

**A cross-cultural comparison of the effectiveness of hunger marketing
between the Netherlands and Taiwan: Do scarcity appeals on online
e-commerce platforms increase consumers' purchase intentions?**

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ABSTRACT

In a digital and globalizing world, hunger marketing is becoming more frequently used in the online marketplace as a strategy to attract audience's attention. The hunger marketing strategy makes use of the so-called scarcity effect, which takes advantage of consumers' emotional desire to purchase scarce products over abundant ones. However, there is limited research about the emerging cross-cultural and online dimension of consumers' purchase intention when subject to scarcity effects, particularly with regards to so-called low involvement products. This study aims to analyze the cross-cultural impacts of how hunger marketing plays a role in affecting consumers' purchase intention for low involvement products in well-known online marketplaces, with participants from the Netherlands and Taiwan as the subjects. The study builds on the by theory proposed in Lynn's Scarcity-Expensiveness-Desirability (SED) model by examining two mediating effects (perceived value and conformity) and considering two cultural values: individualism and uncertainty avoidance. Specifically, Western consumers are thought of as more individualistic, so they may prefer to buy things to distinguish themselves from others. On the other hand, in terms of uncertainty avoidance, Asians are demonstrated to feel safer when following what others have bought. Moreover, mediating effects of perceived value and conformity are examined. The theory behind the SED model states that scarcity leads to assumed expensiveness and thus increases people's desire for a good or service. Accordingly, a 2 (online product offering with and without hunger marketing) by 2 (Dutch and Taiwanese consumers) online experiment was conducted to determine the purchase intention of consumers. To investigate the proposed hypotheses, 167 participants from both of the sample countries participated in an online experiment. Regression analysis was used to analyze the collected data. The finding shows that hunger marketing for low involvement products has little effect on consumers' purchase intention on online marketplaces. Neither perceived value nor conformity has mediating effects. However, compared to Asian countries, hunger marketing has a more positive influence on consumers' purchasing intentions in Western countries. The work concludes by considering that marketing practitioners should re-examine the scarcity effect on online marketplaces in Asian countries and further examine the scarcity effect for more product categories in Western countries.

KEYWORDS: Hunger marketing, Scarcity, Culture difference, Product involvement, Purchase Intention

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1. Introduction

Hunger marketing is a relatively new term in the field of marketing. According to Chen, Kuo, Jhan, and Chiu (2014), hunger marketing refers to providers of a good or service deliberately restricting the supply of their product in order to create a surplus demand phenomenon.

This effect of scarcity is considered the central focus of this hunger marketing strategy as it taps into consumers' desire to purchase competitive products before they become

unattainable through either becoming sold out, or becoming too costly (Chen et al., 2014).

This work considers the term the 'scarcity effect' as a key dimension of hunger marketing as defined by Chen, Kuo, Jhan and Chiu (2014). The scarcity effect itself focuses on the

behavioral and economic consideration that when goods or services are scarce, that humans will be more likely to engage with the information they have been presented with. This

research therefore specifically considers the scarcity effect dimension of hunger marketing throughout the work.

The hunger marketing strategy is widely used across different products and in markets around the world. It has been especially used in Asia, for instance it was applied to the Thunder chocolate product in the Taiwanese market in 2014 — Thunder chocolate is a candy bar product from a Japanese brand. Upon the introduction of the product, the brand limited the quantity of daily supply, which led to a phenomenon where consumers could not buy the chocolate even when they had the budget to do so (Liu, 2014). The hunger marketing strategy thus drew the public's attention to Thunder chocolate and increased people's eagerness to purchase the product. Ultimately, this has benefited Thunder chocolate, not only in sales growth but also brand awareness.

As mentioned, the scarcity effect is the key element of hunger marketing, and previous research demonstrates how this tactic can be best applied, for example, Stock and Balachander (2005) show that scarcity strategies can generally be applied to non-essential or

special products rather than commodities, staples or new-to-the-world products. Whilst Asian countries have typically used hunger marketing for low-involvement products such as non-essentials or consumables, Western countries have typically applied the strategy for high involvement products such as accommodation or transport tickets.

Product involvement refers to consumers' perception of the importance, intrinsic need of, and interest in a product (Richins & Bloch, 1986; Xue & Zhou, 2010). For high involvement products, because consumers have more interest in them and value these products more, they tend to put more effort on information searching and price analysis compared with low involvement products. So, when marketers in Western countries apply hunger marketing to high involvement products to emphasize that the products are "almost sold out", they are aiming to speed up consumers' purchase decision time on a commodity that may typically require a longer time before a purchase decision is made (Chen et al., 2014) – this can ultimately reduce the likelihood of the customer finding a similar competing product and taking their custom elsewhere. As the credentials of hunger marketing have increased, it has been increasingly applied in various global markets for different products, and with the rise of online shopping in the 21st Century hunger marketing is now being increasingly applied in the online marketplace. While there is some limited research that has examined hunger marketing online (Chen et al., 2014), a key limitation here is that most studies have been conducted with participants who were from the same country, making it difficult to apply the results to the emerging global scope – this is a particularly relevant point as the field of marketing increasingly needs to consider greater international competitiveness within and across the different markets.

Additionally, Jung and Kellaris (2004) noted the importance for future studies of the scarcity effects to examine different countries simultaneously to improve the generalizability of results; most research about the scarcity effect on low-involvement products has only

been conducted in Asia; Bae and Lee (2005) and Huang, Zeng, and Wei (2011) found that the scarcity effect is moderated by the level of product involvement in the Asian markets.

Whereas the lack of robust research about Western people's response to the scarcity effect for low involvement products means that these results found in Asian markets cannot necessarily be applied in the Western markets.

Thus, it should be questioned whether the available theories on hunger marketing is fully applicable to current markets, particularly with the significant rise in online shopping platforms over the past two decades. This has changed the nature of how consumers make purchasing decisions: in front of their computer and away from high-street shops. Furthermore, with greater global competitiveness, there is value in understanding how marketing strategies can be applied in adjacent markets and the effects that it may have on consumers from different cultures. A review of the literature suggests this online and international perspective of marketing is an emerging gap in the literature that should be addressed. To fill this gap, research should focus on updating and increasing the overall volume of work that looks to empirically analyze online hunger marketing across cultures.

Therefore, the purpose of this study is to address these research gaps, and explore the effects of hunger marketing for low involvement products on online shopping platforms and to compare the difference between the Asian and Western consumers' purchase intention of hunger marketing products to contribute to the development of the field.

1.1 E-commerce and the online marketplace

This study specifically focuses on the effect of hunger marketing on online shopping platforms. Before going any further, it is therefore essential to define an important concept: electronic commerce (e-commerce). E-commerce refers to economics transitions with electronic channels. (Delfmann, Albers & Gehring, 2002). With e-commerce, consumers can trade without time and space limitations and the convenience of e-commerce has led to a

wide-spread increase of online shopping and retailing. According to To and Ngai (2006), online retailing is now regarded as a typical application of business-to-customer (B2C) e-commerce. There are different types of B2C e-commerce, discussed below.

Firstly, there is brand-specific or vendor-specific B2C e-commerce. This type of B2C e-commerce refers to enterprises that have developed their own online stores, allowing customers to directly conduct the shopping process through the suppliers' own websites or applications. Well-known vendor-specific e-commerce platforms are provided by brands – well-known examples include brands such as Nike and Apple. The second type of B2C e-commerce is the online e-commerce marketplace. This is where a dedicated platform provides customers with products from a variety of vendors (Ranganathan & Ganapathy, 2002). In this case, the online e-commerce marketplace acts as a third party by handling the transaction processes and allowing customers to search and purchase multiple products from different brands simultaneously (Ranganathan & Ganapathy, 2002). A well-known example of an e-commerce marketplace is the platform provided by Amazon.

The convenience and transparency of information on the online e-commerce marketplaces are valued by consumers; they typically have a search function that allows the user to type what it is they are looking for and to receive a variety of relevant options. This then allows the user to assess the different options available to them and decide on the best purchasing decisions (Slattery, Simpson, & Utesheva, 2013). However, the ability of the Internet to provide consumers with instant and diverse product information (Ranganathan & Ganapathy, 2002) also brings challenges to suppliers. For example, similar competing products are often listed together, making it more challenging for a supplier to attract the attention of the customer to their product. Attracting the attention of a customer and accelerating their purchase decision before they select a different product has therefore become a key task of the supplier in the competitive online marketplace.

1.2 Hunger marketing in Asia and Western countries

As discussed, hunger marketing is widely applied in Asia where marketers have now made use of the strategy for all kinds of products including both high and low involvement products. Shopee is an example of an online e-commerce marketplace in Taiwan that uses a hunger marketing strategy in order to enhance its sales performance (Figure 1.1). An example of the use of the hunger marketing strategy can be seen here when users of the platform are presented with the notes for products, such as: (1) being in high demand, (2) being almost sold out and (3) a timer showing expiration time. This information is used to trigger the interest of potential customers and to deliver a faster purchasing decision as there is a perception that a product is more competitive and at risk of being unattainable when it becomes sold out.



Figure 1.1: An Advertising Example of Hunger Marketing Strategy on Shopee.

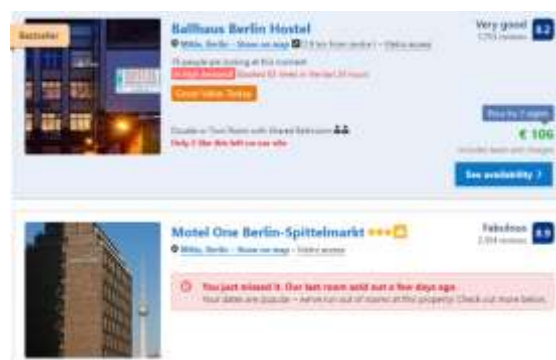


Figure 1.2: An Advertising Example of Hunger Marketing Strategy on Booking.com.

Again, hunger marketing in Western countries has typically been used for high involvement products and services such as accommodation and travel tickets. For instance,

Booking.com, one of the popular travel e-commerce websites that allows people to book their accommodations via its platform, has applied hunger marketing to its website and application. When a user starts to search and plan the accommodation for a trip, the results page shows information emphasizing the scarcity of a given room or hotel. Figure 1.2 is an example of the search results that are shown on Booking.com. There is various information presented accentuating the scarcity of products, such as: (1) the number of people also looking at the same product, (2) the average number of bookings of a given product, (3) a special offer showing a discount for '*today only*' with a timer showing expiration time, (4) the limited availability of existing products, and (5) unavailable items. The advertising with the above information on Booking.com can be regarded as the application of hunger marketing because it demonstrates how in demand and scarce the products are to encourage purchases (Jang, Ko, Morris & Chang, 2015; Sharma & Alter, 2012).

From the above two examples, it is obvious that hunger marketing has been used in both Asian and Western countries. The main difference is that hunger marketing applied to high involvement products more in Western countries, but in Asian countries, it is used for both high involvement and low involvement products.

1.3 Research aim and context

In light of the current literature and research that is available in the discipline of hunger marketing, it is evident that there is an emerging literature gap relating to the dynamic, globalizing and competitive nature of the online marketplace (To and Ngai, 2006). This has demonstrably aroused the interest of researchers over the past two decades (Chen et al., 2014; Jung and Kellaris, 2004). With the aim of investigating the hunger marketing effect specifically for low involvement products on purchase intention on an online marketplace between Asian and Western countries, this study intends to answer the following research question:

What are the effects of hunger marketing for low-involvement products on the purchase intention on an online marketplace in Asian and Western countries?

1.4 Theory and mediating variables

The Scarcity-Expensiveness-Desirability (SED) model developed by Lynn (1992) is used as the main theory of the research. The core concept behind the SED model is that people think scarce goods are more valuable, therefore their desire to purchase scarce goods is higher than the available ones.

This study therefore builds upon this existing theory which assumes that when consumers are subject to hunger marketing appeals, that their purchase intention is influenced as a result of (1) perceived value (Chi, Yeh & Tsai, 2011) and (2) conformity (Gierl, Plantsch, and Schweidler, 2008). The study looks to apply this theory within the context of an online e-commerce marketplace with cross-cultural comparisons.

To address the aims of cross-cultural comparison between Asian and Western countries within this research project The Netherlands and Taiwan have been selected as the research locations. The two countries' similar economic freedom in the global economy allows a representative comparison in the results and conclusions of this study. Economic freedom refers to the fundamental right of every person to control his own labor and property (Miller, Kim, & Roberts, 2019). Individuals are free to work, produce, consume and invest in an economically free society. The economic freedom index is measured based on four factors: rule of law, government size, regulatory efficiency and open markets (Miller et al., 2019). On one hand, the Netherlands scored 76.2 for economic freedom, ranking 13th in the 2018 index. The Netherlands ranks fifth out of 44 countries in the European region. On the other hand, Taiwan's score of economic freedom is 77.3, ranking 10th in the 2018 index. Taiwan ranks fifth among the 43 economies in the Asia-Pacific region; both countries have an overall score above the world average (Miller et al., 2019).

Whilst the Netherlands and Taiwan have comparable scores of economic freedom, the focus of this study is to deeply explore the impact of cultural differences on consumer purchase intention – analysis suggests these two countries have profound cultural differences. Work has shown that conformity would be higher in collectivist cultures than in individualist cultures (Bond & Smith, 1996). According to Hofstede's cultural value dimensions (2011), the Netherlands has higher scores than Taiwan in terms of individualism (the Netherlands: 80, Taiwan: 17), while Taiwan scores higher in uncertainty avoidance (the Netherlands: 53, Taiwan: 69). Individualism refers to a social theory favoring freedom of action for individuals over collectivism (De Mooij & Hofstede, 2010). Uncertainty avoidance refers to how cultures differ on the amount of tolerance they have of unpredictability (De Mooij & Hofstede, 2010). These differences in the score of cultural value dimensions may go some way to explaining why hunger marketing is applied differently and has different effects in Asian countries and in Western countries.

As consumers in Asian countries score lower in individualism, they are thought of as conforming consumers, which means they prefer to follow other people's buying decisions instead of buying things to make themselves different from others. Thus, conformity increases the perceived value of products that many other people are known to have purchased, and thus conformity enhances the purchase intention. Western consumers, however, are thought of as more individualistic, so they may prefer to buy things to distinguish themselves from others (De Mooij & Hofstede, 2010) – here it is therefore feasible to assume that popular products could have a negative effect on purchase intention.

With regards to uncertainty avoidance, Asians are demonstrated to feel safer when following what others have bought. Jung and Kellaris (2004) found that the scarcity effect is more effective among participants with a higher degree of uncertainty avoidance as it can reinforce the belief that the product or service is highly popular amongst others. Consumers

with a lower degree of uncertainty avoidance in Western countries are more willing to take risks, so they may not follow others' purchase decision and could feasibly be less susceptible to this dimension of hunger marketing.

The effect of the two variables described above may explain why hunger marketing is more common in Asia than in the West – as the returns on investing in a hunger marketing strategy in Asia could feasibly be greater due to the population being more susceptible to being affected by these conditions. Furthermore, it may explain why it is applied more frequently for low involvement goods in Asia, such as consumables; these products are commonly seen by others in society across daily life, thus the perception of being conformist may be magnified here.

1.5 Present study

In summary, the research will conduct a cross-cultural comparison to enrich the existing literature around hunger marketing by building upon the existing theoretical framework; that purchase intention is influenced by (1) perceived value and (2) conformity; and that these variables may indeed be affected by the disposition of the different cultures in the Netherlands and Taiwan. This is done with the objective of providing relevant results and conclusions for the benefit of the academic community and to support marketers in helping them to deliver effective solutions in the performance of hunger marketing and advertising strategies for products.

In light of the available literature and the prevailing theory the research objectives of this paper are:

1. to verify the impact of hunger marketing on consumers' purchase intention;
2. to examine the relationships between hunger marketing and purchase intention through mediating variables: perceived value and conformity;
3. to conduct the comparison in two contexts, the Netherlands and Taiwan.

2. Theoretical Framework and hypotheses development

Numerous researchers have discussed the effects of scarcity, the core element of hunger marketing. In this section, the important concepts and theories of their research are elaborated upon in reference to this piece of work, and then five hypotheses are proposed. In Section 2.1, an overview of commodity theory and the SED model is introduced, and how these theories are applied to this research is discussed. In Section 2.2, a detailed explanation of scarcity will be provided: firstly, the scarcity principle and definition are introduced along with a discussion on scarcity classification; secondly, scarcity appeals and messages are elaborated upon to discuss how the scarcity classification can be applied to scarcity appeals. The prior research on the effects of scarcity is reviewed in Section 2.3.

As the research focuses on low involvement products, the concept of product involvement is elaborated in Section 2.4, and relevant research is also discussed. In Section 2.5, the dependent variable of this study, purchase intention, is defined. In Sections 2.6 and 2.7, a detailed explanation of the two mediating variables, (1) perceived value and (2) conformity is introduced and the impact of these two variables on purchase intention is discussed. Finally, in Section 2.8, the role of cultural differences in the research is explained.

2.1 Commodity theory and the SED model

To examine the effect of hunger marketing on consumers' behavior, it is necessary to consider commodity theory as developed by Brock (1968). This is based on two core premises: (1) "any commodity will be valued to the extent that it is unavailable"; and (2) "threat increases commodity-seeking behavior and the tendency to withhold commodities from others" (p. 246). This theory therefore states that items will be viewed as more valuable if they are more restricted and less available because consumers perceive the value of the products as being based on their degree of availability. The positive valuation associated with limited availability of a commodity can be regarded as the scarcity effect.

Several empirical studies examining the effects of limited availability support the

commodity theory. Verhallen and Robben (1994) found that when books were difficult to obtain due to their popularity (demand) and the limitation of their availability (supply), they were considered to be unique and more valuable than those that could not be obtained by chance or at any time. Although the stimulus materials of the Verhallen and Robben experiment were not identified as a high or low involvement product, their research still supported the scarcity effect in commodity theory. Later research also found that perceived scarcity has a significant positive impact on assumed expensiveness; that consumers see scarce products as more valuable (Wu et al., 2012). The above examples demonstrate the value of research into the commodity theory as it can influence the perceived value of a product. It is important to note that this work was not undertaken under the context of e-commerce.

Lynn (1987) adapted the commodity theory and detailed the scarcity effects. In this work it was suggested that the generalization of economic principles helps to explain scarcity's enhancement on perceived value, the fundamental implication is that people intrinsically understand the principle of supply and demand as a determiner of market prices; therefore, when customers face a scarce product they assume greater demand for it compared to the available one, this raises the possibility of a higher price being estimated for the commodity (Lynn, 1987; Oruc, Eisend, Söllner, Eisend, & Söllner, 2015). According to supply and demand principles, a higher price will lead to a decrease in demand, and thus the market eventually reaches equilibrium.

Based on the generalization of economic principles and commodity theory, Lynn (1991) conducted a meta-analysis to examine the effect of unavailability on perceived values and found out that the need for uniqueness mediates the impact of scarcity on commodity values, concluding that scarcity strategies are more effective when applied to people who exhibit a high degree of uniqueness.

Lynn (1992) further considered the assumed expensiveness as a mediator of the positive influence of scarcity on desirability. In order to emphasize the scarcity effect caused by psychological factors, the Scarcity-Expensiveness-Desirability (SED) model was proposed (Figure 2.1). The SED model states that individual's think of products and services as being more expensive once their availability is reduced. This, Lynn explained, occurs due to naive economic theory; he assumed that people's naive economic beliefs are learned from direct, or indirect experience in the marketplace, and these beliefs have an impact on attitudes and behaviors. Scarcity's enhancement of desirability is therefore mediated by the assumption that scarce things cost more as in economic theory the law of supply and demand states that scarce supply leads to increased prices. People may develop such beliefs from messages they receive throughout daily life, for example the purchasing of event tickets from scalpers at a higher price (Lynn, 1992; Oruc et al., 2015). In these sorts of situations individuals learn to associate scarcity with expensiveness. Hence, hunger marketing utilizes this theory to drive sales by tapping in to learned attitudes and behaviors

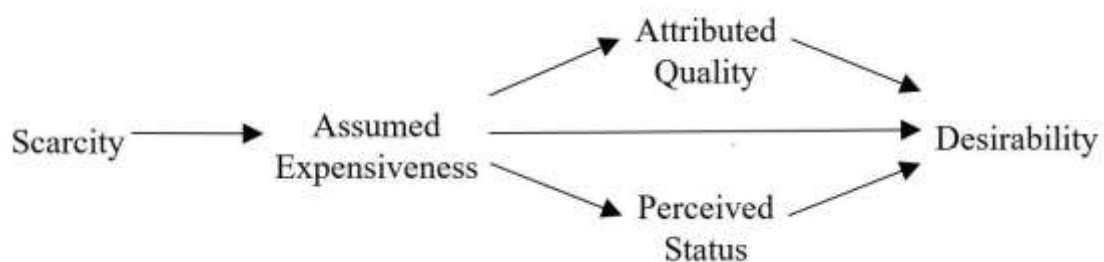


Figure 2.1: The SED model (Retrieved and adapted from Lynn, (1992))

Secondly, Lynn (1992) suggested that by increasing the perceived status and attributed quality of a good that the assumed expensiveness can further increase along with the desirability of a commodity. Perceived status was defined as a phenomenon in which people crave expensive products to enhance their social status (Lynn, 1992). Attribute

quality is interpreted as the fact that people think expensive goods tend to have high quality. These two factors are based on the assumption of the link between expensiveness and desirability, that is, people think expensive goods have higher quality and therefore it is a valuable investment to improve their social status. Lynn (1992) also stressed that perceived status and attributed quality might be just one of many psychological factors that explain the assumed expensiveness.

As this research focuses on low involvement products, the second part of the SED model with attributed quality and perceived status is not suitable for this research. Thus, the research will solely build on the first part of the SED model that examines the assumed expensiveness created by scarcity, which is ultimately based on the theory that in people's belief, the value of scarce items is greater than those of more available ones, leading to the positive association of scarcity and desirability (Lynn, 1989). Lynn did not explain the performance difference of product categories in this model; it is therefore worth investigating whether all kinds of products were in line with the scarcity effect. This research will specifically examine the scarcity effect for low involvement products and study whether consumers' perception of the value of the products will be different after seeing hunger marketing advertisements.

2.2 Scarcity

Hunger marketing is a relatively new term in the practical and academic field and a limited number of studies have explicitly been undertaken. The scarcity of a product is intrinsic to hunger marketing – an overview of scarcity is discussed in the following section.

2.2.1 Scarcity Classification

Cialdini (2007) defined six main principles of persuasion: reciprocity, social proof, commitment and consistency, liking, authority, and scarcity. Cialdini therefore proposed that people can be persuaded by using 'scarcity', i.e. that when something is perceived as more

valuable because the availability is restricted, their decision on how to engage with it can be changed (Cialdini, 2007). According to Cialdini, scarcity can be classified into two tactics: limited number tactics and deadline tactics. The former refers to when a customer is aware that a specific product is in short supply that cannot be certain to last for long. The latter is a tactic in which some official time limit is set up for customers' opportunity to access to the products or services provided (Cialdini, 2007). However, Cialdini's scarcity classification was based solely upon limited number and deadline, which does not fully represent all different types of scarcity.

Gierl et al. (2008) elaborated further on these concepts proposed by Cialdini. The limitation in quantity emphasizes the number of products that can be purchased, while the limitation in time represents the amount of time remaining for ordering a product. Gierl et al. (2008) categorized the causes of limitation in quantity and in time (Figure 2.2). First is scarcity in quantity because of supply; the 'limited edition' and 'limited volume' are two typical instances of this. Second, scarcity in quantity because of demand; messages such as 'almost sold out' and 'only few items left in stock' are typical instances here. Third, scarcity in time because of supply; messages such as 'only available today' are instances of this type of scarcity. Based on the three categories, it is apparent that scarcity in quantity can be caused either by changes in supply or by changes in demand. The consequence of scarcity in time can only be caused by limited supply (Oruc et al., 2015).

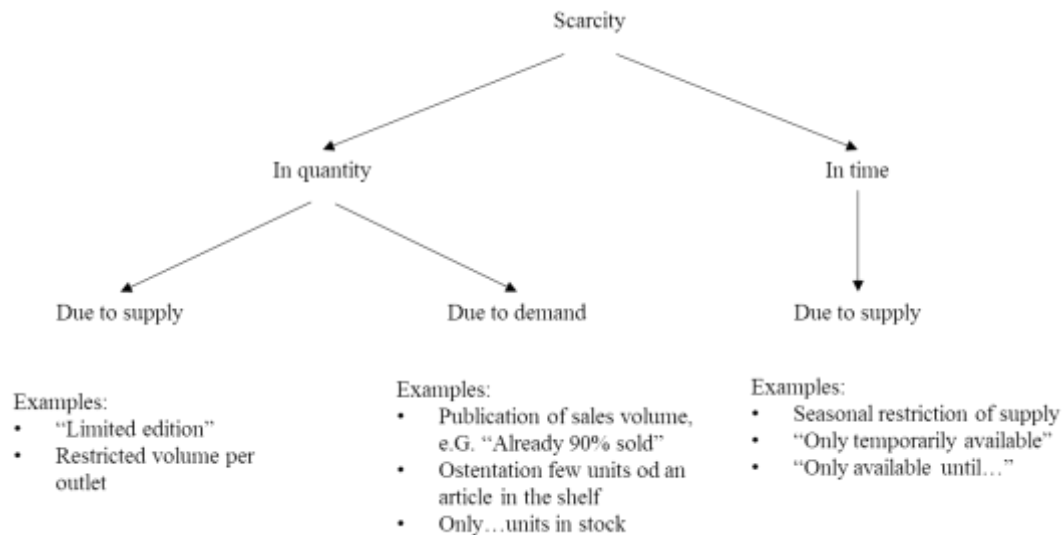


Figure 2.2. Types of scarcity (Gierl et al., 2008)

As this research focuses on the scarcity effect for low involvement products, the scarcity in quantity due to supply such as limited edition is not applicable to the research as limited-edition strategies are infrequently implemented for low involvement products. Therefore, the research addresses scarcity in quantity due to demand and scarcity in time because of supply. That is, excess demand and time-limited supply cause product scarcity, leading to the perception that consumers may experience the unavailability of a certain commodity in the future and that their window of opportunity to purchase the commodity is limited. As customers' perception of the received scarcity signals such as scarcity appeals and scarcity messages plays a significant role in the interpretation, it is necessary to have a deep understanding of scarcity appeals and scarcity messages. This will be discussed in detail in the next section.

2.2.2 Scarcity appeals and scarcity message

According to Stevens, Loudon, Clow and Baack, (2014), advertising appeal is defined as "the general tone and nature of the commercial or message". Scarcity appeals can therefore be regarded as a commercial or message conveying information on a products availability that

may influence the consumer's perception of scarcity. This research focuses on two main types of scarcity in scarcity appeals: (1) due to excess demand and (2) due to limited supply. They can be categorized as limited-quantity scarcity (LQS) and limited-time scarcity (LTS).

Specifically, LQS messages show customers that the promotional offers are provided in predefined quantities, i.e. that supply is limited. Messages around the limited edition of product packages and the quantity of stock left frequently appear in scarcity appeals. LTS messages show the products are available for a certain period of time, and after that, they are no longer available (Aggrawal, Jun, & Huh, 2011). Messages that state a product or offer is available for *today* only can be regarded as a typical example of the LTS. The work from Aggrawal et al., (2011) on the effects of scarcity messaging indicates that this information has a positive impact on the assessment and attitude of the consumer towards the products.

The research discussed above applies LQS and LTS messages together to demonstrate the scarcity effect in hunger marketing. However, as this work looks to examine scarcity effects and low involvement products, the LQS message on limited edition products is deemed unnecessary for inclusion in this study and is therefore not considered. This is because low involvement products are seldom delivered with limited edition products. Instead, only messaging on the limited number of stocks is used to demonstrate the LQS messages. All the scarcity messages considered in this study convey a signal that there may be a chance of unavailability of products in the future; these provide customers with a sense of urgency or competition to obtain the product in line with the scarcity effect.

2.3 Prior research on scarcity effect

In the previous sections, the SED model, scarcity classification, and scarcity messages have been defined and discussed. This section will review previous academic research on scarcity effects. Key points will be discussed in the review and knowledge gaps will be contextualized against the proposed perspectives of this research.

Verhallen and Robben (1994) conducted an experiment that examined different types of unavailability, or scarcity, to contextualize the hunger marketing strategy – a strategy that taps into consumers’ tacit understanding of supply and demand. In their experiment, the perceived unavailability of recipe books was delivered against four different conditions: scarcity caused by limited supply; scarcity caused by surplus demand; scarcity caused by both limited supply and surplus demand; and scarcity caused by accidental circumstances. The result of the study indicated that people reacted differently to different causes of product scarcity. Scarcity due to limited supply and surplus demand in combination (i.e. caused by the market) was demonstrated to have the greatest impact on participants’ preference of recipe books; these sources of scarcity were attributed to delivering a positive relationship with the perceived uniqueness of the product amongst the participants.

In later studies, Van Herpen et al., (2009; 2014) the scarcity effect due to limited supply and excess demand was further examined to understand the effect of uniqueness and the bandwagon effect by using shirts and bottles of wine, respectively. The bandwagon effect was defined in the 2009 study as the desire to follow ‘the sentiments of the majority’. These commodities were used in the work because consumers tend to showcase their personal identity with certain purchases, these chosen commodities were deemed as appropriate for the research aims. In the 2009 study, scarcity due to limited supply and excess demand, and the proximity of the participant to the store were controlled. Scarcity due to limited supply led to the bandwagon effect regardless of the participant’s proximity to the store. However, when there was scarcity due to excess demand participants chose the more available product – in particular when they were in closer proximity to the store. Again, in the 2014 study when there was scarcity due to supply the participants generally chose the wine which had limited supply, whereas when there was excess demand there

was no significant difference between the products chosen and there was no clear bandwagon effect. The results of Van Herpen's work reinforce the theory of the scarcity effect and introduces the concept of the bandwagon effect. The studies suggest that the bandwagon effect is more prevalent on consumer purchase intention when a product has limited supply.

In contrast to bandwagon effect, the *need of uniqueness* effect emphasizes that consumers prefer limited products because limited availability stands for exclusiveness and thus they can express particular social status while possessing the limited products, particularly with luxury items (Herpen, Pieters, & Zeelenberg, 2005). In Gierl and Huettl's study (2010), the effects of supply and demand driven scarcity on customers' attitude toward products was examined further. The research was conducted by categorizing products into conspicuous and non-conspicuous consumption. The study stated that some products can satisfy social needs by being highly admired and respected as *conspicuous consumption goods*; jewelry and mobile phones are common examples of conspicuous consumption goods. The study found that when a product is for conspicuous consumption, scarcity due to limited supply is expedient compared to scarcity due to excess demand. In contrast, if a product is for *non-conspicuous consumption*, scarcity due to high demand brings about more positive product evaluations (Gierl & Huettl, 2010; Oruc et al., 2015).

2.4 Product involvement

According to existing research, product involvement is defined as the perceived importance of, inherent need of, and interest in a product (Richins & Bloch, 1986; Xue & Zhou, 2010).

Zaichkowsky (1986, p.341,) defined low involvement products as items that the consumer scarcely engages with; with low involvement products they do not carry out an “extensive search for information or comprehensive evaluation of the choice alternatives”. Later research by Hanzaee and Taghipourian (2012) elaborated on this definition of low involvement products further, stating that consumers have less motivation to process the information attributed to low involvement products.

2.4.1 Product involvement and scarcity effect

Research undertaken by Bae and Lee (2005) demonstrated that a scarcity message has a more positive impact on purchase intention compared to a non-scarcity message and that the impact of the scarcity effect is greater when the degree of product involvement, or when the consumer product knowledge is low. However, the authors note that the study result was merely based on thirty respondents in Korea, so the representativeness of the result does remain questionable. Later research conducted by Huang, Zeng, and Wei (2011) also found that the impact of the scarcity effect due to time limitation is moderated by the level of product involvement. They again found that the scarcity effect was more effective in low involvement products (i.e. instant coffee and fruit juice) than high involvement products (i.e. mobile phone and digital cameras).

This literature demonstrates that there is a robust base of research examining the effects of the scarcity effect on consumer purchasing decisions, and how the desire to conform (i.e. the bandwagon effect), be individual (i.e. the need of uniqueness), or the consumers’ involvement in the product can impact consumer purchase intention. However, it is evident that these studies have not examined how other variables such as consumers’ cultural traits or the experience of shopping online may ultimately impact the effect that

scarcity can have. This has been identified as a research gap through the literature review and is considered an important area to address as the trend of online shopping continually grows, and as scarcity messages are increasingly used as a hunger marketing strategy. The need to address this knowledge gap is both an academic and practical necessity for researchers and marketing professionals, respectively; in light of this theoretical understanding, the hypotheses of the study will be defined with respect to purchase intention (Section 2.5), the mediating effect of perceived value (Section 2.6), and the mediating effect of conformity (Section 2.7).

2.5 Purchase intention

Azjen's (1991) study stated that intention is a factor to motivate consumers and thus influence their behavior; this study focuses on the scarcity effect on purchaser intention as a means to understand consumer behavior and its impact on hunger marketing. According to Oruc et al. (2015), marketers aim to apply different instruments to affect consumers' behaviors that will ultimately influence their purchase intention. Kim and Pysarchik (2000) demonstrated that there is a strong correlation between consumers' behaviors and their purchase intention, and that purchase intention can feasibly be used as a proxy to measure consumer purchase behavior. Oruc et al. (2015) reiterated this concept stating consumer behavior in itself is too broad to be measured, and that researchers typically use purchase intention as a dependent variable instead because it is measurable. This is congruent with further research conducted by Haque et al., (2015), thus purchase intention is used as the dependent variable of this study.

For the most part, intention reveals how much effort consumers intend to put into implementing their behavior. The likelihood that a particular action will actually be performed by an individual depends largely on the degree of their intention (Haque et al., 2015). When the level of intention to perform a particular behavior is higher, the likelihood

of performing a corresponding action is higher. Based on the discussion, purchase intention can be simply defined as the level to which consumers intend to buy products (Wu et al., 2012).

Previous sections have clarified several theories and concepts of the existing research. This research elaborates on this body of work and will utilize the SED model (Section 2.1), which emphasizes the effect of scarcity, to examine its effect on consumer intention. Scarcity's enhancement of desirability may be mediated by people's belief that the value of scarce items is higher than available ones, which leads to the positive association between scarcity and desirability (Lynn, 1989); such perceptions increase consumer cravings for goods and thus enhances the purchase intention. In this research limited-quantity (scarcity due to excess demand) and limited-time scarcity (scarcity due to limited supply) messages are applied to products to demonstrate hunger marketing as scarcity appeals for low involvement products and the first hypothesis is proposed:

H1: Compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to higher purchase intention.

2.6 The mediating effect of perceived value

Dodds and Monroe (1985) argued that consumers would have a subjective perception during the purchase process. Such subjective perception can be regarded as the perceived value of the products that can be attained when evaluating what consumers give and what they get during the purchase process (Dodds and Monroe, 1985). A later study suggested that perceived value is a significant antecedent variable to satisfaction and behavioral intentions (Chen & Chen, 2010).

Zeitham (1988) elaborated further on perceived value by giving examples of perceived benefits and perceived sacrifices; he defined perceived value as consumers' overall assessment of the utility of a product based on the perception of what they have

gained and what they have sacrificed or paid. From Zeithaml's point of view, value refers to a highlighted tradeoff between receiving and giving components (Zeithaml, 1988, p. 14), noting that it is the consumers' evaluation of the perceived benefits of products provided by enterprises, which is a subjective cognitive perspective. More recently, Medeiros, Ribeiro and Cortimiglia's (2016) experimental result demonstrated that the perceived value of a product is directly related to the level to which consumers are willing to pay for it. In other words, when consumers need to make a purchase decision, they will first evaluate the value of the product, so as to establish the price elasticity, which will be different based on their perception and evaluation of the products. Ponte, Carvajal, and Escobar's study (2015) further demonstrated that online purchase intention is both influenced by perceived value as well as trust.

Perceived benefits can be divided into an entity (such as the product itself) and non-entity (such as convenience and technology). Perceived sacrifice can be divided into monetary (such as price) and non-monetary (such as time and efforts) sacrifices. The positive evaluation of the benefits and costs of the product indicates that it will have a satisfactory or pleasant perception of the product – a positive perceived value from a customer (i.e. that the product offers good value) may bring positive emotions and thus they may be more willing to make a purchase (Kumar, Lee, and Kim, 2006; Chi et al., 2011; Wu et al., 2012). From the perspective of consumer behavior, perceived value can be defined from economic and psychological perspectives (Gallarza, Gil-saura & Holbrook, 2011). From the perspective of economics, perceived value has a strong relationship with consumers' willingness to pay for products with their perceived price. In the psychological dimension, the value is related to the cognitive and affective impact on consumers' product purchase decision and brand selection (Gallarza, Gil-saura & Holbrook, 2011).

When consumers think that the quantity of products produced by the manufacturer

is limited, or the sales time is limited, it is possible to improve the perceived value of the product further (Ong, 1999), and by employing these supply limits, marketers can thus increase sales in the interest of a vendor or organization. Cialdini (2007) hypothesizes that scarcity enhances the perceived value and attractiveness of a product or opportunity. Some scholars believe that rare objects have a certain value because precious objects are rare (Jung & Kellaris, 2004), so scarcity therefore enhances the perceived value of products (Cialdini, 1985; Lynn & Bogert 1996). Later research done by Wu et al. (2012) confirmed that there is a positive relationship between scarcity and assumed expensiveness.

In line with the discussion on the SED model, scarcity is assumed to lead to expected expensiveness and thus result in higher desirability of the product. Scarce products are expected to be more expensive than the available ones, and thus consumers may have a subjective perception that scarce products are more valuable. Based on the discussion and the SED model, the following hypotheses are proposed:

H2: Compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to higher perceived value.

H3: Perceived value has a positive relation with purchase intention.

2.7 The mediating effect of conformity

Bearden et al. (1989) stated that conformity behavior is the thinking and behavioral tendency of individuals in seeking a group identity. Claidière and Whiten (2012) defined conformity as “...when an individual in a group displays that behavior because it is the most frequent [behavior] the individual witnessed in others”. Tsao, Hsieh, Shih, and Lin (2015) provided more detailed information about conformity stating that dissonance occurs when a person observes that the views and behavior of a group are different from their own, they are then forced to change in order to conform; individuals are thus inclined to adjust their cognition or behavior in order to meet the norms and expectations of the group as well as to

reduce cognitive dissonance (Lippa, 1990; Tsao et al., 2015).

Specifically, according to Deutsch and Gerard (1955), there are two types of conformity behavior, namely informational conformity motivation and normative conformity motivation. First, information conformity is the influence of accepting information from others to obtain the truth; it comes from the desire to be correct. Second, normative conformity is the influence of conforming to others' expectations; it comes from the desire to be liked and accepted (Tsao et al., 2015). As this research aims to investigate people's response to scarcity effects on an online marketplace, which is a public online space, the focus of this research is information conformity – the rationale is that when something is close to being sold-out, many people have come to the conclusion that the product is desirable and that they have purchased it. Tsao et al., (2015) theorize that consumers receive information from other people to make decisions; the information gathered online can therefore be regarded as external information and may therefore have an impact on individuals who prefer information integration.

When providers adopt hunger marketing, they deliberately restrict the supply of products to create a sense that the demand of products exceeds the supply (Chen et al., 2014), consumers receive this information that the products are scarce (and by proxy are popular). Thus, when subject to hunger marketing with scarcity messages, consumer willingness to follow the purchase behavior of others may increase at the same time in order to conform (Parker and Lehmann, 2011). Therefore, we assume that the level of conformity has a mediating effect between hunger marketing and purchase intention. Based on the discussion above, the research proposes the following hypotheses:

H4: Compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to a higher degree of conformity.

H5: The degree of conformity is positively related to purchase intention.

2.8 Cultural difference

According to Hofstede's cultural value dimensions (2011), the Netherlands scores higher than Taiwan in terms of individualism (the Netherlands: 80, Taiwan: 17) and Taiwan scores higher in uncertainty avoidance compared with the Netherlands (the Netherlands: 53, Taiwan: 69). Hofstede's model has been applied to global branding and advertising field (De Mooij & Hofstede, 2010). This research focuses on individualism-collectivism and uncertainty avoidance in particular. Individualism is a preference for a loosely-knit social framework. In contrast, collectivism is a tightly-knit social framework and related to the higher level of interdependence in societies. Uncertainty avoidance refers to the attitude toward uncertainty and risk. Countries scoring high in uncertainty avoidance tend to maintain rigid codes of beliefs and behaviors and are less willing to accept new ideas, and thus there is a need for rules and formality to structure life in such countries (De Mooij and Hofstede, 2010).

The difference in score of cultural value dimensions of individualism and uncertainty avoidance in the Netherlands and Taiwan may be one of the explanations for why hunger marketing is more broadly used in Asian than Western countries. Consumers in Asian countries are thought of as conforming consumers, which means they prefer to follow other customers' buying decision. In contrast, Western consumers, are thought of more individualistic and thus they may prefer to buy things to distinguish themselves from others (De Mooij & Hofstede, 2010).

Moreover, another explanation might be consumers in Asia feel safer while following what others have bought. Jung and Kellaris (2004) found that the scarcity effect is more effective among participants with a higher degree of uncertainty avoidance. Consumers with a lower degree of uncertainty avoidance in Western countries are more willing to take risks, so they may not follow others' purchase decision. This may be a further reason why hunger marketing is more common in Asia than in the West.

Even though most Western consumers are maximizers when it comes to high involvement products (i.e., trying to decrease the risk for expensive purchase), they are less inclined to contemplate low involvement products. Different from the satisficers who make up their mind by following the usual script or adopting the first option corresponding to their selection criteria, maximizers tend to gather and analyze more information from the environment to make the best decisions (Voropanova, 2015). This may mean that hunger marketing can be effective for low-involvement products, assuming that consumers can be persuaded easily.

Conversely, if the technique only instills the need for conformity in Asian but not Western countries, it may not be effective for increasing a product's perceived value and purchase intention. Recent studies have proven that culture has an influence on consumers' behaviors online. Mazaheri, Richard and Laroche (2011) have used Hofstede's cultural value dimensions to investigate cross-cultural online consumers' behaviors between Western and Eastern countries and the result was supported by Hofstede's model. This study also conducts a cross-cultural comparison of the effectiveness of hunger marketing by building on this theory; in this study the comparison is between participants in the Netherlands and Taiwan to investigate if the cultural difference has an impact on the effect of hunger marketing.

In short, based on Hofstede's cultural value of six dimensions, this research took individualism and uncertainty avoidance as two control variables to compare the effect of culture on the research general model (*Figure 2.3*) between Taiwanese and Dutch people.

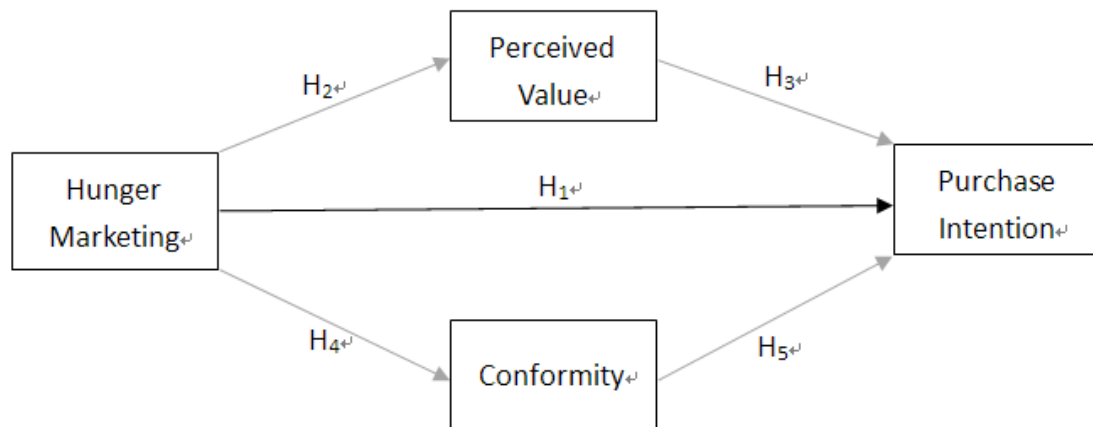


Figure 2.3. An overview of the general research model and proposed hypotheses

3. Methodology

Based on the literature review and proposed hypotheses, an appropriate experimental research design was developed in order to investigate scarcity effects for low involvement products on purchase intention. This chapter describes and discusses the methods used in the investigation. The first section describes the experimental design, procedure, and stimulus materials. The second section describes in greater detail the sampling procedure and participants of the experiment. The third section discusses the measurement of data. Potential control variables and the correlations to the main variables are discussed in the fourth and fifth sections, respectively. The manipulation check is discussed in the sixth section. Finally, the data analysis is discussed in the final section.

3.1 Research experimental design, procedure, and stimulus materials

A quantitative research method was employed in this study to examine the effect of hunger marketing on the purchase intention of the participants. Specifically, an online experiment was conducted using Qualtrics software. The advantages of conducting an online experiment are the reason for this method being chosen; online experiments are low cost, time efficient, and allow the researcher to obtain large sample data (Babbie, 2015). An online experiment is also an appropriate means for studying the specific effects of variables that are manipulated (Shadish, Cook & Campbell, 2002). SPSS was used to conduct data analysis off the back of the online experiment to analyze the data and extrapolate meaningful results.

The research used a 2 (online product offering with and without hunger marketing) by 2 (Dutch and Taiwanese consumers) between-subjects online experiment to examine if hunger marketing has an impact on consumers' purchase intention and whether this impact differs across cultures. Participants were told that the purpose of the study was to investigate their online shopping behaviors and opinions. Then they were exposed to the stimulus material and asked to answer an online questionnaire for the measurement of the variables.

Regarding the procedure, all participants were required to agree to a consent agreement before participating in the experiment. Here, they were informed that the research process was completely anonymous, and that the data was for academic purpose only. There was no need for a cover story and mock questions to mask the purpose of the study. Upon completion of the consent agreement, participants were first asked to fill in several questions on their demographics relating to age, gender, nationality, and education level. Participants were then asked to fill in a list of statements about their cultural values. After this, participants were randomly selected to see one of two different product offering pictures, which was either with or without scarcity appeals. After the exposure to a stimulus online offering, participants were asked to fill in several questions to measure their perceived value, conformity degree, and purchase intention relating to the stimulus. Finally, they were asked to do the manipulation check in order to enhance the research validity. All the variables were measured against existing scales from previous empirical studies. The survey that participants engaged with can be found in Appendix A.

Amazon was selected as the representative platform of the e-commerce marketplace in this experiment because it is one the largest online marketplace with 310 million active customers in the world (Statista, 2016). Applying the Amazon product offering layout to the stimulus materials ensured familiarity amongst participants with the online e-commerce marketplace advertising layout in the experiment. The research also recognized that shipping fees charged by online retailers can influence customers' order rates (Jiang, Shang, & Liu, 2013), to remove this external factor, the stimulus materials for this research did not include any information about shipping fees.

This research focuses on low-involvement products and thus used a representative product to satisfy the experimental aims and objectives, furthermore the selected product needed to be appealing, suitable for everyone without gender or regional limitations, and

should have been a product that consumers demonstrably have a significant interest in. Moreover, the selected product should be readily available on Amazon. Dens and Pelsmacker (2010) and Liang (2012) selected a snack bar as a low involvement product to investigate the advertising effect and consumers' behaviors as it satisfied these key criteria (except the availability on Amazon). Therefore, a snack bar was selected as the representative of a low involvement product of this research, in agreement with the example from previous research. In order to avoid the brand awareness and brand loyalty effect that may influence the purchase intention of a participant (Malik, Ghafoor, Hafiz, Riaz, Hassan, Mustafa, & Shahbaz, 2013), a fictional brand name "ChiBar" was applied to the test object.

In terms of scarcity appeals, scarcity due to limited supply and scarcity due to excess demand were applied to be the scarcity message themes in the scarcity appeals. Specifically, the stimulus material with hunger marketing included following scarcity messages: for the scarcity due to excess demand, messages included (1) the number of people also looking at the same product; (2) the purchase history of the products; and (3) the limited quantity of left stocks. For the scarcity due to limited supply, messages with (1) great value for today only with a timer showing the expiration time. It is worth noting that the limited quantity of leftover stock is regarded as the scarcity due to excess demand and not of scarcity due to limited supply -- this is because low involvement products rarely have their supply limited by vendors; it is therefore assumed that participants followed this interpretation in this study (i.e. that a limited quantity of stock for the ChiBar product is due to excess demand). The stimulus material for the control groups were shown in a standard Amazon layout without any scarcity messages. Because the research concentrates on cross-cultural comparison in Taiwan and the Netherlands, a Chinese version of the survey was needed for those in Taiwan. Figure 3.1 contains examples of the stimulus materials used: (1) the English version

of the stimulus material with scarcity messages; (2) the English version of the stimulus material without scarcity messages; (3) the Chinese versions of the stimulus material with scarcity messages; and (4) the Chinese version of the stimulus material without hunger marketing.

3.2 Sampling procedure and participants

To participate in the study, all subjects had to be above 18 years old, and because this research has chosen the Netherlands and Taiwan to conduct the cross-cultural comparison, participants' nationalities were either the Dutch or Taiwanese. People that did not fit these criteria were excluded from the research. The duration of data collection lasted seven days from 3rd May 2019 to 8th May 2019.

The total number of participants of this online experiment was 203 and 82.3% of participants finished all of the online experiment (N=167). There were 72 Dutch participants and 95 Taiwanese participants, and because the research was a 2 (online product offering with and without hunger marketing) by 2 (Dutch and Taiwanese consumers) online experiment, four conditions are expected for the experiment and each condition consisted of at least 30 participants. The participants were randomly assigned to see either a stimulus material with or without a scarcity message. Dutch participants were exposed to an English version of the stimulus with hunger marketing (n = 37) and an English version of the stimulus without hunger marketing (n = 35). Taiwanese participants were exposed to a Chinese version of the stimulus with hunger marketing (n = 48) and a Chinese version of the stimulus without hunger marketing (n = 47).

The non-probability sampling method was chosen for this research because it is more affordable and feasible compared to probability sampling. To be more specific, the recruitment of participants was mainly conducted online via multiple social networks (Facebook, Instagram and LinkedIn), email, and websites (forums). The researcher sent

(1) English version of the stimulus material with hunger marketing.



(2) English version of the stimulus material without hunger marketing.



(3) Chinese version of the stimulus material with hunger marketing.



(4) Chinese version of the stimulus material without hunger marketing.



Figure 3.1. Stimulus materials material

(1) English version of the stimulus material with hunger marketing.

(2) English version of the stimulus material without hunger marketing.

(3) Chinese version of the stimulus material with hunger marketing.

(4) Chinese version of the stimulus material without hunger marketing.

the experiment link to friends, relatives and they distributed the survey on the researcher's behalf to invite people to participate in the online experiment. The non-probability method was further justified as a personal approach helps to improve the response rate (Baltar & Brunet, 2012). Snowball sampling was also conducted in which subjects recommend useful potential candidates to participate in the study, this helps to enrich the data variability (Marshall, 1996). The researcher recognized that using non-probability sampling may not obtain representative samples of the whole population, so to reduce bias here, the research conducted further recruitment in public by engaging with passersby at random in public places such as train stations and restaurants to participate in the online experiments during the data collection period.

3.3 Measurements

Perceived value, conformity, and purchase intention were the three main variables in this study. All three scales in this research were developed based on previous research and an overview of all items can be found in survey Appendix A. As some items of the three scales were adjusted from the original scale in order to fit the purpose of this study, it was necessary to conduct a factor analysis and reliability test to investigate if the adapted scales were reliable and suitable for this research. Specifically, a principal component analysis (PCA) was performed for each scale. First, the Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy was investigated. The value of KMO represents the proportion of variance in a variable that may be due to underlying factors. According to Pallant (2007), in order to indicate whether the factor analysis is suitable for the data, the KMO value should exceed 0.60. Secondly, for the suitable factor analysis of the data, the value of Bartlett's test of sphericity needs to be statistically significant (i.e. less than 0.05).

The research used Kaiser's criterion and Cattell's scree test to investigate the number of factors created. Kaiser's criterion is based on Eigenvalues and was conducted to

investigate how many Eigenvalues were greater than 1.0 (Pallant, 2007). If the analysis indicates a one-dimensional scale a reliability analysis can be executed. Moreover, Cronbach's alpha of 0.70 is acceptable in factor analysis, but higher values of 0.80 or above are more preferable (Pallant, 2007). When scales were deemed reliable, scale scores were formed by calculating the mean of all the items. If Cronbach's alpha could be enhanced by removing an item from the scale, this item was removed. The remaining items were subsequently formed on a new scale.

Perceived value. This variable was measured by using a four-item scale as developed by Dodds, Monroe, & Grewal (1991) and Wu et al. (2012). In order to ensure participants clearly understand the context of the questionnaire, this study replaced "this product" in the original scale with "the candy bar". Participants were asked to indicate the degree of agreement of four statements on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree): *(1) This candy bar is good value for money; (2) The expected price for this candy bar is acceptable; (3) This candy bar is a good buy; and (4) This candy bar appears to be a good bargain.* The KMO value was 0.84, and Bartlett's test of sphericity was significant ($p < 0.001$). The four items formed a one-dimensional scale as one component was found with an Eigenvalue above 1 (Eigenvalue of 3.27). Moreover, in the Scree plot a clear bend was noticed right after the component. All four items had a positive correlation with the component and had a factor loading of at least 0.88. The scale of perceived value was reliable (Cronbach's alpha = 0.93) and could not be improved by removing items. Overall, the mean of the perceived value was 4.09, and the SD was 1.23.

Conformity. This variable was measured by adapting Chen and Lu's (2015) three-item scale. The original scale was used to measure group-buying conformity. The three original statements were *(1) Products that are most purchased via group buying, will make me want to join group buying; (2) My demands and taste for products via group buying are similar to*

that of others; and (3) *Through online group buying, I get sense of identification with my peers*. In this study, 'group-buying' was replaced to 'online shopping'. Some words in the statements were adjusted to meet the research purpose. Participants were asked to interpret the degree of agreement of three statements on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree): (1) *if I see a product is purchased by others online; I am inclined to purchase it myself too*; (2) *my online shopping behavior is similar to that of others*; and (3) *by purchasing products others have bought before me, I get a sense of identification with my peers*. The KMO value was 0.72, and Bartlett's test of sphericity was significant ($p < .001$). The three items formed a one-dimensional scale as one component was found with an Eigenvalue above 1 (Eigenvalue of 2.19). Moreover, in the Scree plot a clear bend could be noticed right after the component. All three items had a positive correlation with the factor and had a component loading of at least 0.84. The scale of conformity is reliable (Cronbach's $\alpha = 0.81$) and could not be improved by removing items. Overall, the mean value of conformity was 3.65, and the SD was 1.27.

Purchase intention. This variable was measured by using the three-item scale developed by Grewal, Krishnan, Baker, and Borin (1998). In order to ensure participants clearly understood the context of the questionnaire, "this product" in the original scale was replaced to "the candy bar" in this study. Participants were asked to interpret to what extent they agreed with the following statements on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree): (1) *I would purchase the candy bar*; (2) *I would consider buying the candy bar at this price*; and (3) *the probability that I would consider buying the candy bar is high*. The KMO value was 0.74, and Bartlett's test of sphericity was significant ($p < .001$). The three items formed a one-dimensional scale as one component was found with an Eigenvalue above 1 (Eigenvalue of 2.60). Moreover, in the Scree plot a clear bend could be noticed right after the component. All three items had a positive correlation with the

component and had a factor loading of at least 0.91. The scale of purchase intention is reliable (Cronbach's alpha = 0.92) and could not be improved by removing items. Overall, the mean of purchase intention was 3.43, and the SD was 1.49.

3.4 Control Variables

Due to the limitation of snowball sampling, the samples from two groups may not be fully comparable; the research implemented different control variables in the experiment to investigate whether there is any possible variable that may have affected the observed relationship. The demographic variables, namely gender, age, and educational level, were used as the main control variables. The participants were all above 18 years old and the age range was 18 to 66. Overall, the mean was 28.95 and SD was 9.46. In addition, gender was recorded as a dichotomous variable, which was 'female' (0) and 'male' (1). There were 60 males (35.9 percent) and 107 females (64.1 percent) participated in the research.

Additionally, education level was recorded as an ordinal variable: 'primary school' (1); 'secondary school, technical/vocational type' (2); 'secondary school, university-preparatory type' (3); 'technical/vocational degree in tertiary education' (4); 'Bachelor degree in applied university' (5); 'Master degree in university' (6); and 'Ph.D., MBA, or other equivalents' (7). The mean was 5.07 and SD was 1.22.

Furthermore, another control variable was used, which was whether participants have ever shopped online and was recorded from 'No' (0) to 'Yes' (1) and the mean value was 0.94 and SD was 0.24. Overall online shopping frequency except for grocery shopping was added as an additional control variable ($M=1.92$, $SD=0.58$) in order to check if the frequency of online shopping and previous online shopping behaviors affect the online advertising effect on participants' purchase intention. The frequency was measured on a five-point Likert scale (1 = never, 5 = very often). The nine shopping categories were developed based on Amazon's existing categorizations, namely Books & Audible; Movies, TV, Music & Games;

Electronics & Computers; Home, Garden, Pets & DIY; Beauty & Health; Toys, Children & Baby; Apparel, Shoes & Watches; Sports & Outdoors Automotive; and Motorcycle & Industrial. Additionally, the grocery online shopping frequency was added as another control variable ($M=2.21$, $SD=1.22$) because the stimulus material of the study, which was a candy bar, belonged to this category.

Moreover, because the research is a cross-cultural comparison between the Netherlands and Taiwan and to be in line with previous academic research in this field (i.e. Hofstede's cultural value dimensions, 2011), two cultural variables, individualism and uncertainty avoidance, were included in the research. This ensures the knowledge that the Netherlands has higher scores than Taiwan in terms of individualism and Taiwan scores higher in uncertainty avoidance, are considered within the work.

Individualism. This variable was measured by using the scale developed by Yoo and colleagues (2011). Participants were asked to interpret the degree of agreement of seven statements on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree): *(1) It is important that I do my job better than others; (2) Winning is everything; (3) Competition is the law of nature; (4) When another person does better than I do, I get tense and aroused; (5) I'd rather depend on myself than others; (6) I rely on myself most of the time; I rarely rely on others; and (7) I often do "my own thing.* Due to a typographical error of the survey, statement 5 was removed from the scale. In the end, the KMO value was 0.74, and Bartlett's test of sphericity was significant ($p < 0.001$). The remaining six items were formed into two components. Both components were found with an Eigenvalue above 1 (Eigenvalue of 2.87 and 1.15). After these two components, a clear bend could be found in the Scree plot. Statement 1 to statement 4 positively correlated with component 1 and explained 48% of variance, while the statement 5, 6 and 7 positively correlated with component 2 and explained 19% of variance. Since the Individualism scale was adopted from previous

research and in order to measure this variable more comprehensively, this research followed the original scale and combined all questions into one component instead of dividing them into two scales. In short, the overall reliability of the individualism scale is considered to be sound (Cronbach's $\alpha = 0.78$) and could not be improved by removing items. Overall, the mean of Individualism was 4.61, and the SD was 1.00.

Uncertainty avoidance. This variable was measured by Chen and Lu's (2015) four-item scale. Participants were asked to interpret the degree of agreement of four statements on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree): *(1) it is important to have instructions spelled out in detail so that I always know what I'm expected to do; (2) it is important to closely follow instructions and procedures; (3) rules and regulations are important because they inform me of what is expected of me; and (4) standardized work procedures are helpful. Instructions for operations are important.* The KMO value was 0.78, and Bartlett's test of sphericity was significant ($p < .001$). The four items formed a one-dimensional scale as one component was found with an eigenvalue above 1 (Eigenvalue of 2.58). Moreover, in the Scree plot a clear bend could be noticed right after the component. All four items had a positive correlation with the component and had a factor loading of at least 0.74. The scale of uncertainty avoidance is reliable (Cronbach's $\alpha = 0.81$) and could not be improved by removing items. Overall, the mean of uncertainty avoidance was 4.85, and the SD was 1.09.

In addition, whether participants have ever considered buying candy bar on Amazon before was defined as another control variable. Participants were asked to choose on a five-point Likert scale (1=never, 5=frequently): *(1) No, never; (2) Yes, sometimes; (3) Yes, regularly; (4) Yes, often; and (5) Yes, frequently.* Overall, the mean was 1.20 and SD was 0.51.

Lastly, because pricing plays a significant role in determining consumers' shopping behaviors, participants were asked if they think this candy bar on Amazon was sold for a

similar price in the supermarket based on a five-point Likert scale (1= much lower, 5= much higher): (1) *No, I think Amazon's price is much lower*; (2) *No, I think Amazon's price is lower*; (3) *Yes, I think they are sold for a similar price*; (4) *No, I think Amazon's price is higher*; and (5) *No, I think Amazon's price is much higher*. Overall, the mean was 2.86 and SD was 0.76.

3.5 Correlations

This research included several control variables to investigate whether certain external factors could have an impact on the research model. Correlations between all variables were measured to investigate which variables coincide. To be more specific, this research especially focuses on hunger marketing conditions, perceived value, conformity and purchase intention (the dependent variable). Therefore, only variables correlated with these mentioned variables were incorporated into the final control variables in this research. In this section, the correlations between the main four variables are elaborated upon. The correlation matrix is shown in Table 3.1. The Pearson correlation coefficient is used to interpret the relationship between two factors on either an interval or ratio scale (Privitera, 2015, p.499). If the two factors are both neither on an interval nor a ratio scale, the Spearman correlation coefficient can be used as an alternative (Privitera, 2015, p.499). In this research, the correlation of the five dummy variables, which are the hunger marketing condition, gender, country, education level and whether the participant has ever shopped online, were again measured by Spearman correlation coefficient. All the remaining variable correlations were measured by using the Pearson correlation coefficient because they were on a ratio scale.

First, there was no significant correlation found between the hunger marketing condition and other control variables. Secondly, perceived value and if participants shop online ($r = 0.30$, $p = .000$) and perceived value and conformity ($r = 0.33$, $p = .000$) correlate positively -- the two positive correlations were weak. Thirdly, there was a significant positive

and weak correlation between conformity and country ($r = 0.22$, $p = .005$), and a significant positive and moderate correlation between conformity and uncertainty avoidance ($r = 0.38$, $p = .000$) and conformity and purchase intention ($r = 0.42$, $p = .000$). Lastly, there was a significant correlation between purchase intention and if participants have shopped online ($r = 0.16$, $p = .000$), purchase intention and if participants have considered buying candy bars on Amazon ($r = 0.20$, $p = .000$), and purchase intention and uncertainty avoidance ($r = 0.18$, $p = .000$). All three positive correlations were weak.

As shown in Table 3.1, there was no significant correlation between these three control variables (gender, age and education level) and the other variables. Therefore, these three control variables were removed and eight control variables were included in this study: (1) country, (2) if participants have shopped online, (3) grocery online shopping frequency, (4) overall online shopping frequency except for grocery, (5) individualism, (6) uncertainty avoidance, (7) if participants have considered buying a candy bar on Amazon before, and (8) similar price perception.

Table 3.1 Correlation Matrix (N=167)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age	1													
2. Country	-.047	1												
3. Gender	-.155*	-.047	1											
4. Hunger marketing	.130	-.019	.054	1										
5. Education	-.139	-.099	-.059	-.069	1									
6. Shop online	-.132	.086	.074	.002	.111	1								
7. Considered buying candy bars on Amazon	.038	.101	.046	.105	-.023	-.151	1							
8. Similar price perception	-.029	-.126	-.021	-.117	-.009	-.179*	.118	1						
9. Individualism	.123	.064	-.239**	.030	.028	.041	-.074	-.208**	1					
10. Uncertainty avoidance	.128	.236**	-.059	.041	-.194*	.199*	-.144	-.065	.293**	1				
11. Perceived value	-.033	.122	.041	-.004	.137	.301**	.078	-.212**	.119	.128	1			
12. Conformity	.011	.215**	.040	.082	.002	.283**	.008	-.150	.153*	.379**	.329**	1		
13. Purchase intention	.009	.109	.089	.044	.089	.159*	.199*	-.290**	.112	.179*	.689**	.428**	1	
14. F-Shopping Overall	-.011	.016	.053	.037	-.028	.401**	.042	-.187*	.110	.196*	.200**	.380**	.358**	1
15. F-Shopping Grocery	-.039	.259**	.129	-.006	.034	.251**	.167*	-.131	.217**	.163*	.216**	.236**	.334**	.512**

*. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed).

3.6 Manipulation check

In order to guarantee a successful manipulation of product offering with scarcity appeals, participants were asked to fill in a multiple-choice survey to indicate what they noticed from the stimulus material. Participants would see the following choices: (1) *The number of people also looking at the candy bar*; (2) *The purchase history of the products*; (3) *The great value for today only message*; (4) *The timer showing expiration time*; (5) *The limited quantity of left stocks*; and (6) *None of above*.

The sample included 167 respondents, there were 84 respondents exposed to conditions with hunger marketing, and 83 respondents were exposed to condition without hunger marketing. The result of the manipulation check showed that participants who encountered different conditions (with or without hunger marketing) responded significantly differently to the items of manipulation check. The frequency of manipulation check for questions 1 – 6 are as follows. First, the frequency of manipulation check question 1 (The number of people also looking at the candy bar) were significantly different, $X^2 (1, N = 167) = 31.70, p < .000$. Second, the frequency of manipulation check question 2 (The purchase history of the product) were also significantly different, $X^2 (1, N = 167) = 33.23, p < .000$. Third, it showed that the frequency of manipulation check question 3 (The great value for today only message) were significantly different, $X^2 (1, N = 167) = 24.53, p < .000$. Fourthly, the frequency of manipulation check question 4 (The timer showing expiration time) were significantly different, $X^2 (1, N = 167) = 30.18, p < .000$. Fifthly, the frequency of manipulation check question 5 (The limited quantity of stock left) were significantly different, $X^2 (1, N = 167) = 32.78, p < .000$. Lastly, it showed that the frequency of manipulation check question 6 (None of the above) were significantly different, $X^2 (1, N = 167) = 43.64, p < .000$. Therefore, it is considered a successful manipulation. The Chi-Square of manipulation check result can be viewed in Table 3.2.

Table 3.2
Manipulation Check

	Answer	Hunger marketing		Pearson Chi-Square Asymp. Sig. (2- sided)
		Without Hunger marketing n=83	With Hunger marketing n=84	
The number of people also looking at the candy bar	Yes	10.8%	51.2%	.000
The purchase history of the product	Yes	10.8%	52.4%	.000
The great value for today only message	Yes	22.9%	60.7%	.000
The timer showing expiration time	Yes	10.8%	50.0%	.000
The limited quantity of stock left	Yes	20.5%	64.3%	.000
None of the above	Yes	62.7%	13.1%	.000

3.7 Data Analysis

The data collection was conducted by using Qualtrics and SPSS was used for detailed data analysis. Inferential analyses were applied to this research. Specifically, OLS (ordinary least squares) regression analysis was conducted to examine all the proposed hypotheses. Linear regression was used to determine the regression line equation of a set of data points (Privitera, 2015, p.499); the linear relationship is that the increase or decline in the level of independent variables leads to an increase or decline in the level of dependent variables. The advantage of OLS regression analysis is that it facilitates the study of various control variables at once, which helps to enrich the results and make the analyses more reliable.

In order to meet the linear relationship requirements, the dependent variables should be measured on a continuous level. If the independent variables are categorical, they can be recorded as dummy variables in order to stand for different categories (Pallant, 2007). In this research, the independent variable was recorded as a dummy variable (an online offering

with hunger marketing = 1 and an online offering without hunger marketing = 0). The control variables such as gender and whether participants have ever shopped online have also been recorded as dummy variables. Other control variables, shopping frequency investigations, were measured on a continuous level. All the dependent variables (perceived value, conformity and purchase intention) were measured by existing scales and were continuous. Therefore, OLS regression analysis was applicable and suitable for this research.

4. Results

In this Section, the results of the OLS regression analysis are examined with respect to the five proposed hypotheses. Each hypothesis is examined to see if it is supported and rejected. Additionally, the three models that were used are discussed in each section. Each model includes eight control variables. The effect of the control variables is presented in the following order: country difference; online shopping behaviour investigation; cultural values; and if participants have considered buying a candy bar online before and similar price perception. The order is based on the survey design. Participants were asked to demonstrate their nationalities and previous shopping behaviours as well we cultural values investigation first. Then, the last part of the survey is about their past consumption thoughts and price opinions on Amazon. An overview of the three models is shown in Table 4.1 and the result of each hypothesis is presented in Figure 4.1. Finally, the cross-cultural comparison between the Netherlands and Taiwan is discussed in the final Section of the Results.

4.1 Model 1: Purchase intention as dependent variable (H1, H3, H5)

Purchase intention was the dependent variable in Model 1. The three independent variables were hunger marketing, perceived value and conformity. The model was examined with respect to three hypotheses: **H1** “compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to higher purchase intention”, **H3** “perceived value had a positive relation with purchase intention”, and **H5** “The degree of conformity was positively related to purchase intention”. The main independent variable, (the online product offering with hunger marketing) was recorded as “1” and the online product offering without hunger marketing was recorded as “0”.

Accordingly, the OLS regression was conducted to examine the effect of all the independent variables on purchase intention. Model 1 included three main independent variables (hunger marketing, perceived value and conformity) and the eight control variables (discussed below). The total number of participants was 167, which ensured the required at

least 10: 1 case to variable ratio (Kline, 2015) and this study used 15:1 case to variable ratio.

Model 1 had explained variance of 61.0 percent and was significant: $F(11,155) = 22.43$, $p = .000$. The effect of hunger marketing on the outcome variable (purchase intention) was insignificant ($b = -0.01$, with $p = .893$.) Hence, **H1** “compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to higher purchase intention” was rejected. The direct causality was insignificant, which meant that hunger marketing has little or no impact on purchase intention.

Perceived value ($b = 0.59$, with $p = .000$) had significant effects on purchase intention. The higher perceived value one has, the higher purchase intention he or she will have. Therefore, **H3** – that perceived value had a positive relation with purchase intention was supported; the model demonstrates that perceived value would lead to higher degree of purchase intention. Similarly, conformity ($b = 0.17$, with $p = .005$) also had significant effects on purchase intention. Conformity has a slightly positive impact on consumers' purchasing intentions. Therefore, **H5** was also accepted; the model demonstrates a higher degree of conformity would cause a higher degree of purchase intention.

Moreover, Table 4.1 shows the several control variables that had an impact on purchase intention. Firstly, the effect of the country difference was insignificant ($b = -0.06$, $p = .270$). The investigation in to shopping behaviours showed there was a significant effect if participants shop online ($b = -0.17$, with $p = .005$); the effect of overall shopping frequency except for groceries was significant ($b=0.15$, with $p=.029$); and the effect of grocery shopping frequency was insignificant ($b=0.11$, with $p=.091$). In terms of cultural values, the effect of individualism on purchase intention was insignificant ($b = -0.06$, with $p = .315$) and the effect of uncertainty avoidance was insignificant ($b = 0.07$, with $p = .265$). Finally, if participants have considered buying a candy bar on Amazon before ($b=0.13$, with $p=.015$) and similar

price perception ($b=-0.16$, with $p=.004$) had significant effects on purchase intention. Accordingly, if participants shop online; overall shopping frequency except for groceries; if participants have considered buying a candy bar on Amazon before; and similar price perception all had impacts on the outcome variable (purchase intention). In terms of overall shopping frequency except for groceries, it shows that the overall shopping frequency except for groceries has a slightly positive impact on purchase intention.

4.2 Perceived value as dependent variable (H2)

In Model 2, perceived value was the main dependent variable. The main independent variable was hunger marketing and was examined with respect to **H2** “compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to higher perceived value”. The hypothesis was again examined by using the OLS regression analysis. Multiple linear regression were then applied to test the effect of the main independent variable (hunger marketing) and the eight control variables on the outcome variable (perceived value).

The regression model showed variance of 15.6 percent, and was significant: $F(9,157) = 3.22$, $p = .001$. The effect of hunger marketing on the outcome variable (perceived value) was not significant ($b = -0.01$, with $p = .958$). Hence, **H2** was rejected as there was no relationship between an online product offering with hunger marketing and without hunger marketing.

Moreover, Table 4.1 shows that several control variables had impacts on the perceived value. Firstly, the effect of country difference was insignificant ($b = -0.07$, with $p = .710$). Secondly, regarding the shopping behaviours investigation, the effect of if participants shop online was significant ($b = 1.32$, with $p = .002$); the effect of overall shopping frequency except for groceries ($b = 0.18$, with $p = .092$) and the effect of grocery shopping frequency ($b = 0.08$, with $p = .407$) on the perceived value were insignificant. Thirdly, in terms of cultural

values, both the effect of individualism ($b = -0.06$, with $p = .518$) and uncertainty avoidance ($b = 0.06$, with $p = .529$) on perceived value were insignificant. The effect of the control variable, if participants have considered buying a candy bar on Amazon before, was insignificant ($b = 0.33$, with $p = .089$). In contrast, the effect of similar price perception had a significant effect on perceived value ($b = -0.26$, with $p = .046$). The control variables, if participants shop online and similar price perception, had a significant impact on the outcome variable (perceived value) but hunger marketing had no significant impact on perceived value. Therefore, **H2** remained rejected. Specifically, if participants shop online has a strong positive impact on purchase intention. On the other hand, similar price perception has a slight negative impact on consumers' purchase intention. The more expensive participants perceived the price to be, the less purchase intention they had.

4.3 Conformity as dependent variable (H4)

Conformity was the main dependent variable in Model 3. In Model 3, conformity was the main dependent variable and was examined with respect to **H4**; "compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to a higher degree of conformity" – this was again examined by using OLS regression analysis. In Model 3, multiple linear regression was applied to test the effect of the main independent variable (hunger marketing) and the eight control variables on the outcome variable (conformity). The regression model demonstrated variance of 23.6 percent, and was significant: $F(9,157) = 6.70$, $p = .000$. To be more specific, the effect of hunger marketing on the outcome variable (conformity) was insignificant ($b = 0.13$, with $p = .450$). Hence, **H4** was rejected. There was no direct relationship between an online product offering with hunger marketing and conformity.

Moreover, Table 4.1 shows that several control variables had an impact on conformity. Firstly, the effect of country difference was insignificant ($b = -0.35$, with $p =$

.068). Secondly, regarding shopping behaviours investigation, both the effect of if participants shop online ($b = -0.11$, with $p = .151$) and the effect of grocery shopping frequency on conformity were insignificant ($b = -0.04$, with $p = .683$); however, the effect of overall shopping frequency except for groceries was significant ($b = 0.619$, with $p = .001$). The overall shopping frequency except for groceries has a positive impact on conformity. Thirdly, in terms of cultural values, the effect of individualism on conformity was insignificant, ($b = -0.04$, with $p = .680$); the effect of uncertainty avoidance was significant ($b = 0.31$, with $p = .001$). Thus, uncertainty avoidance has a slightly positive impact on conformity. Finally, both, if participants have considered buying a candy bar on Amazon before ($b = 0.11$, with $p = .539$) and similar price perception ($b = -0.07$, with $p = .584$), had an insignificant effect on conformity. Accordingly, overall shopping frequency except for groceries and uncertainty avoidance had an impact on the outcome variable (conformity), but hunger marketing had little impact on conformity. Therefore, **H4** remained rejected.

Table 4.1 Regression Model 1, Model 2, Model 3

	Purchase intention Model 1	Perceived value Model 2	Conformity Model 3
Constant	.237	2.409	.077
Hunger marketing	-.020	-.098	.133
Perceived value	.715***		
Conformity	.201**		
<i>Control variables</i>			
Individualism	-.081	.063	.038
Uncertainty avoidance	.089	.059	.313**
Country	-.183	.074	.349
Shop online	-1.042**	1.322**	.590
Consider buying candy bars on Amazon	.390*	.328	.113
Similar price perception	-.311**	-.255	-.067

F-Shopping Overall	.369*	.018	.619**
F- Shopping Grocery	.130	.077	-.036
R^2	.78	.40	.53

Note. Significant levels: * $p < .05$ ** $p < .01$ *** $p < .001$. (2-tailed)

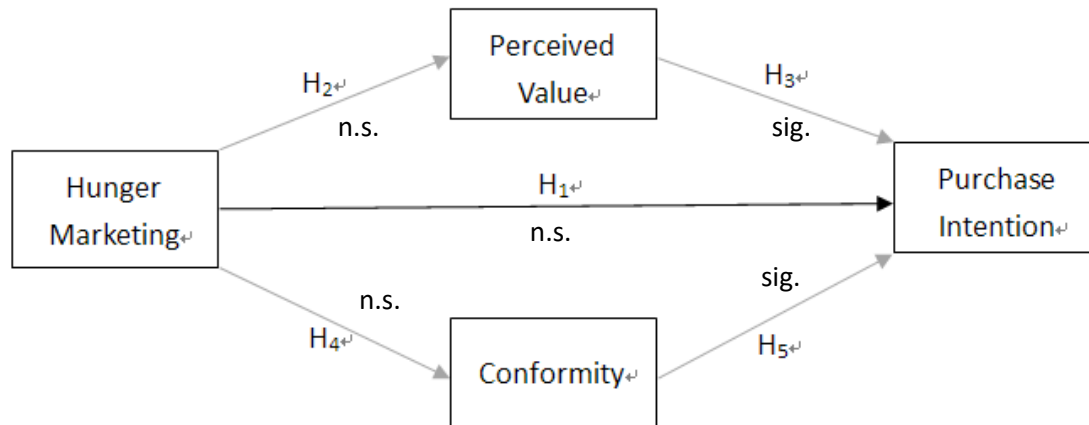


Figure 4.1. The result of each hypothesis

4.4 Country comparison

4.4.1 Model 1: Purchase intention as a dependent variable

The results presented in Sections 4.1, 4.2 and 4.3 show that country difference did not have a significant effect on the outcomes of the experimental models. In line with the research aims of this work to examine a cross-cultural comparison on the effects of hunger marketing (between consumers in the Netherlands and Taiwan), two further OLS regression analyses were conducted to examine the three models described in the previous section, respectively. These two OLS regression analysed the two countries separately. In Model 1, purchase intention was the main dependent variable. Hunger marketing, perceived value and conformity were the three main independent variables. Additionally, cultural value (individualism and uncertainty avoidance) were selected as two control variables. In this research, the total number of Dutch participants was 72 and the number of Taiwanese was

95. According to Kline (2015), the least ideal sample-variable ratio should be larger than 10:1. This study used 15:1 case to variable ration. The results of Model 1 are shown in Table 4.2.

Firstly, regarding participants from the Netherlands, the regression model showed a variance of 58.4 percent, and was significant: $F(5, 66) = 18.52, p = .000$. Specifically, the effect of hunger marketing was marginally significant ($b = 0.431$, with $p = .082$). Hunger marketing has a slightly positive impact on purchase intention. Perceived value had a significant effect on purchase intention ($b = 0.81$, with $p = .000$). Perceived value has a stronger positive impact on purchase intention compared to hunger marketing. Conformity ($b = 0.08$, with $p = .496$), individualism ($b = 0.04$, with $p = .708$) and uncertainty avoidance ($b = 0.00$, with $p = .984$) had an insignificant effect on purchase intention.

Secondly, regarding participants from Taiwan, the regression model showed a variance of 49.4 percent, and was significant: $F(5, 89) = 19.84, p = .000$. To be more specific, the effect of hunger marketing was insignificant ($b = -0.11$, with $p = .624$). Perceived value ($b = 0.73$, with $p = .000$) and conformity ($b = 0.34$, with $p = .000$) had significant effects on purchase intention. Accordingly, both perceived value and conformity has a positive impact on Taiwanese's purchase intention, but perceived value has a stronger impact. Individualism ($b = -0.08$, with $p = .552$) and uncertainty avoidance ($b = 0.06$, with $p = .614$) had an insignificant effect on purchase intention. In short, from the above analysis, it can be seen that perceived value had an impact on purchase intention in the Netherlands and Taiwan. Furthermore, conformity has a positive impact on purchase intention in Taiwan. Compared to Taiwan ($b = -0.11$, with $p = .624$), hunger marketing had marginally significant positive impacts on purchase intention than in the Netherlands ($b = 0.431$, with $p = .082$).

Table 4.2 Regression Model 1 – Country Comparison

			Unstandardized		Standardized			
			Coefficients		Coefficients			
			Std.					
Country	R ²		B	Error	Beta	t	Sig.	
Netherlands	.76	(Constant)	-.600	.740		-.811	.420	
		Hunger marketing	.431	.244	.144	1.764	.082	
		Perceived value	.802***	.107	.698	7.502	.000	
		Conformity	.081	.119	.066	.685	.496	
		Individualism	.044	.117	.031	.377	.708	
		Uncertainty avoidance	.002	.121	.002	.020	.984	
Taiwan	.70	(Constant)	-.729	.753		-.969	.335	
		Hunger marketing	-.108	.220	-.037	-.492	.624	
		Perceived value	.726***	.097	.575	7.470	.000	
		Conformity	.343***	.095	.297	3.619	.000	
		Individualism	-.077	.130	-.051	-.597	.552	
		Uncertainty avoidance	.063	.124	.046	.506	.614	

a. Dependent Variable: Purchase intention

b. Note. Significant levels: * $p < .05$ ** $p < .01$ *** $p < .001$. (2-tailed)

4.4.2 Model 2: Perceived value as a dependent variable

In Model 2, perceived value was the main dependent variable and hunger marketing was the main independent variable. Additionally, cultural values (individualism and uncertainty avoidance) were selected as the two control variables. The results of Model 2 are shown in Table 4.3.

Firstly, regarding participants from the Netherlands, the regression model showed a variance of 9.1 percent, and was marginally significant: $F(3, 68) = 2.26$, $p = .089$. Specifically, the effect of hunger marketing was insignificant ($b = 0.08$, with $p = .794$). In terms of cultural

values, individualism ($b = 0.30$, with $p = .039$) had a significant effect on perceived value but uncertainty avoidance ($b = 0.19$, with $p = .186$) had an insignificant effect on perceived value. Accordingly, individualism has a slightly positive impact on Dutch's perceived value. Secondly, regarding participants from Taiwan, the regression model showed a variance of 0.1 percent, and was insignificant: $F(3, 91) = 0.18$, $p = .907$. To be more specific, the effect of hunger marketing was insignificant ($b = -0.11$, with $p = .660$). In terms of cultural values, individualism ($b = -0.06$, with $p = .690$) and uncertainty avoidance ($b = 0.07$, with $p = .592$) had insignificant effects on perceived value. In short, from the above analysis, it can be seen that hunger marketing had little impact on perceived value in both countries. However, individualism had a significant impact on perceived value in the Netherlands. Neither individualism nor uncertainty avoidance had impacts on perceived value in Taiwan.

Table 4.3 Regression Model 2 – Country Comparison

Country	R ²		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
			B	Std. Error	Beta			
Netherlands	.30	(Constant)	1.615	.913			1.768	.082
		Hunger marketing	.080	.305	.031		.263	.794
		Individualism	.303*	.144	.244		2.109	.039
		Uncertainty avoidance	.194	.145	.156		1.336	.186
Taiwan	.08	(Constant)	4.182	.695			6.019	.000
		Hunger marketing	-.106	.241	-.046		-.441	.660
		Individualism	-.057	.142	-.048		-.401	.690
		Uncertainty avoidance	.070	.130	.064		.538	.592

a. Dependent Variable: Perceived Value

b. Note. Significant levels: * $p < .05$ ** $p < .01$ *** $p < .001$. (2-tailed)

4.4.3 Model 3: Conformity as a dependent variable

In Model 3, conformity was the dependent variable and hunger marketing was the independent variable. Additionally, cultural values (individualism and uncertainty avoidance) were selected as the two control variables. The results of Model 3 are shown in Table 4.4.

Firstly, regarding participants from the Netherlands, the regression model showed a variance of 14.2 percent, and was significant: $F(3, 68) = 3.77, p = .015$. Specifically, the effect of hunger marketing was insignificant ($b = 0.40$, with $p = .151$). In terms of cultural values, individualism ($b = 0.07$, with $p = .608$) had an insignificant effect on conformity but uncertainty avoidance ($b = 0.36$, with $p = .009$) had a statistically significant effect on conformity. Accordingly, uncertainty avoidance has a slightly positive impact on Dutch's conformity. Secondly, regarding participants from Taiwan, the regression model showed a variance of 12.6 percent, and was significant: $F(3, 91) = 4.39, p = .006$. To be more specific, the effect of hunger marketing was insignificant ($b = 0.02$, with $p = .942$). In terms of cultural values, individualism ($b = 0.04$, with $p = .761$) had an insignificant effect on conformity but uncertainty avoidance ($b = 0.40$, with $p = .003$) had a significant effect on conformity. Accordingly, uncertainty avoidance has a slightly positive impact on Taiwanese consumer's conformity. In short, from the above analysis, uncertainty avoidance had a significant impact on conformity in the Netherlands and Taiwan, but hunger marketing had little impact on conformity in both countries.

Table 4.4 Regression Model 3 –Country Comparison

			Unstandardized	Standardized			
			Coefficients	Coefficients			
			Std.				
Country	R ²		B	Error	Beta	t	Sig.
Netherlands	.38	(Constant)	1.213	.823		1.473	.145
		Hunger marketing	.399	.275	.165	1.452	.151
		Individualism	.067	.130	.058	.515	.608
		Uncertainty avoidance	.355**	.131	.308	2.708	.009
Taiwan	.36	(Constant)	1.624	.712		2.282	.025
		Hunger marketing	.018	.247	.007	.073	.942
		Individualism	.044	.145	.034	.306	.761
		Uncertainty avoidance	.404**	.133	.338	3.027	.003

a. Dependent Variable: Conformity

b. Note. Significant levels: * $p < .05$ ** $p < .01$ *** $p < .001$. (2-tailed)

5. Conclusion

This research has empirically examined the hunger marketing effect on online e-commerce marketplaces in order to contribute to the research and knowledge of the academic community and to inform commercial decision making. The work has not only looked to analyze the impact of hunger marketing on low involvement products (i.e. on a candy bar), but it has also looked to determine the cross-cultural effects of hunger marketing in two different markets – an important consideration in a globalizing commercial world. These key research gaps were identified within the literature review of this work, where it became apparent where there was both a low volume of research directly examining the effect of hunger marketing in online shopping and among consumers from different cultures.

To answer the research question, *“what are the effects of hunger marketing for low involvement products on the purchase intention on an online marketplace in Asian and Western countries?”*, the methodological approach built on research of previous studies in the field whereby a 2 (online product offering with and without hunger marketing) by 2 (Dutch and Taiwanese consumers) online experiment was conducted to determine the purchase intention of consumers. The finding shows that hunger marketing for low involvement products has little effect on consumers’ purchase intention on online marketplaces. However, compared to Asian countries, hunger marketing has a marginally significant and positive influence on consumers’ purchasing intentions in Western countries. Specifically, this research proposed five hypotheses and the results of each hypothesis are discussed below.

5.1 Discussion

5.1.1 The effect of hunger marketing on purchase intention (H1)

The first hypothesis assumed that compared to an online product offering without hunger marketing, an online product offering with hunger marketing will lead to higher purchase

intention. In light of the results from the statistical analysis, the hypothesis was rejected, meaning that hunger marketing does not always cause a higher purchase intention. The result contradicted the Scarcity-Expensiveness-Desirability (SED) model developed by Lynn (1992), which states that scarcity leads to assumed expensiveness and increases people's desire for products. The main reason for hunger marketing not leading to higher purchase intention in an online marketplace may well be because the Internet offers the possibility for consumers to find alternative, competing products conveniently that also meet their needs. Thus, the consumer may simply purchase a different product, instead of having an increased desirability for the product that is offered with a scarcity message.

Indeed, Kristofferson, McFerran, Morales, and Dahl (2016) stated that consumers may look to other avenues, such as different online platforms or channels, to purchase scarce products. That is, consumers may consider that if they invest some time and efforts searching for more information elsewhere, they will find many alternatives for the scarce products they have seen online – this may ultimately reduce the effect of hunger marketing on their purchase intention. Additionally, skepticism about the authenticity of marketing hunger information can be another explanation as to why hunger marketing does not have the expected impacts on purchase intention. Skepticism is an attitudinal defense that refers to a negative attitude toward the motives and claims of advertising (An, Jin, & Park, 2014). With skeptical attitudes such as “advertising information tends to let consumers buy unnecessary items” or “the shown information is doubtful”, thus consumers with skepticism may be less affected by hunger marketing.

5.1.2 The effect of hunger marketing on perceived value and purchase intention (H2, H3)

In this study the second hypothesis, that hunger marketing will lead to a higher degree of perceived value, was rejected. The result showed a contradiction with commodity theory (Brock, 1968) that items will be viewed as more valuable if they are more restricted and less

available because consumers perceive the value of the products as being based on their degree of availability. Even though several studies proved that scarcity effects have a positive impact on consumers' perceived value (Verhallen & Robben, 1994; Wu et al., 2012), this research found that scarcity effects do not always have positive impacts on perceived value. The reason for this result may be that for low involvement products, consumer's see less importance and interest in a product (Xue & Zhou, 2010), which may lead to them paying less attention to the product information and (scarcity) messages. Further, the convenience of seeking other platforms and alternatives may lead consumers to feel that the value of the item is not as high as the scarcity appeal suggests. Therefore, hunger marketing for low involvement products does not cause a higher degree of perceived value.

The third hypothesis, perceived value has a positive relationship with purchase intention, was supported. Overall, consumers with higher perceived value have a higher purchase intention. The result was in line with prior research that the perceived value of a product is directly related to the level to which consumers are willing to pay for it (Medeiros, Ribeiro & Cortimiglia, 2016). However, because the second hypothesis, that that hunger marketing will lead to a higher degree of perceived value, was rejected, it showed there was no mediating effect of perceived value between hunger marketing and purchase intention.

5.1.3 The effect of hunger marketing on conformity and purchase intention (H4, H5)

The fourth hypothesis, that hunger marketing will lead to a higher degree of conformity, was rejected in this study. Parker and Lehmann (2011) stated that if a product is popular, many consumers will flock to it, and that this will prompt other consumers to consider the popularity and assume that the product is of good quality, thus leading to an increase in conformity of consumers purchasing the same product. However, in this study, the result showed that hunger marketing did not lead to a higher degree of conformity, contradicting Parker and Lehmann's (2011) statement. The main explanation may also be that the higher

score of individualism in both countries revealed that individualistic consumers prefer to make their own decisions, so the impact of hunger marketing was weakened. A study has shown that Individuals in countries with a high degree of individualism value individual freedom, whilst individuals in countries with a low degree of individualism attach importance to harmony and conformity (Gorodnichenko & Roland, 2012). As the two countries, the Netherlands and Taiwan, have both scored high in individualism, the little impact of hunger marketing on conformity is therefore expected, and consumers in countries with a higher level of collectivism may be more affected by the impact of hunger marketing on conformity

The fifth hypothesis, which was that the degree of conformity is positively related to purchase intention, was supported by the research. The result was in line with the previous study; consumers that scored higher in conformity also showed higher purchase intention (Ahmad, et al., 2013) and this can be explained by the fact that consumers avoid perceived risks of online shopping by following others' previous purchase. However, because the fourth hypothesis, that hunger marketing will lead to a higher degree of conformity, was rejected, it showed there was no mediating effect of conformity between hunger marketing and purchase intention. Although there is no direct causality between hunger marketing and conformity and purchase intention, this study found there was a positive relationship between conformity and purchase intention.

5.1.4 Country comparison

In terms of the cross-country comparison, this research found that hunger marketing has no statistically significant influence on purchase intention in Taiwan, whilst hunger marketing has marginally significant impacts on purchase intention in the Netherlands. Specifically, Taiwanese people reacted negatively to hunger marketing on purchase intention, in contrast, Dutch people reacted positively. The reason may be that hunger marketing has

been widely applied in Asian markets, and Asian people may have become desensitized to this information or doubt the truth of the messages; this can moderate or even negate the impact on their purchase intention. As discussed before, skepticism about the authenticity of marketing hunger information may be one of the explanations as to why hunger marketing does not have the expected impacts on purchase intention. The negative attitude toward the claims of advertising and information may reduce consumers' willingness to purchase (An, Jin, & Park, 2014). Whilst, because hunger marketing for low involvement products is less frequent in Western countries, the scarcity messages may attract Western people's attention and further affect their purchase intention.

To be more specific, this research examined perceived value, conformity and two cultural values (individualism and uncertainty avoidance) between the Netherlands and Taiwan and investigated their effects on purchase intention. It was found that perceived value has statistically significant effects on purchase intention in both countries. Interestingly, this study found that a higher degree of conformity led to a higher purchase intention in Taiwan only. This may be explained by the fact that Asian people have higher degree of uncertainty avoidance, and thus follow what others have bought to reduce the risk of shopping online. Regarding the two cultural values, the research found that there was no statistically significant difference in individualism between those from the Netherlands and Taiwan, which contradicted the theory from prior research (Hofstede's cultural value dimensions, 2011). On the other hand, in this research the results showed that Taiwanese scored statistically significantly higher in uncertainty avoidance than Dutch people. However, it showed that neither individualism nor uncertainty avoidance has an impact on purchase intention in this case. This may be explained by other cultural values such as indulgence, which refers to the extent that people try to control their desires and impulses (Hofstede, 2011), these may be ultimately be more impactful than individualism and

uncertainty avoidance when discussing consumers' purchase intention.

Secondly, this research found that hunger marketing has no statistically significant influence on perceived value in the Netherlands and Taiwan. Specifically, uncertainty avoidance did not have statistically significant impacts on perceived value in both countries. However, the results did show that individualism has a positive relationship with perceived value in the Netherlands. Prior research has proven that individualism has an impact on psychological aspects such as innovation and long run growth (Gorodnichenko, & Roland, 2012). The result of this study has showed that more research is needed to investigate the relationship between individualism and perceived value in the Western context.

Finally, hunger marketing had no statistically significant influence on conformity in the Netherlands and Taiwan. Specifically, individualism did not have statistically significant impacts on conformity in both countries. Nevertheless, uncertainty avoidance had positive and significant impacts on conformity in the Netherlands and Taiwan. This may be explained by previous research; individuals scoring higher in uncertainty avoidance tend to establish more formal rules and be less willing to tolerate deviant thoughts and behaviours (Moon, Chadee & Tikoo, 2008). Thus, people with a higher degree of uncertainty avoidance may be more inclined to follow by instructions or by what has been done by others, which leads to a higher degree of conformity in this case.

5.2 Limitations

Some limitations with the research method are recognized and described in the following section to guide future research. Firstly, Amazon was selected as the online e-commerce marketplace in this research: The stimulus material was presented in the Amazon marketplace format. However, whilst Amazon is the largest online e-commerce marketplace around the world, Taiwanese consumers are known to prefer local online marketplaces such as Shopee, whereas Dutch people are more familiar with the local online marketplace such

as Bol.com. The unfamiliarity with the Amazon platform may have affected the consumers' purchase intention. Due to e-loyalty -- which refers to the willingness of consumers to continue to purchase from a certain website rather than switch to other websites (Flavian et al, 2006) -- consumers may be more willing to purchase through the platforms they have previously used and developed trust for. Hong and Cho (2011) found that trustworthiness of the intermediary plays an important role in determining the level of consumer trust and acceptance of sellers on the marketplace. The results show that consumers' trust in intermediaries has a strong impact on their attitudinal loyalty and purchase intention (Hong and Cho, 2011).

Secondly, the use of a fictional brand "ChiBar" was applied to this research without examining its rationale and may have had a confounding effect on the participants. Several participants mentioned that they did not want to purchase the candy bar because they were not familiar with this brand, or that they would only choose famous brands when purchasing candy. Thirdly, several participants thought it was less convenient to purchase a candy bar online at all because they needed to wait for the shipment -- typically purchasing a candy bar may be done impulsively for immediate consumption and satisfaction. Therefore, it is worth noting that because this experiment took a candy bar as the stimulus material, and that individual external factors may have had a greater influence on consumers' purchase intention than the hunger marketing on the specific product -- thus the effectiveness of the hunger marketing may have been reduced in this case. These practical limitations are recognised and should be examined in greater depth before further iterations of this study are designed.

Other practical limitations of the study are considered. For example, this study only used one product, a candy bar, to examine the effects of hunger marketing. Therefore, the results can only be generalized to a low-involvement candy bar but may not be applicable to

other low involvement products. Additionally, in order to present the authentic consumer online shopping condition, participants in this study were not restricted to watching stimulus materials for a certain number of seconds. This means that participants may not have read the stimulus carefully or that they skipped over the page quickly and the desired effect of the hunger marketing strategy may have been limited. Whilst in future studies the participants could be forced to view the stimulus material for a set period of time, this may reduce the authenticity of the study.

Finally, limitations of the sampling method are acknowledged; snowball sampling was chosen as the main sampling method in this research. The potential problem of snowball sampling is that it is a non-probability method and there is a chance that some groups of people are not included in the sampling population – this can generate an unbalanced sample with selected demographic characteristics, which may lead to a bias in the research conclusions (Sadler, Lee, Lim, & Fullerton, 2010). Even though some participants were recruited randomly in public places, most participants were recruited from the researcher's social network which may demonstrate certain characteristics or attitudes. Therefore, it must be stated that there may be participant characteristics from outside of the researcher's network such as the elderly that have not been reflected in this study. Moreover, this research selected Dutch and Taiwanese people to represent the population. It is acknowledged that the limited sample size and variety makes it difficult to apply the result to different countries in their respective regions (i.e., Western and Asian countries). Nonetheless, the consideration of Taiwanese and Dutch participants has not obviously been undertaken before, and the results can still be considered a valuable starting point for cross-cultural comparisons in the field of hunger marketing.

5.3 Suggestions for future research

Because there are several limitations for this research, a number of suggestions for future research are provided, namely online marketplace platform and stimulus materials selection; skepticism investigation; two-types of scarcity effects examination; online shopping behaviours and price perception investigation; and individualism scale improvement. The following paragraphs elaborate upon the previous suggestions.

Since consumers have their preference of online e-commerce platforms (Flavian et al, 2006), it is recommended that further research uses the most popular local platform depending on the regions considered instead of using an online e-commerce platform which is global but relatively unknown to participants. This may increase the authenticity of the experimental condition and reduce the inclusion of confounding factors in the results. Moreover, this research only used a candy bar to examine the effects of hunger marketing, making it difficult to generalize to other low involvement products. Therefore, it is recommended that future research look to consider other low involvement products to enhance the generalizability. Additionally, as discussed before, skepticism about the authenticity of marketing hunger information may be one of the explanations that consumers are not affected by these messages. Therefore, it is recommended that future research investigate the role of skepticism in affecting consumers' behaviour when consumers receive advertising messages.

Furthermore, in this research, scarcity due to limited supply and scarcity due to excess demand were applied to stimulus materials and the result showed that scarcity has little effects on purchase intention. However, prior research has shown that there are two types of scarcity, which is scarcity due to limited supply and scarcity due to excess demand (Aggrawal, Jun, & Huh, 2011). Therefore, it is recommended that further research compare which type of scarcity has a larger impact on consumers' purchase intention to deliver more meaningful results for the academic community and marketing practitioners. Moreover, it is

also suggested that further research measures the level that scarcity affects the degree of purchase intention, which may help to quantify the hunger marketing strategy and measure the effect in more detail.

Furthermore, this research found that consumers' online shopping behaviours, such as online shopping frequency, have a significant effect on purchase intention. It is recommended that further research investigates consumers' shopping behaviours when examining the marketing effect to understand the implications that this has on their final purchase decision. Also, in this research, the similar price perception was found to play an important role in affecting consumers' purchase intention -- further research that also explores the effect of price perception when it comes to consumer's purchase decision may be valuable. Lastly, this research examined the individualism scale developed by Yoo et al. (2011) and found two components in the original scale. It is recommended that future studies measure individualism on two different scales to measure the different aspects of individualism more accurately.

5.4 Strength and Implications

Following to the results and conclusions of this empirical study, several managerial implications can be made to allow marketing practitioners to make use of the research findings. First, although the hunger marketing effect was not statistically significant, this research found that people in the Netherlands responded positively to offerings with hunger marketing but people in Taiwan responded negatively; marketing practitioners may adjust their marketing strategy on online marketplace platforms based on people in different countries – this may help them understand that hunger marketing may have been over applied in Asian countries where consumers have been desensitized to the strategy, whilst consumers in Western Countries may be considered more susceptible to novel scarcity messages. Therefore, marketing professionals may need to reconsider or re-examine hunger

marketing strategies being used in Asian markets and seek other more effective alternatives when conducting online marketing strategies to increase the revenues.

Moreover, this research confirmed that perceived value and conformity have a positive impact on consumers' purchase intention. Even though hunger marketing does not lead to an increase in perceived value and conformity, marketing practitioners can still be guided by the findings and search for alternative strategies that can increase consumers' perceived value and conformity. To be more specific, Asian people were found to have a higher degree of conformity compared with Western people and the higher degree of conformity had a positive relation with purchase intention in Asia. Therefore, marketing practitioners can examine other strategies and alternatives to activate Asian people's conformity and further influence their purchase intention. Additionally, this research confirmed that Taiwanese people scored more highly in uncertainty avoidance than Dutch people, and that it had a positive relation with conformity. Marketing practitioners may make use of these noted differences and apply various strategies aside from hunger marketing to receive their intended results.

Last but not least, this research found that consumers' shopping behaviours play a significant role in purchase intention. That is, if consumers shop online, consumers' frequency of shopping online and similar price perception have a significant impact on their purchase intention. To optimize the marketing strategy, it is suggested that marketing practitioners analyze consumers' shopping behaviours and their prior purchase experiences and apply target marketing strategies based on this information. Targeted marketing strategies refers to the concept that the key to achieving an organization's goals is not only to identify customers' needs but also to provide them with their desired satisfaction in a more effective and competitive way (Mainardes and dos Cerqueira, 2015). Compared to the use of generic strategies or content, using personalized marketing strategies that provide

product information that consumers find relevant and affordable may contribute to more revenues and ultimately benefit sales performance in the long run.

To conclude, this research conducted a real empirical study on participants in the Netherlands and Taiwan; this addressed a research gap that showed cross-cultural analysis is truly limited in the field of hunger marketing. This made the results novel, and the field-trial aspect of the work made the results valid to the research objectives. With the evolving global nature of international online marketplaces, it is imperative that future research follows on with this cross-cultural approach to deliver meaningful results for the marketing field.

References

- Aggrawal, P., Jun, S. Y., & Huh, J. H. (2011). Scarcity messages—A consumer competition perspective. *Journal of Advertising*, 40(3), 19-30.
- An, S., Jin, H. S., & Park, E. H. (2014). Children's advertising literacy for advergames: perception of the game as advertising. *Journal of Advertising*, 43(1), 63-72.
doi:10.1080/00913367.2013.795123
- Azjen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ahmad, W., Arshad, H. M., Sabir, R. I., & Ashraf, R. U. (2013). Antecedents of purchase intention for foreign apparel products among Pakistani university students: Implications for market entry strategy. *Middle-East Journal of Scientific Research*, 16(9), 1255-1263. DOI: 10.5829/idosi.mejsr.2013.16.09.12018
- Babbie, E. R. (2015). *The basics of social research*. Boston, Massachusetts: Cengage Learning
- Bae, Y., Lee, S., (2005). The effect of scarcity message on consumer's purchase intention in the Internet shopping mall. *Asia Pacific Advances in Consumer Research* 6, 252–258.
- Baltar, F., & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research*, 22, 57-74. doi:10.1108/10662241211199960
- Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 15(4), 473.
doi:10.1086/209186
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Aschs (1952b, 1956) line judgment task. *Psychological Bulletin*, 119(1), 111-137.
doi:10.1037//0033-2909.119.1.111
- Brock, T.C., (1968). Implications of Commodity Theory for value change, in: *psychological foundations of attitudes*, 243–275. Academic Press, New York.
- Chen, C., & Chen, F. (2010). Experience quality, perceived value, satisfaction and behavioral

- intentions for heritage tourists. *Tourism Management*, 31(1), 29-35.
doi:10.1016/j.tourman.2009.02.008
- Chen, Y., & Lu, H. (2015). We-commerce: Exploring factors influencing online group-buying intention in Taiwan from a conformity perspective. *Asian Journal of Social Psychology*, 18(1), 62-75. doi:10.1111/ajsp.12083
- Chen, Y., Kuo, C. J., Jhan, Y. and Chiu, P. (2014) Hunger marketing on smartphone, *Proceedings of PICMET '14 Conference: Portland International Center for Management of Engineering and Technology; Infrastructure and Service Integration*, Kanazawa, pp. 1950-1957.
- Chi, H., Yeh, H. R., & Tsai, Y. C. (2011). The influences of perceived value on consumer purchase intention: The moderating effect of advertising endorser. *Journal of International Management Studies*, 6(1), 1-6.
- Cialdini, R. B., (2007). Influence: The psychology of persuasion (pp. 173-174), NY: Collins.
- Claidière, N., & Whiten, A. (2012). Integrating the study of conformity and culture in humans and nonhuman animals. *Psychological Bulletin*, 138(1), 126-145.
doi:10.1037/a0025868
- Delfmann, W., Albers, S., & Gehring, M. (2002). The impact of electronic commerce on logistics service providers. *International Journal of Physical Distribution & Logistics Management*, 32(3), 203-222.
- Dens, N., & Pelsmacker, P. D. (2010). Consumer response to different advertising appeals for new products: The moderating influence of branding strategy and product category involvement. *Journal of Brand Management*, 18(1), 50-65. doi:10.1057/bm.2010.22
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *The Journal of Abnormal and Social Psychology*, 51(3), 629-636. doi:10.1037/h0046408

- Dodds, W. B. & Monroe, K. B. (1985). The effect of brand and price information on subjective product evaluations. *Advances in Consumer Research*, 12(1), 85-90
- 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(3), 307. doi:10.2307/3172866
- Flavian, C., Guinalíu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & Management*, 43(1), 1-14. doi:10.1016/j.im.2005.01.002
- Gallarza, M. G., Gil-Saura, I., & Holbrook, M. B. (2011). The value of value: Further excursions on the meaning and role of customer value. *Journal of Consumer Behaviour*, 10(4), 179-191. doi:10.1002/cb.328
- Gierl, H., & Huettl, V. (2010). Are scarce products always more attractive? The interaction of different types of scarcity signals with products suitability for conspicuous consumption. *International Journal of Research in Marketing*, 27(3), 225-235. doi:10.1016/j.ijresmar.2010.02.002
- Gierl, H., Plantsch, M., & Schweidler, J. (2008). Scarcity effects on sales volume in retail. *The International Review of Retail, Distribution and Consumer Research*, 18(1), 45-61. doi:10.1080/09593960701778077
- 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. doi 10.1016/s0022-4359(99)80099-2
- Gorodnichenko, Y., & Roland, G. (2012). Understanding the individualism-collectivism cleavage and its effects: Lessons from cultural psychology. *Institutions and Comparative Economic Development*, 213-236. doi:10.1057/9781137034014_12
- Hanzaee, K. H., & Taghipourian, M. J. (2012). The effects of brand credibility and prestige on

- consumers purchase intention in low and high product involvement. *Journal of Basic and Applied Scientific Research*, 2(2), 1281-1291.
- Haque, A., Anwar, N., Yasmin, F., Sarwar, A., Ibrahim, Z., & Momen, A. (2015). Purchase intention of foreign products. *SAGE Open*, 5(2), 215824401559268.
doi:10.1177/2158244015592680
- Heo, C. Y., Lee, S., Mattila, A., & Hu, C. (2013). Restaurant revenue management: Do perceived capacity scarcity and price differences matter? *International Journal of Hospitality Management*, 35, 316-326. doi:10.1016/j.ijhm.2013.05.007
- Herpen, E. v., Pieters, R., & Zeelenberg, M. (2005). How product scarcity impacts on choice: snob and bandwagon effects. *Advances in Consumer Research*, 32, 623-624.
- Herpen, E. V., Pieters, R., & Zeelenberg, M. (2009). When demand accelerates demand: Trailing the bandwagon. *Journal of Consumer Psychology*, 19(3), 302-312.
doi:10.1016/j.jcps.2009.01.001
- Herpen, E. V., Pieters, R., & Zeelenberg, M. (2014). When less sells more or less: The scarcity principle in wine choice. *Food Quality and Preference*, 36, 153-160.
doi:10.1016/j.foodqual.2014.04.004
- Hofstede, G. (2011). *Cultures consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1). doi:10.9707/2307-0919.1014
- Hong, I. B., & Cho, H. (2011). The impact of consumer trust on attitudinal loyalty and purchase intentions in B2C e-marketplaces: Intermediary trust vs. seller trust. *International Journal of Information Management*, 31(5), 469-479.
doi:10.1016/j.ijinfomgt.2011.02.001
- Huang, J., Zeng, Y., & Wei, F. (2011). Consumer response to online time-limited promotion:

- The moderating role of consumer involvement and product familiarity. *Journal of Chinese Marketing*, 4(2), 53-60.
- Jang, W. E., Ko, Y. J., Morris, J. D., & Chang, Y. (2015). Scarcity message effects on consumption behavior: Limited edition product considerations. *Psychology & Marketing*, 32(10), 989-1001. doi:10.1002/mar.20836
- Jiang, Y., Shang, J., & Liu, Y. (2013). Optimizing shipping-fee schedules to maximize e-tailer profits. *International Journal of Production Economics*, 146(2), 634-645. doi:10.1016/j.ijpe.2013.08.012
- Jung, J. M., & Kellaris, J. J. (2004). Cross-national differences in proneness to scarcity effects: The moderating roles of familiarity, uncertainty avoidance, and need for cognitive closure. *Psychology and Marketing*, 21(9), 739-753. doi:10.1002/mar.20027
- Kim, S., & Pysarchik, D. T. (2000). Predicting purchase intentions for uni-national and bi-national products. *International Journal of Retail & Distribution Management*, 28(6), 280-291. doi:10.1108/09590550010328544
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. NY: The Guilford Press.
- Kristofferson, K., McFerran, B., Morales, A. C., & Dahl, D. W. (2016). The dark side of scarcity promotions: How exposure to limited-quantity promotions can induce aggression. *Journal of Consumer Research*. doi:10.1093/jcr/ucw056
- Kumar, A., Lee, H., & Kim, Y. (2009). Indian consumers purchase intention toward a United States versus local brand. *Journal of Business Research*, 62(5), 521-527. doi:10.1016/j.jbusres.2008.06.018
- Liang, Y. (2012). The relationship between consumer product involvement, product knowledge and impulsive buying behavior. *Procedia - Social and Behavioral Sciences*, 57, 325-330. doi:10.1016/j.sbspro.2012.09.1193

- Ling, K. C., Chai, L. T., & Piew, T. H. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research*, 3(3), 63-76. doi:10.5539/ibr.v3n3p63
- Lippa, R. A. (1994). Introduction to social psychology (2nd ed.). Belmont, CA: Thomson Brooks/Cole Publishing Co.
- Liu, Z. L., (2014, May 16). The less you can buy, the more you want! Commodity word-of-mouth marketing. Retrieved May 20, 2019, from <https://www.smartm.com.tw/Article/313934cea3>
- Lynn, M. (1989). Scarcity effects on value: Mediated by assumed expensiveness. *Journal of Economic Psychology*, 10(2), 257-274.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology and Marketing*, 8(1), 43-57. doi:10.1002/mar.4220080105
- Lynn, M. (1992). Scarcity's enhancement of desirability: The role of naive economic theories. *Basic and Applied Social Psychology*, 13(1), 67-78. doi:10.1207/s15324834basp1301_6
- Lynn, M., & Bogert, P. (1996). The Effect of Scarcity on Anticipated Price Appreciation. *Journal of Applied Social Psychology*, 26(22), 1978-1984. doi:10.1111/j.1559-1816.1996.tb01783.x
- Lynn, M., (1987). The effects of scarcity on value: Investigations of Commodity Theory (doctoral dissertation). The Ohio State University.
- Mainardes, E. W., & Cerqueira, A. S. (2015). Measuring the internal-market orientation in the public sector. *Public Organization Review*, 16(2), 179-197. doi:10.1007/s11115-015-0307-1
- Malik, M. E., Ghafoor, M. M., Hafiz, K. I., Riaz, U., Hassan, N. U., Mustafa, M., & Shahbaz, S. (2013). Importance of brand awareness and brand loyalty in assessing purchase

- intentions of consumer. *International Journal of Business and Social Science*, 4(5), 167-171.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-526.
doi:10.1093/fampra/13.6.522
- Mazaheri, E., Richard, M., & Laroche, M. (2011). Online consumer behavior: Comparing Canadian and Chinese website visitors. *Journal of Business Research*, 64(9), 958-965.
doi:10.1016/j.jbusres.2010.11.018
- Medeiros, J. F., Ribeiro, J. L., & Cortimiglia, M. N. (2016). Influence of perceived value on purchasing decisions of green products in Brazil. *Journal of Cleaner Production*, 110, 158-169. doi:10.1016/j.jclepro.2015.07.100
- Miller, T., Kim, A. B., & Roberts, J. M. (2019, January). Country Rankings. Retrieved April 22, 2019, from <https://www.heritage.org/index/ranking>
- Mooij, M. D., & Hofstede, G. (2010). The Hofstede model. *International Journal of Advertising*, 29(1), 85-110. doi:10.2501/s026504870920104x
- Moon, J., Chadee, D., & Tikoo, S. (2008). Culture, product type, and price influences on consumer purchase intention to buy personalized products online. *Journal of Business Research*, 61(1), 31-39. doi:10.1016/j.jbusres.2006.05.012
- Ong, B. S. (1999). Determinants of purchase intentions & stock-piling tendency of bonus packs. *American Business Review*, 17(1), 57-64.
- Oruc, R., Eisend, M., Söllner, A., Eisend, M., & Söllner, A. (2015). *The effects of product scarcity on consumer behavior: A meta-analysis* (Unpublished master's thesis). Frankfurt (Oder), Europa-Universität Viadrina Frankfurt, Diss.
- Pallant, J. (2007). *SPSS Survival Manual* (3rd edition). Maidenhead England: Open University Press McGraw-Hill.
- Parker, J. R., & Lehmann, D. R. (2011). When shelf-based scarcity impacts consumer

- preferences. *Journal of Retailing*, 87(2), 142-155. doi:10.1016/j.jretai.2011.02.001
- Ponte, E. B., Carvajal-Trujillo, E., & Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management*, 47(C), 286-302. doi:10.1016/j.tourman.2014.10.009
- Privitera, G. J. (2015). *Statistics for the behavioral sciences* (2nd ed.). Thousand Oaks, CA: Sage, Inc.
- Ranganathan, C. & Ganapathy, S. (2002) Key dimensions of business-to-consumer web sites. *Information and Management*, 39(6), 457-465.
- Richins, M. L., & Bloch, P. H. (1986). After the new wears off: The temporal context of product involvement. *Journal of Consumer Research*, 13(2), 280-285. doi:10.1086/209067
- Sadler, G. R., Lee, H. C., Lim, R. S. H., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health Sciences*, 12(3), 369-374.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton, Mifflin and Company.
- Sharma, E., & Alter, A. L. (2012). Financial deprivation prompts consumers to seek scarce goods. *Journal of Consumer Research*, 39(3), 545-560. doi:10.1086/664038
- Slattery, Peter & Simpson, J & Utesheva, Anastasia. (2013). Online persuasion as psychological transition, and the multifaced agents of persuasion: A personal construct theory perspective. *Proceedings of the 24th Australasian Conference on Information Systems*. 1-11.
- Statista (2016, January). Amazon total active users 2013-2016 | Statistic. Retrieved February

18, 2019, from <https://www.statista.com/statistics/476196/number-of-active-amazon-customer-accounts-quarter/>

Stevens, R. E., Loudon, D. L., Clow, K. E., & Baack, D. (2014). *Concise encyclopedia of advertising*. NY: Routledge.

Stock, A., & Balachander, S. (2005). The making of a “hot product”: A signaling explanation of marketers’ scarcity strategy. *Management Science*, 51(8), 1181-1192.

doi:10.1287/mnsc.1050.0381

To, M. L., & Ngai, E. (2006). Predicting the organisational adoption of B2C e-commerce: An empirical study. *Industrial Management & Data Systems*, 106(8), 1133-1147.

doi:10.1108/02635570610710791

Tsao, W., Hsieh, M., Shih, L., & Lin, T. M. (2015). Compliance with eWOM: The influence of hotel reviews on booking intention from the perspective of consumer conformity. *International Journal of Hospitality Management*, 46, 99-111.

doi:10.1016/j.ijhm.2015.01.008

Verhallen, T. M., & Robben, H. S. (1994). Scarcity and preference: An experiment on unavailability and product evaluation. *Journal of Economic Psychology*, 15(2), 315-331. doi:10.1016/0167-4870(94)90007-8

Voropanova, E. (2015). Conceptualizing smart shopping with a smartphone: Implications of the use of mobile devices for shopping productivity and value. *The International Review of Retail, Distribution and Consumer Research*, 25(5), 529-550.

doi:10.1080/09593969.2015.1089304

Wu, W., Lu, H., Wu, Y., & Fu, C. (2012). The effects of product scarcity and consumers need for uniqueness on purchase intention. *International Journal of Consumer Studies*, 36(3), 263-274. doi:10.1111/j.1470-6431.2011.01000.x

Xue, F., & Zhou, P. (2010). The effects of product involvement and prior experience on

- Chinese consumers' responses to online word of mouth. *Journal of International Consumer Marketing*, 23(1), 45-58. doi:10.1080/08961530.2011.524576
- Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing*, 23(3-4), 193-210. doi: 10.1080/08961530.2011.578059
- Zaichkowsky, J. L. (1986). Conceptualizing involvement. *Journal of Advertising*, 15(2), 4-34. doi:10.1080/00913367.1986.10672999
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22. doi:10.1177/002224298805200302

Appendix A: English and Chinese version of survey

English Version

Dear participant,

Thank you very much for participating in this research. This research is conducted by student of the Media master's programme of the Erasmus University Rotterdam. It consists of a survey, asking your cultural values, your online shopping behavior, as well as your opinion about an example product offering online.

Please be aware that your participation is completely voluntary, meaning that you can quit at any time during your participation. Furthermore, your personal information will be kept strictly confidential and the findings of this survey will be used only for research purpose. Hence, your anonymity is guaranteed at all time.

Completing the survey takes approximately 5 to 10 minutes. If you have any questions during or after your participation, please feel free to contact the researcher Yu-Hsuan Wu: j3790807@student.eur.nl

☐ I understand the above and agree on participation in this research.

Before entering the main survey, we ask you to complete the two questions below to determine whether you are eligible for participation.

Q1. What is your age?

- 17 years or younger
- 18
-
- 100 years or older

Q2. Where are you from?

(dropdown menu using Country list)

Thank you for your answers. You fit the target group of interest. Before we move on to the advertisement, we would like to know more things about you.

Q3. Could you specify your gender?

- Male
- Female
- Other

Q4. What is the highest educational level that you have completed?

- Primary school
- Secondary school, technical/vocational type
- Secondary school, university-preparatory type
- Technical/vocational degree in tertiary education
- Bachelor degree in applied university
- Master degree in university
- Ph.D., MBA, or other equivalents

This study is conducted in different countries. First, I would like to ask you several questions about cultural values. Please mind that there are no right or wrong answers. To what extent do you agree with the following statements?

	Strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly Agree
Q5_1. It is important that I do my job better than others	1	2	3	4	5	6	7
Q5_2. Winning is everything	1	2	3	4	5	6	7
Q5_3. Competition is the law of nature	1	2	3	4	5	6	7

Q5_4. When another person does better than I do, I get tense and aroused	1	2	3	4	5	6	7
Q5_5. I'd rather depend on myself than others	1	2	3	4	5	6	7
Q5_6. I rely on myself most of the time; I rarely rely on others	1	2	3	4	5	6	7
Q5_7. I often do "my own thing"	1	2	3	4	5	6	7

Please indicate to what extent you agree with the following statements. (Uncertainty avoidance)

	Strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree
(1) It is important to have instructions spelled out in detail so that I always know what I'm expected to do	1	2	3	4	5	6	7
(2) It is important to closely follow instructions and procedures	1	2	3	4	5	6	7
(3) Rules and regulations are important	1	2	3	4	5	6	7

because they inform me of what is expected of me							
(4). Standardized work procedures are helpful. Instructions for operations are important	1	2	3	4	5	6	7

I would now like to know more about your online shopping habits.

Q7. Do you shop online?

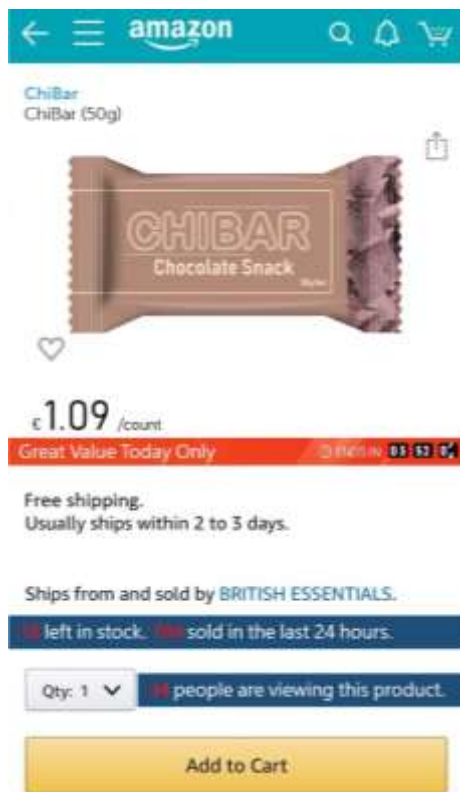
- Yes
- No

Q8. Which one of followings most accurately describes your online purchase frequency in each category:

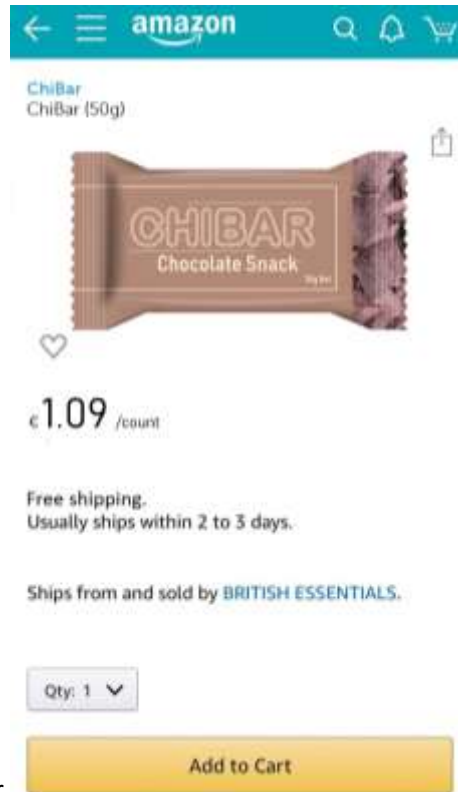
	Never	Sometimes	Regularly	Often	Very often
Books & Audible	1	2	3	4	5
Movies, TV, Music & Games	1	2	3	4	5
Electronics & Computers	1	2	3	4	5
Home, Garden, Pets & DIY	1	2	3	4	5
Beauty & Health	1	2	3	4	5

Grocery	1	2	3	4	5
Toys, Children & Baby	1	2	3	4	5
Apparel, Shoes & Watches	1	2	3	4	5
Sports & Outdoors	1	2	3	4	5
Automotive, Motorcycle & Industrial	1	2	3	4	5

You are now more than halfway. Next, you will see an online offering. Imagine that you are browsing Amazon's online shop and encounter the following product. You will see one picture showing a product with some information. Please pay attention to the picture as the following questions will be based on the coming picture.



or



Q10. We would like to know your opinion on the candy bar, please indicate the to what extent you agree with the statements below. (Perceived value)

	Strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree
(1) This candy bar is good value for money	1	2	3	4	5	6	7
(2) The expected price for this candy bar is acceptable	1	2	3	4	5	6	7
(3) This candy bar is a good buy	1	2	3	4	5	6	7

(4). This candy bar appears to be a good bargain	1	2	3	4	5	6	7
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Q11. We would like to know your opinion on the candy bar, please indicate the to what extent you agree with the statements below. (Conformity)

	Strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree
(1) I want to buy the candy bar because there is a lot of purchase online	1	2	3	4	5	6	7
(2) My demands and taste for this candy bar are similar to that of others online	1	2	3	4	5	6	7
(3) I get a sense of identification online because I buy the candy bar that others also bought it	1	2	3	4	5	6	7

Q12. We would like to know your opinion on the candy bar, please indicate the to what extent you agree with the statements below. (Purchase Intention)

	Strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree
(1) I would purchase the product	1	2	3	4	5	6	7
(2) I would consider buying at this price	1	2	3	4	5	6	7
(3) The probability that I would consider buying is high	1	2	3	4	5	6	7

Q13. What did you see in the advertisement? (multiple choice possible)

- A number of people also looking at the candy bar
- A purchase history of the products
- The great value for today only message
- A timer showing expiration time
- A limited quantity of left stocks
- None of above

Q14. Have you ever considered buying candy bar on Amazon?

- No, never
- Yes, sometimes
- Yes, regularly
- Yes, often
- Yes, frequently

Q15. Do you think this candy bar is sold for a similar price in the supermarket?

- No, I think Amazon's price is much lower
- No, I think Amazon's price is lower
- Yes, I think they are sold for a similar price
- No, I think Amazon's price is higher
- No, I think Amazon's price is much higher

Q16. Please list your reasons for either wanting or not wanting to buy the candy bars featured on Amazon.

You have finished the questionnaire. Thank you for your time and effort. If you have questions or comments about the questionnaire, please list them below.

Chinese version

您好:

非常感謝您參與這項研究，此研究由鹿特丹大學商業與媒體碩士課程的國際學生進行，主要內容是詢問您文化價值觀、線上購物行為以及某線上產品範例的看法。

本項研究尊重參與者意願，即您可以在問卷過程中隨時退出，且您的個人信息將嚴格保密。本調查的結果僅用於課堂目的，參與者以匿名方式完成問卷。完成調查大約需要 5 到 10 分。

如果您在參與期間或之後有任何問題，請隨時與研究生吳同學聯繫：

j3790807@student.eur.nl

☐ 本人明白上述情況，並同意參與本研究。

在正式問卷開始前，需要請您完成以下兩個問題，以確定您是否符合本研究資格。

Q1. 請問您今年幾歲?

- 17 或以下
- 18
-
- 100 或以上

Q2. 您來自哪裡? (dropdown menu using Country list)

謝謝您的回答。您符合本次研究對象資格。問卷正式開始前，我們想了解更多關於您的資訊。

Q3. 您的性別？

- 男
- 女
- 其他

Q4. 您目前最高的教育程度是？

- 國民小學(含)以下
- 國中
- 高中/高職
- 專科/技術學院
- 大學
- 研究所
- MBA 或博士班(含)以上

此為全球跨國研究，我們需要詢問關於您文化價值觀相關問題。請注意，問卷沒有正確或錯誤的答案。

請填寫您在多大程度上同意以下描述：

	非常不同意	不同意	有點不同意	既不贊成也不反對	有點同意	同意	非常同意
Q5_1. 比其他 人表現更好對 我而言是重要的	1	2	3	4	5	6	7
Q5_2. 獲勝就 是一切	1	2	3	4	5	6	7
Q5_3. 競爭是 自然法則	1	2	3	4	5	6	7
Q5_4. 當有人 表現得比我好 時，我會變得 緊張和激動	1	2	3	4	5	6	7
Q5_5. 我寧願 靠自己而非別 人	1	2	3	4	5	6	7
Q5_6. 我大部 分時間都依賴 自己; 很少依 賴別人	1	2	3	4	5	6	7
Q5_7. 我較常 自己行事	1	2	3	4	5	6	7

請填寫您在多大程度上同意以下描述：

	Strongly disagree	Disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Agree	Strongly agree
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(1) 有詳細的說明是很重要的，這樣我才知道應該做什麼	1	2	3	4	5	6	7
(2) 嚴格遵守指示和步驟是很重要的	1	2	3	4	5	6	7
(3) 規章制度很重要，因為其代表他人對我的期望是什麼	1	2	3	4	5	6	7
(4). 標準化的工作步驟很有用，操作說明很重要	1	2	3	4	5	6	7

我們想進一步了解一些您線上購物習慣

Q7. 您是否會於線上購物？

- 是
- 否

Q8. 請選出您線上購物下列產品的頻率

	從不	偶爾	經常	頻繁	非常頻繁
書籍與有聲書	1	2	3	4	5

電影，電 視，音樂與 遊戲	1	2	3	4	5
電器與電腦	1	2	3	4	5
居家，園 藝，寵物與 DIY	1	2	3	4	5
美容與健康	1	2	3	4	5
食品與雜貨	1	2	3	4	5
玩具，兒童 及嬰幼兒	1	2	3	4	5
服裝，鞋子 與鐘錶	1	2	3	4	5
運動與戶外 活動	1	2	3	4	5
汽機車相關 與工業用途	1	2	3	4	5

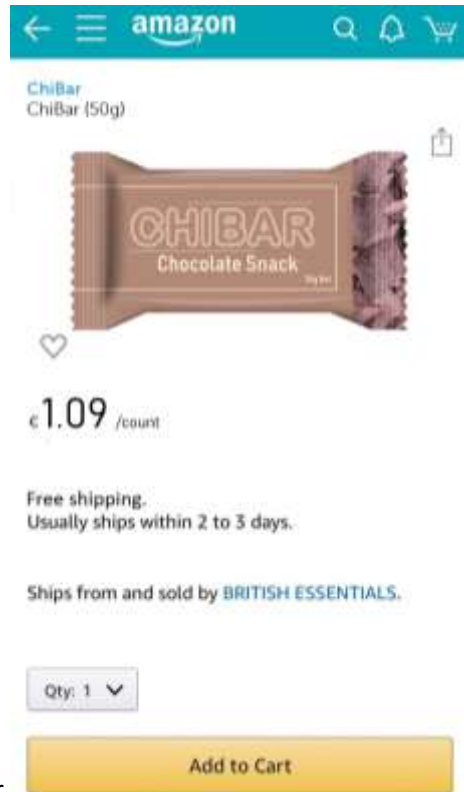
您已經完成一半的問卷了。接下來，您將看到一個線上購物商品。

假設您正在瀏覽亞馬遜(Amazon)線上商店時然後看到下列產品。您將看到一張夾帶訊息的產品圖片。

請注意這張圖片，接下來的問題與此圖片有關：



or



Q10. 我們想知道您對此零食的看法，請說明您在何種程度上同意以下描述：

	非常不同意	不同意	有點不同意	既不贊成也不反對	有點同意	同意	非常同意
(1) 這個零食物有所值	1	2	3	4	5	6	7
(2) 這個零食的預設價格是可以接受的	1	2	3	4	5	6	7
(3) 這個零食很便宜	1	2	3	4	5	6	7

(4). 這個零食看起來很划算	1	2	3	4	5	6	7
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Q11. 我們想知道您對此零食的看法，請說明您在何種程度上同意以下描述：

	非常不同意	不同意	有點不同意	既不贊成也不反對	有點同意	同意	非常同意
(1) 如果在網上看到別人買過的東西，我也傾向於購買	1	2	3	4	5	6	7
(2) 我的網購行為和別人的很相似	1	2	3	4	5	6	7
(3) 購買別人也會買過的產品，我獲得了一種同儕的認同感	1	2	3	4	5	6	7

Q12. 我們想知道您對此零食的看法，請說明您在何種程度上同意以下描述：

	非常不同意	不同意	有點不同意	既不贊成也不反對	有點同意	同意	非常同意
--	-------	-----	-------	----------	------	----	------

				反對			
(1) 我會購買 這個零食	1	2	3	4	5	6	7
(2) 我會考慮 以這個價格 購買此產品	1	2	3	4	5	6	7
(3) 我考慮購 買的可能性 很大	1	2	3	4	5	6	7

Q13. 請問您在廣告上看到了下列哪些資訊：

- 許多人也在看此零食
- 這零食的購買紀錄
- 限時特賣
- 倒數計時器
- 庫存數量有限
- 以上皆無

Q14. 你曾經考慮過在 Amazon 線上商店購買零食嗎？

- 否，從未考慮
- 是，偶爾考慮

- 是，有時考慮
- 是，經常考慮
- 是，頻繁考慮

Q15. 您認為此零食的價格比您在實體超市購買的還要便宜嗎？

- 否，我認為 Amazon 亞馬遜的價格要低非常多
- 否，我認為 Amazon 亞馬遜的價格較低
- 我認為兩者的售價是差不多的
- 否，我認為 Amazon 亞馬遜的價格較高
- 否，我認為 Amazon 亞馬遜的價格要高非常多

Q16. 請寫下您為何想購買或不想購買剛剛在亞馬遜(Amazon)線上商店看到的零食：

您已完成問卷。感謝您寶貴的時間，非常感謝您的幫助！

如果您對此問卷有疑問或意見，請在下方列出。

請按"下一步"箭頭按鈕儲存所有答案。