

Mind the gap

A study of understanding the intention-behaviour gap of alternative protein consumption in the Netherlands by using the social practice theory

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Summary

The demand for animal-based proteins and especially meat is increasing. The overconsumption of meat has severe consequences for the environment, human health and animal welfare. Animal products account for a high percentage of GHG emissions in high-income countries. A dietary shift to a more plant-based diet could increase carbon sequestration and reduce greenhouse gas emissions. Therefore, reducing the consumption of meat could be a beneficial strategy for climate mitigation. In the Netherlands the share of consumers that accepted a flexitarian diet is rising. However, Dutch consumers discuss their intention to lower their meat consumption but this does not translate to their actual behaviour. This is called an intention-behaviour gap.

The aim of this study is to understand the intention-behaviour gap of consuming vegetarian options more frequently instead of meat options. It does so by (1) analyzing the intention to consume vegetarian options more frequently, and (2) analyzing the happenings in the intention-behaviour gap by means of the social practice theory by Shove et al. (2012). A practice is a routinized behaviour and could be influenced by the three elements material, competences and meaning. In this study the theory enables to understand the practice of choosing vegetarian options more frequently instead of meat options. The main research question of this research was:

How do social practices explain the intention-behaviour gap amongst flexitarians in the Netherlands?

In order to answer the research question, a qualitative research approach was applied for which a survey and 10 semi-structured interviews were conducted. The survey served for the selection of the interviewees and as support for the analysis of the interviews.

The main influence on the intention-behaviour gap is the habitual behaviour of meat consumption. This deep-rooted habit makes it difficult to change to a more vegetarian diet. Also, the taste of meat and the convenience of consuming meat make it difficult to switch to a more vegetarian diet. The efforts of changing this habitual behaviour in combination with the difficulties within the three elements of the social practice theory and the negative influences of other people could be an explanation for the intention-behaviour gap.

This study can be build on by further research on the protein transition and especially on the development of methods to influence the elements of the social practice theory in order to be able to shift to a (more) vegetarian diet. Eventually this research will contribute to the protein transition.

Key words: Reducing meat consumption, intention-behaviour gap, social practice theory, flexitarians

Preface

Before you lies the thesis *“Mind the gap - A study of understanding the intention-behaviour gap of alternative protein consumption in the Netherlands by using the social practice theory”*, a qualitative research based on a survey and semi-structured interviews. It has been written to fulfill the graduation requirements of the Master Corporate Sustainability at the Radboud University in Nijmegen. The research started in February 2022 and lasted until August 2022.

The thesis was requested by the magazine Food & Agribusiness of Misset Uitgeverij, where I undertook an internship at the content development department. My research question was formulated with the support of my thesis supervisor Dr. Adam Calo and my internship supervisor Indi Kloet Overbeeke. At the beginning it was difficult to conduct a theoretical research and to fulfill to my internships wishes of a more practical research approach. Fortunately, both my supervisors were always available and willing to help me with my research. I am very happy that I was able to incorporate my previous education (HBO Bachelor in Food & Business) and therefore my preference towards the food sector into my thesis topic.

I would like to thank my internship and especially Indi Kloet Overbeeke for giving me the opportunity of a research internship and to see a media organization up close. It was very educational and interesting to learn and do new things in the media/agricultural sector. At the end of my internship I had the opportunity to present my research process and my results to all my colleagues at Misset Uitgeverij. In addition, I would like to thank Dr. Adam Calo for his supervision during the thesis. He gave me good insights and helped me through my research. He was always available and was very specific in his feedback. I also would like to thank my family, friends and fellow students for the support throughout the research process. They really supported me and kept me motivated during this period.

I worked hard for the thesis and I am proud that I finished my research. I hope you enjoy reading it.

Josine van Dijk

Nijmegen, August 2022

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1. Introduction

1.1 Research problem

Currently, the demand for animal proteins is increasing due to several drivers. The study of Milford et al. (2019) states that the *“meat demand increases with income, urbanization, female participation, western culture, social globalisation and natural conditions favourable for meat production, while it falls with rising prices, Muslim population, economic globalisation and unfavourable natural conditions”*. In addition, Tosun and Gürce (2018) argue that the growing population and increasing prosperity are also significant contributors to the overconsumption of animal-based products. The overconsumption of meat has negative effects on the environment and human health (Tosun & Gürce, 2018). In the European Union, agriculture is responsible for approximately 10% of the greenhouse gas (GHG) emissions and almost 70% of these emissions come from the animal sector (Detzel et al., 2021). Also, the production of animal-based proteins uses an enormous amount of water. In addition, the excessive consumption of animal-based protein leads to obesity and other health issues (WUR, n.d.). The intensive agricultural sector in the Netherlands is a large contributor to the high emissions of GHG and nitrogen. The Dutch agricultural sector contains four times more animal biomass per hectare than the average in the European Union (European Commission, 2020). According to Westhoek et al. (2014), the impacts of the high meat consumption on the environment and health are high. The effects of halving the meat, dairy products, and eggs consumption in the European Union would result in a reduction of 40% in nitrogen emission, and 25-40% in GHG emissions. In addition, 23% less use of cropland for food is achieved (WUR, n.d.; Berners-Lee, Hoolohan, Cammack, & Hewitt, 2012; Westhoek et al., 2014). Moreover, a recent study of Sun et al. (2022) explains the high benefits of the transition away from meat in global north countries. The study confirms that a dietary shift to plant-based foods in global north countries could increase carbon sequestration and reduce greenhouse gas emissions by 61%. As also mentioned by Detzel et al. (2021), the study of Sun et al. (2022) supports the outcome that animal products account for a high percentage of GHG emissions in high-income countries. Considering the agricultural globalization, there is a possibility that agricultural emissions could decrease around the world (Sun et al., 2022). Therefore, this could confirm that a move towards a (partly) plant-based protein diet will be a beneficial strategy for climate mitigation (WUR, n.d.; Berners-Lee, Hoolohan, Cammack, & Hewitt, 2012; Westhoek et al., 2014).

Protein play a string role in human dietary preferences and national needs. A human needs 0,8 grams of protein per kilogram of body weight per day. Proteins can be divided in animal-based protein and plant-based protein (Gibney, Lanham-New, Cassidy, & Vorster, 2009). Meat, fish, diary and eggs are the most frequently consumed animal-based proteins, where legumes are the most frequently consumed plant-based proteins. Other possibilities are nuts, cereals, tofu, insects, and seaweed (Onwezen, Kunz, Dagevos, & Verain, 2020). In the Netherlands, animal-based protein are the main source of protein. According to the Rijksinstituut voor Volksgezondheid en Milieu (RIVM, 2016), in 2015 the average daily consumption of protein in the Netherlands was 78 grams of which 61 percent animal-based. In 2020, the average person consumed 76 kilograms of meat per year. That comes down to an average of 109 grams of protein per day, where of 74 grams are animal-based protein. Consequently, this is considerably more than is needed for an healthy balance (Dagevos, Verhoog, van Horne, & Hoste, 2021). Protein and the way it is consumed in the Netherlands is very embedded in daily life. Therefore, it can be complicated to change this dietary habit (Werner & Risius, 2021).

An emerging strategy to drastically shift diets away from animal products is the rise of meat-substitutes, and in the Netherlands there has been a surge of private sector activity devoted to this potential. The question at the center of the meat-substitute intervention is the role of consumer preferences. That is, will they accept these products?

The rise of plant-based diets and meat substitutes

Since recent years plant-based protein diets are mainstreaming, the market for plant-based alternatives is subject to change. According to different researchers the market is growing and will continue to grow the coming years (Dagevos, Verhoog, van Horne, & Hoste, 2021; Menkveld, 2021; Geijer & Gammoudy, 2020; Schreijen et al., 2021). In the Netherlands, only 3% of the population is vegetarian and never consumes meat and fish products. However, the adoption of flexitarian diets, where people do not consume meat every day of the week, is increasing. In 2020 45% of the adults consume meat with a maximum of four days a week (CBS, 2021). Capper (2021) stated that a flexitarian diet “can involve anything from a conscious decision not to eat meat at every meal, to giving up meat one day per week or eating a primarily vegetarian diet, augmented with the occasional meat burger” (p. 1). Important motives for pursuing a flexitarian diet are health and sustainability, but also animal welfare and affordability/price of meat are drivers for practicing a flexitarian diet, but further in-depth research about the understanding of these motives is limited (Kemper, 2020; Lacroix & Gifford, 2019)

Another promising development in the protein transition are meat substitutes. Meat substitutes are protein rich products based on vegetables (Tosun, Yanar, Sezgin, & Uray, 2021). In 2020 the market share of meat substitutes in the Netherlands was 0,7 percent and it will continue to grow to 1,3 percent in 2025 (Geijer & Gammoudy, 2020). However, the impact of meat substitutes on the meat consumption is a long process. Consequently, the Rabobank indicates that in 2035 the European market of alternative protein products is still a niche market (Schreijen et al., 2021). In fact, the market equality between meat and meat substitutes will most likely only occur around 2050 (Geijer & Gammoudy, 2020).

The role of companies and manufacturers in the protein transition supply chain

According to research of Misset Uitgeverij (Hogenkamp, 2021), there are 263 companies in the Netherlands that are operating in the protein transition market. These companies can be separated into two groups: the start-ups who only focus on alternative protein sources, and existing companies that included an alternative protein product in their product range. Mostly, these companies have their focus on meat substitutes and dairy substitutes. Another outcome of the research is the interest of the companies in consumer behaviour concerning the protein transition. In order to be able to grow, the companies have the necessity to keep investing in the protein transition market by means of marketing and brand management.

Intention-behaviour gap

In research of the Wageningen University (Onwezen et al., 2020) there is stated that the Dutch consumer is more likely to consume alternative proteins than in 2015. However, this intention is not significantly translated into their actual behaviour. The consumers are interested and acknowledge their intention and motivation towards a more plant-based diet, but in their food consumption pattern there is no remarkable change noticed. This effect is called an intention-behaviour gap (Onwezen et al., 2020). In order to close this gap, companies active in the producing alternative protein products can play a role in changing the animal-based food consumption pattern. This intention-behaviour gap is problematic for the market growth of alternative proteins and thus closing the gap is of high importance for these companies. However, the understanding of this gap through research is lacking. Therefore, this research focuses on the understanding of the intention-behaviour gap of consuming vegetarian options more frequently. To create a clear understanding of the intention-behaviour gap, the social practice theory is used as a guideline in this research. By means of a survey and semi-structured interviews among Dutch flexitarians data is gathered and analyzed. The social practice theory helps to understand the intention-behaviour gap by dividing the gap by critically describing the practice of consuming vegetarian options more frequently. Eventually, this research can contribute to the development of a method for companies

to stimulate consumers to choose for plant-based proteins more frequently and thus contribute to the climate mitigation.

This study focuses on flexitarians because flexitarianism is a promising development in more sustainable and healthier eating patterns. Also, the change to a flexitarian diet requires less effort than the complete elimination of meat from the diet. Therefore, it would be more easily adopted by a bigger number of consumers (Dagevos, 2021).

1.2 Research aim and research questions

The **research aim** of this study is to understand the intention-behaviour gap of consuming vegetarian options more frequently instead of meat options by (1) analyzing the intention to consume vegetarian options more often, and (2) analyzing the happenings in the intention-behaviour gap with the support/by means of the social practice theory, in order to be able to advice food companies in the protein transition chain in the Netherlands on how to influence (potential) consumers to choose for vegetarian options more often.

Main research question: How do social practices explain the intention-behaviour gap amongst flexitarians in the Netherlands?

Sub questions:

Sub-question 1: What is the current behaviour towards consuming vegetarian food?

Sub-question 2: Which initiatives are already there to promote vegetarian options among flexitarians?

Sub-question 3: Which aspects play a role in the frequency of choosing for vegetarian options/food?

Sub-question 4: What are the materials, competences, and meaning of consuming vegetarian options among flexitarians?

1.3 Scientific and societal relevance

1.3.1 Societal relevance

Climate change and its consequences are a substantial topic in the current society. The rise of circular green economy objectives, where the focus shifts to taking the consequences of economic activities on the human well-being into account, is quickly developing (Sulich & Soloduch-Pelc, 2022). Moreover, the problematic meat consumption and the change that it needs, fits in this new approach. Various studies identified the impacts of the meat consumption on climate change. The negative effects of the meat industry are not beneficial for the climate and this is translated in GHG emissions and the rising temperature (Milford, Le Mouël, Boudirsky, & Rolinski, 2019). Also, the Netherlands report the need for diets to change in terms of meat consumption to lower the pressure on the environment and health (Westhoek et al., 2014). However, the resistance of consumers in changing their meat consumption is relatively high. They are aware of the impacts of their meat consumption on the environment and on their health, but this does not translate in their actual behaviour. In order to change this obstruction, this research will provide an understanding of this intention-behaviour gap to make a starting point for this transition. This research will provide insights into the practices of Dutch consumers concerning their vegetarian eating pattern.

1.3.2 Scientific relevance

In recent years, the protein transition is a well-known topic among scientists. The focus is mainly on the impact of the production and consumption of meat on various subjects. Aiking (2014) addresses the importance of the protein transition due to the growing world population. He states that the production of animal-based protein is a major driver for climate change, biodiversity loss, and freshwater depletion. In addition, the negative health effects of overconsumption of meat have been studied and these studies conclude that meat contributes to an increased risk of cardiovascular disease, strokes and cancer (Eckl, Biesbroek, van 't Veer, & Geleijnse, 2021). In order to deal with the negative effects of the meat consumption, the protein transition is needed. Dagevos and Voordouw (2013) studied whether the reduction of meat consumption is realistic. According to a study of Eckl et al. (2021) female gender, information on health and the environment, and lower price of non meat protein can act as drivers for the protein transition. However, in this research the specific method to use these drivers is not elaborated on. Aiking (2014) argues the importance of developing a way to change the diets of consumers into a more sustainable diet.

However, it is important to first acknowledge the dietary habits of Dutch consumers. According to Remington (1936) dietary habits originate from tribal life and are influenced by religion, geographical habitat, climate, commerce, modern industrial and inventive knowledge, and advertising. Dietary habits are taught in childhood and are therefore slow in change. A study of Rozin (1996) confirms that diets are formed by social norms, socialization, and social environment, especially within the family and at school. In the last years, social media platforms are also mentioned as an social influence on dietary choices (Kley, Kleinen-von Königslöw, & Dunker, 2022). Though, deeper research on the development of a method to change the diets of consumers into a more sustainable diet is still lacking.

Different studies conclude that Dutch consumers have the intention to lower their meat consumption due to the environment and health. Though, this intention does not translate to the amount of meat that is consumed in the Netherlands (Onwezen, Kunz, Verain, & Dagevos, 2020; Wolstenholme et al., 2021).

2. Literature review and theoretical framework

2.1 Literature review

Motives of the acceptance of alternative proteins

According to Onwezen et al. (2020) the motives of the acceptance of alternative proteins can be divided in emotions and social norms. Positive emotions are described as emotions that people experience by thinking about alternative proteins. Alternatively, negative emotions are likely to be used as predictive factors in food related studies. Additionally, the social norms are the unwritten rules that tell us how to behave in certain situations. With regard to the intention to consume alternative proteins, the social norms have increased throughout the years 2015-2019 (Onwezen et al., 2020). This is a positive development in adopting alternative proteins. Moreover, the research concludes that the perceptions of society are a bigger motive in accepting alternative proteins than personal motivation and beliefs. In order to understand the motives of the intention to consume plant-based proteins, it is of interest to know the motives of actual vegetarians of eating no meat proteins. A study of Hoffman, Stallings, Bessinger, & Brooks (2013) divides the vegetarians into two groups, namely the health oriented and ethically oriented vegetarians. An important finding in this study is the difference in motivation to practice a vegetarian diet. Earlier, it is found that in implementing dietary change, ethical motivations are more effective than health motivations (Ogden, Karim, Choudry, & Brown, 2007). Ethical motivations include 'animal rights', 'ethics', 'religion/spiritual beliefs', 'the environment', 'other - ethical', and health motivations include 'health', 'weight loss', and 'other - health'. The vegetarians with ethical motivations had a slightly higher conviction, had been vegetarian for a longer time, and consumed fewer animal products than health vegetarians. On the contrary, it still is undiscovered whether ethical or health motivations have an influence on consumer behaviour. (Hoffman et al., 2013). Krizanova, Rosenfeld, Tomiyama, & Guardiola (2021) state that there "arises an important call for psychological research to identify what factors promote and undermine individuals' abilities to adhere to a plant-based diet" (para. 1). Hopwood, Bleidoorn, Schwaba, & Chen (2020) suggests health, environment, and animal rights as the three main reasons to choose for a vegetarian diet in the Western society. In the study there is mainly a focus on the motivations for adopting a vegetarian diet. Conversely, the reasons for resistance towards vegetarian diets are not elaborated on, which could imply that a complete understanding of the motives is lacking. There is no other study that contributes to this complete understanding. In order to be able to understand the motives completely, it is necessary to investigate the specific situations and choices in vegetarian diets. Also, the resistance towards these diets should be elaborated on. Moreover, inconsistencies in the research of motives of the acceptance of alternative proteins are mainly present in combining the negative and positive perceptions in dietary choice. That is, a higher focus on the positive perceptions towards alternative diets is noticed in the research. In order to create a complete understanding of the motives of the acceptance of alternative proteins, there should be more research about the negative perceptions, such as resistance. The role of the negative perceptions in the acceptance of alternative proteins remains unclear.

Theory of planned behaviour

The theory of planned behaviour is initially developed by Ajzen (1985) and it suggests that our attitudes, subjective norms, and perceived behavioural control influence our intention to engage in a behaviour. In this theory, intention is the most important incentive for human behaviour. Although, this depends on the willingness and control the person has over their behaviour. The attitude towards the behaviour is determined by the positive or negative beliefs about the behaviour. The subjective norms are based on social influence of important referent individuals or groups. The value that is assigned to these beliefs and the motivation to perceive them establish the effect of subjective norms on behavioural intention.

The perceived behavioural control includes the resources and opportunities obtained and how effective these are in performing the behaviour. However, it could be argued that the theory is not suitable for reducing the meat consumption among Dutch consumers, because the theory implies that people behave according to the available information and the consideration of consequences of their actions. According to Bscheiden, Mandarano, & Stroebele-Benschop (2020) people are not necessarily aware of the consequences of their meat consumption and the different benefits lowering the meat consumption could have. It could be concluded that the theory of Ajzen (1985) may be overlooking important aspects to be able to generalize the theory for all topics, including meat consumption.

Therefore, Çoker and van der Linden (2020), elaborated on the theory of planned behaviour to understand pro-environmental behaviour. This study concludes that especially subjective norms significantly predicted the intentions to reduce meat consumption. Similarly, this corresponds to the research of Onwezen et al. (2020) about the motives of the acceptance of alternative proteins. In addition, problem awareness is an important factor in creating an attitude that contributes to creating intentions and behaviour (Çoker & van der Linden, 2020). Pro-environmental behaviour is seen as “a tool for explaining and predicting adherence to plant-based diets” (Krizanova et al., 2021). Hence, the enlargement of knowledge about the environmental impact of meat consumption could be a very effective means to increasing intentions to eat less meat. However, an intention does not directly change into behaviour (Gomes et al., 2018). Intentions are poor predictors of behaviour and therefore it can not be assumed that they automatically lead to desired behaviour (Van ’t Riet et al., 2011). In order to ensure effective interventions for reducing the meat consumption the barriers between intention and actual behaviour need to be studied (Graves & Roelich, 2021). Promotional activities are seen as a possible successful method to help the intention be translated to actual behaviour (Rivis, Sheeran, & Armitage, 2011). However, the research of Rivis, Sheeran and Armitage (2011) is focused on the broad health behaviour and not specific for meat consumption reduction. It is not exactly clear what would be the best promotion method in the specific area of reducing meat consumption.

Promotion of vegetarian options

Although it is unsure what the best method for promotion of reducing the meat consumption is, the knowledge among Dutch consumers is growing because of activities to promote vegetarian options. For example, the campaign ‘Week zonder vlees’ is well-known in the Netherlands. This campaign takes place each year in March and is about cutting meat out of your diet for a week. ‘Week zonder vlees’ is organized by the Food Consultancy & Communications Agency Green Food Lab in order to achieve their mission to let plant-based become the new ‘culture’ in the Netherlands. The campaign helps achieve this by translating this mission into concrete actions and directly measurable results (Green Food Lab, n.d.). Another promotion method is top-down promotion from the government (Knieling & Leal Filho, 2013). However, reducing meat consumption is far from a consensus position. In the climate campaign of the Dutch government in 2019, the advice on lowering the meat consumption was withdrawn. It is not exactly clear why this advice was withdrawn, but possibly the meat lobby had some influence on this removal. After critiques from NGOs such as Wakker Dier, the advice on lowering the meat consumption was incorporated in the climate campaign again. However, it mainly focused on increasing the consumption of nuts and legumes, and not specifically on lowering the meat consumption (Wakker Dier, 2021). NGOs, universities and other institutions also promote lowering the meat consumption by cultivating knowledge by means of education (Laestadius, Neff, Barry, & Frattaroli, 2016).

Intention behaviour gap

As mentioned earlier, the intention to consume less meat products is not directly translated into (performed) behaviour (Onwezen et al., 2020). Fishbein and Ajzen (1975) mention the principle that the intention is assimilated into behaviour in their Theory of Reasoned Action. However, the intention-behaviour gap framework developed by Barr (2004) criticizes this theory by revealing the instability of the relation between the intention and behaviour. He argues that the behavioural intention is partly reflected on the behaviour, but that this reflection is by no means definite. The intention should be used as an indicator for the translation to behaviour, though it is necessary to further investigate the influences on actual action which can differ in each situation. Onwezen et al. (2020) focused on the acceptance of novel proteins by Dutch consumers in a longitudinal study. She emphasizes the intention to consume alternatives for meat, such as legumes and seaweed, increased, but this is not expressed in the self-reported consumption. Onwezen et al. (2020) argues that there is a gap between intentions and the consumption behaviour. However, a specific solution to close the intention behaviour gap has never been found. Kollmuss and Agyeman (2002) confirm the complexity of the shift from environmental awareness and the intention to change behaviour to pro-environmental behaviour and thus closing the intention-behaviour gap. The study also states that comfort and convenience are important factors in shaping pro-environmental behaviour. Translating the willingness to change to actual behaviour can fail because the persistence of practicing the behaviour is not high enough. Van 't Riet, Sijtsema, Dagevos, & de Bruijn (2011) argue that habits have a negative effect on the way intentions influence behaviour. Habitual behaviour causes the intentions to be poor predictors of behaviour. This could explain the intention-behaviour gap of consuming less meat. The habitual behaviour of eating meat as mentioned by Onwezen et al. (2020) is so deeply integrated into daily habits that it does not easily translate into actual behaviour. It could thus be a cause of the intention-behaviour gap. Also, activating personal norms could be a way of closing the intention-behaviour gap according to Godin, Connor, & Sheeran (2010). They claim that intentions that are more aligned with the individuals moral norms were more likely to be translated into behaviour. Self-expectations and norms should be more important in adopting the desired behaviour. However, the research of Godin, Connor, & Sheeran (2010) is not specifically focused on the meat consumption. Therefore, it is unclear if their research is applicable in closing the intention-behaviour gap of lowering the meat consumption. Onwezen et al. (2020) enumerates a few practical implications for changing meat consumption behaviour. The article suggests that both cognitive benefits and positive affective factors are relevant in promoting the consumption of alternative proteins. Cognitive factors are related with the characteristics of an individual, where affective factors are associated with emotions and attitudes of individuals. They also suggest that learning from success stories of other related literature could be effective in closing the intention-behaviour gap. Yet, it is unclear where this suggestion is based on.

Systemic steps to support the protein transition

In order to be able to close the intention behaviour gap, an understanding of behavioural science should be encountered. Onwezen (2022) elaborates further on the understanding of the intention-behaviour gap by the creation of an overview of systemic steps to support the protein transition. In the study, four systemic steps are suggested by Onwezen (2022): "(a) identifying the behaviour that requires changing, (b) exploring the drivers behind the specified behaviour, (c) selecting fitting interventions, and (d) systematically assessing the impact of these interventions on the specified behaviour and the entire food system" (p. 443). These steps are elaborated on for the specific situation of reducing meat consumption. It is important to understand the problem behaviour, but also the target groups. In addition, one has to determine the drivers of behaviour in order to be able to create an appropriate intervention. In the study a few examples of interventions are debated. Examples of interventions are information strategies,

persuasion strategies, training, environmental restructuring, coercion, restriction, modelling, and enablement.

The interventions need to be arranged on the basis of the motivations, opportunities, and abilities of the different target groups. The development of the content of the steps differs per situation. The systemic steps can be used to contribute to achieving behavioural change in the protein transition (Onwezen, 2022). However, this is a time consuming method, for example because of the different socio-demographic characteristics of consumer groups. Also, a detailed understanding of the intention-behaviour gap has not been a result of the study of Onwezen (2022).

It should be mentioned that not only consumer behaviour has an influence on the consumption of vegetarian options. Other influences could be power (accessibility), politics, NGOs, and other institutions. These influences are taken into consideration but will not be main focuses of this research. The other influences are taken into account and will be discussed in the research, but the main focus is on the consumer behaviour in the intention-behaviour gap.

2.2 Theoretical Framework

In order to gain a deeper understanding of the intentions of flexitarians concerning their meat consumption, the framework of environmental behaviour developed by Barr (2004) is a helpful theory. The framework of environmental behaviour divides the intention in three sets of variables that influence environmental behaviour: environmental values, situational factors, and psychological variables. First, environmental values consist of personal orientations towards the environment (Barr, 2004). Second, the situational factors play a role in influencing behaviour. Situational factors are measuring the social context of the individuals. Third, psychological variables, or personal perceptions, influence behaviour. The content of these variables form the intention and have an influence on the actions or the behaviour. Barr (2004) also explained that the influence of the intention on the actual behaviour is by no means definite. Certainly, the research of Onwezen (2022) confirms this by discovering the intention-behaviour gap. A step to determine the influence of the intention towards the behaviour should thus be added.

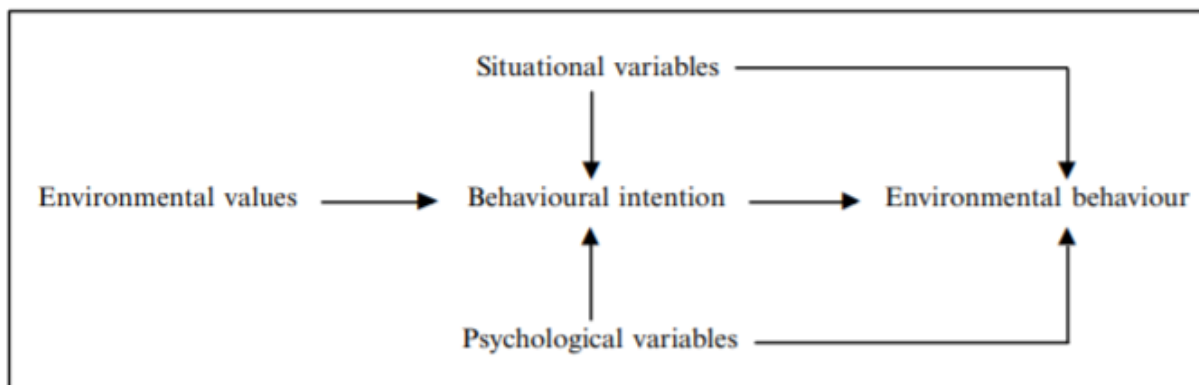


Figure 1: Conceptualization of environmental behaviour (Barr, 2004)

The Social Practice Theory could contribute to this determination (Shove, Pantzar, & Watson, 2012). The social practice theory shows the way people follow different concerns, recognize new alternative actions during practices, and learn how they have to adjust to fit in the new demands of the structure. According to Reckwitz (2002) a practice is “a routinized type of behaviour”. In this research, the routinized type of behaviour is the frequency of the consumption of meat and the aim of this research is to understand why this practice is different than initially intended. Practices are divided in three elements: materials, competences and meaning. The first element ‘materials’ are physical objects, tools, infrastructure, hardware and the body itself. The second element is ‘competence’ and this element stands for the

“know-how, background knowledge and understanding” (Shove et al., 2012, p. 24). By Giddens (1984) competence is described as practical consciousness in the sense of being capable of evaluating performances. Warde (2005) refers to the importance of knowing and having the skills that are required to perform a practice. In short, competence consists of skills, knowledge, and expertise (Shove et al., 2012). The third element ‘meaning’ is derived from Reckwitz (2002) elements description into mental activities, emotion and motivational knowledge. Meanings “represent the social and symbolic significance of participation in any one moment” (Shove et al. 2012, p. 24). The social practice theory is about making and breaking links between the three elements to be able to transform a certain practice. The key factor of the social practice theory is that practices itself are not changeable, but the elements can be influenced in a way that you are able to change behaviour (Shove et al., 2012). The relevance of the social practice theory for this research is to understand how the current behaviour in consuming meat can change to the desired behaviour.

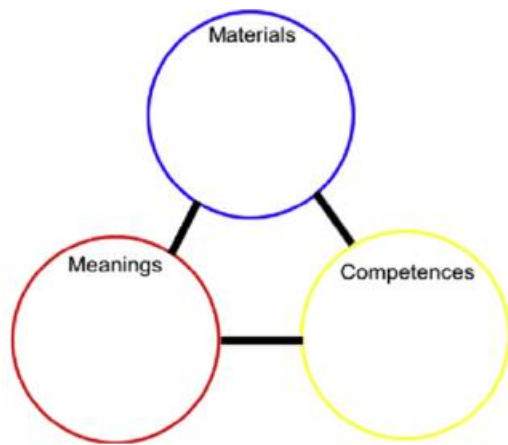


Figure 2: Elements of the social practice theory (Shove et al., 2012)

2.3 Operationalisation

In the introduction, it became clear that the intention to consume vegetarian options more frequently instead of meat options is present among Dutch consumers. However, this is not translated into the actual behaviour which results in an intention-behaviour gap (Onwezen et al., 2020).

In the conceptual model, the intention-behaviour gap is displayed in combination with the framework of environmental behaviour and the social practice theory (Barr, 2004; Shove et al., 2012). The framework of environmental behaviour helps describing the deeper layers of the behavioural intention to consume less meat. In order to be able to give an accurate description of the intention, the elements of the framework of environmental behaviour are inserted in the conceptual model. The separation of the environmental values, situational variables and psychological variables give input for declaring the behavioural intention. In the next part of the conceptual model, the framework of environmental behaviour is extended with the social practice theory. In order to achieve the desired behaviour, the intention-behaviour gap should be “closed”. Studying the three elements of the social practice theory (materials, competences, meaning), may explain the gap between intention and behavioural desire. Moreover, a focus on meanings materials and practices of conscious consumers may support innovative interventions designed to move eaters toward a diet with less meat. In addition, this research may reveal the relative wisdom of existing or planned interventions that aim at changing dietary behaviours in the Dutch sector. Finally, when discussing behaviour change, it is important not to omit other structural influences on the meat consumption of Dutch consumers. The structural forces are for example power, politics, policies, the market, and other institutions. While these influences are not the main focus of this research, they may provide grounds for future complimentary research and may explain confounding results.

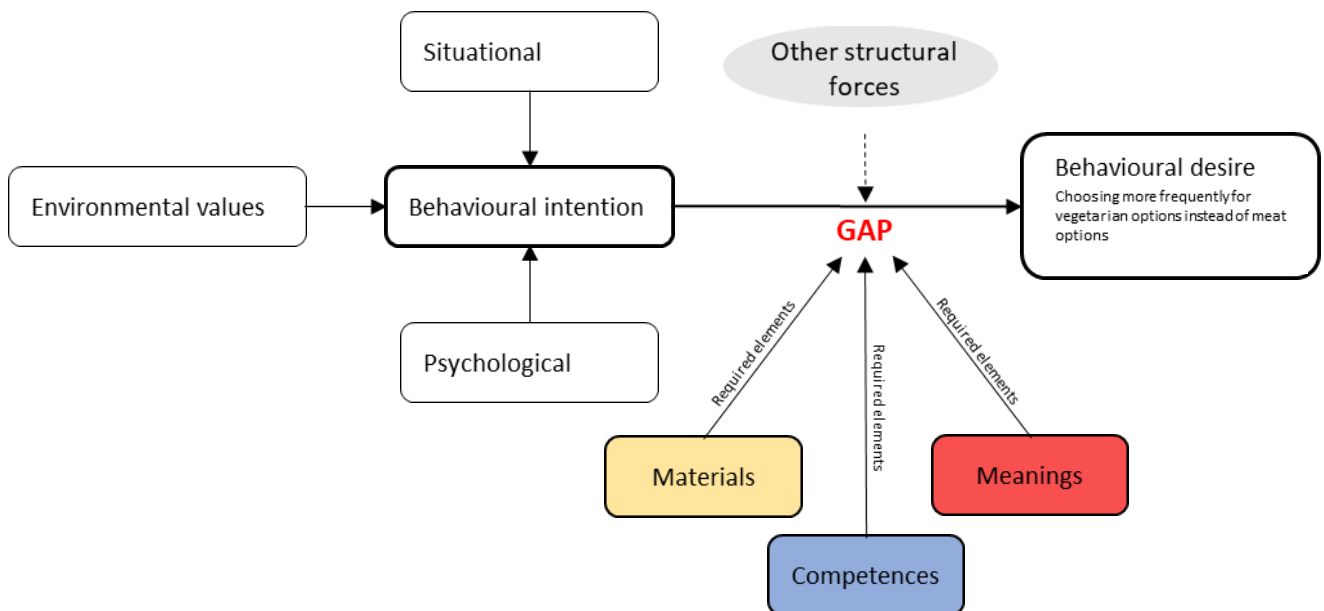


Figure 3: Conceptual model (source: own source)

3. Methodology

In order to answer the research question “How do social practices explain the intention-behaviour gap amongst flexitarians in the Netherlands?” a qualitative research approach is applied. Since this research aims to understand the intention-behaviour gap of consuming vegetarian options more frequently instead of meat options, a qualitative research is a fitting approach (Creswell & Poth, 2018). To understand the influences of the behavioural intention and the intention-behaviour gap in practicing the behavioural desire, the study calls for an in-depth research approach. Qualitative research emphasizes interpretations and meaning and helps understanding the in-depth layers of consumer behaviour (Casula, Rangarajan & Shields, 2020).

Furthermore, both a deductive and inductive approach is applied in order to explain the intention of flexitarians, but also to understand the intention-behaviour gap (Creswell & Poth, 2018).

3.1 Data sources

3.1.1 Survey

In order to find participants for the interviews, a short survey is spread among Dutch consumers. The survey contributes to defining the social practice of flexitarianism based on the experiences of the practitioners. The survey mainly serves as the base for further research during the interviews, but also gains a lot of insight in the dietary habits of flexitarians which can support answering the research question. Another goal of the survey is to create a base for the interviews by asking questions to gather personal information of the respondents concerning flexitarian diets. The combination of the survey and the interviews results in the understanding of the intention-behaviour gap. Non-flexitarians are filtered out of the survey after question one, which is about the average frequency of consuming vegetarian meals a week. Respondents under the age of 18 years old were also filtered out. A wide-spread of respondents within the flexitarian category was preferred to be able to generalize the findings. The survey was undertaken in Dutch, because the research is focused on Dutch consumers. The survey was spread among Dutch citizens, who are automatically seen as Dutch consumers, through social media (LinkedIn, Facebook, Instagram) and subscribers of the magazine Food & Agribusiness of Misset Uitgeverij. In order to be able to generalize the findings and ensure the reliability of the surveys, a sample size of the population was determined. The sample size was set on a minimum of 385 respondents with the application of a 5% margin of error. Eventually, a number of 390 respondents was reached. 215 of these answers were useable due to respondents being filtered out of the survey in question one. The minimum sample size of 385 respondents has not been met. However, the number of respondents is still quite high and therefore the findings of the survey can somewhat be generalized. The survey serves as an input for the interviews and can be used for strengthening the findings in the results section and answering the research question.

The full version of the survey is displayed in Appendix 1 (in Dutch).

In Table 1 the answers on question one are shown. Question one reflects on the average frequency of consuming vegetarian meals a week. This is also the question where respondents were filtered out of the survey when they (1) consume meat daily, (2) never consume meat (vegetarian), and (3) consume vegetarian meals less than four times a month. Most of the respondents eat vegetarian 1-2 times a week (25%). ‘Vegetarians’ and ‘consumers that eat 5 to 6 times a week vegetarian’ are in the minority with respectively 12% and 10%. In total 45% of the respondents was filtered out of this question because they do not fit in the flexitarian consumer group.

Table 1: *The average frequency of eating vegetarian a week (source: own research)*

Average frequency of vegetarian meal	Survey respondents
Never	19%
Less than 4 times a month	14%
1-2 times a week	25%
3-4 times a week	20%
5-6 times a week	10%
Every day (vegetarian)	12%

Table 2 shows the age of the flexitarian respondents that participated in the survey and of the selected interviewees. In the survey the group between 18 and 25 years old (51%) is represented more than the other groups. Especially the age of 65+ and 36-45 years old hardly participated in the survey. This has an influence on the representativity of the outcomes.

Table 2: *Age of all respondents in the survey and age of the selected interviewees (source: own research)*

Age	Survey respondents	Selected interviewees
18-25 years old	51%	50% (5)
26-35 years old	19%	20% (2)
36-45 years old	5%	10% (1)
46-55 years old	11%	10% (1)
56-65 years old	12%	10% (1)
65+	2%	0% (0)

The main reason of the respondents that fit into the research group is climate and environment (46%) followed by health (19%) and other (13%). 'Other' mostly consists of arguments about variation in meals, convenience, taste, or they have more than one main reason. In Table 3 the results are displayed. The interviewees were selected by means of their main reason for consuming vegetarian meals. Respondents with different main reasons participated in the interviews in order to be able to explore different factors that have an impact on the practice of consuming vegetarian options more frequently. There were no interviewees selected from the options 'influence of my environment' and 'price of meat/costs', because they were less represented and relevant than the other options.

Table 3: *Main reason vegetarian consumption in the survey and of the selected interviewees (source: own source)*

Main reason vegetarian consumption	Survey respondents	Selected interviewees
Environment and climate	46%	50% (5)
Health	19%	20% (2)
Animal welfare	11%	20% (2)
Influence of my environment	6%	X (0)
Price of meat/costs	6%	X (0)
Other	12%	10% (1)

3.1.2 Semi-structured interviews with flexitarians

In this research, 10 semi-structured interviews with flexitarians are conducted. The benefit of this interview technique is the possibility to ask in-depth questions about the answers given (Bryman, 2012). This results in deeper and more information from the interviewees. In this research, the interviews provide in-depth knowledge of the intention and the behaviour of flexitarians. By choosing a specific group, it is easier to generalize the results and draw a conclusion (Toffel, 2016). As mentioned in the previous paragraph, the selection of the interviewees has been done through the survey. In the last question of the survey there was asked if the survey respondent wanted to participate in an interview. If they wanted to participate, the respondents were selected on the ground of their answers in the survey compared with the total outcome of the survey. Respondents with different main reasons for their vegetarian consumption were selected in order to be able to understand the deeper meanings of their dietary choices. The outcome of the survey was the guideline for choosing the interviewees. For example, 'climate and environment' was the main reason of 46% of the respondents. By selecting the interviewees this was taken into account, which resulted in 50% of the interviewees having 'climate and environment' as the main reason for their vegetarian consumption. This contributes to the validity of the research. Also, the age was taken into consideration by selecting the interviewees. The main reason for the vegetarian consumption of 12% of the respondents was 'Other'. These respondents mainly had more than one main reason for their vegetarian consumption, such as 'climate and environment' and 'animal welfare'. However, a few respondents indicated that they consumed vegetarian meals for variation in their diet, but also some respondents mentioned that they do not really mind if their meal is vegetarian or not. This was an interesting opinion and fitted the research question. Lastly, during the selection of the interviewees there was a small preference towards flexitarians that consume vegetarian meals 3-4 times a week (on average). The idea behind this was that these people are more aware of their actions than respondents that consume vegetarian meals 1-2 times a week, because 1-2 times a week could be more of a coincidence. In addition, it could be that the respondents that consume vegetarian meals 5-6 times a week (on average) sometimes already eat vegetarian every day of the week. However, in order to deliver a reliable answer on the research question, there were also respondents selected that consume vegetarian meals 1-2 and 5-6 days per week on average.

The interviews took place online via Microsoft Teams and the video and audio is recorded.

Table 4 shows the interviewees that participated in this research. The first column shows the reference number of the interviewee, which is used further in this research. In the last column the main reason of the interviewees of consuming vegetarian options instead of meat is listed.

Table 4: List of interviewees, gender, age, average consumption of vegetarian meals per week, and main reason for consuming vegetarian options.

Interviewee (reference number)	Gender	Age category	Average consumption of vegetarian meals per week	Main reason consumption vegetarian meals instead of meat
1 (R1)	Female	18-25	3-4 times a week	Climate and environment
2 (R2)	Female	18-25	5-6 times a week	Animal welfare
3 (R3)	Female	18-25	3-4 times a week	Climate and environment
4 (R4)	Male	18-25	5-6 times a week	Health

5 (R5)	Female	56-65	1-2 times a week	Climate and environment
6 (R6)	Male	26-35	1-2 times a week	Health
7 (R7)	Male	36-45	3-4 times a week	Animal welfare
8 (R8)	Female	18-25	1-2 times a week	Other
9 (R9)	Male	46-55	3-4 times a week	Climate and environment
10 (R10)	Male	26-35	1-2 times a week	Climate and environment

3.2 Data analysis

The objective of this research is to analyze the social practice of consuming vegetarian options more frequently instead of meat options and to explain the intention-behaviour gap. In order to be able to explain the intention-behaviour gap, interview questions probed the elements of the social practice of consuming vegetarian options more frequently instead of meat options. The 10 semi-structured interviews with Dutch flexitarians are analyzed with the use of Atlas.ti. An abductive approach has been used to analyze the interviews. The theory of Bryman (2012) is used as guidance for analyzing the interviews. First, open coding was performed in order to find the most important aspects in the interviews. After coding all the transcripts, similar codes were merged into one code. Then, relational codes were categorized in code groups. The main code groups are based on the social practice theory and consist of: 'material', 'competences' and 'meaning'. In addition, other code groups were added to create a complete view of the intention behaviour gap. By dividing the codes into these categories, the intention behaviour gap could be explained. The results of the analysis are described in chapter four.

3.3 Validity and reliability

Validity and reliability are important in providing a complete research. Validity concerns internal and external validity (van Thiel, 2014). In this research, the three elements of the social practice theory (materials, competences, meaning) are used to understand the intention-behaviour gap. When analyzing the transcripts of the interviews, the codes could be categorized in these elements when they fitted the description of the elements given in paragraph 2.2. However, the findings are dependent on the interpretation of the researcher, because the interpretation is subjective, a complete reliability is hard to obtain (Guba & Lincoln, 1994). In order to deliver an accurate research, the methods are described step by step. In addition, an interview guide is available to be able to reproduce this research and increase reliability. When conducting semi-structured interviews, a variation of the questions asked per interview is possible. This could lead to incomplete answers which results in a lower reliability of the research. Therefore, the importance of asking in-depth questions during the interviews is marked and executed.

The spreading of the survey was done through social media and the survey was also sent to approximately 2000 subscribers of the magazine Food & Agribusiness of Misset Uitgeverij. The majority of the respondents of the survey (51%) is classified in the category 18-25 years old. This could result in a lower reliability because it may not be comparable with the population of Dutch flexitarians. However, the subscribers of Misset Uitgeverij are mainly older than 30 years old. This means that the respondents group that participated through social media is corrected by the subscribers of Misset Uitgeverij. Still, it should be noted that it is not traceable which respondents participated through social media and which respondents participated as a subscriber from Misset Uitgeverij.

This study focuses on Dutch flexitarians. This specific group is chosen in order to be able to deliver a more useable and generalizable research.

4. Results: the social practice of consuming vegetarian options more frequently

This chapter describes the results of the interviews by means of the social practice theory in order to understand the intention-behaviour gap. This chapter answers the sub question: *‘What are the materials, competences, and meaning of consuming vegetarian options among flexitarians?’*. Furthermore, this chapter delivers input for the understanding of the intention-behaviour gap of consuming vegetarian options more frequently.

The reason meat is still frequently chosen over the vegetarian option is because consuming meat is ingrained in the habits of the respondents since a young age. This habitual behaviour has resulted in consuming meat becoming the standard and easier choice. Also, the taste of meat is still preferred over the taste of vegetarian alternatives. Choosing for vegetarian options is often experienced as more difficult due to the feeling of lacking knowledge and skills. Another finding is the positive and negative influence the diets of other people could have on the consuming behaviour of the respondents. The habitual behaviour of consuming meat is the main influence on the intention-behaviour gap.

4.1 Reasons of consuming vegetarian options

In paragraph 3.1.1 the main reasons of the selected interviewees were displayed. During the interviews, the interviewees elaborated on their main reason of consuming vegetarian options. However, all respondents also had other reasons for consuming vegetarian options. These reasons differentiated from the consideration of animal welfare, to health, climate impact, price of meat, and taste of meat.

“The main reason at the beginning really was just the healthy lifestyle, but of course now, that I am a little more involved, I also think more about for example animal welfare. And also climate, what effect it has on that” (R4, 2022).

The interviews confirm that there is not only one main reason for consuming vegetarian options, but that there are more motives and considerations involved. These motives and considerations can be seen as a meaning. The quote above of R4 (2022) indicates that he experiences and considers that consuming vegetarian options more frequently is healthier than the believed alternative, namely meat.

Also, the influence of other people is referred to several times by each respondent. ‘Other people’ could be family, children, friends, or other acquaintances. R9 (2022) mentions that his children made him aware of the impact meat has on the environment: *“a few of my children are pretty conscious about it. And through my children, I also see the importance of the future and the way I leave the world behind”* (R9, 2022). Other respondents are positively influenced by friends that already eat vegetarian regularly or follow a vegetarian or vegan diet. To support this a quotation of R6 reads *“the influence has been pretty big, because thanks to them I have got to know alternatives and have realized that it can also be tasty and nice”* (R6, 2022). However, the influence of other people is also enlightened from a negative perspective. *“Here now in my environment, it is not so standard that you necessarily eat vegetarian. And when I eat with others, I do eat meat more often (...). Yes, so really the environment is an influence”* (R3, 2022). This negative influence is confirmed by R2 when she talked about joining her roommate for dinner:

“It was a meal with, there was a lot of meat in it, something like chicken, bacon and shrimp. Quite a lot. And it was kind of tasty, but then for example I thought when I was eating: “this is

very excessive”, but I am not going to ask them to keep it separated for me. Then I will just eat it, but inside I think... Yeah well” (R2, 2022).

With this quotation it becomes clear that the situation of the respondents at certain moments can change the meaning of consuming vegetarian options. Other people, such as family and friends can influence the meaning of consuming vegetarian options.

4.1.1 Meat consumption

Environment, health and animal welfare are the predominant motives of consuming vegetarian options among the respondents. However, the popularity of meat substitutes is increasing. Each of the respondents mention that they are aware of the impact meat has on the climate.

“There is a difference, but you hardly taste it with the sauce and everything. So then I think it is worth the difference. Also, for the environment and then I think it is nicer to just not choose meat once in a while” (R8, 2022).

Still, some of the respondents consume meat three to six times a week on average. Taste is an important driver for this behaviour. Consequently, the findings indicate that taste is the main motive of the respondents for their meat consumption. R5 said about meat: *“but I just think it is super tasty. So, I don’t want to become vegetarian”* (R5, 2022). R7 confirms this: *“simply because I like meat”* (R7, 2022). R9 sees the taste of meat as an obstacle for eating vegetarian more often: *“it does not work out for me and I am, I like meat tremendously just I like good food very much and I like meat very much too”* (R9, 2022).

Convenience is another motive for the consumption of meat. Most Dutch people are raised with eating potatoes, vegetables and meat for dinner. R5 also claims that: *“I have been raised with eating potatoes, vegetables and meat”* (R5, 2022). Actually, all respondents explain that they are raised that way and that can explain why they think choosing meat is a convenient choice. R4 describes this as *“having a meat culture”* (R4, 2022). R6 (2022) acknowledges that by saying: *“Well, meat is still very much in my system”*. Also, R3 mentions she has periods when she sports a lot. *“I want to eat a lot of proteins and I try to do that with vegetarian products as much as possible, but sometimes it is easier to just eat some chicken”* (R3, 2022). The habit of consuming meat is hard to change according to several respondents: *“If your habit is to eat meat every day, then you just stick to that and I think to then deviate from it, to then break your habit, is quite difficult”* (R4, 2022). So, convenience is an important aspect in shaping a diet with a lower meat consumption. In paragraph 4.2 there is elaborated on habits in the eating pattern of the respondents.

4.1.2 Meat substitutes

The development of meat substitutes is an ongoing process. Meat substitutes are seen as materials in terms of the social practice theory. Since recent years, the availability and the quality of meat substitutes is rising. R6 notices that:

“It [meat substitutes] is really a lot and I find that really positive. People are becoming more open to it and there is also more demand for it. And I must also say that the availability has become much bigger and has really improved, so the products you get now are not only more varied, but the quality is also just better” (R6, 2022).

The use of meat substitutes differs among the respondents. One respondent almost never consumes meat substitutes. He mentions that he does not understand why it has to be in a certain shape and

named a certain way (R7, 2022). On the contrary, other respondents do think it could be important that meat substitutes resemble an actual meat product.

“Yes, and that is why you buy it much easier, when it looks like meat. Because then that is what you are used to and that is what it is supposed to look like. That’s also how you think it tastes better. It does not make sense, because sometimes it is not like that at all” (R5, 2022).

R8 finds it *“just a little easier to just think of something with it then. And then I am more likely to do it too”* (R8, 2022). R9 confirms that resembling meat substitutes could help in the transition to a lower meat consumption, but it depends on the habits a person has:

“If you are a potato, vegetable, meat eater, then it is much more difficult, because then you really have to replace your [real] meat component with a meat component. And if, like me, you eat a lot of pastas and soups and curries, then you don't just have traditional potato, vegetable, meat dishes. And then it is easier to process meat substitutes in it” (R9, 2022).

It seems that the reason for choosing meat substitutes that resemble the actual meat product is mainly the convenience these meat substitutes bring. Also, when meat substitutes do resemble the actual meat product, *“it makes it easier for people to get into a vegetarian diet”* (R4, 2022). Especially, when meat substitutes are sold with the goal of replacing the actual meat product, then it should look like it. For example, ‘Kipstuckjes’, produced by the Vegetarische Slager, are designed and marketed to replace chicken. *“It looks and tastes preferably just as good as chicken”* (R1, 2022).

Taste as main driver and motivational element for meat consumption is sometimes still missing in meat substitutes. The respondents feel limited in their options when wanting to eat vegetarian. R3 answers on if she is missing something in the alternatives for meat. She answers:

“No, no, I do not really miss alternatives. Well... no, no, I do not miss alternatives, but I do sometimes have the feeling: “if only this was better”. For example, a weird example, vegetarian sausages? Yes, I ate that once, but I just really did not like it. Yes, then I choose to eat it or not. Or I choose to eat meat sausages” (R3, 2022).

Another respondent declares that he not necessarily misses something in the alternatives, but he argues that he has *“the feeling that it is not filling enough. When I eat vegetarian, I am often hungry again after one or two hours”* (R10, 2022). Additionally, some respondents would like to have meat substitutes that resemble a specific product, such as bacon, steak, or a sausage roll. This reflects on the importance of taste by the consumption of vegetarian options. So, if vegetarian options were better in taste, the respondents are more likely to skip meat in their meals.

However, not only appetite, taste, and availability are causes of the feeling of limitation amongst the respondents. Also, the combination of habitual behaviour and knowledge could be influential factors on this feeling. The respondents tend to choose for meat because they feel comfortable by this choice and they know how to cook, store and consume it. Some of the respondents feel that they do not have enough knowledge or skills to prepare a meat substitute. This fits the competence element of the social practice theory. For example, tofu and falafel do not resemble a meat product. R8 mentions:

“You have those packages that you cut into pieces of tofu in an Asian marinade or something. And then I feel like: oh, that seems cool to wok. But if you have a block of tofu I think yes I find it difficult to think of something with it” (R8, 2022).

This confirms that there is a need of knowledge and skills in order to rise the popularity of meat substitutes. This fits into the competence element of the social practice theory. The experience of R5 explains that cooking should not be too hard. *"I don't like it when it gets too hard. If I have to think about cooking food: what is possible and what is not? I find that annoying. That's exactly why... I do not want that"*. (R5, 2022). Moreover, as mentioned earlier, R5 likes meat substitutes that resemble the actual meat product, because she then can replace it more easily. The resemblance of a meat substitute to actual meat could help change the feeling of limitation in meat substitutes: *"people are perhaps still used to eating a dish with meat in this time. If the vegetarian product looks like the real meat product, then I think it is easier to stimulate people to eat vegetarian"* (R3, 2022).

Though, the understanding of the creation of meat substitutes that resemble an actual meat product amongst most of the respondents is there. As mentioned earlier, it could be helpful for the transition towards a more vegetarian diet.

The price of meat substitutes compared to meat is also a topic of discussion. Meat substitutes are still considered more expensive than meat. However, some respondents also mention that they lowered their meat consumption due to the price of meat. Particularly, as argued by the respondents, beef is expensive. According to the respondents, the price of meat substitutes varies a lot because of the different brands and claimed quality. *"I think meat substitutes are extremely expensive. Especially the good stuff is very expensive and that is a shame"* (R1, 2022). R3 (2022) agrees with this by saying:

"I think that some vegetarian products are still very expensive, but I think that it will improve soon and maybe it already has, I am not sure. Because of course it is quite new and then sometimes I do find it unfortunate when a vegetarian option costs me more, because then... Yeah, for some people it may feel like you are sacrificing something [meat] and then you even have to pay a higher price for the alternative"

It seems, from this quote, that the price of meat substitutes could be an important part of a negative turn towards reducing the meat consumption. For example, R7 is able to afford the alternatives and also willing to pay more (R7, 2022). Though, not all respondents can afford more expensive products. For instance, R6 says *"you also have to realize I am just a student, so I can not always just choose the best option for the environment"* (R6, 2022). R4 mentions that he spends a lot of money on groceries nowadays because of the current inflation. This also plays a role in his choice in groceries (R4, 2022). However, promotion of vegetarian options in terms of a price discount is mentioned by the respondents numerous times. R8 argues: *"Only sometimes, for example, when there is such a crazy promotion, then I go to the store and have a look because then I go and see: 'oh what do they have? Just a quick look: oh maybe I can try it once'"* (R8, 2022). This feeling is confirmed by other respondents, for instance, R3 explains a situation: *"for example, in the supermarket, that is a very extreme discount, but there you sometimes have Vivera (brand) for 1 euro. Well I think that is really good, because it also stimulates people to buy it and use it"* (R3, 2022). The majority of the respondents confirms that promotion of vegetarian options helps them in consuming vegetarian options more frequently. The survey supports this by having promotion mentioned by 33% of the survey respondents as important aspect to helping them eat less meat. Promotion of meat substitutes results in an increasing access and attention towards meat substitutes and makes the respondents aware of the vegetarian alternatives.

4.2 System change

In paragraph 4.1 convenience is mentioned by the respondents as a motive for the consumption of meat. This convenience started in their childhood, where it was the normal diet to consume potatoes, vegetables and meat for dinner. This *"meat culture"* as mentioned by R4 (2022) can be translated into a

habit in the living system. This habit is included in the upbringing of children by the parents of the respondents and thus was already a habit before the respondents could make their own choices. *“We always just eat potatoes, vegetables and meat mom never cooks anything else, but eats potatoes, meat and vegetables every day and then my father prefers two pieces of meat”* (R8, 2022). Also R7 confirms that he used to eat meat every day when he was younger: *“my parents are quite traditional in origin”* (R7, 2022). This habit has become the social norm of many Dutch consumers and has led to an increasing meat consumption. The meaning of meat consumption is currently changing again from meat being the every day choice, to skipping meat more frequently and choosing for vegetarian options. Yet, it was noticeable that during the interviews the respondents referred to their ingrained habits as a difficulty in changing to a more vegetarian diet. *“It is a big step to embed new things in your routine what I have noticed”* (R2, 2022). In addition, R5 mentions *“I have been eating meat for 58 years. There is not just one sudden moment when you think: well, I really should not eat meat anymore. Especially if you really like it [meat]”* (R5, 2022). This refers to the change to the current diet the respondents have and thus replacing their meat dishes with vegetarian dishes was, and still is, a slow process due to their deep-rooted habits. The slow process became clear after the interviews. First, the awareness of the consequences of consuming meat grew. R9 talked about the *“gradually slow realization”* of the consequences of his meat consumption and the awareness of the need to take action (R9, 2022). The sources of awareness were work, family and friends. These sources of influence will be further elaborated on in paragraph 4.3. In the social practice theory, this awareness can be explained in terms of a shift in the meaning of the consumption of meat and vegetarian options. The awareness creates a negative perception on meat consumption, which results in the shift in meaning. That is, consuming vegetarian options is experienced more positively than before the awareness was there. Also, the awareness of the consequences of meat consumption fits in the competence element considering the awareness is raised by knowledge. The knowledge is gained through different sources, such as friends, family, school, but mainly through television, the internet and campaigns (e.g. Week zonder vlees). After the awareness ‘phase’ the respondents tried to lower their meat consumption by trying new recipes. Especially meat substitutes were mentioned by the respondents as useful for new recipes. Particularly, meat substitutes that resemble the actual meat product (see paragraph 4.1). R10 talks about his permanent choices in vegetarian options, these options mainly contain meat substitutes *“I look at the shelves, but I already have a number of options that I choose from, for example a cheese schnitzel or vegetable burger, another vegetable burger, a few variants and that was it”* (R10, 2022). The shift to immediately only consuming vegetarian options seems to be unreasonable. R6 answers about his shift towards consuming more vegetarian options: *“that is just growing along the way, because meanwhile I am getting to know more and more new dishes in my system. More vegetarian alternatives and that just happens gradually”*. However, for some respondents the shift was easier than others experienced it. For example, R1 consumed vegetarian dishes all of her life because her parents chose to eat vegetarian twice a week (R1, 2022). Also, R2 easily shifted towards a more vegetarian diet because of a rule she set for herself about consuming meat: *“only if I really like it [meat]”* (R2, 2022). Still, the shift is in progress and they did not completely shift to a vegetarian diet yet.

Even though the respondents sometimes have a hard time in choosing the vegetarian option instead of the meat option, they think it is a matter of doing. R2 is even sometimes annoyed by other people: *“It is more like the laziness or something that annoys me. I think just try it once (...) but I understand that people are in a kind of pattern that they eat a lot of meat”* (R2, 2022). R5 confirms, based on her personal experience, that people should just try vegetarian options:

“If you have never tasted it and never made it, or you do not know a recipe how to prepare it, then you just do not do it. But if you have only tried it once and you think: ‘oh that is actually really nice, we should do it more often’” (R5, 2022).

So, based on the experiences of the respondents one can only know if they like it, if they tried it. Trying new things helps with getting to know new possibilities and change the eating habits. In an example, R8 explains very clear what this exactly means. She explains:

“I thought I am just going to try vegetarian mincemeat once, because I am just curious about it, when it was on sale or something. And then I had made that and then I actually thought: I do not really taste much of a difference because of the sauce and everything around it. Then I went to compare and then it was really I think half of the calories and a lot less fat and all that. And then I thought: oh yes! But when I am exercising a lot, then I also think it is cool that it is a little healthier” (R8, 2022).

According to the respondents there are different possibilities to change the habit of consuming meat every day. Note that these possibilities are based on the experiences of the respondents. From the research data there are five recognizable possibilities in order to change the habit of consuming meat every day. These five possibilities include: the price of meat has to go up, new alternatives should be brought under attention (promotion), and there should be influences of external elements (i.e. other people, market, government, and knowledge and education). The price and new alternatives will be deeper elaborated on in this paragraph. The influences will be discussed in paragraph 4.3 and knowledge and education will be discussed in paragraph 4.4.

First, the respondents mention that it would be a positive development if the price of meat goes up. *“I think the price is really important. If the price is the same or vegetarian products cost less, I really think people will choose it [vegetarian] more often” (R3, 2022).* In the survey there is also asked what aspects would play a role in lowering the meat consumption. The ‘price of products’ was selected by 48% of the survey respondents. In this case, the price of products could also mean the price of meat substitutes. However, in combination with the interview results it becomes clear that the price of meat is a significant aspect in lowering the meat consumption. R9 (2022) thinks that if the price of meat rises, people will lower their meat consumption automatically. R1 approaches it from a different point of view. She thinks the price of vegetarian options should be an important consideration: *“I also think it would help to make the price really lower than that of meat” (R1, 2022).* This is confirmed by R6, he indicates that he not really misses something in the field of meat alternatives, but that the price of the alternatives bothers him. *“Often, for example, seeds are very expensive, or you have to buy extra vegetables and vegetables are also very expensive in my opinion. It [lower price of meat alternatives] would help to eat vegetarian more often” (R6, 2022).* However, the ability to be able to pay more for vegetarian products differs per person. R7, who buys everything if possible organic, is willing to pay more for his food: *“I am willing to pay more for it, because it is a price difference. I can afford it, that is one. And two, yes I consciously make that choice to buy something organic” (R7, 2022).* This could signify that price is not influencing the meaning of consuming meat and vegetarian options for people who are financially stable. Though, this can not be confirmed because only one respondent has expressed this.

In short, price seems to be an influence for the interview and survey respondents on choosing to consume vegetarian options more often. Raising the prices of meat and/or lowering the prices of vegetarian options could be a substantial influence on the frequency of consuming vegetarian options instead of meat.

The second possible beneficial opportunity according to the respondents could be the promotion of (new) alternatives. The results of the survey show that the promotion of vegetarian options could play a pivotal role in lowering the meat consumption. 28% of the survey respondents selected promotion of vegetarian options as means for lowering their meat consumption. Also, the promotion of lowering the

meat consumption was selected by 11% of the survey respondents. R10 said he thinks promotion of vegetarian options will work better than the promotion of lowering the meat consumption:

“The promotion of lowering the meat consumption, I have the idea that that has less effect than promoting vegetarian food because, with one you actually offer a nice new adventure for example, and with the other it is forbidding [to eat meat] or [pushing] eating less meat. It is kind of banning it or wanting to reduce it, that has a kind of negative connotation and I think that has less of an effect on people in general” (R10, 2022).

Following this, R3, whose current roommates mostly consume meat every day, thinks promotion of vegetarian options is a chance to excite consumers to consume vegetarian options more often:

“For example at the Coop [supermarket]. Although that is a very extreme discount. But there you sometimes have Vivera [brand] for €1 per product. Well, I think that is really good, because it also makes my roommates say: ‘yes Vivera is on sale, I am going to buy that’. I think that is a good thing because as a result, people get to know brands and maybe try them more often” (R3, 2022).

In addition, it is interesting to mention that 20% of the survey respondents bases their choice between meat or vegetarian on the offers and price discounts in the supermarket. For example, R8 normally makes a grocery list before she goes to the supermarket. *“Only sometimes, when there is a big action, then I will take a look because then I look: ‘oh, what do they have? Oh maybe I can try that sometimes”* (R8, 2022).

During the interviews, when talking about the promotion of vegetarian options, the respondents mainly focused on supermarkets. Also, the shelf layouts are discussed:

“I think it might also be a good thing. You have people who have a fixed route through the supermarket and those who do not go past the vegetarian shelf sometimes, but if you mix it up [meat and vegetarian], people also think: ‘oh chicken 4 euros, oh vegetarian chicken 3.80 euros or also 4 euros, let’s try it’. Otherwise people forget, people do not go looking for it often” (R3, 2022).

R4 has another thought about the place of the vegetarian options in the supermarket: “Sometimes it is even easier than buying meat, because they [vegetarian options] are all piled up together, so I can just easily pick out. Effortless” (R4, 2022). However, the thought of R4 is personal and the thought of R3 is more based on what she thinks other people would think, the shelf layout probably has an impact on the visibility of vegetarian products. Still, Dutch consumers have the habit to consume meat and they are more inclined to walk over to the meat aisle. The habit is to choose for meat and if you are not confronted with the alternative, then it is hard to break the habit.

“I actually automatically go to the meat aisle. And then I am at home cooking and think gosh, I might as well have bought a meat substitute. I think I should have done that. Yes. Then I already bought that chicken thigh fillet” (R5, 2022).

The promotion of vegetarian options can be classified in the elements material and meaning of the social practice theory. It is important how the vegetarian options are presented and if there are any appealing offers. Especially, the habit of automatically walking over to the meat aisle should be broken by this presentation. This presentation could comprise mixing meat and vegetarian options in one aisle/shelf. The meaning of consuming vegetarian options is more or less influenced by the promotion of vegetarian

options. If the prices are lower and the products are findable, then it could be more likely, when there is awareness of the consequences of meat consumption, to choose for the vegetarian option. It seems that the promotion of vegetarian options still has a way to go and that most respondents think the supermarket is the best place for this promotion.

The respondents really try to make the transition towards a more vegetarian diet and they are really eager to learn more about possibilities for their diet. Not only their own minds are forming the competences and meaning of changing their behaviour, but other influences also play a big part in this 'system change'.

4.3 Influences

There are different influences on the frequency of consuming vegetarian meals. These influences are crucial in understanding the intention-behaviour gap of consuming vegetarian options more frequently. This paragraph is divided in three sub-paragraphs and in every sub-paragraph there will be referred to the elements of the social practice theory.

4.3.1 Influence of other people

The influence of other people implies to be an essential aspect of shaping a diet. In this research, other people are people who are in the direct circle of the Dutch consumers, that is: family, friends, partners, roommates and colleagues. First, it is noticeable that the survey shows that 35% of the respondents determines their meal based on the need of the person they have in company during their meal. The influence of other people could be both positive and negative. The positive influence indicates the influences of other people that result in choosing vegetarian options more frequently. Having dinner with friends is substantially referred to by the respondents as a significant influence on their diet. R6 discusses his previous negative feeling towards vegetarian food. However, he learned from other people that this feeling is not exactly valid.

"Since I live on my own and because of dining with other people who eat vegetarian food, I have come to see that it is not true at all. That my impression does not correspond at all with reality and that I actually now also see the benefits of a vegetarian diet. Like for example, you do not always have to eat a meat substitute or a bean burger or something instead of your steak" (R6, 2022).

R8 believes that dining together is an effective means in getting familiar with vegetarian food.

"I often dine with my colleague and then she comes up with something new that I have never tasted before and then we eat that for dinner. Then I think it is pretty nice and then the week after, when I do not know what I want to eat, I think: 'oh I can make that again' you know, such as shakshuka or something. I will never try it myself but I ate it once with her and then I think: 'oh yes that was nice, I am going to make it for myself sometime'" (R8, 2022).

R9 elaborates on the importance of collectively shifting towards a more vegetarian diet. He acknowledges that he probably would make the choice for meat more often if he would live alone. He states that motivation is higher when other people are involved (R9, 2022). It seems that the feeling that other people are motivated to lower their meat consumption inspires with creating the motivation to shift to a more vegetarian diet.

"My sister, for example, who has actually stopped eating meat for quite some time, but maybe she eats it once every few months if there is no other option. Because at a certain point she started eating less meat, I also was a bit more involved with it" (R2, 2022).

This situation was the start of R2's shift towards a more vegetarian diet. R3 made this shift when she moved out of her parents house to study in Wageningen. She frequently cooked dinner with fellow students and learned some new vegetarian recipes.

"Because they [fellow students] were vegetarians, the recipes that I learned were all vegetarian, so it was very normal for me to not use meat ... It was, when you were going to eat with friends, actually often the standard was to eat vegetarian" (R3, 2022).

However, when she moved back to her hometown to another student home her meat consumption rised again. She thinks her environment is a substantial influence.

"I notice that here [new student home] it may be a kind of different bubble. Currently, here in my environment it is not the standard to eat vegetarian and if I dine with others, then I eat meat more often because I first ate vegetarian 6 times a week I think. Yes, so really because of my environment" (R3, 2022).

Some people in her environment are negative about consuming vegetarian meals. This results in R3 not wanting to ask if the meal can be vegetarian. *"The reason I do not eat vegetarian more often is usually because of the people I eat with"* (R3, 2022). This feeling is acknowledged by R2 and R4 who also discuss the negative influence on their diet when they have dinner with other people who are not necessarily involved in lowering their meat consumption. R4 finds it difficult to ask people to adjust to his wishes of having a vegetarian meal.

"What I think is difficult about that is that I always find it difficult... Then I am very much imposing my opinion and then I am.. I do find myself a bit pushy and very whiny. Like, 'hey guys I would like to eat vegetarian, so adjust for me'. Yes I think that is a little bit too much. I do not find it very nice of myself, so I am not a person that imposes things (...). I think it is a bit stupid to have to say: "guys, I eat vegetarian so adjust all your habits to me", I think that is a bit stupid to say" (R4, 2022).

R2 is not following a complete vegetarian diet because she still wants to have the freedom to choose what she likes. However, she mostly chooses for a vegetarian meal, approximately 5-6 times a week on average. This is sometimes quite hard to maintain because of the people she is with. An example of when she was deciding with friends where to have lunch:

"I said that I would really like to eat somewhere where I can eat something vegetarian and then you get a comment like: "Yeah, but you also ate meat yesterday, didn't you?" and then I thought yes okay that is true, but I found that very difficult because I was not officially vegetarian, but yeah that people then had the idea that I was nagging or something" (R2, 2022).

The results present that other people in the environment have a substantial influence on the diet of the respondents. This could be positive, in the way the respondents first adjust to others who want to eat vegetarian and then learn new recipes from those people. But, the influence could also be negative in a way that the respondents do not want to force people to adjust to their wishes of eating vegetarian. The feelings that emerge play a role in the emotion of the respondents which corresponds with the element

meaning of the social practice theory. Being a flexitarian and wanting to consume vegetarian meals around other people could change the meaning of choosing vegetarian options more frequently. The respondents do not want to burden other people with their preferences which results in them not eating vegetarian. On the positive note, they adjust to other people who do eat vegetarian and then get motivated to also do it for themselves. The respondents gather knowledge and learn recipes from other people, which fits in the competence element of the social practice theory. The influence of other people is probably the most powerful influence on the behaviour of the respondents.

4.3.2 Influence of the market

The second influence on the behaviour towards choosing vegetarian options more frequently is the market. The market is a broad subject and in this research the market are companies such as producers of meat, meat substitutes and vegetarian alternatives, and supermarkets. Also, non-profit organizations (NGOs) are included in the market.

As mentioned in paragraph 4.2, offers in the supermarket have an influence on the choice between meat or vegetarian meals. R2 lived in Amsterdam for a while, exactly at the moment the supermarket Albert Heijn expanded their range of vegan and vegetarian products.

"I thought that was very nice, because then you just have more options. For example, chicken corn, if I have a craving for it. You now have those chicken fingers [meat substitute] from Mora [brand], then yes I will buy them. So let's say the more products there are on the market that kind of satisfy my cravings, the more often I buy that and the less meat I eat" (R2, 2022).

According to the respondents the availability of vegetarian options differs per supermarket. R3 thinks Albert Heijn is the frontrunner in the vegetarian development in the supermarket. She compares it with the supermarket that is close to her house (Coop):

"I really like Albert Heijn. I wish it was close to my house, because they have so many vegetarian things and I like that so much. I think it is really good that they encourage that. Near me is the Coop and I think it is getting a little better, but I find it very limited ... You should not be there for vegetarian bread toppings, then you really have to go to Albert Heijn. So it also differs per supermarket" (R3, 2022).

The efforts of the supermarket fit in the material element of the social practice theory. The supermarkets provide the material, i.e. the vegetarian alternatives, to the Dutch consumers. This distribution contributes to the infrastructure of vegetarian alternatives and the implementation of a more vegetarian diet.

Another market influence are different campaigns. An example of such a campaign is 'Week zonder vlees' (translation: week without meat). R6 was triggered by the campaign and is positive about it:

"I think it is good actually, because that is why I started eating less meat earlier, not directly because of that, but I tried it once and then a lot of products are on sale, I mean meat substitutes. This is one way to get people to change their system" (R6, 2022).

Also, R8 elaborates on the 'Week zonder vlees' campaign in a positive way:

"It does help, because then everything is included in discounts and then I am going to look: 'oh nice' and then I will try things. Then you look at it a little longer or something and then you think that it is maybe nice to try sometime" (R8, 2022).

She actually means that she is triggered earlier when the vegetarian alternatives have a price discount due to the 'Week zonder vlees' campaign. Nevertheless, the respondents that are already very conscious about their vegetarian consumption, feel like they are beyond this campaign with their experience in consuming vegetarian alternatives. *"I do not have the idea that I need to be stimulated for that, because I already consume less meat"* (R6, 2022). R3 adds to this: *"for me personally, as a consumer, it is not of much use, but perhaps also because I am already becoming a bit aware of it"* (R3, 2022).

What will stimulate the respondents in choosing vegetarian options more frequently is cookbooks, social media and grocery subscriptions/meal boxes (HelloFresh). First, cookbooks are an inspiration for many of the respondents. Sometimes they purchased the book themselves or they received it as a present. R7 really likes trying new things. Since the corona crisis he had a lot of time to experiment and cook from cookbooks. The reason that he likes certain cookbooks is because they do not have a lot of ingredients and that the recipes are relatively quickly done. This can be connected to making a choice based on convenience. Cookbooks can be classified in the material element of the social practice theory. Cookbooks support the shift towards a more vegetarian diet. However, consumers first need to be influenced to buy such a cookbook or it has to be gifted by someone. In addition, R9 gets inspired by the NRC newspaper:

"I am the first to read the NRC on a Saturday and I always read the cooking section and that always gives me ideas, then I think: oh nice, I am going to cook that. I always like to be inspired with recipes, nice vegetarian recipes" (R9, 2022).

It could also be argued that learning recipes from a cookbook fits in the competence element of the social practice theory. The respondents gather knowledge and skills to be able to perform the practice.

Another influence on the shift towards a more vegetarian diet is social media. Especially amongst the respondents in the age category 18-25 years it is a popular means to learn and be encouraged. *"I follow a lot of vegetarian accounts [on Instagram] and also many accounts that also make sure that it is a healthy meal"* (R3, 2022). Social media is not necessarily used that frequently for recipes and inspiration, but it is recognized by the respondents as a means to get inspiration from and as a suitable communication tool for promoting vegetarian alternatives. Again, this differs per respondent. As mentioned above, R3 is following vegetarian accounts on Instagram and she gets inspired by these accounts. R8 is active on TikTok, a social media platform that displays short videos.

"For example, I often see TikToks with recipes, I always find it very nice and then I also try to copy them. That is almost always with meat. So, I do not know if I see some more vegetarian things, if I would try it faster" (R8, 2022).

As long as consumers are not confronted with this kind of content, they are not really influenced by social media. That is the same as with cookbooks where it is necessary to purchase or be gifted a cookbook. However, there is also another influential factor mentioned by the respondents, namely HelloFresh. HelloFresh is only mentioned by R5, but it is related to getting to know new recipes. HelloFresh is a subscription for a meal box where you can choose from a range of recipes. R5 thinks that HelloFresh contributed to changing her habit of consuming meat every day. *"HelloFresh also helped with that, HelloFresh made it easier to deal with"* (R5, 2022). Therefore, HelloFresh is a tool that stimulates to consume vegetarian meals more frequently. This tool fits in the material element of the social practice theory, but on the longer term knowledge is gained about these recipes which means that it can also be placed in the competence element of the social practice theory.

It is noticeable that the influence of the market is not as leading in the opinions of the respondents. An explanation for this could be that the market influences mostly happen subconsciously. The respondents declare that the influence of the market is there in a way of handing tools to make it easier to change their eating pattern. However, most of the tools need initiative of the consumer itself, such as following social media accounts, purchase cookbooks and find recipes online. The material is there, but the habit of practicing the use of this tool is still missing.

4.3.3 Influence of the government

Despite the fact that the government was not the main focus of the research, it has been addressed by the respondents during the interviews. Therefore, there will be an elaboration on this subject.

There are different opinions of the role of the government among the respondents. In particular stimulation for making other choices is referred to: *"I think that there should just be a really strong, unambiguous message from the government"* (R1, 2022). R3 adds to this:

"I do not think the government should be the one to ban people from eating meat, but I think they can play a positive role and I think it is better to approach people positively by showing them what is possible, instead of showing what is no longer allowed" (R3, 2022).

The effectiveness of a positive approach in stimulating a more vegetarian diet was also addressed by R10 and is included in paragraph 4.2. R6 also believes that the government should stimulate citizens to lower their meat consumption. He argues that the government can be involved in educating children about the impacts of meat consumption (R6, 2022). R7 has a daughter who still goes to primary school and he elaborates on the government stimulating this education: *"a healthy school [project], that is, in addition to exercising, also nutrition. I think that is very good and that partly came from the government. I think it is nice that there is at least awareness"* (R7, 2022). R10 is not so sure about the role of the government: *"the role of the government should be limited"* (R10, 2022).

Providing subsidies to companies in order to innovate or lower the price of certain products is another means that is mentioned by the respondents. These subsidies are not necessarily seen as positive or helpful. R6 argues:

"It is often said: 'hey, we are going to issue subsidies to companies that are more concerned with sustainability', so including sustainable food production, but there is very little innovation within those subsidies, purely because in the end it is all about earning money" (R6, 2022).

This opinion gives the impression that there is little trust in the role of the government. R9 expects the government to intervene in this matter. However, he states that the government is currently doing the opposite, because they subsidize the meat industry (R9, 2022). R2 agrees with this, she states: *"I really feel like the government is just kind of like sponsoring the meat industry by the choices they make and by all the millions that go to big companies such as Unilever and things like that"* (R2, 2022). Although, she is not completely sure about her statement, it is notable that the trust in the government in this matter is not that high. As also elaborated on in chapter two, R2 refers to the campaign of the Dutch government for the Dutch citizens about living a more sustainable life. The advice of lowering the meat consumption was first deleted and later, after several critics, added again.

"They can throw all kinds of campaigns out the door, but at the same time they finance things such as Unilever and stuff. Because yes, I can get very angry, but I think that the government should just be neutral" (R2, 2022).

A transparent and clear campaign is the missing influential factor the government can partake in according to the respondents. *"I think a campaign, or also communicate with supermarkets. For example, guidelines"* (R3, 2022). R4 believes it is important to stimulate young adults in making sustainable and healthy choices. He elaborates: *"I think that young people are generally more flexible than older people"* (R4, 2022). In addition, R6 thinks the government should play a role in stimulating certain food (less meat) in education (R6, 2022).

Another current topic in lowering the meat consumption is the meat tax. It becomes clear that the meat tax, which means that the prices of meat will rise, should not stand alone. It should be combined with meat alternatives having a lower price than meat. *"Immediately stop subsidies on 'wrong' food and immediately stop subsidies on meat and in fact start taxing polluting components more. A product should be priced according to the damage it causes to the environment"* (R9, 2022). R9 actually suggests to not only implement a meat tax, but also a tax on all polluting components. However, R10 also mentions an important aspect of implementing a meat tax: *"I do not know. I think it [meat tax] is idealistically agreeable. Only, you also harm a lot of poorer families"* (R10, 2022).

Overall, there is not enough depth in the data on the influence of the government to be able to draw conclusions about their role in the intention-behaviour gap. There are different opinions about the role of the government in the transition towards a more vegetarian diet. Still, it is clear that the government should play a role in stimulating Dutch citizens for choosing vegetarian options more frequently instead of meat options. Therefore, it would be interesting to include the influence on the government in lowering the meat consumption in further research. This should fit the competence and meaning element of the social practice theory. Considering the Dutch government will contribute to knowledge and skills and citizens will most likely change their opinion on their meat consumption.

4.4 Knowledge and education

In this paragraph, the experiences and opinions on knowledge and education are shared. It is also discussed what the added value of education about this subject is. The coherence of the three elements of the social practice theory can be explained as follows. Knowledge and education are part of the competence element of the social practice theory. Education results in knowledge and skills, but knowledge and skills eventually lead to a different meaning. For example, by gaining knowledge about the negative effects of meat consumption, the meaning of consuming meat could change in order to be able to contribute to sustainability, health or animal welfare. In order to realize the education, different materials are needed such as teaching materials, information, etc. The coherence and links between the three elements becomes very clear in this paragraph.

First, the understanding of the current knowledge and skills of the respondents is important. Moreover, it is important to mention that 44% of the survey respondents are consciously engaged in their protein intake. For the interview respondents this is 60%, which translates to six respondents.

The respondents feel that consuming meat occasionally could be convenient to not accidentally skip important nutrients and vitamins. *"That is why it is nice for me to eat meat now and then, because then you still absorb the nutrients"* (R4, 2022). However, it is unsure where this feeling is based on. R2 finds it hard that there is so much information and that is the reason she is not sure about what is right anymore (R2, 2022). She also states: *"I think it would be nice to have knowledge about it, but it just feels like a lot of effort to understand"* (R2, 2022). R6 adds to this: *"sometimes you hear things about veganism, for example, that [when you are vegan] you do not get enough of certain vitamins. I think that needs to be clearer. There should be more attention for this information"* (R6, 2022).

The knowledge each respondent has is very different. It is understandable that they all know the effects of meat consumption. However, deeper knowledge about nutrition, sustainability and health is

not always existent among the respondents. For example, R5 was, during the interview, not very familiar with the subject of sustainability. On the question about her knowledge about sustainability she answered: *"I do not know"* (R5, 2022). She pays attention to her meals in terms of the meals being healthy, but she is not really sure what changes in her nutrition when consuming more vegetarian options (R5, 2022). Also, R10 is not really occupied with gaining knowledge about nutrition, sustainability, health and the protein transition: *"I do not really know anything about that. No, I am not aware of that at all"* (R10, 2022). In contrast, R7 and R9 are more aware of the recent developments in the protein transition. This is actual very logical considering they both work in the food sector. *"I have also started eating vegetarian more because of my work. When I worked at HAK [vegetable and legume manufacturer], that was five years ago, I started eating more and more vegetarian"* (R9, 2022). His work resulted in an expansion of his knowledge because he was involved in the protein transition on a daily basis. As a result of working in the food sector and his growing interest in nutrition, health and sustainability in the protein transition, R7 subscribed to a professional magazine that focuses on the protein transition: *"I think it is interesting to read and inquire information about it"* (R7, 2022). R1 confirms that working in the food sector has had an influence on her knowledge. She discusses that she was motivated to learn more, but when she switched her job the interest faded away (R1, 2022).

It is important to understand what means and methods are necessary to expand the knowledge among flexitarians. Moreover, as mentioned earlier, knowledge creates awareness and it makes the switch to consuming more vegetarian options instead of meat options easier. Habits can be broken by influencing the elements of the social practice theory. According to the respondents, education is crucial to improve the knowledge on the protein transition. Especially education for children and young adults is considered as an valuable approach.

"I think it [education] could play a very, very big role. I think it is also very important to start with people, with children. And yes children do not cook, but they can tell their parents: 'I had this in school' or 'we learned this. Shall we try that?'" (R3, 2022).

R5 agrees with investing in education to develop awareness and knowledge among children. *"I think that is a really good one, I think it should be taught more from childhood. Primary school"* (R5, 2022). Correspondingly, R6, R7 and R9 also think education on primary school could be a suitable step. R10 discusses the change from generation to generation. For instance, the now 20-30 years old learn their children to eat vegetarian multiple times a week, then it becomes a habit and that eventually lowers the meat consumption (R10, 2022). An example that fits this approach and is mentioned by several of the respondents, is smoking. R9 explains:

"Like, the young people nowadays or say the whole generation that know since primary school that smoking is bad for your health. That is really in people's consciousness and that was not the case forty years ago. In this way you can now also show very clearly in people's consciousness that eating meat is not sustainable and actually not very health" (R9, 2022).

But, there is a chance that not every parent wants their children to get food education in primary school. *"I think that it could work, but I think a lot of parents will still protest"* (R1, 2022). R7 is a member of the parents participation council at his daughters primary school. He argues that he noticed that most parents not necessarily desire deeper information. He gives an example:

"I mean an example is school fruit. That was a period when school fruit was handed out from school three times a week, a project. And if you looked at the feedback survey, how that was

experienced, not very strong I must confess. There was also not much enthusiasm from many parents and I did not know, but a lot of children do not actually bring fruit from home” (R7, 2022)

Therefore, it is not certain if educating children about nutrition, health and sustainability is feasible. The education could help with learning children other possibilities, but parents should give permission. Moreover, some respondents think it is better to influence people at an older age.

“I think it is a little better in high school. Then they might start thinking about it themselves, becoming more aware that they do not choose a sausage sandwich during the break, but get something else. Yes, I think they must be a little older for it” (R8, 2022).

R4 thinks young adults are the right target group to educate and influence: *“I think that young adults are the most effective target audience to try to address it [educate them]” (R4, 2022).*

There are different suggestions from the respondents how the knowledge and skills can be improved and how the education should be organized. In particular, providing information through books, videos, magazines, documentaries, news articles, social media, campaigns and supermarkets is recognized as a suitable method.

“If I could just read a book or follow a lot of YouTube series about this, I would be happy to do it. YouTube series would be great, because then you have to put in even less effort. Then I can just watch” (R2, 2022).

R1 (2022) adds: *“I think an option is to just make more documentaries and stuff like that, but also to integrate it into commercials maybe or campaigns or in nice tv programs or something”*. Social media can, as mentioned in paragraph 4.3.2, play a role in the promotion and expansion of knowledge among Dutch consumers. Yet, books, videos, magazines, documentaries and social media are all tools available on platforms and need to be looked up by a person itself. This means that the person/consumer should already have interest in learning about the topics around the protein transition. If this is not the case, then people will not come in contact that quickly with this kind of information. This results in the fact that they will not gain the needed knowledge and skills to lower their meat consumption in order to contribute to the protein transition. Therefore, supermarkets could be an important part of delivering information to consumers. *“That is the place where people make choices” (R6, 2022).* Supermarkets are visited multiple times a week and can display information in the store. R7 argues that he would like to see an information sign about, for example CO₂ emissions per product. R3 also suggests an information sign about sustainable choices:

“They should just hang a sign in the supermarket with this means this, and this means that. I would like that, but then I want to know it on the spot, on the moment, when I am shopping. I am not going to look for that in my spare time. Yeah maybe just a big sign somewhere on the wall, or in between the shelves” (R3, 2022).

Currently, *“the only thing you can sometimes read these days [in the supermarket] is where the product comes from” (R4, 2022).* So, according to the respondents, supermarkets can increase their efforts in displaying information about the nutrition and sustainability of products. Though, convenience is still highly valued, also during supermarket visits. R8 states:

“I am not one to really stand in front of the shelves that long. If you also have to look at all that [signs with information], then doing groceries really becomes a bit of a day job. While, I am also

like, it is all fine, but I just want in and out of the supermarket within ten minutes and I am really not going to look at every product: 'oh is there a better one?' Then I think it will take a long time" (R8, 2022).

All things considered, it seems that influencing and education children from a young age could provide knowledge and skills to change the habit of meat consumption in the long term. However, the parents have an influence on this decision and that could be a bottleneck for executing this plan. Also, providing information to consumers is also frequently mentioned by the respondents. Access to materials, such as books, videos, social media platforms, and other media, is essential for realizing this provision of information. Lastly, supermarkets might also be an influential factor in imparting knowledge. Though, out of all suggested methods to improve knowledge and skills with certain forms of education, it is not exactly certain which method would be best fitting. Further research is necessary to understand what are the most suitable ways to improve the competence element of the social practice theory in this topic. In this part of the research, the interaction between the elements of the social practice theory is very comprehensible. The right amount of knowledge and skills in order to be able to change the behaviour should be taught, only the way to enforce the knowledge and skills is yet to be determined.

5. Conclusion and discussion

5.1 Conclusion of the research

In this thesis, research has been conducted to understand the social practice of the intention-behaviour gap to consuming vegetarian options more frequently in the Netherlands. Based on a survey and semi-structured interviews amongst Dutch flexitarians, the research was carried out to answer the main research question. The main research question of this research was:

How do social practices explain the intention-behaviour gap amongst flexitarians in the Netherlands?

This chapter will answer the research question in accordance with the three elements of the social practice theory. First, there will be a short elaboration on the main finding of the research. After this elaboration, the three elements are discussed separately in order to understand the intention-behaviour gap of choosing vegetarian option more frequently.

The main finding of this research and influence on the intention-behaviour gap is the habit of consuming meat. This habitual behaviour, the consumption of potatoes, vegetables and meat for dinner as the standard, is developed at a young age. The habit already exists before the respondents could make their own choices. This deep-rooted habit makes it difficult to change to a more vegetarian diet and is seen as an obstacle. Therefore, it is referred to as a slow process. However, the awareness of the respondents about the consequences of meat consumption and the need to change their habit is present. This habit in the system of the flexitarians will be further elaborated on when discussing the three elements of the social practice theory.

5.1.1 Material

The first important 'material' consideration is the availability and quality of vegetarian alternatives, including meat substitutes. In recent years, the range of vegetarian alternatives has risen and the quality has improved. This results in a higher availability of vegetarian alternatives and thus more product variation. This availability and variation makes it easier to choose for a vegetarian alternative instead of meat. Furthermore, if the resemblance of meat substitutes compared to the actual meat product is high, the satisfaction of the consumption of meat substitutes increases. The resemblance results in a comparable experience to consuming meat, which is still a habit in the system of flexitarians. However, according to the interview data, the increasing quality of vegetarian alternatives mostly leads to a higher price, which is a reason not to choose for a vegetarian alternative and continue choosing meat. The price of vegetarian alternatives is experienced as an obstacle for consuming vegetarian options more frequently. Promotion in terms of price discounts, can contribute to lowering the price of vegetarian alternatives. The results indicate that promotion of vegetarian alternatives creates awareness, increases accessibility and generates a more appealing price for vegetarian alternatives. However, price discounts are temporary and therefore vegetarian alternatives are still considered expensive. The relatively high price in combination with taste is not (yet) a persuasive means to change behaviour. The taste of meat is considered as the main motive for consuming meat. The results show that the taste of vegetarian alternatives is still lagging compared to meat. It could be concluded that if the taste and price of vegetarian alternatives have an advantage over meat, it is more likely that flexitarians choose for a vegetarian alternative. Yet, the preference for the taste of meat is the reason why the transition to a (more) vegetarian diet is not yet positioned in the desired situation.

Another 'material' consideration to understand the intention-behaviour gap are recipes, cookbooks, meal boxes and social media. Recipes, cookbooks, meal boxes and social media are appropriate tools to help choose vegetarian options instead of meat options. However, these tools require personal effort will it be effective and an influence on the behaviour of consumers. Recipes need to be searched for, cookbooks need to be purchased or gifted, meal boxes need to be affordable and desired, and social media accounts need to be followed in order to have an influence. In fact, the use of these tools is actually already a step too far. The change towards a more vegetarian diet should not be too difficult. If there is too much effort required for expanding knowledge and thus being able to choose vegetarian options more frequently, the change will not be encouraged.

To summarize, the material element of the intention-behaviour gap consists of meat, vegetarian alternatives/meat substitutes, tools such as recipes, cookbooks, meal boxes and social media, and promotion. Meat is still preferred over most of the vegetarian alternatives/meat substitutes because of the better taste and price. Also, meat is considered as the easiest choice because it is a habit in the living system of the Dutch population. Tools can be used in order to encourage flexitarians to consume vegetarian options and change this habit, but that requires personal effort and that is considered as difficult and not convenient.

5.1.2 Competence

The results indicated that some competences required for the performance of the desired behaviour are lacking amongst flexitarians/respondents. The choice for meat is still the most comfortable choice because the respondents have the knowledge and skills for preparing meat dishes. Preparing vegetarian options is seen as more difficult and the majority of the respondents feel that they lack the skills or knowledge to be able to consume vegetarian options more frequently. The knowledge and skills are derived from other people, internet and campaigns. Other people, such as family and friends, are according to the results the main source of knowledge. The respondents learn a lot of recipes from other people and this leads to an increasing knowledge of vegetarian recipes. Also, the Dutch campaign 'Week zonder vlees' is known by the respondents as an appropriate means for developing knowledge and skills. Nevertheless, the respondents feel like they are not necessarily the target group of this campaign, because they are already too far in the transition towards a more vegetarian diet. Moreover, it merely focuses on the awareness side of lowering the meat consumption and that awareness is already present in the minds of the respondents. Despite the fact that the awareness of the consequences of meat consumption is present, the step to apply the knowledge gained through other people, internet and campaigns is hard. It seems that the habit of the consumption of meat takes the upper hand when it comes to deciding between meat or a vegetarian alternative in a meal. It is noticeable that most of the respondents automatically choose for a meal that contains meat. The deep-rooted habit is hard to overcome. However, this also differs per respondent because some have been in touch with the needed knowledge for a longer time and therefore have more interest in preparing vegetarian meals. They are more integrated in the vegetarian diet, but they still consume meat out of convenience and thus have not overcome the habitual behaviour yet.

Another reason why it is hard to translate the knowledge into actual behaviour is the amount of information that is available. When searching for information about a (more) vegetarian diet, the respondents declare that they find it difficult to judge which information is accurate. This overload on information could mean that flexitarians gain the wrong information or stop delving in information about vegetarianism. This results in the knowledge and skills not developing at all.

Also the role of the Dutch government in increasing the knowledge and skills among Dutch consumers is elaborated on. Stimulation to lower the meat consumption and choose more frequently for vegetarian options is lacking. It is important for the government to get involved in lowering the meat

consumption in the Netherlands and encourage the Dutch citizens to create awareness amongst them and motivate them to choose vegetarian options more frequently instead of meat options.

The main missing component in the competence element of the intention-behaviour gap is the influence of education on a young age about nutrition, health and sustainability of food. It is indicated by the respondents that they feel like they should have been educated about the consequences of meat consumption. The respondents believe that this will increase the awareness of these consequences from a young age which creates other habits in their living system. That is, consuming vegetarian options more frequently instead of meat options. Consequently, the habit of consuming meat every day possibly disappears and is replaced by vegetarian being the norm. However, this is the ideal situation and further research on nutrition, health and sustainability education is needed to understand the effects on the shift towards a more vegetarian diet.

5.1.3 Meaning

The consumption of meat is integrated as a habit into the living system of flexitarians. They grew up with the idea that consuming meat every day was normal. Still, the taste of meat is seen as an important element of a meal and is still very much enjoyed by flexitarians. Flexitarians consume vegetarian options more frequently to change this behaviour and avoid falling back into habitual behaviour. The awareness of the negative consequences of meat consumption has grown and that contributes to the shift towards flexitarian diets. The main reasons for flexitarians to consume vegetarian options are environment and climate, health, and animal welfare. A combination of these reasons is also among the possibilities for lowering the meat consumption. The concerns about climate, health and animal welfare are essential for the change towards a more vegetarian diet.

Nevertheless, the intention-behaviour gap still exists and it is important to understand the contribution of the meaning of consuming vegetarian options to this intention-behaviour gap. The choice to eat vegetarian is experienced as difficult by the respondents. This difficulty translates in not being able to decide what they are going to prepare for dinner and automatically picking up meat in the supermarket. In addition, choosing to eat vegetarian around people who eat meat is experienced as an inconvenience. The feeling of being a burden to other people and them needing to adjust to your preferences is not encouraging for flexitarians to continue choosing to eat vegetarian around other people. In short, the meaning element of the intention-behaviour gap of consuming vegetarian options more frequently can be explained as follows: the habitual behaviour of consuming meat and the positive feeling about the taste of meat are the starting points for the intention-behaviour gap. Also, the shift for making the vegetarian option the more standard option asks a lot of effort. The difficulty of choosing what to eat and the influences of other people who do not eat vegetarian are an explanation for the intention-behaviour gap to the desired behaviour of choosing vegetarian options more frequently. Consuming vegetarian options is not as integrated in the living system as meat. Changing this habitual behaviour in combination with the difficulties and (negative) influences of other people could be an explanation of the meaning element of the intention-behaviour gap.

5.2 Discussion

This research conducted an analysis to understand the intention-behaviour gap of choosing vegetarian options more frequently instead of meat options by using the social practice theory. The social practice theory is about making and breaking links between the three elements to be able to transform a certain practice. In this research, the three elements material, competence and meaning are interlinked, which means that they influence each other.

The social practice theory turned out to fit well in the aim of the research due to its broad understanding of practice. By utilizing this theory, a clear understanding of the influential factors on

choosing vegetarian options more frequently has been outlined. In the article of Hopwood et al. (2020) it was suggested that health, environment and animal rights were the main reasons to choose for a vegetarian diet in the Western Society. These findings are in correspondence with the results of this thesis. The article of Hopwood et al. (2020) lacked to elaborate on the resistance towards vegetarian diets and therefore could not provide a complete understanding of the motives of consuming vegetarian options. In this thesis, the resistance towards vegetarian diets is analyzed and resistance is mainly the result of the habitual behaviour of consuming meat. This habitual behaviour makes it difficult to develop a new system where consuming vegetarian options is more integrated. Therefore, resistance is not the correct label for this difficulty and it better could be translated to obstacles. This thesis elaborates on the obstacles that cause the intention-behaviour gap of consuming vegetarian options more frequently instead of meat options. This intention-behaviour gap, indicated by Onwezen et al. (2020), is confirmed by the results of the research. The respondents discussed that they strive to lower their meat consumption, but the obstacles and thus their habitual behaviour delay the change to a more vegetarian diet. The habitual behaviour of consuming meat is the main aspect of the intention-behaviour gap and fits in all three elements of the social practice theory.

The elaboration of Onwezen (2022) on the systemic steps to support the protein transition is taken into account by conducting the research. Though, not the complete method needed to be utilized due to it being a time consuming method and because this research only fits step 'b' of the method: *"exploring the drivers behind the specified behaviour"* (Onwezen, 2022). The first step about identifying the behaviour that requires changing is already done in many other studies. This is discussed in the introduction of this thesis. However, for future research step 'c' and 'd' are interesting to look into in order to develop ways to close the intention behaviour gap and assessing the impact this change has on the entire food system.

5.2.1 Limitations and recommendations for future research

Although this study provided an understanding of the intention-behaviour gap of choosing vegetarian options more frequently instead of meat options, these results naturally come with a number of limitations that should be borne in mind. In this paragraph the recommendations for future research are also elaborated on.

First, the main focus of the study was merely on consumer behaviour aspects. The added value of a deeper consideration of structural forces such as power, government and other institutions could be interesting. Although, power and government were considered during the interview and some results relate to these forces, a deeper understanding of the impact of these aspects is lacking. Therefore, future research can contribute on this deeper understanding by researching the influence of power on choices of flexitarians. Also, the meat lobby and the hidden influences on decisions of the government should be researched in order to be able to establish a full profile of the required developments to make the shift to a more vegetarian/sustainable diet.

Furthermore, the theoretical framework provided two theories. The theory of planned behaviour and the social practice theory. The theory of planned behaviour was used for understanding the approach to the behavioural intention. Eventually, the theory of planned behaviour served mainly as support for describing the intention to consume vegetarian options more frequently and therefore it is not elaborated on in the results section and conclusion of this thesis. The social practice theory was a fitting approach for the research. The links between the three elements of the social practice theory are slightly superficially elaborated on due to the lack of in-depth data. Only during the interviews deeper information about the habit of eating meat was obtained. Therefore, in-depth information about the habitual behaviour of meat consumption was lacking and this resulted in not being able to fully describe the interlinkages between the elements of the social practice theory. However, the interlinkages are

described but it would have been better if there could have been a deeper elaboration on the role of the habitual behaviour combined with the three elements of the social practice theory. Nevertheless, it is clear that the habitual behaviour of consuming meat is the main aspect of the intention-behaviour gap and that it is the main obstacle for changing to a more vegetarian diet. Further research could elaborate more on this habitual behaviour by exploring its origin and deeper explaining the influence on the protein transition in general.

Additionally, interview findings might be biased to a certain extent due to the shame for their meat consumption. Since the interview respondents are aware of the consequences of meat consumption, may this be for environmental, health or animal rights, they could have adjusted their answers to what they think are desirable answers. This is called a social desirability bias which is the tendency of respondents to provide an answer in a way they think it is more socially acceptable than the actual true answer (Grimm, 2010). However, to reduce the risk of this bias influencing the results, the interview questions were asked in a non-leading and open way. It is not expected that the social desirability bias has influenced the results of this thesis. Still, it is amongst the possibilities and therefore important to mention.

The number of survey respondents were higher than expected and eventually could serve as support for the results of the interviews. The survey contained 12 questions about personal information regarding the diet of the respondents. It would have been from added value if more questions were asked about the current diet of the respondents or about their intention of lowering their meat consumption. However, this could have also been a negative development in the research because it could have exceeded the demarcation of the research. Therefore, it could be interesting to conduct a quantitative study in order to discover relations between certain variables. For example, the relationship between the average of consuming vegetarian options per week and the main reason to choose for a vegetarian option could be studied in order to receive a deeper understanding of the influences on the diet of the respondents. Even though, this kind of research should be framed differently, this quantitative research approach combined with the qualitative research approach could provide a useful overview and contribute to the development of new policies and campaigns to boost the shift to a more plant-based diet.

Lastly, this research contributes to the understanding of the intention-behaviour gap of choosing vegetarian options more frequently instead of meat options. This understanding can be build on by further research on the protein transition and especially to the development of methods to influence the elements of the social practice theory and thus be able to shift towards a (more) vegetarian diet. The different materials and competences required in order to change the meaning of consuming vegetarian options are discussed in this research. In order to make progress in the protein transition and contribute to a more sustainable and healthy way of life, the three elements of the social practice theory need to be influenced. Behaviour itself can not be changed, but the elements can be influenced in order to possibly change behaviour.

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Appendices

- Appendix 1 Survey full version (in Dutch)
- Appendix 2 Interview guide (general, in Dutch)

Appendix 1 – Survey full version (in Dutch)

Enquête beweegredenen vegetarisch eten

Beste deelnemer,

Ik ben Josine van Dijk, student Corporate Sustainability aan de Radboud Universiteit. Voor mijn master scriptie doe ik onderzoek naar de beweegredenen van Nederlandse consumenten om vegetarisch te eten. Deze enquête draagt bij aan dit onderzoek. Het invullen kost ongeveer 5 minuten.

Aan het einde van de enquête vraag ik u of u verder betrokken wilt zijn bij dit onderzoek.

Bedankt alvast voor het invullen!

* Vereist

1. Hoe vaak eet u gemiddeld vegetarisch per week?*

- A. Elke dag
- B. 5-6 keer per week
- C. 3-4 keer per week
- D. 1-2 keer per week
- E. Minder dan 4x per maand
- F. Nooit

2. Wat is uw geslacht?*

- A. Man
- B. Vrouw
- C. Overig
- D. Zeg ik liever niet

3. Wat is uw leeftijd?*

- A. <18 jaar
- B. 18-25 jaar
- C. 26-35 jaar
- D. 36-45 jaar
- E. 46-55 jaar
- F. 56-65 jaar
- G. 65+

4. Wat is uw woonsituatie?*

- A. Alleenwonend
- B. Tweepersoonshuishouden zonder (thuiswonende) kinderen
- C. Éénoudergezin
- D. Gezinshuishouden
- E. Ik woon met huisgenoten/vrienden/studentenhuis
- F. Andere

5. Hoogst voltooide opleiding*

- A. Lager onderwijs
- B. LBO/MAVO/VMBO
- C. HAVO/VWO/atheneum/gymnasium
- D. MBO
- E. HBO
- F. Universiteit
- G. Andere

6. Bepaalt u zelf uw maaltijden?*

- A. Ja
- B. Nee
- C. Soms

7. Wat is de hoofdreden dat u niet elke dag vlees eet?*

- A. Dierenwelzijn
- B. Klimaat en milieu
- C. Gezondheid
- D. De prijs van vlees/kosten
- E. Invloed van mijn omgeving
- F. Andere

8. Hoe lang eet u al minder vlees? (in jaren)*

.....

9. Hoe maakt u dagelijks de keuze tussen vlees en vegetarisch? (meerdere antwoorden mogelijk)*

- A. Ik plan vooruit in de week en wissel vlees/vis/vega af
- B. Ik heb vaste dagen waarop ik vegetarisch eet
- C. Iemand anders in mijn huishouden maakt deze keuze
- D. Ik bepaal dit aan de hand van aanbiedingen
- E. Ik bepaal dit aan de hand van het aanbod in de winkel
- F. Ik bepaal dit aan de hand van mijn eigen behoefte
- G. Ik bepaal dit aan de hand van de behoefte van de persoon/personen met wie ik eet
- H. Andere

10. Bent u bewust bezig met het consumeren van voldoende eiwitten? *

- A. Ja
- B. Nee

11. Hoe zorgt u dat u voldoende eiwitten binnenkrijgt? (meerdere antwoorden mogelijk) *

- A. Vleesvervangers (zoals groenteburger)
- B. Peulvruchten
- C. Zeewier/algen
- D. Andere dierlijke eiwitten (ei, melk, vis, etc.)
- E. Andere

12. Welke aspecten zouden u kunnen helpen om minder vlees te eten? (meerdere antwoorden mogelijk)*

- A. Educatie
- B. Prijs van producten
- C. Mijn gezondheid
- D. Promotie van minder vlees eten
- E. Promotie van vegetarische mogelijkheden
- F. De smaak van vegetarische mogelijkheden
- G. Ik wil niet minder vlees gaan eten
- H. Andere

13. Zou u verder mee willen werken aan dit onderzoek in de vorm van een interview? *

- A. Ja
- B. Nee

14. Op welk e-mailadres kunnen we u bereiken? *

.....

15. Op welk telefoonnummer kunnen we u bereiken?

.....

Bedankt voor uw deelname!

Bedankt voor uw deelname aan deze enquête. Bij verdere vragen kunt u contact opnemen met Josine van Dijk via josine.van.dijk@ext.misset.com

Appendix 2 - Interview guide (general, in Dutch)

Interview guide definitief

Informatie van interviewee:

Naam

Leeftijdscategorie

Geslacht

Introductie:

Bedankt voor uw tijd. Ik zal nog een keer uitleggen waarom ik dit interview doe. Ik studeer Environment & Society Studies aan de Radboud Universiteit en ik doe onderzoek naar de beweegredenen van Nederlands consumenten om vegetarisch te eten/minder vlees te consumeren om inzicht te krijgen in hun consumentengedrag in de eiwittransitie. Dit interview is een aanvulling op de enquête die u heeft ingevuld.

Bent u bekend met de term flexitariër? (Uitleg: *“een flexitariër is iemand die niet elke dag vlees eet, maar geen vegetariër is. Dit begint vanaf minimaal 1 dag per week tot 6 dagen per week vegetarisch eten”*)

Dit is een semi-gestructureerd interview. Dit betekent dat ik vragen heb bedacht, maar er ook veel ruimte is om zelf te vertellen of inbreng te hebben in het interview. Als u denkt dat er iets van belang is voor het onderzoek, dan is daar uiteraard ruimte voor. Het interview zal ongeveer 60 minuten duren. Ik zou dit interview graag willen opnemen als dat voor jullie akkoord is. U blijft anoniem, er worden geen namen genoemd in het verslag. De enige personen die mijn scriptie zien, zijn mijn scriptiebegeleider en mijn stagebegeleider. Als u een vraag niet wilt beantwoorden of u wilt het interview stoppen dan is dit mogelijk. Als er vragen of bezwaren zijn dan hoor ik dat graag.

1. Zou u kunnen uitleggen waarom **(antwoord enquête)** de hoofdreden is dat u flexitariër bent?
 - a. Zijn er ook nog andere redenen waarom u **(aantal keer - antwoord enquête)** vegetarisch eet?
 - b. Zou u willen vertellen waarom u **(aantal keer - antwoord enquête)** vegetarisch eet?
 - c. Welke factoren hebben meegespeeld in uw (bewuste) keuze om niet alle dagen vlees te eten?
2. Wat is de reden dat u niet geheel vegetarisch bent?
 - a. Je eet nu **(... jaar - antwoord enquête)** minder vlees. Is dit altijd hetzelfde patroon geweest in deze **(... jaar - antwoord enquête)**? Waarom wel niet?
3. Was u er voordat u meedeed aan de enquête bewust van dat u onder de categorie flexitariërs valt?
 - a. Ja: Bent u bewust flexitariër geworden (dus minder vlees gaat eten dan u eerder deed)?
 - b. Ja: Hoe heeft u ‘actie’ ondernomen om flexitariër te worden/minder vlees te gaan eten?
 - c. Nee: Wat vindt u van de term flexitariër?
4. Eet iedereen in uw huishouden niet elke dag vlees?
 - a. Zo ja, vegetarisch of flexitarisch?
 - b. Hoe vaak eten zij vlees?
 - c. Deden zij dit (flexitarisch eten) eerder dan u?
 - i. Bent u door hen beïnvloedt bij het maken van uw keuze/bij het krijgen van uw eetpatroon?
5. Hoe zit het met uw omgeving, hoeveel mensen in uw directe omgeving zijn ook flexitariërs?
 - a. Hoe merkt u dat in uw leven/eetpatroon?
 - b. Hebben zij invloed op uw eetpatroon?

- c. Doorvragen: leg uit waarom en hoe?
6. U stelt dat u de keuze maakt tussen vlees en vegetarisch (**antwoord(en) enquête**), kunt u dit wat meer toelichten?
 - a. Waarom, hoe gaat dit in zijn werk?
7. Hoe bepaald u wat/welke maaltijd u gaat eten? (tool, recepten, omgeving, etc.?)
8. Eet u meer vlees in thuissituaties of als u buiten de deur eet?
 - a. Waar is dit dan? Is dit dan in de horeca, op bezoek, vakantie, etc.?
9. In welke mate vindt u het belangrijk dat plantaardige alternatieven op het 'echte' vleesproduct lijken?
 - a. Is het aanbod hiervan een reden om meer vegetarisch te eten?
 - i. Waarom?
 - b. Wat zijn uw meest geconsumeerde vleesvervangers?
 - i. Waarom?
10. Zorgen mensen in uw omgeving ervoor dat u minder vlees eet? (dus ook bedrijven)
 - a. In welke zin? (mensen in omgeving, campagnes, in de winkel)
11. In welk opzicht heeft de overheid een rol bij de vleesconsumptie van Nederlandse consumenten?
 - a. Heeft dit een rol ja of nee?
12. U geeft aan de volgende aspecten: (**antwoorden enquête**) een hulpmiddel te vinden om (nog) minder vlees te eten, waarom vindt u dat? (per keuze toelichten)
 - a) (**antwoorden enquête**)
13. Weet u wat de eiwittransitie is? (Uitleg: *"Met de term eiwittransitie wordt de verschuiving van de consumptie van dierlijke eiwitten naar (meer) plantaardige en alternatieve eiwitten bedoeld. Dit is beter voor de gezondheid en het milieu."*)
 - a. Wat vindt u ervan dat er steeds meer aandacht is voor de consumptie van plantaardige eiwitten?
 - b. Hoe bent u hiermee bezig?
14. Wat weet u over de gezondheid van voeding?
 - a. Wat vindt u belangrijk aan de gezondheid van voeding?
 - b. Gericht op het vervangen van vlees?
 - c. Hoe bent u hiermee bezig in uw dagelijks leven?
15. Wat weet u over de duurzaamheid van voeding?
 - a. Wat vindt u belangrijk aan de duurzaamheid van voeding?
 - b. Gericht op het vervangen van vlees?
 - c. Hoe bent u hiermee bezig in uw dagelijks leven?
16. Kennis over het vervangen van vlees
 - a. Welke alternatieven voor vlees nuttigt u vooral?
 - b. Waarom deze alternatieven? / Hoe heeft u voor deze alternatieven gekozen?
 - c. Zijn er andere alternatieven die u zou willen proberen/nuttigen?
 - d. Is er iets dat u mist in de huidige alternatieven?
 - i. Zo ja, wat dan?
17. Wat zou u nog in willen leren over de eiwittransitie/vegetarisch eten om uw kennis te verbreden?
18. Hoe denkt u dat educatie een rol kan spelen in de eiwittransitie/het verminderen van de vleesconsumptie?
 - a. Wat zal voor u een goed hulpmiddel kunnen zijn?

19. Bent u tevreden met uw balans in vegetarisch en vlees eten?
 - a. Zou u dit kunnen toelichten?
20. Hoe (moeilijk vindt/ervaart) u het om minder vlees te eten?
 - a. Uitleg
21. Zou u minder vlees willen eten?
 - a. Waarom?
 - b. Waarom lukt dit niet/wel volgens u?
 - c. Intention-behavior gap?
 - i. Wat zijn hier de redenen van?
 - ii. Bent u hier bekend mee?
22. Zou u in een korte samenvatting kunnen uitleggen wat u denkt dat belangrijk is voor de eiwittransitie en wat hierin uw eigen bijdrage kan zijn?
 - a. Wat heeft u hiervoor nodig om deze bijdrage te kunnen leveren?

Afsluiting

Dit was het interview. Heeft u nog vragen of toevoegingen?

Nogmaals bedankt voor uw tijd. Ik waardeer dit heel erg. Ik ga met de informatie aan de slag en ik zal mijn uiteindelijke resultaten ook met u delen. Zou u dat willen? Als ik nog verdere vragen heb, zou ik dan contact met u op mogen nemen? Zijn er verder nog vragen voor mij?

Hoewel het interview anoniem is, wil ik u erop wijzen dat het mogelijk is om antwoorden op vragen te schrappen. Heeft u hier behoefte aan?

Nogmaals bedankt.