The effect of promotions on meal-kits across channels

How purchase intention for meal-kits is influenced by channel type and promotions



Name: Lieke Vos Student number: s1030879 Subject: meal-kits and promotions Supervisor: Marleen Hermans Second examiner: Nanne Migchels

Abstract

The aim of this study is to provide new insights in the effect of channel type on purchase intention for meal-kits and the effect of promotions on this relationship. The research question in this study is: *In which way do promotions affect consumer purchase intention regarding meal-kits across channels?*

To answer this research question an online survey was conducted amongst Dutch respondents. In this survey an introductory text was shown to respondents, respondents subsequently filled in the questionnaire including questions about purchase intention with regard to the meal-kit shown. Thereafter, data was analyzed using multiple regression analysis in SPSS. However, no significant results were found, therefore no support has been found for the hypotheses in this study.

To conclude, the results show that channel type does not have an influence on purchase intention for meal-kits. There was no difference in purchase intention for meal-kits in offline versus online channels or meal-kits from supermarkets or specialized suppliers. In addition, promotions do not have a moderating role on the link between channel type and purchase intention. Still, these outcomes are valuable for managers, as these results provide information about factors influencing purchase behavior for meal-kits.

Keywords: meal-kits, promotions, discounts, premiums, convenience food, retailing, fmcg.

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Chapter 1. Introduction

Convenience and health are big trends in today's food industry (Brunner, Siegrist, & Van der Horst, 2010; Rabobank, 2019). Meal-kits have become popular as they cater to these needs for fast and fresh (Distrifood, 2018a). Meal-kits are boxes that consist of fresh, pre-packaged ingredients with a recipe included (Distrifood, 2018b), which help consumers save time and effort on the preparation of meals (Hertz & Halkier, 2017).

The first meal-kit is originated in Sweden and was launched in 2007 (Food Box HQ, n.d.). The meal-kit market was growing in popularity, some even called it 'meal-kit mania', however the market is slowly moving into a more mature life cycle phase (Nielsen, 2018). During this phase sales will peak and ultimately decline, competition will increase and brands will try to differentiate to maintain or increase their market share (Lumen, n.d.). As a result, a lot of heterogeneity exists among meal-kits that are being offered to consumers nowadays. Meal-kits are offered by supermarkets such as Albert Heijn and specialized suppliers such as HelloFresh, who offer their meal-kits in both offline and online shopping channels. Hence, consumers can choose between shopping offline or shopping online for meal-kits. In the beginning of 2018 online meal-kit suppliers sold 60% more compared to the year before (Distrifood, 2018a). Although most sales still take place online, offline is growing at a high level (Nielsen, 2019). Next, consumers can choose between shopping at supermarkets or shopping at specialized suppliers. The number of households that buy meal-kits from specialized suppliers has lately been decreasing (Distrifood, 2018b). Meanwhile, supermarkets start to sell more meal-kits, with Albert Heijn as one of the key players (Distrifood, 2018b). Hence, a shift in shopping channels is taking place. As competition is increasing, retaining customers seems to be one of the problems meal-kit suppliers in general are facing nowadays (Marketwatch, 2018). The market becomes saturated (Lumen, n.d.). Hence, more and more is spent on promotional actions to consumers (Distrifood, 2018a, Nielsen, 2016). Both specialized suppliers and supermarkets invested a lot in marketing recent years (De Tijd, 2019), for instance, HelloFresh tries to acquire customers by offering heavy discounts (De Tijd, 2018). Furthermore, promotions efforts increased in both offline and online channels, for instance, nearly ten million was spent on advertising for meal-kits in online channels (Nielsen, 2016).

Although sales have been increasing, the meal-kit market is becoming more mature (Nielsen, 2018). Shopping channels are changing rapidly and competition is increasing (Black, Lockett, Ennew, Winklhofer, & McKechnie, 2002; Business Insider, 2019). While meal-kits are 'convenient', they are not fully viewed as 'convenience food' (Hertz & Halkier, 2017; Lindt,

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2019). Hence, insights from studies with regard to 'convenience food' may not apply to mealkits. Despite the increased use of promotional activities in the category we lack knowledge on how promotions affect purchase intention for meal-kits across channels (offline/online and supermarket/specialized). Promotions can be split up into monetary promotions, such as discounts, and non-monetary promotions, such as premiums (Gedenk, Neslin, & Ailawadi, 2006). The following research question will be addressed:

In which way do promotions affect consumer's purchase intention regarding meal-kits across channels?

1.1 Theoretical contributions

There is already quite some literature about convenience foods (e.g. Brunner et al., 2010; Candel, 2001; Hertz & Halkier, 2017) in which drivers of convenience food consumption have been examined. However, there is only little written about meal-kit consumption and purchase behavior with regard to meal-kits, especially across different channels (Lindt, 2019). Meal-kits are typically classified as convenience foods in literature as they save time on certain elements in preparing meals. However, meal-kits are somewhat different from convenience foods as they do not save time on all dimensions related with the preparation of meals. Hence, meal-kits are not fully considered as 'convenience foods' (Hertz & Halkier, 2017). As other products can be more 'convenient', Candel (2001) recommends using 'convenience foods' as a relative construct. This study adds to literature in two ways.

First, since there is a lot of heterogeneity among meal-kits, this study aims to examine the influence of channel type (offline/online and supermarket/specialized) on purchase intention. First, meal-kits suppliers are introducing meal-kits in different channels and even though most sales still takes place online, offline is growing strongly (Nielsen, 2019). Meal-kits are available offline and online, consumers can purchase meal-kits in traditional stores and via internet (e.g. Jumbo offline (in-store), Jumbo online, HelloFresh offline (at Plus Supermarkets), HelloFresh online, Albert Heijn offline (in-store), Albert Heijn online). A plethora of literature (e.g. Arce-Urriza, Cebollada, & Tarira, 2017; Brashear, Kashyap, Musante, & Dontu, 2009; White & Manning, 2001) has argued that offline shoppers tend to value other attributes compared to online shoppers. In addition, there is limited information about consumer food-buying behavior, especially in online channels (Liang & Lim, 2011). Second, meal-kits are offered by suppliers who are specialized in meal-kits and by supermarkets who have a broader assortment. Hansen (2003) argues that drivers for purchasing products at specialized suppliers are different compared to drivers for purchasing at supermarkets. While a shift in shopping channels is taking place only a few studies examined a combination of channels simultaneously (Lindt, 2019). Moreover, no studies examined the relationship between channels and purchase intention for convenience food and especially for meal-kits. This study aims to investigate the relationship between channels and purchase intention, therefore this study might provide insights in the current stream of literature on food-buying behavior in different channels. It is important to study the effect of channel type (offline/online and supermarket/specialized) on purchase intention for meal-kits because information about food-buying behavior in different channels allows an improved understanding of customer segmentation and can help marketers develop marketing strategies to obtain competitive advantage (Liang & Lim, 2011).

Second, the link between channel type and purchase intention is expected to be moderated by promotions. Promotions are marketing tools used to encourage consumers to purchase certain products (Blattberg & Neslin, 1990) and can be classified into monetary promotions (discounts) and non-monetary promotions (premiums) (Büttner, Florack, & Göritz, 2015; Gedenk et al., 2006). Previous studies have examined the effect of promotions, and in particular monetary promotions, on purchase intention in retailing (e.g., Arce-Urriza et al., 2017; White & Manning, 2001). However, the effect of promotions on 'convenience foods' in retailing has not been widely studied yet (Arce-Urriza et al., 2017). Feichtinger, Luhmer and Sorger (1988) found that consumers buying convenience food are often not sensitive to price and promotions. Nevertheless, while meal-kits are often considered being less convenient, meal-kit consumers might differ from consumers buying general 'convenience foods' with regard to price and promotion sensitivity. Furthermore, although promotions often lead to increased category consumption (Hawkes, 2009), the impact of promotions might differ per channel. Currently, only limited information is available about how promotions influence channel choice (Hawkes, 2009). Moreover, this study aims to investigate the effect of channel type on purchase intention for meal-kits while promotions are in place. Therefore, this study might provide new insights in the current stream of literature on promotions in retailing. Furthermore, previous studies (e.g. Arce-Urriza et al., 2017; Lam, Vandenbosch, Hulland, & Pearce, 2001) focused in particular on monetary promotions and argued that these can improve store performance by attracting traffic and transforming visitors into shoppers (Lam et al., 2001). On the other hand, only limited studies have examined the effect of non-monetary promotions (Hawkes, 2009). So, no attempts have been made to examine how purchase intention per channel type is influenced by promotions, especially for non-monetary promotions. However, it is important to analyze the effects of promotions to be able to effectively use promotions as a tool across channels (Büttner et al., 2015). Information about the effect of channel type on purchase intention while moderated by

promotions might provide insights in the efficiency of promotions per channel. In addition, information might provide insights in 'store-switching' behavior of consumers.

1.2 Structure of the thesis

In the second chapter of this thesis the central concepts of this study are described on the bases of previous studies, the second chapter ends with a set of hypotheses and the conceptual model. The third chapter comprises the methodology of this study, including research design, operationalization, methodology and research ethics. Subsequently, in the fourth chapter the results of this study are discussed. Finally, the fifth chapter presents the conclusion and discussion, which also includes implications for theory, management and future research.

Chapter 2. Theoretical background

In this paragraph the main concepts of this study will be discussed in more depth. First, convenience foods and meal-kits will be discussed in detail. Next, a theoretical overview of promotions will be given and finally detailed information about consumer characteristics and behavior in different channels will be provided.

2.1 Convenience foods and meal-kits

Convenience products are products that allow minimizing time and effort needed for cooking (Candel, 2001). Hence, convenience-orientation can be defined as: "the degree to which a consumer focuses exclusively on saving time and effort" (Wieseke, Kolberg, & Schons, 2016, p. 476). Furthermore, Traub and Odland (1979, p. 3) argue: ". . . the term convenience food refers to fully or partially prepared foods in which a significant amount of preparation time, culinary skills, or energy inputs have been transferred from the home kitchen to the food processor and distributor." In this study meal-kits are classified as convenience foods as they save time on certain elements in preparing meals. Meal-kits are classified as convenience food as they reduce time (pre-packaged ingredients), mental effort (recipe included) and physical effort (contains all ingredients necessary for the meal-preparation process). Other products can be more convenient, hence convenience foods will be viewed as a relative construct accordingly to Candel (2001).

2.1.1 Convenience food

Previous research in this field focused mainly on the identification of drivers for purchasing convenience food (e.g. Brunner et al., 2010; Candel, 2001; Hertz & Halkier, 2017). Brunner et al. (2010) identified drivers that are connected to convenience food consumption. Cooking skills, health orientation, knowledge of nutrition and avoiding waste have a negative influence on convenience food consumption according to this study. This means that consumers who are very aware of their health or consumers who enjoy cooking will consume less convenience food products (Brunner et al., 2010). Time scarcity is seen as one of the main drivers of the transformation of consumers buying behavior to quick, efficient or convenient choice options (Jabs & Devine, 2006; Moisio et al., 2004). Furthermore, previous studies indicate that there is some unclarity about the term convenience foods, mainly due to diversification in the category in recent years (Hertz & Halkier, 2017). People often have an unfavorable image to convenience products (Costa, Schoolmeester, Dekker, & Jongen, 2007; De Boer, McCarthy, Cowan, & Ryan, 2004) as consumers cannot manage the food preparation process, which may evoke anxiety about food origination and quality (Carrigan, Szmigin, & Leek, 2006). Consumers buying convenience

foods are often not price sensitive because they are prepared to pay extra in exchange for convenience, convenience foods have inelastic demand (Feichtinger, Luhmer, & Sorger, 1988).

2.1.2 Meal-kits

Meal-kits are generally classified as 'convenience foods' in literature (e.g. Brunner et al., 2010; Hertz & Halkier, 2017). Meal-kits save time on for example planning and shopping, however there are some differences compared to general 'convenience foods' (Hertz & Halkier, 2017). First, certain activities, such as the cooking itself, are not eliminated from the process as mealkits still contain fresh products (Hertz & Halkier, 2017). Furthermore, meal-kits contain more nutrients compared to other convenience foods as these contain fresh ingredients and encourage eating various kinds of food (Hertz & Halkier, 2017). Meal-kits are boxes that consist of ingredients with a recipe included and are traditionally offered by specialized suppliers such as HelloFresh (Distrifood, 2018b). However, supermarkets are catching up and compete with specialized suppliers, which is called intertype competition (Hansen, 2003). Supermarkets offer meal-kits both offline and online, while specialized suppliers mainly offer meal-kits online but recently also introduced meal-kits offline (in supermarkets). Hence, another distinction in channels can be made as meal-kits are offered in both offline and online channels. Furthermore, offline meal-kits are primarily offered as 'single' boxes, while online meal-kits are primarily offered as subscriptions for multiple boxes. Lindt (2019) indicated that one of the barriers for buying meal-kits is the obligation to subscribe, which therefore typically applies to online mealkits. Other barriers are the price and the preparation time according to consumers (Khan & Sowards, 2018; Lindt, 2019). Furthermore, identified drivers for purchasing meal-kits are convenience, variation and inspiration (Drost, Van der Wal, & Baas, 2015).

2.2 Promotions

Promotions are a marketing tool applied by producers and retailers to maximize sales (Gedenk et al., 2006, p. 345). All definitions with regard to promotions have in common that promotions are temporary marketing strategies implemented to influence consumer behavior (e.g. Blattberg & Neslin, 1990). Previous studies in this field focused mainly on the effects of promotions on for example sales and developing techniques to measure these effects (Gedenk et al., 2006). Gedenk et al. (2006) differentiate between short-term effects and long-term effects of promotions, short-term effects happen while the promotion is active while long-term effects occur after promotions took place. Previous studies found that consumer promotions, especially monetary promotions, are an important element in competitive dynamics for retailers (Ailawadi, Beauchamp, Donthu,

Gauri, & Shankar, 2009). Promotions can improve store performance by reaching store visitors while making purchase decisions (Gedenk et al., 2006) and transform visitors into shoppers (Lam et al., 2001). Hence, promotions are used to obtain and retain consumers and to encourage consumers to buy certain products which can result in sales volume growth (Blattberg & Neslin, 1990; Chen, 2004). Moreover, promotions are an important factor in explaining consumer purchase behavior (Arce-Urriza et al., 2017). Promotions can influence purchase intention in a positive way (Ririn, Rahmat, & Rina, 2019).

Previous studies classify promotions into two kinds: monetary promotions, such as discounts, and non-monetary promotions such as advertisements, samples or premiums (Büttner et al., 2015; Gedenk et al., 2006). In this study both types of promotions, monetary and nonmonetary, will be included. Temporary price reduction (TPR), also referred to as discounts, is a form of monetary promotions which is most often used (Gedenk et al., 2006). Consumers prefer discounts for expensive products and high-risk products as they have a lower urge to build up inventory for these kind of products (Lowe, 2010; Sinha & Smith, 2000). Next, non-monetary promotions can be split up into 'supportive' promotions and 'true' promotions like premiums or sampling (Gedenk et al., 2006). Moreover, 'supportive' promotions are often used in combination with monetary promotions, however they can also be used without a monetary promotion (Gedenk et al., 2006). Examples of 'supportive' promotions are advertisements and displays. Both types, monetary and non-monetary promotions, may have varied effects on buying behavior (Srinivasan & Anderson, 1998). Büttner et al. (2015, p. 172) conclude: "monetary promotions primarily provide utilitarian benefits such as monetary savings, more quality for the same price or reduction in search costs. Non-monetary promotions, on the other hand, provide primarily hedonic benefits, such as entertainment . . .". Utilitarian benefits are described as effective, helpful, functional and practical, while hedonic benefits are described as exciting, fun, delightful and enjoyable (Yim, Yoo, Sauer, & Seo, 2013). Hence, people with experiential shopping orientations will be more inclined to choose for a non-monetary promotion, compared to consumers who are more task-oriented. Besides, task-oriented consumers are more inclined to choose for a monetary promotion, compared to experiential-oriented consumers (Büttner et al., 2015). Non-monetary promotions can arouse positive and favorable associations about brand personalities and link these to the brand, they can help in differentiating a brand from its competitors (e.g. Mela, Gupta, & Jedidi, 1998; Chu & Keh, 2006; Palazón-Vidal & Delgado-Ballester, 2005). The influence of non-monetary promotions on the attractiveness of an offer is generally lower compared to the impact of monetary promotions (Chandon et al., 2000; Palazón & Delgado-Ballester, 2011). Also, there is evidence that some types of non-monetary promotions

(supportive promotions) may be interpreted by consumers as signals for price cuts, even when these are not accompanied by an actual monetary promotion. This could be explained because the two are closely linked in consumers' minds (Gedenk et al., 2006).

Price sensitive consumers are often more sensitive for promotional variables such as price cuts as price sensitivity is often intertwined with promotion sensitivity (Shankar & Krishnamurthi, 1996). Subsequently, consumers shopping offline are usually more sensitive to promotions compared to consumers shopping online (Andreeva, Cortinäs, & Elorz, 2010; Brynjolffson & Smith, 2000; Vakratsas & Bass, 2002). Promotion effects were significant offline, however effects were not significant online (Arce-Urriza et al., 2017). Arce-Urriza et al. (2017) argue that effects are not significant online as consumers shop here mainly for convenience.

2.3 Shopping channels

Although meal-kits are traditionally sold through online channels, offline sales is growing at high speed (Packaged Facts, 2018; Nielsen, 2019). In addition, supermarkets start to sell more meal-kits (Distrifood, 2018b), while specialized suppliers are losing market share (Distrifood 2018b). Hence, the scope of shopping channels available for consumers has been increasing, next to the increase in competition between channels (Black et al., 2002). Channel choice can be determined by the utility of a channel with respect to consumer preferences for attributes and the perceived performance on these attributes (Sonderegger-Wakolbinger, Stummer, 2015). This choice is influenced by consumer characteristics, product characteristics, channel characteristics and the reputation of the organisation or brand (Black et al., 2002). Furthermore, two shopping orientations can be distinguished, shoppers driven by utilitarian dimensions are often very task-focused while shoppers driven by hedonic dimensions often have a more experiential shopping orientation (Büttner et al., 2015). First, consumer behavior in offline versus online retailing will be discussed. Next, differences between supermarkets and specialized suppliers will be discussed.

2.3.1 Offline versus online

There is quite some literature about differences between offline and online retailing and consumer behavior across these channels (e.g. White & Manning, 2001, Arce-Urriza et al., 2017). Previous studies found that online shoppers are often moved by utilitarian dimensions and hedonistic dimensions (Pappas, Kourouthanassis, Giannakos, & Lekakos, 2017) and tend to seek convenience (Brashear et al., 2009). In addition, consumers with high convenience motivation have higher intentions to purchase online food services according to Yeo, Goh and Rezaei

(2017). Online shopping is quicker compared to offline shopping, to fill a 12-item basket consumers spent twenty minutes in offline stores compared to approximately eleven minutes in online stores (Anesbury, Nenvcyz-Thiel, Dawes, & Kennedy, 2016). Furthermore, consumers tend to prefer online platforms as shopping mediums as this makes shopping from their own houses possible whenever they want (Jiang, Yang, & Jun, 2013; Yeo et al., 2017). Online shopping is considered useful because it helps consumers save time and reduce efforts (Chiu, Wang, Fang, & Huang, 2014). However, online shopping is viewed as high-risk compared to offline shopping because actual interaction with the product is eliminated from the shopping process (Thamizhvanan & Xavier, 2013). Andrews and Currim (2004, p. 72) studied differences between offline and online shoppers and found: "... online shoppers are less price-sensitive and more given to brand screening", which can be explained by their convenience-orientation (Feichtinger, Luhmer, & Sorger, 1988). Furthermore, effects of promotions differ between shoppers in offline and online environments (Arce-Urriza et al., 2017). Although consumers shopping online can easily compare offers (Yeo, Goh, Rezaei, 2017), consumers shopping offline are usually more sensitive to promotions (Andreeva, Cortinäs, & Elorz, 2010; Brynjolffson & Smith, 2000; Vakratsas & Bass, 2002).

2.3.2 Supermarkets versus specialized suppliers

Meal-kits are offered by both supermarkets and specialized suppliers. Specialized suppliers generally trade with a single product category, while supermarkets generally trade with multiple product categories (Hansen, 2003; Huddleston, Whipple, Mattick, & Lee, 2009; Stern & El-Ansary, 1988). Previous studies mainly focused on the competitiveness of specialty stores when competing with supermarkets (Hansen, 2003) and customer perceptions with regard to store attributes (Huddleston et al., 2009). Huddleston et al. (2009) found that consumers shop at specialty stores mainly for the quality and freshness of products. Furthermore, customer perceptions of the assortment and service provided are often higher in specialty stores (Huddleston et al., 2009). Products offered in specialty stores are often not available in conventional supermarkets (Huddleston et al., 2009), however the line between supermarkets and specialty stores is blurring (Retailtrends, 2016; The Food Institute, 2015). Blurring implies fading of lines between for example traditional retail and specialty stores or the catering industry (Retailtrends, 2016; The Food Institute, 2015). For example, specialized suppliers (e.g. HelloFresh) recently started to offer their products at supermarkets (Plus Supermarkets). In addition, due to the pandemic (Covid-19) blurring has been increasingly visible (Grocery Dive,

2020). Furthermore, customers shopping at specialty stores are found to be less price-sensitive compared to customers shopping at supermarkets (Hansen, 2003).

2.4 Conceptual model

This study focuses on purchase intention for meal-kits across channels (offline versus online and supermarket versus specialized). In this dependence relationship, channel type is the independent variable which influences the dependent variable purchase intention. Promotions can moderate the relationship among the independent and the dependent variable, this construct is divided into no promotions, monetary promotions and non-monetary promotions.

Discounts will be used to represent monetary promotions, since this form of monetary promotions is most often used (Gedenk et al., 2006). For non-monetary promotions a form of 'true' promotions will be used, this form will be used to prevent issues with interpretation as some consumers see supportive non-monetary promotions as signals for price cuts (Gedenk et al., 2006). Premiums will be used as a form of non-monetary promotions, alike previous research in fast moving consumer goods (Büttner et al., 2015). The conceptual model is shown in figure 1.



Figure 1. Conceptual model

2.5 Hypotheses

Consumers who purchase meal-kits prefer convenient and fast, but healthy and fresh ways to eat (Drost et al., 2015). Moreover, convenience is one of the key drivers for purchasing meal-kits (Drost et al., 2015). Therefore, it is assumed that consumers who purchase meal-kits look primarily for convenience throughout the entire customer journey. Consumers do not only want to save time and effort on preparing the foods and thinking about a recipe, they also want to save time and effort on purchasing products.

Channel choice is determined by the utility of a channel with respect to consumer preferences for attributes and the perceived performance of these attributes (Sonderegger-Wakolbinger, Stummer, 2015). Therefore, channel choice for meal-kit consumers will be determined by the utility of the channel with respect to convenience, as this is an important element for consumers purchasing meal-kits (Drost et al., 2015). Yeo, Goh and Rezaei (2017) found that consumers with higher convenience motivation will have higher intentions to purchase online food services. Furthermore, Chocarro, Cortiñas and Villanueva (2013) found that time pressure has a positive effect on the probability of shopping online for low involvement purchases such as food. Consumers shopping online are more convenience oriented compared to consumers shopping offline, hence convenience is an important driver to shop online (Brashear et al., 2009; Andrews & Currim, 2004). Shopping online is beneficial to meal-kit consumers as online shopping helps reducing time and effort needed for the meal preparation process, for instance, time to find products or to fill a basket is shorter and availability of ingredients is generally known. Furthermore, shopping can be planned ahead. Meal-kits offered in online channels often contain meals for multiple days, which reduces the mental effort needed for mealplanning. Thus, we expect that purchase intention is higher for meal-kits in online channels as compared to offline channels as consumers look for convenience in all phases of the customer journey. Therefore, it is assumed that the effect of offline on purchase intention is weaker compared to the effect of online on purchase intention.

H1: purchase intention for meal-kits is lower in offline channels than in online channels.

One of the barriers for buying meal-kits is the obligation to subscribe (Lindt, 2019). The disadvantage of subscription models is that consumers miss flexibility as consumers often have to be at home when the meal-kit is delivered. Besides, subscriptions cannot easily be adapted to for instance the amount of meals per week (Lindt, 2019). Less than forty percent rate these

subscriptions as 'flexible' (ING Economics Department, 2018). Both supermarkets and specialized suppliers offer meal-kits for comparable prices and ingredients. However, meal-kits offered by traditional supermarkets are often not bound to subscription models and can be more easily adapted. On the other hand, specialized suppliers such as HelloFresh typically use a subscription model for purchasing meal-kits. Consumers are hesitant concerning subscription models for tangible goods, many consumers do not think these subscriptions are appealing (ING Economics Department, 2018). In addition, supermarkets offer a broader assortment to consumers compared to specialized suppliers. Consumers can shop for multiple products at supermarkets, which could result in a feeling of increased flexibility and convenience.

Channel choice is determined by the utility of a channel with respect to consumer preferences for attributes and the perceived performance of these attributes (Sonderegger-Wakolbinger, & Stummer, 2015). Because flexibility is an important attribute for consumers who purchase meal-kits and supermarkets are more able to deliver flexibility it is assumed that purchase intention (for the first box) is higher for meal-kits from supermarkets compared to mealkits from specialized suppliers. Therefore, it is expected that the effect of supermarket on purchase intention is stronger compared to the effect of specialized supplier on purchase intention.

H2: purchase intention is higher for meal-kits from supermarkets than for meal-kits from specialized suppliers.

Consumers buying 'convenience foods' in general are often less price sensitive (Feichtinger, Luhmer, & Sorger, 1988). Consumers are prepared to pay extra in exchange for convenience, hence convenience foods have inelastic demand (Feichtinger, Luhmer, & Sorger, 1988). Because meal-kits are not fully considered as 'convenience foods' (Hertz & Halkier, 2017), meal-kits are likely to have more elastic demand and consumers are expected to be more price sensitive. Subsequently, price sensitive consumers are often more sensitive to promotions according to Shankar and Krishnamurthi (1996). Furthermore, Ririn, Rahmat and Rina (2019) found that promotions can influence purchase intention in a positive way.

Andrews and Currim (2004, p. 72) found that customers shopping online are less price sensitive compared to customers shopping offline, this can be explained by their convenience orientation (Feichtinger, Luhmer, & Sorger, 1988). Since consumers prefer to shop online because of time-constraints and convenience, these factors also influence subsequent purchasing behavior (Arce-Urriza et al., 2017). Hence, consumers shopping online are less likely to seek out promotions, instead they might use automatic tools to fill their basket (Arce-Urriza et al., 2017). Subsequently, previous research on the effects of promotions in shopping channels stated that consumers shopping offline are usually more sensitive to promotions (Andreeva et al., 2010; Brynjolffson & Smith, 2000; Vakratsas & Bass, 2002). The effect of promotions was significant in offline channels, however the effect was not significant in online channels since consumers shop here primarily for convenience and saving time (Arce-Urriza et al., 2017).

All in all, consumers buying meal-kits are expected to be more sensitive to promotions compared to consumers buying 'convenience foods' in general. In addition, consumers shopping offline are expected to be more sensitive to promotions compared to consumers shopping online because of their convenience orientation. Therefore, we expect that the effect of promotions is stronger for consumers shopping in offline channels compared to the effect of promotions on consumers shopping in online channels. A visualized overview of hypothesized relations can be found in Appendix III.

H3a: the negative effect of offline on purchase intention for meal-kits is weakened by promotions.

Shoppers with experiential orientations are more inclined to choose for non-monetary promotions, non-monetary promotions provide hedonic benefits to consumers. More taskoriented consumers tend to choose monetary promotions, as monetary promotions provide mainly utilitarian benefits (Büttner et al., 2015). Consumers shopping for meal-kits often tend to seek certain attributes such as convenience, variation and inspiration (Drost et al., 2015). However, since convenience is one of the key drivers for buying meal-kits (Drost et al., 2015), utilitarian benefits are assumed being more valuable to meal-kit consumers. Consumers with high convenience-motivation see shopping as a problem-solving task and are therefore mainly driven by utilitarian dimensions (Bellenger & Korgaonkar, 1980). Therefore, the influence of monetary promotions is expected to be stronger. On the other hand, non-monetary promotions are expected to have a smaller impact on the link between channel type and purchase intention for convenience-oriented consumers. Hence, consumers are expected to have higher purchase intention to shop offline when monetary promotions are in place, while consumers are expected to have lower purchase intention to shop offline when non-monetary promotions are in place. Thus, purchase intention is expected to be higher offline for monetary promotions compared to non-monetary promotions. A visualized overview of hypothesized relations can be found in Appendix III.

H3b: the negative effect of offline on purchase intention for meal-kits is expected to be weakened more by monetary promotions compared to non-monetary promotions.

Nowadays meal-kits are offered by both specialized suppliers and supermarkets. Consumers shop at specialty stores mainly for the quality and freshness of products. Price, advertisements and favorable offers were found as less important factors for consumers shopping at specialized suppliers (Hansen, 2003). Customers are found to be less price-sensitive compared to customers shopping at supermarkets (Hansen, 2003). Subsequently, higher price sensitivity is often intertwined with higher promotion sensitivity according to Shankar and Krishnamurthi (1996).

In contrast to consumers shopping for 'convenience foods' in general, it is expected that consumers shopping for meal-kits are more sensitive to promotions. Next, consumers shopping at supermarkets are in general more sensitive to promotions compared to consumers shopping at specialized suppliers. Hence, it is assumed that promotions have an effect on the link between channel type and purchase intention for meal-kits. Moreover, it is assumed that the effect of promotions is stronger for meal-kits offered by supermarkets compared to the effect of promotions on meal-kits offered by specialized suppliers. A visualized overview of hypothesized relations can be found in Appendix III.

H4a: the positive effect of supermarket on purchase intention for meal-kits is strengthened by promotions.

Previous research on meal-kits made a comparison between attribute perceptions for different types of meal-kits and found that specialized suppliers (HelloFresh and Marley Spoon) score higher on variation and inspiration while supermarkets (Albert Heijn and Jumbo) score higher on for example value for money (Lindt, 2019). Furthermore, meal-kits from specialized suppliers are often bound to subscription models, which could have a negative impact on perceptions of flexibility and convenience. Consumers shopping at supermarkets are therefore expected to be more task-oriented compared to consumers shopping at specialized suppliers. More task-oriented consumers tend to choose monetary promotions, as monetary promotions provide mainly utilitarian benefits (Büttner et al., 2015). In addition, discounts are often most effective in competitive markets and the influence of non-monetary promotions on the alluringness of offers is generally lower compared to the impact of monetary promotions (Chandon et al., 2000; Lal, 1990; Palazón & Delgado-Ballester, 2011). Hence, consumers are expected to have higher

purchase intention to shop at supermarkets when monetary promotions are in place, while consumers are expected to have lower purchase intention to shop at supermarkets when nonmonetary promotions are in place. Purchase intention is expected to be higher at supermarkets for monetary promotions compared to non-monetary promotions. A visualized overview of hypothesized relations can be found in Appendix III.

H4b: the positive effect of supermarket on purchase intention is expected to be strengthened more by monetary promotions compared to non-monetary promotions.

Chapter 3. Methodology

In this chapter a description of how this study will be conducted is given. First, the design of this study will be discussed, followed by the operationalization of constructs and methodology. Finally, research ethics are addressed.

3.1 Design

A quantitative research method was applied to collect information about purchase intention of meal-kits across channels and the influence of promotions on this relationship. To test the formulated hypotheses an online survey-experiment has been designed, wherein the independent variables were manipulated to discover the effects on the dependent variable (Mutz, 2011). A survey was used because it facilitates gathering much information in a limited time period (Vennix, 2006). The advantage of quantitative research is the ease in analyzing differences between groups (Burns, 2006). Self-administered questionnaires (SAQ) are often used for online surveys, this instrument was also used for this study. An advantage of SAQs is the lack of interference from the researcher, respondents can fill in the questionnaire at their own speed and may feel less fear for judgement (Burns, 2006). Lavrakas (2008, p. 803) defined SAQs as: "a self-administered questionnaire (SAQ) refers to a questionnaire that has been designed specifically to be completed by a respondent without intervention of the researchers (e.g. and interviewer) collecting the data". In order to use a SAQ for an online survey two criteria should be met: appropriate phrasing and an adequate format (Lavrakas, 2008). To ensure all criteria were met and to prevent problems that may threaten validity and reliability a small pre-test was conducted. The plus-minus method was used to make sure respondents did comprehend all questions in this survey. Respondents assigned plus signs at questions they did comprehend and minus signs behind questions they did not understand (Sienot, 1997). Vannette (2015) recommends using evaluative questions when conducting a pre-test, these questions were asked in person to gain more in-depth knowledge about problems respondents may occur. To conduct the pre-test a small group of people was gathered through the private network of the researcher to fill in the questionnaire and provide feedback.

This study did consist of a 2 (offline versus online) x 2 (supermarket versus specialized) x 3 (promotions: none, monetary, non-monetary) design, which implicates that there are 12 plausible scenarios. In this study a between-subjects design was used. Respondents were allocated to one of the scenarios at random to increase external validity, each respondent was then asked the exact same questions including items measuring purchase intention. Using a between design allows for cleaner comparison and prevents biased answers because of survey-

fatigue. Using a between-design was beneficial for this study as the length of the session is shorter compared to the length of the session using a within-design, not all 12 scenarios were showed to respondents. However, individual differences can introduce error and more resources are needed (Allen, 2017).

The study was conducted in the Netherlands, to prevent misunderstandings and lower the barrier to participate the language of the questionnaire was in Dutch. Measurement scales from previous academic studies were used in this survey to ensure internal validity, the scales were initially designed in English but have been translated to Dutch. For translating the scales, a 'back translation method' was applied to establish adequate translation. This means that the questions for this survey were translated to Dutch and then translated back to English by a bilingual person afterwards (Douglas & Craig, 2007). Furthermore, existing brands were used in the survey: HelloFresh was used for specialized suppliers and Albert Heijn for supermarkets. Consumers are often already aware of these brands and their products, because both brands are popular and well known among Dutch consumers (Distrifood, 2018a, Distrifood, 2018b). Awareness of these brands can facilitate making a clear distinction between the channels, a clear distinction is important to analyze the differences in purchase intention between channels.

The questionnaire was structured as follows: the questionnaire started with a short introduction to thank the participant for filling in the questionnaire, to explain the aim of this study and to give a short description about the meal-kit. Information about research ethics such as anonymity were highlighted as well. Next, some introductory questions were asked about for example familiarity with meal-kits. Subsequently, one scenario was shown and questions about purchase intention were asked. The most important questions were put first because of the concentration of the respondent, which is often higher at the beginning. Finally, questions about gender, age and other demographic items were asked. The final questionnaire can be found in Appendix II.

Respondents for the survey were gathered via either social media platforms or personally, face to face. Convenience sampling and a cross-sectional design were applied, data was gathered at one point in time due to time limits. Collection of data was only possible in a restricted time period, since a submission date has been set up by Radboud University. With the intention of acquiring statistically significant results, the minimum sample size is 50 and preferably 100 observations according to Hair, Black, Babin and Anderson (2014). The minimal sample size for regression analysis has a ratio of five observations per independent variable (Hair et al., 2014). However, selecting a ratio of 15 observations per independent variable is preferable. Hence, we aimed for a sample size of at least 180 respondents. Participants were selected based on their

nationality (Dutch) and their age (18+ years) as it is important that respondents have sufficient power in the purchase process for groceries.

3.2 Operationalization

In this study scenarios will be used for all independent variables. To measure the effect of channel type on purchase intention two scenarios will be used per variable. The introductory texts describe whether questions with regard to meal-kits apply to online or offline channels and whether questions apply to specialized suppliers or supermarkets. The introductory texts for these scenarios can be found in Appendix II. Furthermore, to measure the effect of promotions on the link between channels and purchase intention promotions will be manipulated by showing respondents either no promotion, a monetary promotion (discount) or a non-monetary promotion (premium). In the first scenario purchase intention will be measured without any promotions. In the second scenario purchase intention will be measured moderated by a monetary promotion and in the third scenario purchase intention will be measured moderated by a non-monetary promotion. Reference prices are based on current store prices, meal-kits are available for approximately €10 per meal (for a full meal). In this study a reference price for meal-kits per meal was used to avoid vagueness with regard to the amount of meals that are offered, which can differ per channel and supplier. Discounts were used at a percentage of 25%, accordingly to previous studies in the fast-moving consumer goods industry (Sun, 2005). Moreover, this percentage is equal to percentages most often used by HelloFresh and Albert Heijn. Next, the chosen premium did contain equal advantages compared to the price discount. Price discounts of 25% on a price level of meal kits (per meal) means a premium worth $\notin 2,50$.

Purchase intention was measured with the scale (five items) developed by Dodds, Monroe and Grewal (1991). This scale has also been used in other studies (three items) on purchase intention and has been tested on discriminant and convergent validity as well as scale reliability (0.92) (Grewal, Krishnan, Baker, & Borin, 1998). Values of 0.8 or higher are generally accepted (Field, 2009). These items were measured on 5-point Likert scales, the first and third item were measured on scales from 'strongly disagree' to 'strongly agree' and the second item was measured on a scale from 'very low' to 'very high' (Dodds et al., 1991). The Likert scale is widely used and is easy to understand for respondents (Malhotra, 2006). The scales have been slightly modified to fit the context of this study.

Finally, in this study control variables for age, gender and education were used. These variables were included considering that demographics can affect purchase intention across channels (Kushwaha & Shankar, 2013; Lindt, 2019) and demographics are related to

convenience-orientation (Brunner et al., 2010; Candel, 2001). Furthermore, type of customer was included as a control variable in this study. Respondents were asked whether they bought mealkits in the previous year and how often they buy meal-kits, which indicates whether respondents are existing customers for meal-kits. Finally, brand awareness is included as a control variable because existing brands were used. Brand awareness was measured on a scale by Verhoef, Langerak and Donkers (2007). These variables were expected to have a possible influence on purchase intention for meal-kits and were therefore used as control variables in this study.

Variable	Operationalization	Source
Channel	One dummy variable that indicates whether the meal-	
offline versus	kit is offline (0/1) available.	
online		
Channel	One dummy variable that indicates whether the meal-	
supermarket	kit is from a supermarket (0/1).	
versus specialized		
Promotions	Two dummy variables that indicates whether the	
	meal-kit is accompanied by a monetary promotion	
	(0/1) or non-monetary promotion $(0/1)$	
Purchase intention	Purchase intention will be measured with the	(Dodds, Monroe,
	following 5-point Likert scale:	& Grewal, 1991)
	-I would purchase this meal-kit (strongly disagree 1	
	to strongly agree 5)	
	-The probability that I would consider buying this	
	product is (very low 1 to very high 5)	
	-I would consider buying this meal-kit at this price	
	(strongly disagree 1 to strongly agree 5)	

Control variables

Gender, age,	What is your gender? Male/Female/Neutral	
education	What is your age?	
	What is your highest education?	
	None/Primary education/Secondary	
	education/Secondary vocational education/Higher	
	professional education/University education	
Type of customer	Are you known with meal-kits? Yes/No	
	Have you bought a meal-kit in the past year? Yes/No	
	How often do you buy meal-kits?	
	Never/Yearly/Monthly/Weekly/Daily	
Brand awareness	is a well-known brand (strongly disagree 1 to	(Verhoef,
	strongly agree 5)	Langerak, &
		Donkers, 2007)

Figure 2. Operationalization

3.3 Methodology

The survey was created with the program Qualtrics. The standard format of Qualtrics, which is offered by Radboud University, was used because of its clear lay-out, ease of use and consistency in navigation (Qualtrics, n.d.). The data was exported to IBM SPSS Statistics for analysis when requirements with regard to sample size were met. In order to analyze the data in an appropriate way multiple regression was used. Multiple regression is a statistical technique which is applied in analyzing the relationship between one dependent variable and various independent variables. This analysis can be widely used in business and economics, from forecasting models to customer decision making (Hair, 2014). This study consists of three independent variables and one dependent variable, therefore regression analysis is suitable. Promotions is a moderator in this study, it can cause a change in the relationship between the independent and dependent variable.

3.4 Research ethics

It is important to address some elements regarding research ethics for this study. First, the researcher did not interrupt the respondent when filling in the questionnaire because a SAQ is used, the respondent could not be influenced by the researcher on site. Moreover, the use of an online SAQ is a viable option for data collection with regard to the current situation for restricting social contact (Covid-19). Furthermore, some requirements apply to academic research with regard to anonymity, transparency, honesty and discreteness (Bersoff, 2003). In the introduction of the questionnaire some important elements are highlighted with regard to anonymity, transparency and confidentiality. Respondents are informed about these before filling in the questionnaire to stimulate honest answers and less socially desirable answers. Besides, the expected duration for filling in the survey was stated in the introduction. To ensure respondents understand the topic a short introduction was given in each scenario, by doing so clarity on the research topic was provided. Next, participation is voluntary and respondents may end the survey at any given moment during the questionnaire. Finally, data was treated confidentially and answers cannot be linked to respondents. All data was treated with care and data has not been shared with other parties. All in all, this study complies with research ethics and does not violate the desired code of behavior.

Chapter 4. Results

In the preceding chapter, the methodology of this study was discussed. In this chapter, the gathered data will be analyzed and hypotheses will be tested. First, sample size and descriptives will be described followed by a reliability analysis and the assumptions with regard to multiple regression. Next, results will be described based on the hypotheses.

4.1 Sample

To validate the questionnaire, a pre-test has been conducted. All items were translated into Dutch and translated back to English by a bilingual person. The questions have also been discussed with a few respondents to test the wording of phrases. Next, the plus/minus- method was used to ensure questions were understandable for all respondents. The items marked with a minus were checked and reformulated if they did not fit the construct well. Data was collected from a total of two hundred and sixteen respondents. Based on missing values twenty-two cases were excluded, these cases were not ignorable since all questions were left open. The final dataset consists of one hundred ninety-four people (70 men, 124 women). Respondents were approached via social networks such as Instagram and Facebook. Participants were randomly assigned to one of the twelve scenarios.

Descriptive statistics of the measured constructs were assessed. The age ranges from 18 to 80, with approximately 50% of respondents between 22 and 28 years of age. Most respondents were higher educated (higher professional education and university education). While many respondents were familiar with meal-kits (88,7%), only a few indicated they bought meal-kits (25,3%). Next, purchase intention showed a mean of 2.76, which is slightly below the midpoint of the scale. This could indicate that people do not have a purchase intention for meal-kits in general, as the mean is below the midpoint of the scale. Brand awareness was included as a control variable, because two existing brands were used in the survey. A One-Sample T-test showed that brand awareness for HelloFresh (M = 18.59, SD = 5.40) differs from brand awareness for Albert Heijn (M = 21.73) with t (193) = -8.098, p = .000. The descriptive statistics are summarized in Table 1.

Demographics		Frequency	Percent
Gender	Male	70	36,1
	Female	124	63,9
Age	18-24 years old	120	60,8
	25 - 34 years old	43	22,2
	35 - 44 years old	12	6,7
	45 - 54 years old	14	6,7
	55 - 64 years old	6	3,1
	65+ years old	1	0,5
Educational level	None	0	0
	Primary education	1	0,5
	Secondary education	13	6,7
	Secondary vocational education	30	15,5
	Higher professional education	79	40,7
	University education	71	36,6
Customer type	Current customer meal-kits	49	25,3
	No customer meal-kits	145	74,7

Figure 3: descriptive statistics

Next, descriptive statistics with regard to purchase intention were assessed. First, purchase intention was higher for meal-kits from supermarkets (2,80) compared to meal-kits from specialized suppliers (2,72). Furthermore, purchase intention was higher for meal-kits in online channels (2,79) compared to purchase intention for meal-kits in offline channels (2,72). Purchase intention in all channels was expected to be moderated by promotions. Purchase intention is lowest in scenarios with no promotion (2,69), while purchase intention is highest in scenarios with a discount (2,82). Purchase intention with premiums (2,74) falls between purchase intention with no promotions and purchase intention with discount. The statistics with regard to purchase intention can be found in figure 4 and 5.

Purchase intention		Specialized	Supermarket	Online	Offline
Ν	Valid	109	85	101	93
	Missing	0	0	0	0
Mean		2,72	2,80	2,79	2,72
Std. Error of Mean		0,079	0,086	0,078	0,086
Std. Deviation		0,824	0,794	0,788	0,836
Variance		0,681	0,630	0,622	0,700

Figure 4: Purchase intention statistics (channels)

Purchase intention		No promotion	Discount	Premium
N	Valid	59	72	63
	Missing	0	0	0
Mean		2,69	2,82	2,74
Std. Error of Mean		0,098	0,100	0,103
Std. Deviation		0,753	0,850	0,821
Variance		0,568	0,723	0,675

Figure 5: Purchase intention statistics (promotions)

4.2 Reliability analysis

Purchase intention was measured on a 5-point Likert scale, ranging from 1 (negative) to 5 (positive). First, validity and reliability of the scales were assessed. Validated scales from previous studies were used to be able to measure what was intended to measure. The wording of items has been modified to match the context of this study.

Next to validity, reliability was assessed. The reliability coefficient is Cronbach's alpha, where .70 is generally used as the lower limit (Hair et al., 2014, p. 123). In this study .70 will also be used as the minimum threshold. Purchase intention has an alpha above the minimum threshold

(.816), which implies that the construct is reliable. Deletion of one of the three items would not increase the Cronbach's alpha. The coefficients for the reliability analysis can be found in Appendix VII.

4.3 Assumptions

Before running the analysis several assumptions with respect to multiple regression analysis had to be met. The assumptions were normality of the error term measured, linearity of the variate, multicollinearity and homoscedasticity. The tolerance levels and VIF were used for analysing multicollinearity, while plots and descriptives were used to check for linearity and homoscedasticity. Furthermore, all variables in the analysis should be of metric measurement level (Field, 2018). Some variables are already transformed from categorical variables into dichotomous variables. Channel type (offline/online and supermarket/specialized) already have 0 and 1 as minimum and maximum. Offline/online was transformed into a dummy variable and coded with 0 and 1 (0 = Online, 1 = Offline). Supermarket/specialized was also transformed into a dummy variable and coded with 0 and 1 (0= Specialized, 1 = Supermarket). However, there were a few categorical variables left in the dataset which had to be transformed to be included in the regression analysis. Promotions consisted of three levels (no promotions, discount, premium) and had to be transformed into dummy variables. Furthermore, the control variable education had to be transformed into dummy variables. Purchase intention was measured on a 5-point Likert scale and is therefore of metric measurement level.

First, normality has been checked by assessing the normal probability plot and P-Plot, which is shown in Appendix V. Furthermore, values for skewness and kurtosis for metric variables have been checked. If Skewness/Standard Error for Skewness or Kurtosis/Standard Error for Kurtosis < |2|, it can be assumed that variables are normally distributed. The values show that HelloFresh Awareness (brand awareness), Albert Heijn Awareness (brand awareness) and Age are not normally distributed. Next, transformations (inverse, square root, natural logarithm, and squared) were applied to these variables, the results of these transformations can be found in Appendix VI. The squared transformation improves the normal distribution for both awareness variables, the transformed variables (squared) are therefore used in the analysis. Transformations for Age did not result in a great improvement, therefore the original variable is used in the analysis. Next, a scatterplot of residual values and predicted outcomes has been created which can be found in Appendix V. There is no systematic relationship between errors and predicted outcomes, there is no distinct pattern that can be derived. Based on examination of the scatterplot we can assume that both homoscedasticity and linearity have not been violated.

The Durbin-Watson statistic should be close to 2 in order to assure independence of errors, in this study we found a value of 2,000 indicating there was independence of errors. Since dummy variables are used, polynomials could not be added to the model to test for linearity. Furthermore, multicollinearity statistics were assessed. The minimum threshold for tolerance levels of independent variables is 0.20 (Hair, 2018). Values below 0.20 could be a sign of high correlations between independent variables. All values of independent variables are above 0.20, which means there is no sign of multicollinearity. However, it should be mentioned that tolerance levels are quite low and almost reach the minimum threshold. Furthermore, values of control variables are all above 0.60. In addition, all VIF values were below 5. A table with summarized results for multicollinearity statistics can be found in Appendix VIII.

Overall, we considered the assumptions for conducting the regression analysis to be met, despite some high correlations between dummies and their interaction terms.

4.4 Results

In this study a multiple regression analysis was conducted to analyse the effect of offline/online and supermarket/specialized on purchase intention, while being moderated by promotions (none/discount/premium). A multiple regression was used as it reveals the relationships with purchase intention while accounting for all other factors and variables simultaneously. Four interaction variables were created by multiplying the independent variables with the moderator promotions. Next, to compare purchase intention between groups, a new variable was computed (*summated score purchase intention*) that averaged the scores from participants on the three items for purchase intention. This variable was used to test all hypotheses. The regression model controlled for gender, age, educational level, customer type, awareness of meal-kits and brand awareness (HelloFresh/Albert Heijn). To be able to include the categorical variables promotion (none/discount/premium) and education dummy variables were computed. The group containing no promotions was used as a reference category in the analysis first (figure 6). In a second analysis the group containing discounts was used as a reference category in the analysis (Appendix IX). The largest group for educational level (HBO) was used as reference category for education throughout the analysis.

The R² value of the model is model R² = .107, which means that the model explains 10.7%. Hence, the independent variables explain 10.7% of variance of the dependent variable purchase intention. So, there may be more variables that have an influence on purchase intention for meal-kits. Furthermore, the F change is not significant: F (19, 174) = 1.095, p > 0.05, which means that the model does not add enough new information. The model is not significant, no

effects of the independent variables on purchase intention were found. Results can be found in figure 6. Figure 6 has no promotions as baseline, the figure with discounts as baseline can be found in Appendix IX. Next, results from the analysis are interpreted and described per hypothesis.

4.4.1. Hypothesis 1

In contrast to H1, there is no statistically significant difference in purchase intention between the two channels ($\beta = -.140$, t = -.644, p > 0.05). Purchase intention for meal-kits is not lower in offline channels compared to online channels. The effect is in the right direction, however the effect is not significant, therefore not supporting H1.

4.4.2. Hypothesis 2

In contrast to H2, there is no significant difference in purchase intention for meal-kits between supermarkets and specialized suppliers ($\beta = .240$, t = 1.110, p > 0.05). Purchase intention is not higher for supermarkets compared to specialized suppliers. The effect is again in the right direction, however the effect is not significant, therefore not supporting H2.

4.4.3. Hypothesis 3a

In contrast to H3a, there is no significant effect of promotions on purchase intention for meal-kits in offline channels (IA1 = β = -.313, t = -1.035, p > 0.05, IA2 = β = -.416, t = -1.351, p > 0.05). The negative effect of offline on purchase intention is not weakened by promotions. The effect is in the right direction, however the effect is not significant, therefore not supporting H3a.

4.4.4. Hypothesis 3b

In contrast to H3b, there is no significant effect of both monetary promotions and non-monetary promotions on purchase intention for meal-kits in offline channels. Both interaction effects (IA1, IA2) are not significant, therefore not supporting H3b.

4.4.4. Hypothesis 4a

In contrast to H4a, there is no significant effect of promotions on purchase intention for meal-kits from supermarkets (IA3 = β = .004, t = .013, p > 0.05, IA4 = β = .319, t = 1.040, p > 0.05). The positive effect of supermarkets on purchase intention is not strengthened by promotions. The effect is not significant, therefore not supporting H4a.

4.4.5. Hypothesis 4b

In contrast to H4b, there is no effect of both monetary promotions and non-monetary promotions on purchase intention for meal-kits from supermarkets. Both interaction effects (IA3, IA4) are not significant, therefore not supporting H4b.

Variable	β	SE B	t	Sig.
Constant	2.927	.502	5.830	.000
Offline	140	.218	644	.520
Supermarket	.240	.216	1.110	.268
Discount	.271	.261	1.038	.301
Premium	.129	.250	.517	.606
Interaction effects				
IA1: Offline*discount	313	.303	-1.035	.302
IA2: Offline*premium	416	.308	-1.351	.178
IA3: Supermarket*discount	.004	.299	.013	.990
IA4: Supermarket*premium	.319	.306	1.040	.300
Control variables				
None	939	.842	-1.114	.267
Primary	-1.55	.840	-1.855	.065
Secondary	.197	.262	.752	.453
Secondary vocational	.159	.194	.822	.412
University education	.016	.138	.117	.907
Age	014	.007	-2.171	.031
Gender	199	.126	947	.345
Customer type meal-kits	364	.143	-2.550	.012
Awareness meal-kits	.251	.214	1.172	.243
Brand awareness HelloFresh	.005	.011	.484	.629
Brand awareness Albert Heijn	.013	.015	.883	.379
R2	.107			
F	1.095			

p*<.010, *p*<.001

Figure 6: no promotions as reference category

Chapter 5. Conclusion and Discussion

The objective was to study whether channel type impacted purchase intention for meal-kits and to study if promotions had an influence on this relationship. The purpose of the study was answering the following research question: '*In which way do promotions affect consumer purchase intention regarding meal-kits across channels?*' To answer this very shortly: no, the type of channel does not influence purchase intention and the relationship is not moderated by promotions.

5.1 Academic implications

While previous studies within the convenience foods category only examined drivers of consumption in general, this study included channel type to study the effect on purchase intention. Type of channel was expected to have an influence on purchase intention for meal-kits since there are differences between attributes such as flexibility and convenience per channel. Online channels and supermarkets were assumed to deliver a higher degree of flexibility and convenience to consumers and were therefore expected to be preferred by meal-kit consumers. However, the outcomes imply that channel type has no effect on purchase intention for meal-kits.

While Yeo, Goh and Rezaei (2017) and Arce-Urriza et al. (2017) found that consumers with higher convenience orientation have a higher intention to purchase food services online, Lindt (2019) found that online and offline are evenly rated on the convenience dimension. The results of this study are in line with Lindt (2019) and contradict Yeo, Goh and Rezaei (2017) and Arce-Urriza et al. (2017). The results from this study imply that there is no difference between purchase intention for online and offline channels. This can be explained by findings from Lindt (2019), who showed that there is no difference between perception of time and effort saving (convenience) between online and offline channels. This means that when consumers are motivated to buy something for convenience, it should not matter whether they buy it online or offline. Next, Thamizhvanan & Xavier (2013) found that online shopping can be viewed as more high-risk compared to offline shopping, as the actual interaction with the product is eliminated form the process. Hence, online shopping is 'convenient' but can also be viewed as 'high-risk', which can cause an unpleasant feeling and might be considered 'inconvenient'. Therefore, the 'convenient' and 'inconvenient' attributes of purchasing meal-kits online can be cancelled out.

Lindt (2019) also stated that the obligation to subscribe can be seen as one of the barriers for consumers in purchasing meal-kits. Hence, this typically applies to specialized suppliers as their meal-kits are often bound to subscription models. While subscriptions for consumable goods are aimed at convenience for consumers (ING Economics Department, 2018), subscriptions cannot be easily adapted and are not seen as 'flexible' (ING Economics Department, 2018; Lindt, 2019). In contrast to these results, this study shows that there is no difference in purchase intention between supermarkets and specialized suppliers. The obligation to subscribe may not be seen as a barrier for purchasing meal-kits as purchase intention for specialized suppliers and supermarkets do not differ, therefore contradicting Lindt (2019). However, these findings are in line with the intention of subscription services, as described by Rudolph, Bischof, Böttger and Weiler (2017). Subscription services are designed to help time-constrained consumers to take care of fulfilling basic needs, such as food (Rudolph et al., 2017). Hence, subscriptions are designed to be 'convenient'. Next, Torma, Aschermann-Witzel and Thøgersen (2018) found that subscriptions help consumers behave accordingly to their intentions, for example to eat healthier food, by committing to a subscription. However, while subscriptions can be 'convenient' and help consumers fulfill intentions, subscriptions can also be seen as 'inconvenient'. Subscriptions become 'inconvenient' due to deadlines for choosing and adapting meal-kit schemes (Sharnock, 2018). This shows that there is a thin line between convenience offered by subscription models. There are positive and negative aspects to subscription models for meal-kits, which can be cancelled out, as this study shows there is no difference in purchase intention for meal-kits from supermarkets or specialized suppliers.

Next, this study included promotions to test whether promotions (none, monetary, nonmonetary) have an influence on the link between channel type and purchase intention. The outcomes of this study indicate that promotions have no moderating effect in this context. This result is not in line with previous studies on the effects of promotions in retailing, for example Ririn, Rahmat and Rina (2019) found that promotions can influence purchase intention in a positive way. However, this study found no evidence supporting the moderating role of promotions on purchase intention across channels. Hence, purchase intention for a particular channel is not influenced by promotions. The absence of a statistically significant effect can be explained by the fact that meal-kits fall within the 'convenience foods' category. Feichtinger, Luhmer and Sorger (1988) found that convenience foods have inelastic demand. Furthermore, Arce-Urriza et al. (2017) found that convenience-oriented consumers are often less price sensitive compared to consumers that are less motivated by convenience. Consumers buying convenience foods may therefore also be less sensitive to promotions. Especially consumers shopping in online channels and at supermarkets might be less sensitive to promotions considering their high convenience orientation. Moreover, convenience-orientation does not only influence channel choice but also influences purchase behavior (Arce-Urriza et al., 2017). Thus, meal-kit consumers are less likely to seek out promotions and are more likely to use tools for automatic

purchases, which could cause consumers to overlook promotions. Convenience-oriented consumers often do not participate in brand screening because of time limitations according to Arce-Urriza et al. (2017). Zhang and Wedel (2009) studied the effectiveness of promotions in online and offline context and found that past purchases have more impact on purchase intention compared to promotions in online context. Personal grocery lists and data of past purchases are often available, hence customers increasingly rely on these. Since meal-kits are not fully considered convenience foods, it was assumed that consumers who purchase meal-kits were more sensitive to promotions. However, the results of this study indicate that meal-kit might not be sensitive to promotions. Consumers who purchase meal-kits might behave just like consumers who purchase 'convenience foods' in general, which also implicates that meal-kits do fall within this category. The results of this study are in line with previous studies (e.g. Arce-Urriza et al, 2017) and indicate that consumers with high convenience orientation are less likely to be influenced by promotions.

Furthermore, monetary promotions (discounts) were expected to have a stronger effect since these are often most effective in competitive markets and have more impact on the alluringness of an offer (Chandon et al., 2000; Lal, 1990; Palazón & Delgado-Ballester, 2011). Besides, Arce-Urriza et al. (2017) stated that the effect of promotions depends on the utility to gain for the consumer. Considering convenience orientation of meal-kit consumers, it would be logical that monetary promotions would be preferred as these deliver utilitarian benefits to consumers. However, the results of this study imply that there is no difference between having a monetary or non-monetary promotion, both promotions did not have a moderating effect in this study. Hence, the results of this study contradict previous studies with regard to promotions in competitive markets (e.g. Chandon et al., 2000; Lal, 1990) as there is no difference between monetary promotions and non-monetary promotions.

In sum, this study contributes to literature with regard to purchase behavior for meal-kits. No differences were found for channel types, which implies that the channel type does not have an influence on purchase behavior for meal-kits. The positive (convenient) and negative (inconvenient) aspects of channels can be cancelled out. Next, no effects for promotions on the link between channel type and purchase intention were found. As Shankar and Krishnamurthi (1996) argue that price sensitivity and promotional sensitivity are intertwined, meal-kit consumers are not expected to be price sensitive. Considering previous studies, both effects can be explained by convenience-orientation. Consumers who purchase meal-kits are mainly driven by convenience, which drives behavior in all stages of the customer journey. Hence, the results of this study show that behavior of meal-kit consumers is quite similar to behavior of consumers who purchase general 'convenience foods'.

5.2 Managerial implications

Previous studies found that meal-kit consumers are highly convenience-oriented, convenience is one of the main drivers for purchasing meal-kits (Drost, Van der Wal, & Baas, 2015; Sharnock, 2018). Moreover, this orientation does not only influence channel choice but also influences subsequent purchase behavior. Hence, convenience is an important element throughout the customer journey for meal-kit consumers. Managers should take this into consideration while mapping the customer journey and designing touchpoints. Furthermore, purchase intention for meal-kits does not differ for online or offline channels or specialized suppliers and meal-kits. The meal-kit that was shown, either HelloFresh or Albert Heijn in an online or offline shopping channel, did not have an effect on purchase intention. Therefore, the channel type does not have an effect on purchase intention for meal-kits. This would entail that it does not matter where the meal-kit is introduced or offered, as long as it offers convenience to consumers. Hence, managers can introduce meal-kits across channels for full market coverage. Full market coverage might be beneficial to meal-kit companies as the market is slowly moving into the maturity stage, full market coverage might help increasing market share. Furthermore, following the theory of planned behavior, accordingly to other studies in food retail (e.g. Wee, Ariff, Zakuan, & Tajudin, 2014), actual purchase behavior is significantly affected by purchase intention. Hence, the type of channel will not have direct implications for the amount of sales that will be generated, since purchase intention does not differ. Next, in case of subscription models, which are generally used by specialized suppliers, managers should be aware of the thin line between 'inconvenience' and 'convenience' offered by subscriptions. Subscriptions can be 'inconvenient' to consumers due to deadlines for choosing or adapting meals. Hence, subscriptions should be made as 'convenient' as possible, for example by making deadlines more flexible or by offering various delivery options. Furthermore, promotions do not have an effect on the link between channel type and purchase intention. Therefore, promotions do not make a difference in competition between channels. Consumers do not switch between channels because of a promotion. Considering these insights, it is recommended for managers to ease the shopping process instead, for example by installing automatic purchase systems which remind customers of their preferences.

5.3 Limitations and future research

The descriptives show that consumers have a higher purchase intention for meal-kits in online channels and for meal-kits from supermarkets. However, the multiple regression analysis showed no significant results. This result was surprising since measurement scales were used from previous research and a sufficient sample size was used in this study. This study has some limitations and recommendations for further research which will be briefly discussed.

First, sample size can have an effect on finding significant effects. However, the sample size used in this study should be sufficiently large (N = 194) according to (Hair et al., 2014). The minimum ratio of 15 observations per independent variable has been taken into account. Therefore, sample size does not seem to be the direct cause in this situation. Furthermore, the sample used in this study is not fully representative for the population, since most respondents were between 18 and 24 years of age. According to Packaged Facts (2017), respondents in the age between 25 and 44 years old are the strongest predictor for the use of meal-kits.

Second, this study made use of a between-subjects design. Respondents had to fill in only one scenario of the twelve possible scenarios. Therefore, respondents did not have any direct comparison between the different options and were presented only one option. No reference was available for making the decisions with regard to purchase intention across channels. A mixeddesign could make the comparison between channels more obvious. The contradiction of channels could force respondents to compare channels in their minds, which could have an impact on the results. Respondents would see both online and offline channels or would see both meal-kits from supermarkets and specialized suppliers, which could lead to different findings with regard to purchase intention for meal-kits. However, as the market is blurring, the use of a mixed-design could increase confusion which could have a negative impact on the results.

Third, in this study existing brands have been used (Albert Heijn and HelloFresh). Existing brands were used since they facilitate making a clear distinction between channels. However, the use of existing brands can have implications for results as consumers might have negative attitudes towards these brands, for instance, HelloFresh has recently been in the news because of their 'pushy' marketing. Furthermore, because of the pandemic (Covid-19) Albert Heijn stopped selling their meal-kits. Hence, awareness of meal-kits offered by Albert Heijn can be lower. Next, the pandemic (Covid-19) could also have had an impact on consumer behavior with regard to food purchases. During data collection consumers showed different behavior with regard to food purchases, consumers were buying in bulk and focused on other product categories. Fourth, this study uses premiums to represent non-monetary promotions and discounts to represent monetary promotions. However, for future research it can be interesting to use other types of promotions. Meal-kit suppliers such as HelloFresh and Albert Heijn mainly use monetary promotions (discounts), which therefore have been chosen for this study. Non-monetary promotions can be split up into 'true promotions', which have been chosen for this study, and 'supportive promotions'. It can be interesting to study the effect of 'supportive' non-monetary promotions on purchase intention, or purchase behavior in general for meal-kits. Furthermore, the type of premium used in this study could have an effect on findings with regard to the effect of promotions. In this study a Tony's Chocolonely chocolate bar was used as an example for the premium (non-monetary promotion). Both consumer preferences as well as perceived fit between brands (between Tony's Chocolonely and either Albert Heijn or HelloFresh) could have had an influence on results, which has not been studied. However, Tony's chocolate bars are quite neutral as a premium since Tony's offer a great variety of products which are suitable for multiple diets (vegan, nut allergies, lactose-intolerant). However, including different types of premiums can be interesting for further research.

Fifth, convenience-orientation seems to play a major role in consumer behavior with regard to meal-kits. Since other studies already indicated that convenience does play a major role for meal-kits this concept was left out of this study. Therefore, type of work or number of working hours a week have not been included as control variables in this study. No questions with regard to convenience-orientation of respondents have been asked. Information about convenience orientation can be helpful in explaining consumer purchase behavior for meal-kits. For further research it can be helpful to include convenience-orientation of consumers, which might help in explaining relationships.

Next, there is a lot of heterogeneity with regard to meal-kit types that are offered to consumers. This study examined the influence of channel type on purchase intention. While this study focused mainly on differences between channels, differences within channels have not been studied yet. Within channels meal-kits differ on for example the amount of meals that are offered. Specialized suppliers mainly offer meal-kits for multiple meals (HelloFresh works with a minimum of 3 meals), while supermarkets also offer meal-kits for just one meal. Studying the effect of these differences within channels can be interesting for further research. Before filling in the questionnaire a short introduction was given about the meal-kit. This introductory text mentioned that it was possible to order the meal-kit at for example HelloFresh or Albert Heijn. This text did not clearly mention that HelloFresh generally makes use of a subscription model and that the discount is for the first box. Differences between channels were discussed, however

differences within channels were not considered. For example, including type of meal-kit, either single box or subscription based, can be interesting for further research.

Finally, this study focused on studying the effect of no promotions, monetary promotions and non-monetary promotions. According to previous studies (Martínez et al., 2007; Chandon, Wansink, & Laurent, 2000; Montaner & Pina, 2008; Winer, 1986) the effects of promotions might differ in time. Hence, non-monetary promotions might show more positive results in the long term compared to monetary promotions with regard to brand associations and brand image. In this study, the long-term effects of promotions were not taken into account. This was not possible due to time-limits. This study only focused on the effect of promotions on purchase intention. Studying effects of promotions on meal-kits in time might be interesting for further research. Information about long term effects might be beneficial to managers in designing marketing strategies.

Chapter 6. References

Ailawadi, K. L., Beauchamp, J. P., Donthu, N., Gauri, D. K., & Shankar, V. (2009). Communication and Promotion Decisions in Retailing: A Review and Directions for Future Research. *Journal of Retailing*, 85, 42-55.

Albert Heijn. (n.d.). AH-Boodschappen. Retrieved from https://www.ah-boodschappen.nl

- Allen, M. (2017). *The SAGE encyclopedia of communication research methods*. Thousand Oaks: SAGE Publications.
- Andreeva, M., Cortinäs, M., & Elorz, M. (2010). The role of purchase regularity and purchase frequency in price and discount sensitivity. *Journal of Marketing Trends*, 1(4), 57–73.
- Anesbury, Z., Nenycyz-Thiel, M., Dawes, J., & Kennedy, R. (2016). How do shoppers behave online? An observational study of online grocery shopping. *Journal of Consumer Behavior*, 15, 261-270.
- Andrews, R. L., & Currim, I. S. (2004). Behavioural differences between consumers attracted to shopping online versus traditional supermarkets: implications for enterprise design and marketing strategy. *International Journal of Internet Marketing and Advertising*, 1, 38-61.
- Arce-Urriza, M., Cebollada, J., & Tarira, M. F. (2017). The effect of price promotions on consumer shopping behavior across online and offline channels: differences between frequent and non-frequent shoppers. *Information Systems and e-Business Management*, 15, 69-87.
- Bellenger, D. N., & Korgaonkar, P. K. (1980). Profiling the recreational shopper. *Journal* of *Retailing*, 56(3), 77–92.
- Bersoff, D. N. (2003). *Ethical conflicts in psychology*. American Psychological Association.
- Black, N. J., Lockett, A., Ennew, C., Winklhofer, H., & McKechnie, S. (2002). Modelling consumer choice of distribution channels: an illustration from financial services. *International Journal of Bank Marketing*, 20(4), 161-173.
- Blattberg, R.C., & Neslin, S.A. (1990). *Sales promotion: concepts, methods and strategies*. Englewood Cliffs: Prentice Hall.
- Boer, M. de., McCarthy, M., Cowan, C., & Ryan, I. (2004). The influence of lifestyle characteristics and beliefs about convenience food on the demand for convenience food in the Irish market. *Food Quality and Preference*, 15, 155–165.

- Bosnjak, M., Galestic, M., & Tuten, T. (2007). Personality determinants of online shopping: explaining online purchase intentions using a hierarchical approach. *Journal of Business Research*, 60, 597-605.
- Brashear, T. G., Kashyap, V., Musante, M. D., & Donthu, N. (2009). A profile of the internet shopper: evidence from six countries. *Journal of Marketing Theory and Practice*, 17, 267-282.
- Brunner, T., Siegrist, M., & Horst, H. van der. (2010). Convenience food products. Drivers for consumption. *Appetite*, *55*, 498-506.
- Brynjolfsson, E., & Smith, M. D. (2000). Frictionless commerce? A comparison of internet and conventional retailers. *Management Science*, *46*(4), 563–585.
- Business Insider. (2019). Picnic doet een test met maaltijdboxen, ook al is de markt flink aan het krimpen. Retrieved from https://www.businessinsider.nl/picnic-maaltijdbox-presto/
- Burns, A. C. (2006). *Principes van marktonderzoek. Toepassingen met SPSS.* (4th ed). Amsterdam: Pearson Benelux B.V.
- Büttner, O. B., Florack, A., & Göritz, A. S. (2015). How shopping orientation influences the effectiveness of monetary and nonmonetary promotions. *European Journal of Marketing*, 49, 170-189.
- Candel, M. (2001). Consumer's convenience orientation towards meal preparation. Conceptualization and measurement. *Appetite*, *36*, 15–28.
- Carrigan, M., Szmigin, I., & Leek, S. (2006) Managing routine food choices in UK families: The role of convenience consumption. *Appetite*, *47*, 372–383.
- Chandon, P., Wansink, B., & Laurent, G. A. (2000). Benefit congruency framework of sales promotion effectiveness. *Journal of Marketing*, *64*, 65-81.
- Cheong, K. J. (1993). Observations: are cents-off coupons effective? *Journal of Advertising Research*, *33*(2), 600-623.
- Chen, C. Y., & Zhang, S. (2006). Understanding the Impact of Certain and Uncertain Store Promotions on the Decision-Making Process in Product Choices. *Advances in Consumer Research*, 33, 526-526.
- Chiu, C. M., Wang, E. T. G., Fang, Y. H., & Huang, H. Y. (2014). Understanding customers' repeat purchase intentions in B2C e- commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), 85-114.
- Chocarro, R., Cortiñas, M., & Villanueva, M. L. (2013). Situational variables in online versus offline channel choice. *Electronic Commerce Research and Applications*, *12*(5), 347-361.

- Chu, S., & Keh, H.T. (2006). Brand value creation: analysis of the interbrand, Business Week brand value rankings. *Marketing Letters*, *17*, 323-331.
- Costa, A., Schoolmeester, D., Dekker, M., & Jongen, W. (2007). To cook or not to cook. A means-end study of motives for choice of meal solutions. *Food Quality and Preference*, 18, 77-88.
- Darian, J., & Cohen, J. (1995). Segmenting by consumer time-shortage. *Journal of Consumer Marketing*, 12, 32-44.
- Davis, S., J. Inman, J. J., & McAlister, L. (1992). Promotion Has a Negative Effect on Brand Evaluations, Or Does It? Additional Disconfirming Evidence. *Journal of Marketing Research*, 39, 143-48.
- Degeratu, A. M., Rangaswamy, A., & Wu, J. (2000). Consumer choice behavior in online and traditional supermarkets: The effects of brand name, price, and other search attributes. *International Journal of Research in Marketing*, *17*, 55-78.
- De Tijd. (2018). *HelloFresh bijna winstgevend*. Retrieved from <u>https://www.tijd.be/ondernemen/consumentengoederen/hellofresh-bijna-</u> <u>winstgevend/9994281.html</u>
- De Tijd. (2019). *HelloFresh maakt voor eerste keer winst*. Retrieved from <u>https://www.tijd.be/ondernemen/consumentengoederen/hellofresh-maakt-voor-eerste-keer-winst/10153238.html</u>
- Distrifood. (2018a). *Maaltijdbox wint snel aan populariteit*. Retrieved from <u>https://www.distrifood.nl/branche-bedrijf/nieuws/2018/02/maaltijdbox-stuk-populairder-101115258</u>
- Distrifood. (2018b). Verspakket rukt op ten koste van maaltijdbox. Retrieved from <u>https://www.distrifood.nl/vers/nieuws/2018/12/verspakket-rukt-op-ten-koste-van-maaltijdbox-101120517</u>
- Distrifood. (2018c). Plus rolt HelloFresh maaltijdboxen uit. Retrieved from <u>https://www.distrifood.nl/vers/nieuws/2018/10/plus-rolt-hellofresh-maaltijdboxen-uit-101119428</u>
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28, 307-319.
- Doorn, van J., & Verhoef, P. (2015). Drivers of and Barriers to Organic Purchase Behavior. Journal of Retailing, 91, 436-450.
- Douglas, S. P., & Craig, C. S. (2007). Collaborative and Iterative Translation: An

Alternative Approach to Back Translation. *Journal of International Marketing*, *15*, 30-43.

- Drost, F., Wal, C. van der., & Baas, B. (2015). *ConceptStore: onderzoek nieuwe methoden boodschappen doen*. Amsterdam: Motivaction Insights.
- Feichtinger, G., Luhmer, A., & Sorger, G. (1988). Optimal price and advertising policy for a convenience goods retailer. *Marketing Science*, 7(2), 187-201.
- Field, A. (2009). *Discovering Statistics using SPSS* (3rd edition). London: SAGE Publications.
- Folderacties.nl. (2015). *Allerhande Box*. Retrieved from <u>http://www.folderacties.nl/allerhandebox/</u>
- Food Box HQ. (n.d.). *The History & Future of Meal Kits*. Retrieved from https://foodboxhq.com/blog/history-future-of-meal-kits/
- Gedenk, K., Neslin, S. A., & Ailawadi, K. L. (2006). Sales Promotion. In M. Krafft, & M. Mantrala (Eds.), *Retailing in the 21st Century* (pp. 345-359). Berlin: Springer-Verlag.
- Grewal, D., Krishnan, R., Baker, J., & Borin, N. (1998). The Effect of Store Name, Brand Name and Price Discounts on Consumers' Evaluations and Purchase Intentions. *Journal of Retailing*, 74(3), 331-352.
- Grocery Dive. (2020). *Meal-kit sales are cooking amid the pandemic*. Retrieved from https://www.grocerydive.com/news/meal-kit-sales-are-cooking-amid-the-pandemic/577367/
- Hair, J., Black, W., Babin, B., & Anderson, R. (2014). *Multivariate Data Analysis*. Harlow: Pearson Education Limited.
- Hansen, T. (2003). Intertype competition: specialty food stores competing with supermarkets. *Journal of Retailing and Consumer Services*, *10*, 35-49.
- Hawkes, C. (2009). Sales promotions and food consumption. *Nutrition Nutrition Reviews*, 67(6), 333–342.
- HelloFresh. (n.d.). HelloFresh. Retrieved from https://www.hellofresh.nl
- Hertz, F., & Halkier, B. (2017). Meal box schemes a convenient way to avoid convenience food? Uses and understandings of meal box schemes among Danish consumers. *Appetite*, 114, 232-239.
- Huddleston, P., Whipple, J., Mattick, R. N., & Lee, S. J. (2009). Customer satisfaction in food retailing: comparing specialty and conventional grocery stores. *International Journal of Retail & Distribution Management*, 37, 63-80.
- ING Economics Department. (2018). Now that we subscribe to music, are tools and

toiletries next? Opportunities and challenges for tangible goods subscriptions. Amsterdam: ING Bank B.V.

- Jabs, J., & Devine, C. M. (2006). Time scarcity and food choices: an overview. *Appetite*, 47, 196–204.
- Jiang, L. A., Yang, Z., & Jun, M. (2013). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, 24(2), 191–214.
- Khan, S. A., & Sowards, S. K. (2018). It's not just dinner: Meal delivery kits as food media for food citizens. *Frontiers in Communication*, *3*, 39.
- Kushwaha, T., & Shankar, V. (2013). Are multichannel customers really more valuable? The moderating role of product category characteristics. *Journal of Marketing Research*, 77(4), 67–85.
- Lal, R. (1990). Price promotions: Limiting competitive encroachment. *Marketing Science*, 9(3), 247-262.
- Lam, S. Y., Vandenbosch, M., Hulland, J., & Pearce, M. (2001). Evaluating Promotions in Shopping Environments: Decomposing Sales Response into Attraction, Conversion, and Spending Effects. *Marketing Science*, 20(2), 194-215.
- Lavrakas, P. J. (2008). *Encyclopedia of Survey Research Methods*. Thousand Oaks: SAGE Publications.
- Liang, A. R., & Lim, W. M. (2011). Exploring the online buying behavior of specialty food shoppers. *International Journal of Hospitality Management*, *30*(4), 855-865.
- Lindt, N. (2019). Meal kits for dinner: Consumer research into the drivers of purchasing either online subscription or offline meal kits (Master's thesis). Retrieved from https://edepot.wur.nl/495484
- Lowe, B. (2010). Consumer perceptions of extra free product promotions and discounts: The moderating role of perceived performance risk. *Journal of Product & Brand Management*, 19(7), 496-503.
- Lumen. (n.d.). *Product life cycles*. Retrieved from <u>https://courses.lumenlearning.com/boundlessmarketing/chapter/product-life-cycles/</u>
- Malhotra, N. K. (2006). Questionnaire Design and Scale Development. In R. Grover, & Vriens, M (Eds.), *The Handbook of Marketing Research: Uses, Misuses, and Future Advances* (pp. 84-94). Thousand Oaks: SAGE Publications.
- Marketing Science Institute. (1999). Hedonic and Utilitarian Consumer Benefits of Sales

Promotions. Retrieved from

http://www.msii.clients.bostonwebdevelopment.com/reports/hedonic-and-utilitarianconsumer-benefits-of-sales-promotions/

Marketwatch. (2018). *People like meal kits, but their business model is unsustainable*. Retrieved from

https://www.marketwatch.com/story/meal-kit-sector-is-facing-a-shake-out-as-its-b siness-model-is-not-sustainable-2018-07-31

- Martínez, E., Montaner, T., & Pina, J. M. (2007). Estrategia de promoción e imagen de marca: Influencia del tipo de promoción de la notoriedad de la marca y de la congruencia de beneficios. *Revista Española de Investigación de Marketing*, 19, 27-51.
- Montaner, T., & Pina, J. M. (2008). The effect of promotion type and benefit congruency on brand image. *Journal of Applied Business Research*, 24(3), 15-28.
- Mela, C. F., Gupta, S., & Lehmann, D. R. (1997). The long-term impact of promotion and advertising on consumer brand choice. *Journal of Marketing Research*, 34(2), 248-261.
- Mela, C.F., Gupta, S., & Jedidi, K. (1998). Assessing long-term promotional influences on market structure. *International Journal of Research in Marketing*, 15, 89–107.
- Mendez, R., Cornélio, M. E., Godin, G., Rodrigues, R. C. M., & Gallani, M. C. B. J. (2010). Development of an instrument to measure psychosocial determinants of physical activity behavior among coronary heart disease patients. *Revista da Escola de Enfermagem da U S P, 44*, 584-596.
- Moisio, R. (2004). Between mothers and markets: Constructing family identity through homemade food. *Journal of Consumer Culture*, *4*(3), 361-384. http://dx.doi.org/10.1177/1469540504046523.
- Mutz, D. C. (2011). *Population-Based Survey Experiments*. Princeton: Princeton University Press.
- Nielsen. (2016). *TV bevordert naamsbekendheid en vertrouwen in e-commerce bedrijven*. Retrieved from

https://www.nielsen.com/nl/nl/insights/article/2016/tv-promotes-awareness-and-co fidence-in-e-commerce/

Nielsen. (2018). *Meal-Kit Mania: Innovation for foodies*. Retrieved from <u>https://www.nielsen.com/us/en/insights/article/2018/meal-kit-mania-innovation-for</u> <u>foodies/</u> Nielsen. (2019). Will Shoppers' Enthusiasm for Meal Kits Remain Strong in 2019? Retrieved from

https://www.nielsen.com/us/en/insights/article/2019/will-shoppers-enthusiasm-for meal-kits-remain-strong-in-2019/

Packaged Facts. (2017). *The Meal Kit Delivery Services Market*. Retrieved from <u>https://www.packagedfacts.com/Content/Featured-Markets/Meal-Kit-Delivery-Services</u>

Packaged Facts. (2018). *Meal Kits: Trends and Opportunities in the U.S., 3rd Edition*. Retrieved from <u>https://cdn2.hubspot.net/hubfs/209482/docs/Samples/PF/Meal%20Kits%20Sample</u> <u>pdf?utm_referrer=https%3A%2F%2Fwww.packagedfacts.com%2FMeal-Kits-Tre</u> d-Opportunities-Editon-11984597%2F

- Palazón, M., & Delgado-Ballester, E. (2009). Effectiveness of price discounts and premium promotions. *Psychology and Marketing*, 26(12), 1108–1129.
- Palazón, M., & Delgado-Ballester, E. (2011). The expected benefit as determinant of deal-prone consumers' response to sales promotions. *Journal of Retailing and Consumer Services*, 18(6), 542-547.
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Lekakos, G. (2017). The interplay of shopping motivations and experiential factors on personalized e-commerce: A complexity theory approach. *Telematics and Informatics*, 34(5), 730-742.

Qualtrics. (n.d.). Homepage. Retrieved from https://www.qualtrics.com

- Rabobank. (2019). *Voedingsmiddelenindustrie*. Retrieved from <u>https://www.rabobank.nl/bedrijven/cijfers-en-trends/food/voedingsmiddelenindustr</u> <u>e/</u>
- Raghubir, P., Inman, J. J., & Grande, H. (2004). The Three Faces of Consumer Promotions. *California Management Review*, 46, 23-42.
- Refrigerated & Frozen Foods Magazine. (2019). *Study: Older adults are target market for meal kit delivery services*. Retrieved from <u>https://www.refrigeratedfrozenfood.com/articles/97273-study-older-adults-are-targ</u> <u>t-market-for-meal-kit-delivery-services</u>
- Retailtrends. (2016). *Vijf redenen waarom blurring booming is*. Retrieved from <u>https://retailtrends.nl/item/43498/-vijf-redenen-waarom-blurring-booming-is</u>
- Ririn, Y., Rahmat, S. T. Y., & Rina, A. (2019). How packaging, product quality and

promotion affect the purchase intention? *Russian Journal of Agricultural and Socio-Economic Sciences*, 8(92), 46-55.

- Rudolph, T., Bischof, S. F., Böttger, T. M., & Weiler, N. (2017). Disruption at the Door: A Taxonomy on Subscription Models in Retailing. *Marketing Review St. Gallen*, 34(5), 18–25.
- Shankar, V., & Krishnamurthi, L. (1996). Relating Price Sensitivity to Retailer Promotional Variables and Pricing Policy: An Empirical Analysis. *Journal of Retailing*, 72, 249-272.
- Sharnock, T. R. (2018). Factors That Influence the Consumer Purchase Decision to Subscribe to a Meal-kit Delivery Service (Master's thesis). Retrieved from <u>https://repository.up.ac.za/bitstream/handle/2263/68801/Sharnock_Factors_2019.pdf?seq</u> <u>uence=1&isAllowed=y</u>
- Sienot, M. (1997). Pretesting web sites: A comparison between the plus-minus method and the think-aloud method for the World Wide Web. *Journal of business and technical communication*, 11(4), 469-482.
- Sinha, I., & Smith, M.F. (2000). Consumer perceptions of promotional framing of price. *Psychology and Marketing*, *17*(3), 257-275.
- Smith, M. D., & Brynjolfsson, E. (2001). Consumer decision-making at an Internet shopbot: Brand still matters. *Journal of Industrial Economics*, 49, 541–558.
- Sonderegger-Wakolbinger, L. M., & Stummer, C. (2015). An agent-based simulation of customer multi-channel choice behavior. *Central European Journal of Operations Research*, 23, 459-477.
- Srinivasan, S. S., & Anderson, R. E. (1998). Concepts and strategy guidelines for designing value enhancing sales promotions. *The Journal of Product and Brand Management*, 7(5), 410-420.
- Stern, L. W., & El-Ansary, A. I. (1988). Marketing Channels. Englewood Cliffs: Prentice-Hall.
- Sun, B. (2005). Promotion Effect of Endogenous Consumption. *Marketing Science*, 24, 430-443.
- Swoboda, B., & Morschett, D. (2001). Convenience-oriented shopping. A model from the perspective of consumer research. In L. Frewer, E. Riskvik, & H. Schifferstein (Eds.), *Food, People and Society. A European Perspective of Consumers' Food Choices* (pp. 177-196). Berlin: Springer Verlag.

Te'eni-Harari, T. (2009). Sales Promotion, Premiums, and Young People in the 21st

Century. Journal of Promotion Management, 14, 17-30.

- Thamizhvanan, A., & Xavier, M. J. (2013). Determinants of customers' online purchase intention: an empirical study in India. *Journal of Indian Business Research*, 5(1), 17–32.
- The Food Institute. (2015). Specialty, Convenience Stores Become More Like Supermarkets. Retrieved from https://foodinstitute.com/focus/specialty-convenience-more-like-supermarkets
- Torma, G., Aschemann-Witzel, J., & Thøgersen, J. (2018). I nudge myself: Exploring 'self-nudging' strategies to drive sustainable consumption behaviour. *International Journal of Consumer Studies*, 42(1), 141–154.
- Traub, L. G, & Odland, D. D. (1979). Convenience foods and home-prepared foods: comparative costs, yield and quality. *Agricultural Economic Report*, 429, 1-185.
- Vannette, D. (2015). 6 ways to pretest your survey before you send it. Retrieved from https://www.qualtrics.com/blog/6-ways-to-pretest-your-survey-before-you-send-it/
- Vakratsas, D., & Bass, F. M. (2002). The relationship between purchase regularity and propensity to accelerate. *Journal of Retailing*, 78, 119-129.
- Vennix, J. A. M. (2006). Theorie en Praktijk van Empirisch Onderzoek. Amsterdam: Pearson Education Limited.
- Verhoef, P. C., Langerak, F., & Donkers, B. (2007). Understanding Brand and Dealer Retention in the New Car Market: The Moderating Role of Brand Tier. *Journal of Retailing*, 83(1), 97-113.
- Wee, C. S., Ariff, M. S. B. M., Zakuan, N., & Tajudin, M. N. M. (2014). Consumers Perception, Purchase Intention and Actual Purchase Behavior of Organic Food Products. *Review of Integrative Business & Economics Research*, 3(2).
- White, G. K., & Manning, B. J. (2001) Convenience, Price, Product. *Journal of Food Products Marketing*, 7, 53-65.
- Wieseke, J., Kolberg, A., & Schons, L. M. (2016). Life could be so easy: the convenience effect of round price endings. *Journal of the Academy of Marketing Science*, 44(4), 474-494.
- Winer, R. S. (1986). A reference price model of brand choice for frequently purchased products. *Journal of Consumer Research*, *13*, 250-6.
- Yeo, V. C. S., Goh, S., & Rezaei, S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, 35, 150-162.
- Yi, Y., & Yoo, J. (2011). The long-term effects of sales promotions on brand attitude across

monetary and non-monetary promotions. Psychology & Marketing, 28(9), 879-896.

- Yim, M. Y. C., Yoo, S. C., Sauer, P. L., & Seo, J. H. (2013). Hedonic shopping motivation and co-shopper influence on utilitarian grocery shopping in superstores. *Journal of the Academy of Marketing Science*, 42, 528-544.
- Ze.nl. (n.d.). *HelloFresh: Pak nu 50% karting op je eerste box!* Retrieved from https://www.ze.nl/kortingscode/hellofresh/
- Zhang, J., & Wedel, M. (2009). The effectiveness of customized promotions in online and offline stores. *Journal of Marketing Research*. *46*(2), 190-206.

Chapter 7. Appendices

Authors	IV		DV	Category
Van Doorn, & Verhoef, 2015	Consumer characteristics (drivers) incl. health, price	Supply side factors (drivers) incl. promotion	Purchase behavior	Organic food
Arce-Urriza, Cebollada, & Tarira, 2017	Online, offline	Promotion (price)	Customer response	Orange juice (grocery retailer)
Brunner, Siegrist, & Van der Horst, 2010	Drivers: e.g. age, nutrition knowledge, cooking skills		Consumption	Convenience food
Brashear, Kashyap, Musante, & Dontu, 2009	Characteristics: attitudes, motivations, demographics		Internet (online) shopping	
White & Manning, 2001	Product related factors	Convenience related factors	Purchase decisions	Food & beverage
Hansen, 2003	Store choice factors specialty stores	Store choice factors supermarkets	Competitiveness	Food & beverage
This study	Online, offline, supermarket, specialized	Promotion (none, monetary & non-monetary)	Purchase intention	Meal-kits

Appendix I. Comparison existing literature

Figure 7: comparison existing literature

Appendix II. Questionnaire

Intro scenario 1

Om van dit pakket gebruik te maken kunt u online uw maaltijdbox bestellen bij HelloFresh. Deze vragen gaan over maaltijdpakketten van HelloFresh die online te koop zijn. De maaltijdbox voor 2 personen kost \in 10 per maaltijd. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 2

Om van dit pakket gebruik te maken kunt u online uw maaltijdbox bestellen bij HelloFresh, deze vragen gaan over maaltijdboxen van HelloFresh die **online** te koop zijn.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Deze maaltijdboxen zijn nu verkrijgbaar met 25% korting. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 3

Om van dit pakket gebruik te maken kunt u online uw maaltijdbox bestellen bij HelloFresh, deze vragen gaan over maaltijdpakketten van HelloFresh die **online** te koop zijn.

Deze maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Bij deze maaltijdboxen krijgt u nu een reep Tony's Chocolonely (1 reep per box t.w.v. $\in 2.50$). In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 4

Om van dit pakket gebruik te maken kunt u online een maaltijdbox bestellen bij de supermarkt. Deze vragen gaan over maaltijdboxen van Albert Heijn die online te koop zijn. De maaltijdbox voor 2 personen kost \in 10 per maaltijd. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 5

Om van dit pakket gebruik te maken kunt u online een maaltijdbox bestellen bij de supermarkt. Deze vragen gaan over maaltijdboxen van Albert Heijn die online te koop zijn.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Deze maaltijdboxen zijn nu verkrijgbaar met 25% korting. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 6

Om van dit pakket gebruik te maken kunt u online een maaltijdbox bestellen bij de supermarkt. Deze vragen gaan over maaltijdboxen van Albert Heijn die online te koop zijn.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Bij deze maaltijdboxen krijgt u nu een reep Tony's Chocolonely (1 reep per box t.w.v. $\in 2.50$). In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 7

Om van dit pakket gebruik te maken kunt u een maaltijdbox van HelloFresh kopen in de winkel. Deze vragen gaan over maaltijdboxen van HelloFresh die u **offline** kunt kopen in de supermarkt. De maaltijdbox voor 2 personen kost $\in 10$ per maaltijd. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 8

Om van dit pakket gebruik te maken kunt u een maaltijdbox van HelloFresh kopen in de winkel. Deze vragen gaan over maaltijdboxen van HelloFresh die u **offline** kunt kopen in de supermarkt.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Deze maaltijdboxen zijn nu verkrijgbaar met 25% korting. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 9

Om van dit pakket gebruik te maken kunt u een maaltijdbox van HelloFresh kopen in de winkel. Deze vragen gaan over maaltijdboxen van HelloFresh die u offline kunt kopen in de supermarkt.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Bij deze maaltijdboxen krijgt u nu een reep Tony's Chocolonely (1 reep per box t.w.v. $\in 2.50$). In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 10

Om van dit pakket gebruik te maken kunt u een Albert Heijn maaltijdbox kopen in de winkel. Deze vragen gaan over maaltijdpakketten die u **offline** kunt kopen bij Albert Heijn Supermarkten. De maaltijdbox voor 2 personen kost \in 10 per maaltijd. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 11

Om van dit pakket gebruik te maken kunt u een Albert Heijn maaltijdbox kopen in de winkel. Deze vragen gaan over maaltijdboxen die u **offline** kunt kopen bij Albert Heijn Supermarkten.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Deze maaltijdboxen zijn nu verkrijgbaar met 25% korting. In hoeverre bent u het eens met de volgende stellingen:

Intro scenario 12

Om van dit pakket gebruik te maken kunt u een Albert Heijn maaltijdbox kopen in de winkel. Deze vragen gaan over maaltijdboxen die u **offline** kunt kopen bij Albert Heijn Supermarkten.

De maaltijdbox voor 2 personen kost normaal gesproken $\in 10$ per maaltijd. Bij deze maaltijdboxen krijgt u nu een reep Tony's Chocolonely (1 reep per box t.w.v. $\in 2.50$). In hoeverre bent u het eens met de volgende stellingen:

Questionnaire

Pagina 1) Bedankt voor uw deelname aan dit onderzoek. Ik ben Lieke Vos, ter afsluiting van mijn Master Marketing aan de Radboud Universiteit doe ik onderzoek naar het effect van promoties op maaltijdboxen in verschillende verkoopkanalen. Deze vragenlijst zal maximaal 5 minuten van uw tijd in beslag nemen. U blijft anoniem en de gegevens zullen vertrouwelijk behandelt worden, resultaten worden uitsluitend voor dit onderzoek gebruikt en worden niet gedeeld met derden. Alvast bedankt voor het invullen van deze vragenlijst.

Pagina 2) Introductie meal-kits

Maaltijdboxen zijn pakketten met verse producten en een recept waarmee een vers gekookte maaltijd bereid kan worden. (foto)

- 1. Bent u bekend met maaltijdboxen? Ja/Nee
- 2. Heeft u het afgelopen jaar een maaltijdbox gekocht? Ja/Nee
- 3. Hoe vaak koopt u maaltijdboxen? (nooit dagelijks)

Pagina 3) Intro promotie & meal-kit \rightarrow beschrijving incl. afbeelding

4. HelloFresh OF Albert Heijn is een bekend merk

(sterk mee oneens tot sterk mee eens)

- 5. Aankoopintentie
 - Ik zou deze maaltijdbox kopen (sterk mee oneens tot sterk mee eens)
 - De kans dat ik deze maaltijdbox zou kopen is (erg laag tot erg hoog)
 - Ik zou overwegen deze maaltijdbox te kopen voor deze prijs (sterk mee oneens tot sterk mee eens)

Pagina 4) Questions part III

- 6. Wat is uw geslacht?
 - Man/Vrouw/Genderneutraal
- 7. Wat is uw leeftijd? (open vraag)
- 8. Wat is uw hoogst genoten opleiding?
 - Geen
 - Basisonderwijs
 - Middelbare school (VMBO, HAVO, VWO)
 - Middelbaar beroepsonderwijs MBO
 - Hoger beroepsonderwijs HBO
 - Wetenschappelijk onderwijs WO

Pagina 5) Bedankt voor uw medewerking aan dit onderzoek! Met vriendelijke groet, Lieke Vos

*Photos which were used in the questionnaire were edited to fix the context of this study, promotions were added and some elements have been removed. Photos were found on Google, before usage copyright was checked. These photos were available via multiple websites.

Monetary (AH & HF)



Picture 1. Albert Heijn * Discount



Picture 2. HelloFresh * Discount

¹ (Folderacties.nl, 2015)

² (Ze.nl, n.d.)

Non-monetary (AH & HF)



Picture 3. Albert Heijn * Premium



Picture 4. HelloFresh * Premium

Appendix III. Hypotheses

H3a: the effect of offline on purchase intention for meal-kits is weakened by promotions.



PI = Purchase intention

Figure 8: hypothesized effects

Offline is expected to have less influence compared to online on purchase intention for meal-kits, which is hypothesized in the first hypothesis in this study (H1). Offline purchase intention is expected to grow harder compared to online purchase intention when promotions are in place, as offline consumers are expected to be more sensitive to promotions (H3a).



H3b: the negative effect of offline on purchase intention for meal-kits is expected to be weakened more by monetary promotions compared to non-monetary promotions.

Figure: 9: hypothesized effects

The effect is weakened for offline when promotions are in place, especially monetary promotions weaken the effect and close the gap between offline and offline. The gap between purchase intention becomes smaller.

*Numbers are randomly chosen, this picture only visualizes the hypothesized effects.

H4a: the effect of supermarket on purchase intention for meal-kits is strengthened by promotions.



PI = Purchase intention

Figure 10: hypothesized effects

Supermarkets are expected to have more influence compared to specialized suppliers on purchase intention for meal-kits, which is hypothesized in the second hypothesis (H2). Purchase intention for meal-kits from supermarkets is expected to grow harder compared to purchase intention for specialized suppliers when promotions are in place (H4a).



H4b: the positive effect of supermarket on purchase intention is expected to be strengthened more by monetary promotions compared to non-monetary promotions.

Figure 11: hypothesized effects

The effect is strengthened for supermarkets when promotions are in place. Purchase intention for supermarkets will increase even more when monetary promotions are in place. Hence, the gap between supermarket and specialized is larger when monetary promotions are in place. *Numbers are randomly chosen, this picture only visualizes the hypothesized effects.

Appendix IV. Operationalization

Variable	Operationalization	Source
Channel offline versus online	One dummy variable that indicates whether the meal-kit is offline $(0/1)$ available.	
Channel supermarket versus specialized	One dummy variables that indicates whether the meal-kit is from a supermarket (0/1).	
Promotions	Two dummy variables that indicates whether the meal-kit is accompanied by a monetary promotion (0/1) or non-monetary promotion (0/1)	
Purchase intention	Purchase intention will be measured with the following 5-point Likert scale: -I would purchase this meal-kit (strongly disagree 1 to strongly agree 5) -The probability that I would consider buying this product is (very low 1 to very high 5) -I would consider buying this meal-kit at this price (strongly disagree 1 to strongly agree 5)	(Dodds, Monroe, & Grewal, 1991)
Control variables		
Gender, age, education	-Wat is uw geslacht? Man/Vrouw/Genderneutraal -Wat is uw leeftijd? (Open vraag) -Wat is uw hoogst genoten opleiding? Geen/Basisonderwijs/Middelbare school (VMBO, HAVO, VWO)/Middelbaar beroepsonderwijs MBO/Hoger	

	beroepsonderwijs HBO /Wetenschappelijk onderwijs WO	
Type of customer	-Bent u bekend met maaltijdboxen? -Heeft u in het afgelopen jaar een maaltijdbox gekocht? Ja/Nee -Hoe vaak koopt u maaltijdboxen? Nooit/Jaarlijks/Maandelijks/Wekelijks/ Dagelijks	
Brand awareness	is a well-known brand (5 point Likert scale from strongly disagree 1 to strongly agree 5)	(Verhoef, Langerak, & Donkers, 2007)

Figure 12: operationalization

Since this study was conducted in the Netherlands the survey was in Dutch. Therefore, items were translated to Dutch when necessary. The translation is shown in the table below, which allows for comparison with the original operationalization.

Variable	Operationalization	Source
Purchase intention	Ik zou deze maaltijdbox kopen (sterk mee oneens tot sterk mee eens)	
	Original: I would purchase this meal-kit (strongly disagree to strongly agree)	(Dodds, Monroe, & Grewal, 1991)
	De kans dat ik deze maaltijdbox zou kopen is (erg laag tot erg hoog)	
	Original: The probability that I would consider buying	(Dodds, Monroe, & Grewal, 1991)

	this product is (very low to very high)	
	Ik zou overwegen deze maaltijdbox te kopen voor deze prijs (sterk mee oneens tot sterk mee eens)	
	Original: I would consider buying this meal-kit at this price (strongly disagree to strongly agree)	(Dodds, Monroe, & Grewal, 1991)
Brand awareness	HelloFresh / Albert Heijn is een bekend merk (sterk mee oneens tot sterk mee eens)	
	Original: is a well- known brand (strongly disagree to strongly agree)	(Verhoef, Langerak, & Donkers, 2007)

Figure 13: operationalization with translation





Figure 14: scatterplot



Normal P-P Plot of Regression Standardized Residual

Figure 15: normal p-p plot



Figure 16: histogram

Appendix VI. Transformations

Awareness (HF)	Traditional	SQ	INV	SQRT	LOG
Skewness	7,6	4,61	13,21	9,88	11,41
Kurtosis	6,9	1,48	17,44	9,67	13,53

Figure 17: transformation Awareness HF

Awareness (AH)	Traditional	SQ	INV	SQRT	LOG
Skewness	10,3	7,62	17,67	12,55	14,57
Kurtosis	15,5	6.84	40,53	21,93	28,95

Figure 18: transformation Awareness AH

Age	Traditional	SQ	INV	SQRT	LOG
Skewness	11,97	17,45	12,57	10,21	11,20
Kurtosis	12,65	36,58	20,13	7,44	9,54

Figure 19: transformation Age

Appendix VII. Reliability analysis

In the table below the output of the reliability analysis is displayed for the dependent variable in this study: "purchase intention". This concept was measured using a scale developed by Dodds, Monroe and Grewal (1991). The has also been used in other studies (also with three items) on purchase intention and has been tested on discriminant and convergent validity as well as scale reliability (0.92). Cronbach's Alpha was calculated and a value of $\alpha = .816$ was found.

Construct	Number of items	Cronbach's alpha
Purchase intention	3	.816

Figure 20: reliability analysis

Appendix VIII. Multicollinearity statistics

The table below displays output with regard to multicollinearity measures (tolerance values and the variance inflation factor).

Variable	Tolerance	VIF
Offline/online	.284	3.435
Specialized/supermarket	.291	3.521
Discount	.211	4.728
Premium	.244	4.102

Figure 21: multicollinearity statistics

Appendix IX. Output SPSS

The table below displays output with regard to the first multiple regression analysis, with no promotions as baseline.

Model	R		R Square	Adjusted R Square	Std. the I	Error of Estimate
	0.327		0.107	0.009	0.80	5
Figure 22: 1	model summary					
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	13.53	19	0.712	1.095	0.36
	Residual	113.23	174	0.651		
	Total	126.76	193			

Figure 23: ANOVA

Variable	β	SE B	t	Sig.
Constant	2.927	.502	5.830	.000
Offline	140	.218	644	.520
Supermarket	.240	.216	1.110	.268
Discount	.271	.261	1.038	.301
Premium	.129	.250	.517	.606
Interaction effects				
IA1: Offline*discount	313	.303	-1.035	.302
IA2: Offline*premium	416	.308	-1.351	.178
IA3: Supermarket*discount	.004	.299	.013	.990
IA4: Supermarket*premium	.319	.306	1.040	.300
Control variables				
None	939	.842	-1.114	.267
Primary	-1.55	.840	-1.855	.065
Secondary	.197	.262	.752	.453
Secondary vocational	.159	.194	.822	.412
University education	.016	.138	.117	.907
Age	014	.007	-2.171	.031
Gender	199	.126	947	.345
Customer type meal-kits	364	.143	-2.550	.012
Awareness meal-kits	.251	.214	1.172	.243
Brand awareness HelloFresh	.005	.011	.484	.629
Brand awareness Albert Heijn	.013	.015	.883	.379
<i>R2</i>	.107			
F	1.095			

p*<.010, *p*<.001

Figure 24: output multiple regression analysis 1 (no promotions baseline)

The table below displays output with regard to the second multiple regression analysis, with discounts as baseline.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	0.327	0.107	0.009	0.806

Figure 25: model summary

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	13.53	19	0.712	1.095	0.36
	Residual	113.23	174	0.651		
	Total	126.76	193			

Figure 26: ANOVA

Variable	β	SE B	t	Sig.
Constant	3.198	.495	6.460	.000
Offline	136	.205	666	.506
Supermarket	073	.212	344	.731
No promotions	271	.261	-1.038	.301
Premium	141	.252	560	.576
Interaction effects				
IA1: Offline*no promotions	004	.299	013	.990
IA2: Offline*premium	.315	.296	1.064	.289
IA3: Supermarket*no promotions	.313	.303	1.035	.302
IA4: Supermarket*premium	102	.301	341	.734
Control variables				
None	939	.842	-1.114	.267
Primary	-1.558	.840	-1.855	.065
Secondary	.197	.263	.752	.453
Secondary vocational	.159	.194	.822	.412
University education	.016	.138	.117	.907
Age	014	.007	-2.171	.031
Gender	119	.126	947	.345
Customer type meal-kits	364	.143	-2.550	.012
Awareness meal-kits	.251 .	.214	1.172	.243
Brand awareness HelloFresh	.005	.011	.484	.629
Brand awareness Albert Heijn	.013	.015	.883	.379
<i>R2</i>	.107			
F	1.095			

p*<.010, *p*<.001

Figure 27: output multiple regression analysis 2 (baseline discount)