firstly, it is tried and tested know-how and secondly, it addresses ways of overcoming challenges to meeting the food provisioning goals. The experiential know-how provided on Mumsnet Talk also acts as a means to curate and modify know-how derived from elsewhere such as cookbooks so it worked in the context it was going to be used.

This suggests that rather than top-down approaches to food waste reduction campaigns, in which information is disseminated from an organisation, approaches that encourage peer-to-peer sharing of know-how should be encouraged; particularly where this helps to meet food provisioning goals at the same time as reducing the amount of food thrown away.

4. Use transitions in food provisioning practices as intervention points for campaigns

The Mumsnet Talk forum threads and the interviews with parents indicate that parents seek out know-how from others at times when their domestic food practices are transitioning. The transitions take place at times when children are moving between stages of eating, such as from drinking milk to weaning and from weaning to a more regular diet. Transitions in food practices also take place at times when there is a change in the wider constellation of practices that make up daily life, returning to work after a period of maternity leave in particular. These times of transition represent what Reckwitz (2002) described as a 'crisis of routine' in practices. O'Neill et al. (2019) similarly described 'fractures' in food practices when otherwise rigid ways of doing things change because of circumstances.

These times of transition are an opportunity to provide parents with know-how at a time when they need to adopt new ways of performing food provisioning practices or adapt exiting ones. Parents are likely to be more receptive to know-how provided in a food waste reduction campaign at this time if it helps them to meet their food provisioning goals within the new circumstances they are presented with.

5. Emphasise the money-saving opportunities that suggestions for meal ideas that may help to reduce food waste may provide

The interviews undertaken for this research echo the findings of others (eg. Watson and Meah, 2012 and Cox and Downing, 2007) that concern for the environmental impact of food waste is not a key concern. However, wasted money was more of a concern in relation to the wasted food.

6. Focus know-how provided in food waste reduction campaigns on cooking and food storage practices

The analysis of the Mumsnet Talk forum posts in Chapter 5 indicated that parents are predominantly seeking know-how about cooking and food storage. This means parents may be particularly receptive to know-how about these practices in any food waste reduction campaign. Many of the questions about these practices on Mumsnet Talk provide inspiration for know-how that could be provided as part of a food waste reduction campaign.

In terms of cooking know-how:

- Recipes to use up ingredients bought in 'shopping incidents', such as ingredients bought on offer or on impulse. Further research into foodstuffs commonly bought in such shopping incidents could help inform the recipes suggested within a food waste reduction campaign.

- Recipes to use up ingredients that have accumulated in kitchen cupboards and the freezer. Further research into foodstuffs that commonly accumulate in cupboards and freezers could help inform a campaign.

- Know-how about how to resurrect or repurpose meals when they go wrong. This could be focused on meals commonly cooked in family homes (such as spaghetti Bolognese) and informed by further research into meals that commonly go wrong when cooked domestically.

In terms of food storage:

- Guidance on what foodstuffs can be frozen, including the healthy, cooked-from-scratch meals that meet food provisioning goals.

- Guidance on how long cooked-from scratch meals can be stored in the fridge.

In terms of food storage, parents were often seeking know-how about how food cooked from scratch should be stored for and how long it would last when stored in the fridge as, unlike pre-made foods, it does not have food storage guidance.

8.2.2 Guidance for household food waste reduction campaigns that use social media

This research, with its focus on parents' use of social media in relation to food, provides timely insights that could inform future social media campaigns aimed at reducing food waste, given the lack of research into how social media could be used in this way (Hou et al., 2022) and the growth in popularity of social media as a resource for practices by parents (Plantin and Daneback, 2009).

The insights within this research that may help to inform future food waste reduction campaigns are:

1. The characteristics of the know-how provided on social media that makes it effective as a means for parents to navigate domestic food practices could help inform the subject matter of campaign materials.

Several characteristics of social media discourse that makes it effective in enabling parents to adapt their food provisioning practices to meet or get closer to meeting their food provisioning goals were identified In Chapter 7. Social media discourse recognises the challenges to meeting food provisioning goals, such as a child's fussy eating and challenges presented by intersecting practices that make up daily life. The know-how is in keeping with the widely held food provisioning goals and recognises the close connections between food provisioning and parenting goals.

As described in the previous section, there are opportunities for food waste reduction campaigns to enable parents to meet their food provisioning goals at the same time as reducing food waste. Hou et al. (2022) also acknowledged the importance of a food waste reduction campaign recognising what is important to a household in relation to food to help ensure that ideas are implemented.

2. The taxonomy of understandings curation can help inform the selection of a social media platform in a food waste reduction campaign.

The taxonomy of understandings curation in Chapter 6 (Table 6.1) lists different affordances in practice of different platforms based on how they curate know-how. This taxonomy could be used to inform platform selection based on what a campaign was setting out to achieve. For example, on online parenting forums, such as Mumsnet Talk, a corpus of know-how about ways to meet family food provisioning goals and reduce food waste could be built over time. This know-how would also be searchable using search engines such as Google. Whereas Facebook and its groups would provide a means for a

highly-targeted food waste reduction campaign, aimed at those with a specific approach to family food provisioning, or specific challenge to reaching food provisioning goals.

3. The taxonomy of understandings curation could help to inform how the food waste reduction campaign is run on a specific platform.

The descriptions of how know-how is curated on different social media platforms in the taxonomy of understandings curation in Chapter 6 (Table 6.1) provide insights that could help inform the implementation of a food waste reduction campaign on social media. The descriptions of the technical affordances of different social media platforms and how they relate to the affordances in practice provide insights into how know-how could be directed at parents within a food waste reduction campaign on social media. For example, on Instagram, hashtag searches by parents provide them with a means for them to seek know-how that will help them adapt their food provisioning practices so they are in keeping with the goals of family food provisioning practices and parenting practices. This means that hashtags used within campaign material created for Instagram would need to be those used by parents to help them meet the family food provisioning and parenting goals. Parents also use photos on this photo-led platform to seek out ideas for family food provisioning, seeking out photos showing meals in keeping with food provisioning and parenting goals. So any photos used in a campaign would need to show meal ideas that are in keeping with family food provisioning and parenting goals.

4. The determinants of whether or not information on social media is used to shape domestic food practices by parents could inform how a campaign is implemented.

Factors influencing whether or not advice and ideas on social media were used to inform future performances of domestic food practices in family homes were described in Section 6.7 of Chapter 6. These factors could be used to inform the writing of the social media content that forms part of a food waste reduction campaign and as well as who is involved in a campaign.

It shows, for example, that consistency in the guidance provided within a campaign would be important as parents described how if a piece of advice or an opinion appeared frequently or in several different places, they were more likely to use it. While those involved in food waste reduction campaigns would only have limited ability to ensure the consistency of guidance given the volume of information online, it does indicate the merits of encouraging others to share know-how provided within a food waste reduction

campaign as well as providing the same know-how in different locations, such as different social media platforms.

In terms of who is involved, in common with Moon et al.'s (2019) findings, parents are more likely to use information on social media if it comes from others who are like them. This research indicates that important factors here are whether others have the same food provisioning goals and are experiencing similar challenges in meeting them. This suggests that a campaign that encourages peer-to-peer sharing of ideas may be more effective than a campaign where know-how is shared by a faceless organisation or someone who parents do not consider to be like them.

In addition to having the same food provisioning goals, this research indicates that individuals are more likely to be trusted by parents in relation to family food provisioning they have a lot of experiential know-how, such as having had several children.

The Social Practice Theory-informed approach to this research indicates the importance of understanding the intended audience of a campaign given that the wider constellation of practices that form part of their daily lives, such as the nature of their paid employment and their studies, shape how they determine what and who they trust on social media in relation to family food provisioning. However, there is a clear tension between having a tightly focused campaign that reaches few people and takes into account the wider constellation of practices that make up their lives and will shape how they determine what they trust and a more broadly focused campaign that reaches a large number of people but is less effectively targeted in this respect.

5. Influencers need to be viewed as authentic and 'micro-influencers' could play a role in a campaign.

During the course of explaining what shaped whether or not information on social media was used to inform their domestic food practices, parents described those they were more likely to take know-how from. Some of this related to high-profile influencers, such as Joe Wicks. Here authenticity meant having the same family food provisioning goals.

Hou et al. (2022) recommended the use of micro-influencers in social media food waste reduction campaigns, micro-influencers being those who are not necessarily connected with a large number of followers, but nevertheless have a relatively high profile within a community and are influential within it. This research shows that the administrators of Facebook groups sometimes play this role in groups related to family food provisioning and

parenting. So encouraging them to be involved with a food waste reduction campaign on social media could add to its effectiveness. Not only do these administrators act as gatekeepers on information shared in Facebook groups, so they would be important in a practical sense in terms of ensuring that know-how that forms part of a campaign reaches parents, but parents also described them as having expertise and so they were trusted.

6. The tone of posts on social media is important.

This research has provided insights into how the teleoaffective structure of food provisioning and parenting influence whether information on social media is used to adapt domestic food practices. Given the emotions associated with food provisioning and parenting due to the challenges of meeting food provisioning and parent goals, posts sensitive to the emotionality of family food provisioning are more likely to inform parents' future practice performances. The same approach should be employed in campaign materials aiming to reduce food waste. This research showed ideas are more likely to be taken up if they are:

- Gentle suggestions rather than being prescriptive or forceful.
- Have a tone that is being warm, supportive and relatable.

8.3 Implications for food policy

The research conducted here, by informing future domestic food waste reduction campaigns, can help national governments, non-governmental organisations and charitable organisations such as Waste and Resources Action Partnership (WRAP) in the UK, work towards UN SDG 12.3 of halving per capita food waste at the retail and consumer level by 2030. The European Commission's Farm to Fork strategy on food waste, which pledges a commitment to SDG12.3, points to the need to take into account consumer research in efforts to reduce waste (European Commission, 2020). This strategy also outlines the need to provide information to consumers about healthy, sustainable food choices, including through digital means.

This research outlines the interconnections between parents' priorities for food, including providing healthy food for their families, food waste and their use of social media. As such, it could inform future interventions that use digital means of communication and are aimed at reducing food waste, while at the same time enabling healthy eating, in keeping with the European Commission's Farm to Fork Strategy.

The UK's National Food Strategy highlights the environmental impacts of food production but omits specific measures to reduce domestic food waste (Dimbleby, 2021). However, it does include recommendations on how to encourage people to change to a healthier diet. The Mumsnet Talk forum participants and the interviewees in this research, were seeking to provide their children with a healthy diet. But challenges such as a lack of time and fussy eating by children stand in the way of this. Given that these are the same issues that lead to food waste, future food policies and strategies should make the connection between approaches that enable healthy eating in families, by providing know-how in how to achieve it, and food waste targets, encouraging the adoption of campaigns aimed at enabling both goals to be achieved. This research suggests that such synergies exist.

8.3.1 Food for thought on healthy eating

Existing initiatives aimed at encouraging healthy eating, such as Public Health England's Eatwell Guide, stress the importance of eating fruit and vegetables and this messaging promotes providing fresh foods (Public Health England, 2018). Figure 8.2 shows the Eatwell Guide that includes predominantly fresh ingredients in the fruit and vegetables section (Public Health England, 2018).

Figure 8.2. Public Health England's Eatwell Guide, which includes predominantly fresh ingredients in the fruit and vegetables section (Public Health England, 2018).

This research supports the findings of others (eg. Plessz and Gojard, 2015) that parents seek to provide meals made from fresh ingredients for their families. However, fresh foods such as fruit and vegetables account for a large proportion of food and drink waste (Quested, Ingle and Parry, 2013). At the same time, research into the nutritional value of canned and frozen foods indicate their high nutritional value and how existing food recommendations underplay the nutritional value of these foodstuffs (Rickman, Barrett and Bruhin, 2007). Policymakers developing future policy aimed at encouraging healthy diets and reducing food waste should consider whether future initiatives should aim to shift social norms away from fresh ingredients being almost exclusively viewed as best, to alternatives, such as frozen foods, that can be stored for longer but have a similar nutritional value.

This study has provided insights into how social media is part of the mix of sources from where the socially-prescribed way of doing things in relation to family food provisioning, including providing foods made from fresh ingredients, are derived and reinforced. However, social media has been used in other initiatives seeking to shift social norms, such as in relation to smoking (Huo et al., 2022) and could be used as part of a campaign aimed at encouraging the use of ingredients in cooking that are not fresh but still have a high nutritional value. Process 6 (Chapter 6) may provide some insights into the nature of such an initiative on social media, including the role of shared experience in reducing the negative emotions associated with performances of practice considered not in line with the socially prescribed way of doing things, which using ingredients such as frozen or tinned vegetables would be at the start of such an initiative before social norms have changed.

8.3.2 Food for thought on food safety

One area where it is more challenging for institutions adapt their policies and communication is in relation to food safety. The analysis of Mumsnet Talk forum threads showed how experiential know-how is provided on food safety within the posts (Process 3, competence contesting in Chapter 5). Some of this experiential guidance, such as reheating chicken twice, contradicts official guidance and is more lenient. This experiential know-how provided on social media encourages the consumption of food that would otherwise go to waste. Similarly, Process 7, the negotiation of the rules of practice, provides interesting insights into how parents use experiential know-how that is specific to their context to negotiate and work around the institutionally-derived food provisioning rules which are seen as rigid and generic. However, encouraging food safety practices that contradict

existing safety guidance in the hope of reducing food waste is likely to be a step too far for institutions aimed at reducing waste and understandably so.

8.4 Gender, domestic food practices and social media practices

The research undertaken in this PhD did not have an explicit focus at the outset on gender and domestic food practices. The research objectives (in Section 1.9) are not gendered, referring to parents. However, the findings in the literature review and in the research undertaken in this study warrant consideration of gender, domestic food provisioning and social media use in family homes and the implications of this for food waste reduction campaigns.

As outlined in the literature review, research by Charles and Kerr (1988) indicates that women are responsible for most of the cooking in a household. More recent studies (e.g. Wolfson, Ishikawa and Hosokawa et. al., 2021) indicate that this pattern has continued, both globally and in the UK specifically. While the term 'intensive parenting' is often used in relation to the large number of child-centred activities undertaken by parents, some authors, notably Hays (1996), have suggested 'intensive motherhood' is more accurate given that responsibility for most of these activities generally falls to the mother.

Some of the research described in the literature review that explores how domestic food practices are negotiated is focused on mothers. Notable examples include Molander's (2011) study of single mothers, in which mothering is conceptualised as a 'meta-practice' that organises food provisioning practices, and Molander and Hartmann's (2018) exploration of the connections between mothering, emotions and cooking. Taken as a whole, the existing literature points to responsibility for domestic food provisioning and other activities associated with children as primarily being that of mothers.

In terms of this research, the anonymity afforded by Mumsnet Talk does not allow the gender of the individual posters within the 101 threads captured to be determined. However, existing research has shown that Mumsnet Talk is used predominantly by mothers (Pedersen and Smithson, 2013). This means that the data and insights derived from this forum are more representative of mothers than parents as a whole.

When recruiting interviewees, the requests for interviews on Twitter and on Facebook groups did not explicitly seek mothers, they sought parents who use Mumsnet Talk and/or other forms of social media in relation to food. The Facebook groups approached for interviewees were also not aimed exclusively at mothers. However, 20 out of the 21 interviewees were mothers. This provides some further evidence that social media

practices connected with parenting and food provisioning are gendered, undertaken predominantly by mothers. It also shows that in the context of this research, the interview sample is appropriate, given the likely predominance of mothers who contributed posts in the Mumsnet Talk threads captured. As with the forum analysis, it means the insights from the interviews are more representative of mothers than parents as a whole.

As described in Section 4.5.4, when conducting the interviews, I was an insider in relation to the interviewees in the sense of being a middle-class parent who is concerned about the diet of their children, but an outsider in the sense of being a father rather than a mother (given that all but one of the interviewees were mothers). I introduced myself as a father of two children and described some of my own experiences in relation to food provisioning and parenting where relevant, including acknowledging the challenges we have faced in reducing food waste if this topic arose in the interview. The aim of this was to engender trust among interviewees, through a sense of shared experience, and create a safe space in which participants would feel comfortable talking about practice performances that ran counter to the socially-prescribed 'correct' way of doing things. My approach was to try to mitigate the danger I would be considered by participants an expert, who would judge their practice performances.

It is not possible to determine whether me being a father, interviewing mostly mothers, influenced the dynamic during the interviews. My sense in the interviews was that the participants were being open and frank, describing their anxieties and situations where their food provisioning practice performances did not match with the 'correct' way of doing things. However, it must be acknowledged that respondents may have answered questions somewhat differently had I been a mother too. Also, that my subsequent analysis of the all the data may have been different had I been a mother.

When presenting the results in Chapter 5, relating to the forum, the individualised numbers allocated to each person mentioned were for 'parents' (e.g. Parent 0001). This is because in the forum, the anonymity of posters means it was not possible to know the gender of individual contributors. Numbering interview participants in the same way in Chapter 6 provided consistency. In broader descriptions of data and in the analysis, the term parents was generally used rather than mother.

The use of the term parents in the analysis in Chapter 5 was borne out of the ambiguity in the gender of the individual Mumsnet Talk forum contributors whose posts were analysed and a desire not to make assumptions in the analysis. However, in hindsight, this concern

was less relevant in Chapter 6. There is the danger that the approach taken in the analysis of generally using the term parents, rather than mothers, may have obscured insights that may have been provided into the connections between mothering, domestic food practices and social media use.

That said, the data presented in this research does provide some insights into the gendered nature of the social media discourse about domestic food practices. For example, it shows that some of the discourse on social media relates to the shared experience of mothers of the practices that intersect with domestic food practices, such as returning to work after maternity leave. Also, when interviewees described how the shared experiences of the worries and frustrations in relation to family food provisioning found on social media provides reassurance, this shared experience was sometimes described specifically as having come from other mothers. Interviewees also described how the sense of connection and trust they had with other social media users was because they were other mothers with shared experiences and a shared sense of the correct way to provide food.

Given the gendered nature of domestic food provisioning practices and interlinked social media practices, it suggests that a gendered approach to food waste reduction campaigns may be appropriate. This would have implications for the implementation of the different recommendations for campaigns provided in sections 8.2.1 and 8.2.2. For example, it would suggest that peer-to-peer experiential know-how, recommendation three in section 8.2.1, should be shared between mothers. It also suggests that when campaigns take into account the determinants of whether or not information on social media is used to shape domestic food practices, recommendation four in section 8.2.2, that mothers are more likely to use information if it is from other mothers with the same food provisioning goals.

8.5 Limitations of this research

Mumsnet Talk is predominantly used by middle-class British mums (Pedersen, 2016). The interviewees within this research were also middle class, all were mums apart from one individual and were living in Britain. This means that this research applies specifically to middle-class parents living in Britain. There are several factors that mean that the insights from this research are specific to this household type. Firstly, food-related practices are shaped by social class (Plessz and Gojard, 2015) and other cultural factors. Secondly, this research has highlighted the extent to which the socially-prescribed goals of food provisioning in family homes are closely connected with and shaped by parenting goals, as are the goals of social media use. The recursive relationship between domestic food

practices and social media practices was also shaped by the wider constellation of practices that make up family life. Taken together, it means that the mechanisms linking online and offline practices described in this research may not be found in other household types.

In other household types, such as households occupied by university students, or homes in which young professionals or retired couples live, some of the goals of food provisioning and goals of any practices that are closely entangled with food provisioning, may be different to those found in family households. The wider constellation of practices that make up daily life and the way they intersect with food provisioning may well be different too. Similarly, the goals of food provisioning in a family household in a different socio-economic context, perhaps in which finances are tight, may well be different to the food provisioning goals of a middle-class family.

Two of the participants in this research said they were originally from different countries. Although they had adopted the food provisioning goals of middle-class family life in the UK, they described different approaches to food provisioning for children in the countries where they grew up, such as Parent 0074 who explained that pre-made food for toddlers, rather than food made from scratch, is the norm in America (Section 6.2.2 in Chapter 6). So households in the UK in which a parent or parents do not originate from the UK may have different food provisioning and parenting goals.

Different household types are also likely to differ in the extent to which they use social media in relation to domestic food provisioning and some may not use it at all.

Given the critical realist perspective of this research it is important to recognise the subjectivity of the research conducted here. The discourse on Mumsnet Talk and the contributions of the interviewees are their perspectives on the reality of day-to-day family life and food and these perspectives have shaped the findings described here. Even unintentionally, their descriptions of what happened in their homes are likely to have been shaped by the social and cultural forces that pervade food provisioning. Related to this, this research has highlighted the extent to which the 'correct' way to provide food and prescriptions of 'proper' food, shape domestic food provisioning. Proper is a word that appears 63 times in this thesis. This means it is not possible to rule out that interviewees may have adjusted their descriptions and interpretations of what went on in their kitchens so they were more in line with the 'correct' and 'proper' way of doing things.

A critical realist perspective also encourages reflexivity on the part of the researcher, acknowledging as it does that the researcher's own experience and exposure to socio-

cultural pressures shapes how research is conducted and how data is analysed. Throughout this study, I have tried to keep in mind my largely 'insider' perspective; an insider in terms of being a parent living in a middle-class family home. Many of the situations, challenges and emotions evident in the Mumsnet Talk threads and in the interviews were familiar to me. This familiarity meant that I felt I had a good understanding of the challenges, frustrations and anxieties that were being described other parents in relation to food. However, it also presents the danger that my perspective and closeness to the subject matter shaded my interpretation of what was happening and the underlying mechanisms I have described.

The interviews took place during the COVID-19 pandemic and daily family life was disrupted before, during and after the interview period. The impact of the pandemic on family life is not the focus of this research, so it has not been addressed in depth in this study. However, given the extent to which family life was transformed by restrictions implemented during the pandemic, with home schooling of children required, parents working from home and children's clubs cancelled as well as the anxieties and uncertainties these disruptions created, it is not possible to rule out the possibility that this impacted subconsciously on what parents described about family life and the emotions they expressed.

This research has been focused on the recursive relationship between domestic food practices and social media practices. It means that as well as understanding what takes place on social media, it has also been important to explore what happened in family homes before social media use and after. The limited view of what happened before and after online forum use provided by the discourse on Mumsnet Talk has already been acknowledged in this research. Some of the threads on Mumsnet Talk did provide some description of what happened in the home before forum use and some forum contributors mentioned when they had implemented ideas and guidance they had read. However, that was not always the case. The interviews were an attempt to provide that view of what happened before and after social media use (as well as during) that was somewhat limited on Mumsnet Talk.

The research conducted here provides support for Hitching's (2012) argument that people can talk about their practices. The interviewees, admittedly with some encouragement and direction, were willing to talk about the minutiae of their domestic food and social media practices. Hitching's suggestions of asking about what Giddens described as 'critical situations' in everyday practice, where ways of doing things were challenged or had to

adapt, provided an effective way to enable participants to describe what happened in their kitchens and on social media. These critical situations were often emotionally charged and so vivid to parents, making them easier to recall. Nevertheless, much of daily family life, including food provisioning practices, is organised around routine. This means that some aspects of mundane practice performances, that may otherwise have informed the mechanisms linking offline and offline practices described here, may have been missed in this research.

In some respects, 21 interviewees is a relatively modest sample size. However, the interviews only formed part of the data collected. There is also a trade-off for researchers to make between having a large number of participants and so a large sample size and having rich data from each participant (Braun and Clarke, 2013). In this research, the approach has been to strike a balance between the number of participant and the depth of the interviews. Each interview was of sufficient duration to dig into family life in relation to food and social media use some in detail. The interview transcriptions enabled a rigorous in-depth analysis to characterise the mechanisms underpinning what was going on.

8.6 Future directions of research

In this section, opportunities for further research in relation to the interaction between domestic food practices and social media use are described as well as opportunities in other areas of research.

8.6.1 Food and social media

This study makes recommendations to inform the implementation of future food waste reduction initiatives, including those relating to how social media could be employed within a campaign. Hou et al. (2022) point to the need for more evaluation of the potential effectiveness of social media interventions in food waste reduction campaigns. A logical next step for this research is to conduct experimental work involving small-scale interventions on social media aimed at reducing food waste that employ recommendations made in this research. This would involve an intervention aimed at middle-class parents living in family homes in the UK in which they are provided with know-how that enables them to meet their food provisioning goals at the same time as reducing food waste. This research also suggests that the intervention should enable and encourage peer-to-peer sharing of ideas and include the use of micro-influencers. Ideally, the experimental intervention would involve measuring actual, rather than self-reported, food waste per

household before and after the intervention, in keeping with Hou et al.'s (2022) recommendations.

In addition to experimental work informed by this research, it would be interesting to explore the interactions between domestic food practices and social media use in family homes in other countries to see whether the mechanisms described in this research, the processes of linkage, are the same or different. In a European context, this research could be undertaken in other countries where domestic food waste is relatively high, such as Luxembourg, Estonia, Slovenia and Slovakia (Brautigam, Jorissen and Pfeifer, 2014) and where the extent of social media use by parents and the platforms used made be different. This would help to determine whether the same or different approaches to food waste reduction campaigns as those suggested in this research could be applied in different countries.

Within the UK, the relationship between domestic food practices and social media could be explored within family households of those from different socio-economic backgrounds and different cultures, such as within family homes in which the parents do not originate from the UK. In these households, it may be necessary to shift the focus of the research from social media to different contexts in which support and know-how is provided to parents in relation to family food provisioning, including offline contexts. Research exploring the relationships between domestic food practices and social media could also be undertaken in different household types, such as in student homes and households made up of young professionals. Taken together, this research on different household types would help to determine the extent to which the recommendations made within this study on food waste reduction campaign design could be employed in campaigns aimed at other household types and the nature of any adaptations that would be required. It could also help to inform a future food waste reduction campaign that is not narrowly targeted at one household type, but in which the messaging and the intervention contexts are adapted for different types of household.

8.6.2 Wider opportunities for further research

While social media has been used as a tool to investigate offline eating practices (Middha, 2018), there is little existing research exploring the interconnections between food, social media and other offline practices. There are several areas of environment-related food practices, such as the consumption of genetically modified foods, vegetarianism and

veganism, where an exploration of the intersections between online and offline practices, using Social Practice Theories as a lens, could provide some useful insights.

My research and teaching are usually in the field of science communication. Science communication as a discipline intersects with several other fields of research, including science education, mass communication and museology and drawing on a broad range of theoretical approaches (Trench and Bucchi, 2010). Social Practice Theory is not a theoretical lens that has been widely adopted in science communication research but in this study has demonstrated how it enables the researcher to explore the interconnections between different practices, both offline and online. So it may present other opportunities for research within science communication.

The overarching aim of this research has always been to understand the connections between food practices and social media to inform future domestic food waste reduction campaigns. In doing so, it has touched upon themes relevant to the communication of science, including food risk, nutrition and children's development. Food has proved to be a messy and complex subject to explore, involving not only understandings of science, but also connections with non-food related practices, including parenting, as well as media discourse, including on social media. Yet Social Practice Theory has provided a means through which to acknowledge and even embrace that messiness by enabling it to be explored within a research project.

Food is not alone as a science-related subject with such messy interconnections between different offline practices and social media. An obvious example is vaccination, with acceptance of vaccines connected with culture, information read online and whether or not someone is a parent, among a wide range of other factors (Al-Jayyousi et al., 2021). With such complex science-related subjects that intersect with day-to-day life, Social Practice Theory could provide new insights for science communication researchers.

The rise of social media and other forms of online communication has meant that how people determine what and who they trust and how they evaluate expertise have assumed a new importance within science communication research. In this study, Social Practice Theory provided a useful means to explore trust and expertise in relation to food. It highlighted how evaluations of the trustworthiness of who and what appears online are shaped by intersecting online and offline practices. It means that evaluations of trust are likely to be highly contextual, shaped by a specific bundle of practices relevant to a specific

subject matter. This means that how similar practice interconnections shape evaluations of trust and expertise should be investigated in relation to other science-related topics.

More broadly than the field of science communication, existing research into online trust tends to use theoretical constructions that break communications down into component parts such as the source, the message, medium and receiver (Wathen and Burckell, 2001) or that use theoretical approaches informed by psychology, such as the Elaboration Likelihood Model (Sterrett et al., 2019). However, Social Practice Theory should be employed as an alternative approach, providing insights into the intersecting practices and component elements of practices that shape who and what is trusted.

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Appendix 1 - forum analysis codebook

This codebook was used to code posts on the Mumsnet Talk forum. It shows the parent (bold) and child codes (inset, light text). Some codes did not have child codes. The codes are listed here as they appear in Nvivo, which lists codes in alphabetical order.

Concern for food waste

Cooking

      Competencies

      Materials

      Meanings

Disposal

      Competencies

      Materials

      Meanings

Eating

      Competencies

      Materials

      Meanings

Evidence of forum posts influencing practices

Evidence of one practice influencing another

Food storage

      Competencies

      Materials

      Meanings

Indications of trust by forum contributors

      Advice is contested

      Explicit indication of trust

Nature of question asked

Seeking advice

Seeking information

Seeking inspiration

Seeking reassurance

Shopping

Competencies

Materials

Meanings

Sources of credibility in posts

Advice given without evidence

Anecdotal evidence

Conversation between participants

External source eg. book, weblink

Forum poster's credibility

Time influencing practices

[Forum post] **Uses emoji**

Appendix 2 - interview questions

1. Tell me about the people who live in your home. Prompts: Who lives with you? How old are they?

2. Tell me about a typical day in your home. Prompts: Who does the cooking? Who do you regularly cook for? What do you often find yourself doing in the kitchen? Who does the shopping? Do you work? Is this what always tends to happen? How did this change during the pandemic?

3. What are your priorities in terms of the food you give to your children?
   Prompt: explore any conflicts/tensions this opens up such as between feeding children nutritious food and food they will actually eat.

4. Do you think there are expectations about what parents should feed their children? Prompt if answer is yes: Where do they come from?

5. Can you describe mealtimes for me?
   Prompts: Does everyone eat together? Does everyone eat the same thing? Do your children tend to eat the food you give them? Has this changed in the pandemic?

6. Which online forum/Facebook group or groups do you use?

7. Tell me about what you use the Mumsnet Talk forum/Facebook Group for and how you use it. Prompts: Do you just look at/contribute to posts about food? Do you ask questions? Do you contribute to threads/conversations? How often would you say you use the forum in a typical week? Do you use your own name or a pseudonym on the Facebook Group?

8. How do you think Mumsnet Talk/Facebook group helps people make decisions around food?

9. Tell me about a recent time when you asked a question or looked at conversations relating to food on the forum/Facebook group. Prompts: What prompted you to do it – what were you thinking about, what was happening? Did you get the information/advice you wanted?
   Additional prompts:
   - Can you remember what you were feeling like at the time? Why do you think you were feeling like that?
   - Why did you want to know about this?

10. Why did you go to the forum/Facebook Group specifically to ask the question/look at conversations relating to food?

Prompts if relevant:

- Is there something that happens on the forum or that you can do that makes you use it?
- Is it something about the other people on the forum?

11. Is the advice you get on the forum different to 'official' advice such as guidance from the government or on food labels?

12. Can you tell me about another time you've asked a question/looked at conversations on the forum/Facebook Group?

13. Do you tend to use the advice/ideas you are given?

    Prompts:

    - Why?
    - If you don't sometimes, why not?
    - Would you say you trust the other people on the forum? If so why?

14. Tell me about other things you read, watch or listen to about food, including other social media you use.

    Prompts: What do you use each of things for?

Appendix 3 – Interview codebook

IN NOTES in NVIVO, NOTE NUMBER OF PLATFORMS USED BY EACH PARENT

Priorities for food cooked for children

Nature of food – type

Nature of food – volume

Ease/speed of provision

Factors influencing priorities (including fussy eating)

Emotions linked to priorities

Other priorities

Expectations (external) of food provided for children

Nature of expectations

Sources of expectations

Emotions linked to expectations

Factors influencing implementation of expectations

Mealtime practices

Eating together

Not eating together

Eating the same things

Not eating the same things

Who does the shopping

Breakfast food (eg child making breakfast – who makes it)

Lunch food (eg whether have packed lunch at nursery – who makes it)

Diner food (incl who makes it)

Factors influencing practices (including medical condition influencing practices)

Changes in practice due to coronavirus

Facebook use (affordances in practice)

(NOTE: EACH OF THESE TO INCLUDE DETAIL ON WHAT MAKES THE PLATFORM USEFUL EG. NUMBER OF RESPONSES, SPEED OF RESPONSES, NATURE OF RESPONSES, NATURE OF PEOPLE THERE etc – ALSO COMMENTS MAKING COMPARISONS WITH OTHER PLATFORMS. SAME FOR OTHER PLATFORMS BELOW)

Advice

Inspiration

Emotional support

What/who trust and why

Negative associations with use

Providing advice etc to others

Forum use (affordances in practice)

(NOTE: INCLUDE FORUM POSTS FOUND THROUGH GOOGLE SEARCH – NEEDS TO INCLUDE HOW THEY GO ABOUT THE SEARCH, SUCH AS SEARCH TERMS)

Advice

Inspiration

Emotional support

What/who trust and why

Negative associations with use

Providing advice etc to others

WhatsApp use (affordances in practice)

Advice

Inspiration

Emotional support

What/who trust and why

Negative associations with use

Providing advice etc to others

Instagram use (affordances in practice)

Advice

Inspiration

Emotional support

What/who trust and why

Negative associations with use

Providing advice etc to others

Book use (affordances in practice)

Advice

Inspiration

Emotional support

What/who trust and why

Negative associations with use

Providing advice etc to others

Pinterest (affordances in practice)

Advice

Inspiration

Emotional support

What/who trust and why

Negative associations with use

Providing advice etc to others

Similarities/differences in guidance to official advice

Facebook

Forum

WhatsApp

Instagram

Pinterest

Books

Family/friends

Websites (including search)

Why use or not use a source

(NOTE: EG. NUMBER OF RESPONSES, PARENTS WHO ARE LIKE MINDED)

Facebook

Forum

Instagram

WhatsApp

Twitter

Books

Family and Friends

How determine whether will use advice/inspiration from a source

(NOTE: EG AGREES WITH PARENTING ETHOS, WHETHER IT'S FROM A TRUSTWORTHY
SOURCE)

Facebook – general

Forum

WhatsApp

Instagram

Books

Family/friend

Who trust and why

Differences in advice between sources

(NOTES: EG NATIONAL DIFFERENCES, DIFFERENCES IN TYPES OF ADVICE EG WHETHER =
THEORY OR PRACTICE)

Perceptions of food waste

Nature of concern

How try to reduce it