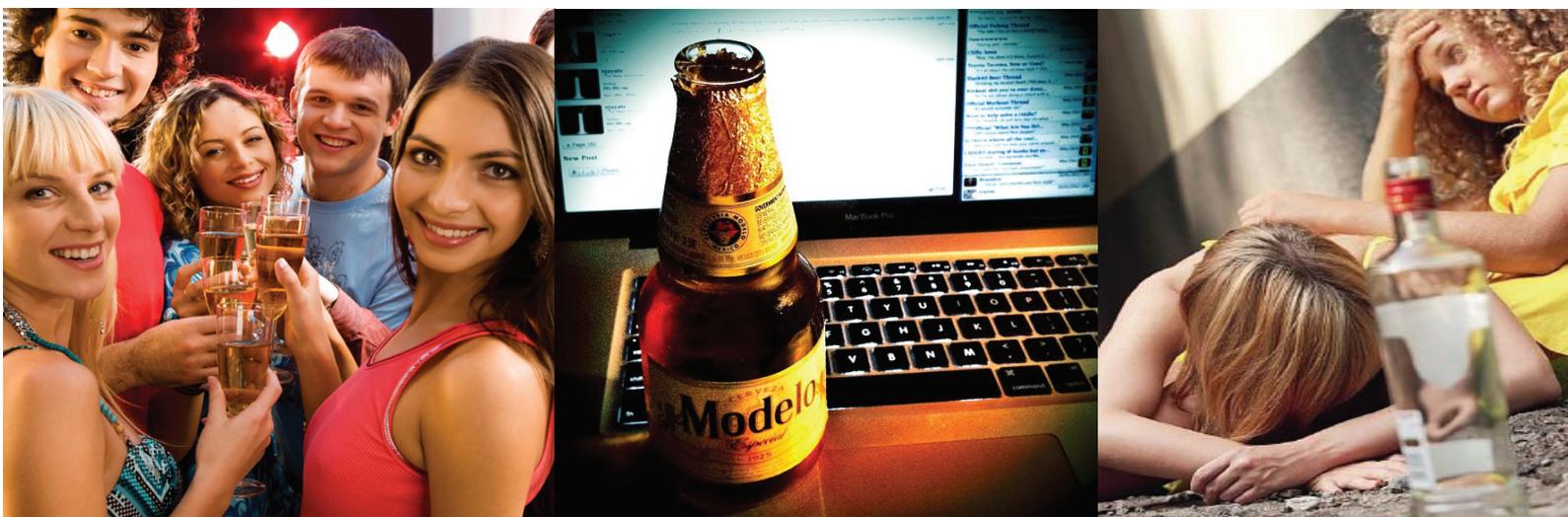


Alcohol purchase 2.0

Premise purchase preferences of adolescents for conventional and digital purchase possibilities for alcohol



This study investigates the determinants that adolescents consider important for selecting different premise locations for alcohol purchase. Their experiences and preferences are a central aspect of this qualitative study, which is the first research project that investigates adolescents' purchase preferences on a conceptual level: based on the framework of the availability theory, on- and off-premise locations and the Internet are compared with each other. For the data collection, 14 focus group discussions with pupils of two age levels and three educational levels were conducted. The results show that adolescents consider not all determinants of the availability theory equally important: age verification by vendors, the product price and waiting time are the most important determinants of adolescents' purchase preferences, leading to a conceptual order of both positive and negative determinants of the availability theory. Additionally, this study shows that adolescents do not consider buying alcoholic products on the Internet but prefer off-premise locations for several reasons.

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Introduction

Adolescents and their alcohol consumption are a well-discussed topic in our society due to the dangerous risks of alcohol consumption that can lead to fatal consequences: some *short-term* consequences include traffic accidents (Sindelar, Barnett, & Spirito, 2004), aggression and fights (Macdonald, Cherpitel, Borges, DeSouza, Giesbrecht, & Stockwell, 2005) or unprotected sex (Sen, 2002). Some *long-term* consequences caused by early alcohol use are alcohol injury and alcohol assault, long-term problem drinking, alcohol dependence (Kelly, Chan, Toumbourou, O'Flaherty, Homel, Patton & Williams, 2012) and impairments of physical and mental health (Anderson & Baumberg, 2006; Tapert, Brown, Kindermann, & Cheung, 2001). Besides, teenage drinking is related to homicide, suicide and delinquent behaviour among adolescents and an impairment of the cognitive functions can be a consequence (Doran, Gascoigne, Shakeshaft & Petrie, 2006).

Although these negative consequences of (excessive) alcohol consumption are serious, the alcohol consumption among adolescents in the Netherlands is high: more than 20% of Dutch adolescents consume *minimal* six glasses of alcoholic drinks on one day a week (Ewalds & Van der Mooren, 2011), which can be considered as heavy alcohol consumption (CBS, 2012). In addition to this, "binge drinking" is a problematic behaviour as well: an increasing number of young adolescents drink regularly great amounts of alcohol in a short period (Monshouwer, Verdurmen, Van Dorsselaer, Smit, Gorter &

Vollebergh, 2008). In total, excessive alcohol consumption led to 706 alcoholic intoxications of adolescents with an average age of 15.5 years in 2012 in the Netherlands (Boeynaems, Van der Lely, Van Hoof, Van Dalen & Rodrigues Pereira, 2013). These figures are startling and raise the question, which aspects influence adolescents in such kind to buy and consume alcohol nonetheless. Previous quantitative studies focus on this question and show that adolescents' alcohol consumption and purchase is positively influenced by various drinking motives (Novak, Burgees, Clark, Zvolensky & Brown, 2003): for example, alcohol consumption is related to influences of social contacts (e.g. friends' alcohol consumption), stress (Abbey, Smith & Scott, 1993) and the perceived outcomes of alcohol use (Tartaglia, 2014). Generally, previous research judges the 'availability of alcohol' as an important predictor for alcohol purchases (Halonen, Kivimäki, Pentti, Virtanen, Subramanian, Kawachi & Vahtera, 2014; Gosselt, 2011; Van Hoof, 2010). Due to the four kinds of availability (economic, legal, physical, social availability) that are explained in the next paragraph, a broad range of influencing aspects for alcohol purchase is covered.

However, the availability theory pays no attention to modern purchase possibilities: alcoholic products can be purchased at different places, like grocery and liquor stores, discotheques or bars, but with since latest developments in alcohol can be bought on the Internet as well. Recent research proves that nearly 13% of alcohol consuming adolescents once have ordered alcohol in an online shop

(STAP, 2011). Therefore, the need for research concerning online alcohol purchase is high, which is also supported by Williams and Ribisl (2012): until now it is unclear why adolescents would purchase alcohol on the Internet and which factors influenced their choice between the different purchase possibilities that can be divided into three categories: the first relevant purchase possibility refers to on-premise locations, where beverages meant to be drunk at the place in question, like restaurants, bars, festivals, etc. (Labhart, Graham, Wells & Kuntsche, 2013). However, differences between on-premise locations exist, as Snowden and Pridemore (2013) noted: the attraction of a restaurant would be its food while the attraction of a bar would be alcohol sales and social settings. The second relevant purchase possibility refers to off-premise locations, for example grocery or liquor stores, which sell beverages that have to be drunk at another place after the purchase (Halonen, Kivimäki, Virtanen, Pentti, Subramanian, Kawachi, & Vahtera, 2013). Purchased beverages at off-premise stores can be drunk in public or in private locations (Wilkinson & Livingstone, 2012). Online purchase locations refer to beverages that are purchased on the Internet and are the third purchase possibility of alcohol in this study. Various Dutch and international websites offer beverages in their online shops, for example grocery and liquor stores, warehouses, newspapers and magazines, specialized wine and beer stores (STAP, 2011) or online marketplaces like eBay or Amazon, *“increasing youths’ exposure to opportunities to buy alcohol online [...] and their wide reach with*

young people” (Williams, 2013). Because online orders suppose no consumption at predetermined locations, Internet is comparable to off-premise locations: beverages are ordered for later consumption and can be used at an undefined location. According to STAP (2011), the Internet can be considered as an extension of the two other purchase possibilities and as an influencing factor of adolescents’ alcohol purchases. For other products, the youth is likely to engage in online shopping and may regard online shopping as a completion of physical stores (Soga & Okamoto, 2011). Statistics indicate that 69% of Dutch consumers between 16 and 75 years use the Internet regularly to purchase diverse products (CBS, 2012): online shopping is a common habit in the Netherlands and the total numbers of online shoppers has increased in the past years (CBS, 2011). Research on the purchase of other risk products, like tobacco, proves that adolescents are likely to engage in online shopping (Mutschler, Diehl & Kiefer, 2007). Therefore, it is assumable that adolescents will engage in online alcohol purchasing more often and higher alcohol consumption by adolescents could be the consequence. The task of this study is to verify this assumption and complete earlier research for two reasons: first, previous research concerning drinking and purchasing motives has used often a quantitative approach to correlate a predetermined set of factors to adolescents’ behaviours. This study investigates adolescents’ opinions and experiences using a qualitative research method. Predetermined purchase motives of the availability theory and other

theoretical assumptions of quantitative studies are verified.

Second, previous research has concentrated on the determinants of alcohol purchase motives at off- and on-premise locations but motives for the Internet have barely been investigated. The aforementioned aspects emphasize the importance the Internet as an emerging purchase possibility for alcohol and its attractiveness to adolescents. Consequently, this study completes earlier research concerning alcohol purchases with the latest alcohol purchase possibilities and provides a unique evaluation of three actual current purchase possibilities in our modern society. Based on the availability theory, which is explained in the next paragraph, adolescents' motives for the different purchase possibilities are determined.

Availability as an influencing factor on alcohol use

Adolescents' alcohol use is influenced by various factors, for example marketing and advertisement strategies (Cheng, Kotler & Lee, 2011) or sociocultural and attitudinal effects (Petratits, Flay & Miller, 1995). However, one of the most important influencing factors and a reliable predictor of the alcohol use intention is the 'availability of alcohol' (Gosselt, 2011; Van Hoof, 2010). Availability is defined as the "degree to which something is at hand when needed", (Van Hoof, 2010) and can be differentiated into four kinds (Van Hoof, Reijlink & Van Dalen, 2010): physical availability, social availability, economic availability and legal availability. Up to now, various research projects have applied the

availabilities to explore alcohol consumption and purchase for conventional purchase possibilities, including off- and on-premise locations but no research has investigated these four availabilities for online alcohol purchase. For this research, theoretical assumptions for online environments were deduced from the existing theoretical framework of off- and on-premise locations to finally investigate and compare adolescents' purchase motives. In the following, definitions and characteristics of the four kinds of availability for each purchase possibility, the influences on alcohol purchase and consumption and the relation between availabilities for each purchase possibility are described.

Physical availability

The physical availability of on-premise and off-premise locations is defined by different factors. An important difference between the three purchase possibilities is that on- and off-premise locations are physically accessible, while Internet itself is an untouchable medium. Therefore, it is important to define characteristics of the physical availability for the three purchase possibilities. The following determinants of the physical availability are related to alcohol purchase, as described by previous studies: first, the opening hours are associated with adolescents' alcohol consumption (Stanley, Henry & Swaim, 2010; Van Hoof, 2010). Extended opening hours of off-premise and on-premise locations are related to higher alcohol consumption (Chikritzhs & Stockwell, 2002; Baker, Johnson, Voas & Lange, 2000). In contrast, online shopping is not limited by opening hours and can be done at any time

(Kim & Hwang, 2012). The effects of these characteristics are not studied yet.

Second, the waiting time between product purchase and consumption differs between the three purchase possibilities. Especially for online purchases, the waiting time for the products is an essential characteristic: beverages are not directly available for consumption due to the product delivery, which is part of vendors' delivery policy and affects consumers channel choice (Gupta, Su & Walter, 2004). For alcohol purchase at off-premise locations, an immediate consumption is not possible as well. This leads to an undefined waiting time between alcohol purchase and consumption, while on-premise locations enable an immediate consumption and provide a very short waiting time between product order and consumption.

Third, the number of on- and off-premise locations is positively related to adolescents' alcohol consumption: a great quantity of on- and off-premise locations leads to greater alcohol consumption (Halonen et al, 2013; Schneider & Gruber, 2013). However, the influences of the number of on-premise locations on alcohol consumption are not self-evident: due a higher product price, alcohol consumption with *low* drinking volume is possible, even if many of on-premise locations are situated in the living environment (Young, Macdonald and Ellaway, 2013). These results indicate the high importance of economic aspects for adolescents, which are described in the paragraph 'economic availability'. For the Internet, earlier research shows that the general extent of Internet use by

adolescents is positively related to their alcohol consumption (Chiao, Yi & Ksobiech, 2014; Ko, Yen, Yen, Chen, Weng & Chen, 2008) but the influences of the number of online stores on alcohol consumption are not studied yet. However, it is a fact that adolescents have the possibility to choose between many online shops for purchasing alcohol, since the number of online shops has grown within the last years (STAP, 2012). Based on the findings for the other two purchase possibilities, it can be assumed that the number of online shops is positively related to alcohol consumption as well.

Fourth, the outlet proximity of off-premise locations influences alcohol consumption positively (Halonen et al, 2013). In cities with a high number of alcohol outlet stores, frequent alcohol consumption is recognized (Resko, Walton, Bingham, Shope, Zimmerman, Chermack, Blow & Cunningham, 2010; Maimon & Browning, 2012; Halonen et al, 2013). Additionally, high proximity of alcohol stores leads to high local access of alcohol and high extent of alcohol consumption (Young, Macdonald and Ellaway, 2012; Van Hoof, Reijlink & Van Dalen, 2010; Young, Macdonald & Ellaway, 2013). The proximity of on-premise locations influences the alcohol consumption of adolescents positively as well: adolescents living close to on-premise locations are likely to drink alcohol more frequently (Halonen et al, 2013). In contrast to the other two options, the Internet is always and easily available through various devices, which leads to a high proximity of the Internet and products. Online shopping can be done at any place by mobile devices, like tablets,

mobile phones or notebooks (Kim & Hwang, 2012; Chen, Hsu, Hsu & Lee, 2014). Moreover, customers could regard the convenience of the home delivery option as an advantage (Chen et al, 2014), including less physical effort (Liu & Forsythe, 2010; Pozzi, 2013) and leading to a high proximity of the products (Pozzi, 2013). In addition to the home delivery also different delivery addresses can be indicated (Chen et al, 2014). In that case, customers have the possibility to consume the beverages at different locations, which could be a “private peer setting” (Korte, Pieterse, Postel & Van Hoof, 2012) or the home address of the adolescent. Pozzi (2013) remarks that some off-premise locations offer home delivery as well, which provides greater alcohol availability to adolescents. In general, vendors of online shops use specific delivery policies that include delivery methods and delivery restrictions, like shipping restrictions to local or national areas (Williams & Schmidt, 2014). These delivery policies would also apply to off-premise locations, if they offer home deliveries and could limit or enhance alcohol consumption by adolescents.

Finally, the product variety is considered as an important factor for online purchases. Internet can be perceived as useful to gain and compare product information from a wide range of products and a great number of online shops (Liu & Forsythe, 2010; Rohm & Swaminathan, 2004). Furthermore, products that are not available at conventional purchase locations can be available on the Internet (Lee & Conroy, 2005), leading to a greater product range (Liu, X., Burns, A.C. & Hou, Y., 2013). For on- and off-

premise locations, no specific relationships between the product variety and alcohol purchase are studied yet. However, it could be assumed that the product variety is more limited which could influence adolescents’ purchase behaviour.

Legal availability

The ‘legal availability’ is determined by the current legislation concerning alcohol use. Laws define adolescents’ age limits for buying beverages. In fact, the Dutch legislation applies to all three purchase possibilities (Smaling & Boersma, 2013). Nevertheless, online regulations were not specifically determined in the legislation: up to December 2013, adolescents above 16 years old but younger than 18 years old were allowed to buy only soft alcoholic drinks with a maximum of 15% ethanol content. Adolescents younger than 16 years were not allowed to buy alcoholic drinks at all (Rijksoverheid, 2012; Korte et al, 2012). Research proves that age limits have strong effects on minor alcohol consumption: legal drinking ages limit alcohol consumption by minors (Jackson, Denny, Sheridan, Fleming, Clark, Teevale & Ameratunga, 2014).

In general, the legislation refers to the compliance of both vendors and minors who have “partial responsibilities” for purchasing/selling beverages (Gosselt, Van Hoof, Baas & De Jong, 2011): the legal restrictions to adolescents include that they are prosecutable for possessing and drinking alcohol in pubs or in public. Due to the defined age groups, differences between age groups can be expected:

older respondents have probably more experience with purchasing and consuming ('soft') alcoholic products than younger respondents.

The partial responsibilities for vendors refer to the age verifications: vendors of all three purchase possibilities are obliged to perform regular before alcoholic drinks are sold. Their compliance is an important mediating factor for the alcohol purchase by adolescents: vendors determine the success or fail of minor alcohol purchase (Gosselt, Van Hoof & De Jong, 2012). For on-premise locations, minor adolescents should not be able to consume alcohol on-premise locations. Nevertheless, research proves that it is still possible for minor adolescents to purchase alcohol at on-premise locations very often, leading to (high) alcohol consumption and binge drinking in many cases (Jander, Mercken, Crutzen & De Vries, 2013). For off-premise locations similar results are observed: although cashiers and sales personnel of off-premise locations are obliged to verify the age of the customer on the identification card, mystery-shopping studies prove that compliance by vendors is low and enables alcohol purchase and consumption by minors in many cases: vendors ask underage customers barely for their ID and make alcohol purchase by adolescents possible (Gosselt, 2011; Van Hoof & Krokké, n.d.).

Vendor compliance is also important for the Internet: Dutch and international research proves that online retailers deliver alcohol without verifying the customers' age at any moment (Van Hoof & Krokké, n.d.; Heckmann, 2004; Bomar, Davis, Hall, Lewandowski &

Weidenbenner, 2003, Williams & Ribisl, 2012; STAP, 2011). Adolescents can use the missing age verifications for the Internet to elude the chance of possible age verifications at conventional purchase possibilities, which was confirmed for other risk products, like medication and tobacco (Mutschler, Diehl & Kiefer, 2007; Fix, Zambon, Higbee, Cummings, Alford & Hyland, 2006). Higher alcohol purchase and consumption by minor adolescents can be the result of the actual situation.

Theoretically, online alcohol sales can provide multiple age verification moments to check the customers age, for example age verification at entering the website or at delivery (Williams & Ribisl, 2012), while for off-premise locations in general one verification moment is common, at the pay desk of a store (Gosselt, 2011). In contrast, on-premise locations can include more age verification moments, for example a first time when entering the location and a second time during the beverage purchase. Due to missing personal contact between vendors and customers, different methods of age verification were developed and tested to prevent alcohol purchase by minors: verification of the customers' ID card by a web camera, verifying the age at entering the website or client cards with personal information about the customer are options for online age verification (Smaling & Boersma, 2013). Until now, no research has investigated the experiences of minor customers with optional online verification methods and its effects on online alcohol sales prevention.

Economic availability

The 'economic availability' refers to the product price of beverages. The product price is considered an important determinant for alcohol consumption (Van Hoof et al, 2010) and has a negative relationship with alcohol (Van Hoof, 2010): if beverages are low in price, they are more attractive for adolescents, which can lead to higher alcohol purchase and consumption (Cook, Phillips-Howard, Morleo, Harkins, Briant & Belis, 2011). The differentiation between off- and on-premise locations is especially important for adolescents' alcohol consumption and purchase: in contrast to off-premise locations, a higher product price has to be paid for alcoholic drinks at on-premise locations (De Jong, De Ricco & Schneider, 2010). Because high product prices influence alcohol consumption negatively, vendors think of ways to attract adolescents, for example a lower product price during 'Happy Hours' in bars or cafes (Van Hoof, Van Noordenburg & De Jong, 2008). Nevertheless, due to their limited financial resources, buying alcohol at cheaper off-premise locations is a common habit to save money: adolescents often engage in "predrinking", which refers to drinking beverages before visiting on-premise locations and leads to higher total alcohol consumption during the whole evening and other risky outcomes (Labhart, Graham, Wells & Kuntsche, 2013). For the Internet, customers often expect that products on the Internet would be cheaper than in conventional contexts (Kamarulzaman, 2011): customers are likely to engage in online shopping to save money. Therefore, it could be assumed that adolescents purchase more

products on the Internet because the financial resources of adolescents are generally limited. Moreover, Internet provides also the possibility to save money by comparing product prices on the Internet easily (Lee & Conroy, 2005). A product comparison is also possible for the on- and off-premise locations: adolescents could either compare products at the off-premise location or compare various off-premise locations with each other.

In addition to the product price, also additional costs could prevent adolescents from purchasing beverages: extra charges are often asked at on-premises, like entrance or wardrobe fees, and for online shopping (e.g. delivery costs), leading to a higher total price of the online order (Kamarulzaman, 2011). Besides, often a minimum purchase quantity (Fix et al, 2006) for online purchases is required, which could inhibit online ordering as well.

Another aspect related to adolescents and the economic availability are the payment methods: within the last years customers adapted to debit and credit cards for paying their purchases or to digital paying methods for online shops (Ally, Toleman & Cater-Steel, 2010), increasing user friendliness and attractiveness of online shops (STAP, 2011). Nevertheless, these payment options can be restricted for minors: if demographic requirements are not met, like minimum age or income for credit cards (Fix et al, 2006), adolescents will probably find difficulties to purchase alcohol on especially the Internet and can be withheld from purchasing beverages online.

Social availability

The 'social availability' is associated with alcohol presence and norms and values concerning alcohol in a persons' network (Grunewald, Ponicki & Holder, 1993). Other persons can play a significant role for alcohol purchase and consumption by minor adolescents: first, secondary purchasing refers to alcohol purchase by older friends or parents purchasing alcohol for minors younger than 16 or 18 years old (Gosselt et al, 2012). This means that norms and values of the buyers can play an important role for alcohol purchases and can influence the likelihood of alcohol consumption by adolescents. Up to now, secondary purchasing is only studied for on- and off-premise locations. Nevertheless, it is feasible for online purchasing: others can order beverages in order to meet possible purchase conditions, like the legal age requirement or specific payment conditions (the need of a credit card etc.). Second, shoulder tapping refers to minor adolescents asking strangers or other customers to purchase alcohol for them (Fabian, Toomey, Lenk & Erickson, 2008) and is studied for off-premise locations (Chen, Grunewald & Remer, 2009). Theoretically, shoulder tapping is possible for the other two purchase options as well. For both aforementioned concepts it is important that another person has a critical role during the purchase process and evidently appreciates underage alcohol consumption. Because of the age limits for alcohol consumption, Dutch legislation restricts other persons to buy alcohol for minors younger than 16 or 18 years at on- and off-premise locations.

In general, 'shoulder tapping' supposes personal contact with other customers at on- and off-premise locations who can influence the alcohol consumption and purchase of adolescents. Additionally, also vendors are part of the social availability and influence adolescents' alcohol consumption: adolescents could not avoid personal contact with vendors if they want to purchase beverages by themselves at on- and off-premise locations. The personal contact with vendors can influence the alcohol purchase, for example, the purchase can be successful if the vendor is a friend of the customer (Gosselt et al, 2011) but can also be a limitation if vendor compliance is high (Gosselt et al, 2012). For the Internet, the missing personal contact with other customers or vendors is one of the greatest differences between the three purchase possibilities. Minor adolescents can perceive this "lack of sociality" as an advantage, if no support and contact from sales personnel is desired (Yang, Lester & James, 2007; Kamarulzaman, 2011).

Earlier research proves that also the attitudes of family members are positively related to alcohol consumption (Valentine, Holloway & Jayne, 2010): a negative parental attitude towards alcohol leads to negative perceptions of alcohol consumption by their children (Turrisi, Jaccard, Dunnam & Grimes, 2001). Moreover, the attitude of family members can even discourage alcohol purchase: adolescents can fear relational consequences, if parents would not appreciate alcohol consumption (Kamarulzaman, 2011). Finally, besides the influences of family members, also

the peers' attitude concerning alcohol consumption and the alcohol use of peers are predictive for the alcohol consumption and drinking patterns of adolescents (Lipperman-Kreda, Grube & Paschall, 2010; Abbey, Scott & Smith, 1993). Additionally, peers can exert pressure on individuals to purchase and consume alcohol or adolescents drink to promote their popularity among peers (McKay & Cole, 2014). In contrast to off-premise locations and the Internet, the attraction of some on-premise locations is a *social* setting (Snowden & Pridemore, 2013) that is associated with drinking alcohol (discotheques, bars, festivals). Therefore, it can be assumed that adolescents can be influenced by the on-premise location itself to purchase and consume alcoholic beverages.

Research questions

This study discovers the experiences and opinions of adolescents for alcohol purchases at on-premise locations, off-premise locations and the Internet, which have not been investigated in detail before. The theoretical framework supposes that the four different kinds of availability are strong influencing factors on adolescent purchase behaviour of alcohol. Although the Internet is a common used medium among adolescents, relevant research about the Internet as a purchase option for alcohol is missing. Therefore, this study extends the availability theory for on- and off-premise locations with the online context and enables a comprehensive investigation and comparison of three relevant purchase possibilities. Due to the

explorative character of this study, the research questions were formulated as followed:

What are the determinants of adolescents' alcohol purchase for on- and off-premise locations and the Internet?

- I. *What are the experiences of adolescents with purchasing alcohol at each purchase possibility?*
- II. *Which aspects do consider adolescents as important to make a choice between the different purchase possibilities?*

Design

For this study, respondents from two age groups and three education levels were recruited, leading to a 'multiple-category-design', that made a comparison of different groups possible (Krueger & Casey, 2000). Both girls and boys were recruited, knowing that gender differences can be an influencing factor: boys tend to consume more alcohol than girls (Delfos, 2011). Therefore, the influence of gender will be part of the data analysis in following chapters. Table 1 shows the sample composition for school levels and age groups.

Table 1: Overview focus group composition

School level	14-15 years	16-17 years
VMBO level (Lower vocational education)	3 focus groups N = 23	3 focus groups N = 21
HAVO level (Higher general secondary education)	2 focus groups N = 11	2 focus groups N = 12
VWO level (Pre-university education)	1 focus group N = 6	3 focus groups N = 21

Procedure

For recruitment of the respondents, multiple Dutch secondary schools (N=418) were contacted by phone and e-mail (Appendix 1). Seven secondary schools agreed to participate between May and December 2013. The contact person selected classes that were available for this study and the teacher or mentor selected pupils randomly, but had to meet the following requirements: first, alcohol must have previously been purchased at (ideally) all kinds of purchase possibilities. Second, respondents met the

requirements for age and education level summarized in Table 1. Because most of the participants were minors, parents were asked for (passive) permission by an informational letter (see Appendix 2) that explains the study design, research topic and ethical aspects. The focus groups took place during school time in a separated classroom to establish a free and undisturbed discussion. Recording devices recorded the group discussions for later transcriptional purposes.

Research method

Focus group sessions were chosen as a research method for this explorative study. A focus group is not pre-determined, open and flexible and therefore appropriate for qualitative studies (Morgan, 1998). For this study, a moderately structured group discussion has been chosen to answer the research question: by interaction between the participants and the researcher, new information was retrieved and individual experiences and opinions were shared (Kamarulzaman, 2011).

All focus group sessions had the same structure: first, an introduction of the researcher and the research project were given. The anonymity of the respondents and confidential data analysis were guaranteed. This led to a relaxed and comfortable atmosphere within the group. In the following, participants introduced themselves to the other group members with their name, age and the purchase experiences with alcohol to "break the ice" and let them feel comfortable within the group. The researcher got to know the participants' names, which was

supportive for the discourse of the discussion (Delfos, 2011). After the introduction of the participants, the discussion topic was explained to the respondents, followed by the discussion itself: participants were asked to give their opinion, to tell about their experiences and to discuss with each other about it. They were not forced to give an answer if they felt uncomfortable with the situation or a specific question. The focus groups ended with a final conclusion by the researcher.

The focus groups took place during school time in a separated classroom from the rest of the class to establish a free and undisturbed discussion. Recording devices recorded the group discussions for later transcriptional purposes. The Ethical Committee for Social Sciences of the University of Twente approved the study design.

Because the focus groups were conducted with young, minor participants, special attention to the moderation of the discussion has been paid. According to Vaughn, Schumm and Sinagub (1996), activities like writing during the focus group session could help to gain and maintain attention. Therefore, a modified version of the "card game" (Robinson, 1999) was used: group members were divided into subgroups of two or three participants, depending on the total size of the focus group. At a central place in the classroom, a poster with blank columns for positive/negative aspects for each purchase possibility was placed. Instead of receiving a set of statements, each team received blank paper cards, which were filled out with their opinions

and thoughts concerning the different options. Similar to an IQA (interactive quality analysis) focus group study (Northcutt & McCoy, 2004), the focus groups thus started with a short, individual brainstorming session in the subgroups. Then, the teams categorized their notes on the table, which represented a visual overview of their opinions and experiences. An advantage of this order was that thoughts of the participants were not influenced by a prior discussion of the whole focus group (Northcutt & McCoy, 2004). According to Kitzinger (1994), the card game has an added value for starting the focus group because it encourages the talk and opinion exchange. Additionally, a cross-comparison between the groups was possible due to the final table content that had been created. In general, visualization is a recommended tool for working with children and adolescents due to the facilitated mode of perception and imagination. Moreover, visualization could help to convey complex or difficult information (Clark, 2011).

When the teams finished writing down their comments, the group discussion started. Based on the table content (see Appendix 7 for an example), the teams explained their cards and discussed their opinions with each other. The researcher gave more discussion input or asked for more explanation if necessary. During the discussion it was important to pay attention to all participants: a dominant participant could lead the conversation whereby other members could not get a chance to speak (McDaniel and Gates, 1995). Therefore, simple conversation techniques like "We want to give everyone a chance to talk"

or “Let’s have someone else go first” were used. At the end of each discussion session the researcher summarized the most important advantages and disadvantages as a conclusion. After the discussion, the researcher photographed the obtained table content for later analysis purposes. All focus group sessions were analysed using Atlas.ti, version 16.2 to code the written data transcripts.

Discussion topics

The input for the discussion was generated by the comments of the respondents. They were asked for an explanation of their cards and for a comparison with the other kinds of purchase possibilities. Therefore, open-ended questions were formulated, for example “what do you mean by this”, “could you give more explanation” or “what do you think about this”.

The determinants described in the theoretical framework were used as a guideline for further discussion topics. During the focus group discussions, the researcher checked if most of the aspects were discussed. If missing, prepared or spontaneous questions were asked (see Appendix 3). Due to the explorative character of this study, the prepared questions were only used as an indication and could be adjusted during the conversation. The combination of the card game and topic list provided a sufficient structure for the researcher but was flexible enough to add/cancel questions during the session and maintain the spontaneous character of the focus group (Krueger, 1998).

Survey

Respondents filled in a short survey after the focus group discussion, consisting of 17 short questions (Appendix 4), which were partly based on research of Korte et al (2012), Yoast, Fleming and Balch (2010) and STAP (2012). All questions were close-ended with exemption of the last three questions. The first four questions measured demographic variables (genders, age, zip code, religion). In the following, participants were asked how often they had purchased alcohol at each purchase option before and how often their age was verified in those cases. The last seven questions measured the general alcohol consumption (amount, date, consumption locations, kind of drinks). Additionally, participants were asked which beverages they consumed most frequently. This information was supplementary to the qualitative information obtained during the discussion groups and was used to give a detailed respondent description.

Interrater Reliability

Before the data analysis was executed, an interrater reliability comparison of 10% of the data by two observers was performed. The code scheme (Appendix 5) was adjusted to gain a higher reliability. Statistical analyses using SPSS calculated a final satisfying interrater reliability of 0.88.

Participants

In total 14 focus group discussions of 55-65 minutes with an average of six participants (N=94) were conducted. To enable a reliable

evaluation of the adolescent popularity, two age groups (14-15 years & 16-17 years) from three Dutch school levels were chosen as participants. 40 respondents were male, 54 respondents were female. Descriptive analysis, using SPSS 21, calculated an average age of 15.78 years, whereby the youngest respondent was 13 years and the oldest respondents were 18 years. 46.8% of the respondents were from VMBO level (lower vocational education), 24.5% from HAVO level (higher general secondary education) and 28.7 % from VWO level (pre-university education). Concerning the religious beliefs, nearly 65% indicated not to be religious, 20% indicated to be Roman Catholic.

Most of the respondents indicated to consume beverages only in the weekends, especially on Saturdays. Almost 40% indicated to drink three to five glasses of alcoholic drinks, about 25% indicated to drink six to ten glasses. Concerning the locations of alcohol consumption, "friends' place" was the most chosen option (16.1%), followed by on-premise locations like

discotheques, bars and festivals. Concerning the alcohol consumption, beer, wine and cocktails were mentioned as the most favourite drinks. Several respondents were aware of alcohols' negative influences on their body and had stopped consuming alcohol after bad experiences with it. These respondents were pleading for a responsible use of alcohol.

Not all respondents were experienced with all three purchase options: 10 respondents specified to have bought beverages on the Internet once but within the last year only seven respondents purchased alcohol online. About 40% reported to have bought alcohol sometimes at grocery stores and on-premise locations. The perceived age verification by vendors varied per category: for on-premises stores, the extent of age verification was regarded as low and for off-premise stores a high extent of age verification was reported. For online purchases, the age of seven respondents (from N=10) was not verified.

Results

In the following the results of the focus group sessions and surveys will be presented. Results are described for economic, physical, legal and social availability, for the additional analysis aspects and group differences and are sorted by the total number of comments per determinant.

Economic availability of alcohol

Table 2 summarizes the number of mentioned positive and negative comments for the economic availability, obtained during the card game. A clear division of meanings towards the economic availability of the three purchase possibilities became clear: the product price was the most important determinant to the adolescents (total N=78) and was based on the relationship between beverage content and price: 96.3% of the respondents agreed with each other that buying beverages at on-premise locations was expensive, while in grocery stores more content could be purchased for less money and often price offerings were available. Additionally, imitation products of well-known brands were often chosen due to the lower price. The availability of specific imitation products within the product assortment influenced the choice for a premise location strongly: especially grocery stores were favoured above liquor stores. Therefore, the code product variety was applicable to both low- and high-priced products. In contrast to off-premise locations, the high product price at on-premise locations withheld adolescents from purchasing beverages. Consequently, adolescents bought often

beverages at off-premise locations and used them for predrinking purposes before visiting on-premise locations. Concerning the Internet, the expected product price differed among the respondents: some expected products to be cheaper while others expected higher total costs compared to on- and off-premise locations. They remarked that additional costs for the delivery of online purchased products would increase the total product price for online orders. Besides, additional costs were also mentioned as a negative aspect of on-premises: often entrance or wardrobe fees had to be paid.

In general, respondents used the price comparisons to compare rather off-premise stores, on-premise locations and the Internet with each other than alcohol outlets of the same premise: respondents tended to compare festivals with supermarkets but not to compare different supermarkets or different websites with each other. This excluded price comparisons between different countries: respondents who lived close to the Belgian or German border described a noticeable price difference and preferred foreign outlets for buying a great quantity of beverages. For the Internet, some respondents thought of price reductions if a higher product quantity was ordered, but criticized to could not benefit from such price reductions: their limited financial budget would inhibit orders with minimum purchase quantities. Another threshold for online ordering was related to the paying methods: the necessary paying methods, for example PayPal, credit or debit cards, were often not accessible to adolescents. Additionally, parents had to give

admission for online banking or would receive copies of the bank statements. It became clear that the parental attitude (see paragraph 'social availability') was strongly linked to the possibility of online banking. Besides, respondents worried

about the possibility of vendors' age verification using their personal information of bank and other payment accounts.

Table 2: Overview obtained comments for economic availability

	On-premise	Off-premise	Internet	Total number of comments
Product price	Neg.: "(Very) expensive" N=26 / Sessions: 1; 2; 3; 4; 5; 6; 7; 9; 11; 12; 14	Pos.: "Cheap(er)" N=29 / Sessions: 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 14	Neg.: "Delivery costs" N=11 / Sessions: 4; 5; 6; 7; 12; 13; 14	N=78 / 100% Negative: 40 / 56.1% Positive: 38 / 43.9%
	Pos.: "In pubs or bars no admission fee" N=1 / Session: 7	Pos.: "You get more for less" N=4 / Sessions: 7; 8; 12	Neg.: "Could be more expensive" N=3 / Sessions: 11; 14	
			Pos.: "Cheaper" N=3 / Sessions 8; 9; 12	
			Pos.: "Often price discounts" N=1 / Session: 4	
Price comparisons	n.a.	Neg.: "Liquor stores are more expensive" N=2 / Sessions: 9; 12	n.a.	N=3 / 100% Negative: 3 / 100% Positive: 0 / 0%
		Neg.: "Great amounts are cheaper at wholesales" N=1 / Session 4		
Minimum purchase quantity	n.a.	n.a.	Pos.: "Price reductions if you buy more" N=2 / Sessions: 2; 11	N=2 / 100% Negative: 0 / 0% Positive: 2 / 100%
Total number of comments	N=27 / 100% Negative: N=26 / 96.3% Positive: N=1 / 3.7%	N=36 / 100% Negative: N=3 / 8.3% Positive: N=33 / 91.7%	N=20 / 100% Negative: 14 / 70% Positive: 6 / 30%	N=83 / 100% Negative: 43 / 51.8% Positive: 40 / 48.2%

Legal availability of alcohol

Table 3 summarizes the number of mentioned positive and negative comments concerning legal availability. The analysis of legal availability showed a quite clear agreement between the adolescents: legal availability for on-premise locations was positively judged (79.5%), while legal availability of off-premise locations was described as negative (93.5%). For online alcohol purchases, about two-thirds of the respondents

judged the legal availability as positive, which was strongly influenced by the experienced and expected age verification by vendors, which was the most important determinant of the legal availability (N=75). The experiences with age verification differed between the three purchase possibilities and were confirmed by the results from the surveys: for on-premise locations, purchasing alcohol was described as easy (N=26).

Table 3: Overview obtained comments for legal availability

	On-premise	Off-premise	Internet	Total number of comments
Regular age verification by vendors	Pos.: "Easy to get"/"No ID control" / "ID control not possible or difficult" N=24 times / Sessions: 1; 3; 4; 6; 7; 8; 9; 10; 11; 12; 13; 14)	Neg.: "ID is always checked" / You cannot buy everything you want when you're under 16 or under 18" N=22 / Session: 1; 3; 4; 6; 7; 8; 10; 11; 12; 13; 14	Pos.: "Easy to get / age verification for vendors difficult" N=10 / Sessions: 1; 4; 10; 11; 12; 14	N=75 / 100% Negative: 33 / 44% Positive: 42 / 56%
	Pos.: "Vendors don't recognize your face" / "You're not noticed" N=2 / Session: 8; 12	Neg.: "ID control does not work" N=2 / Times: 1; 4	Pos.: "Anonymous" N=2 / Sessions: 12	
	Pos.: "If a pub runs poorly, you can get drinks easier" N=1 / Session: 6	Pos.: "Supermarket not that easy but easier than liquor store" N=1 / Session: 7	Neg.: "Age verification" N=4 / Sessions: 1; 2; 4	
	Pos.: "Age verification" (meant as positive) N=1 / Session: 4	Pos.: "Easy to get" N=1 / Session: 1	Neg.: "ID control does not work" N=1 / Session: 1	
	Neg.: "It could happen that you won't get it because of ID control" Times: 3 / Session: 9; 12 Neg.: "ID control doesn't work" Times: 1 / Session: 1			
Legal restrictions for customers	Pos.: "Other people could get it for you" N=3 / Sessions: 8; 13	Neg.: "You have to walk with it in public / police control" N=4 / Session: 12	Pos.: "You can adjust your age" N=1 / Sessions: 6	N=13 / 100% Negative: 9 / 69.2% Positive: 4 / 30.8%
	Neg.: "You cannot take drinks with you, so you are obligated to purchase there" N=2 / Sessions: 2; 14 Neg.: "Police control" Times: 2 / Session: 12	Neg.: "You have to use a false ID if you want it" N=1 / Session: 13		
Different kinds of age verification	n.a.	n.a.	Neg.: "Purchase is controllable" N=1 / Session: 8	N=1 / 100% Negative: 1 / 100% Positive: 0 / 0%
Total number of comments	N=39 / 100% Neg.: N=8 / 20.5% Pos.: N= 31 / 79.5%	N=31 / 100% Neg.: N=29 / 93.5 % Pos.: N=2 / 6.5 %	N=19 / 100 % Neg.: 6 / 31.6 % Pos.: 13 / 68.4 %	N=89 / 100% Negative: 43 / 48.3% Positive: 46 / 51.7

Especially in hard economic times, vendors would sell beverages to adolescents more easily. Moreover, vendors could hardly verify the age of each customer in crowded situations. In addition to the group of vendors who sold alcohol to adolescents, another group of personnel was

described as important: security personnel would often verify respondents' age at the entrance of festivals, bars or pubs, "because most of the pubs are for people from 16 years and older. They ask for our age if we order liquors, but they sell beer without verifying age, because security staff

already let us in" (girl, 15 years, lower vocational education). In general, respondents reported still a chance of possible age verification with multiple verification moments, for example at the entrance and the bar, but this was not perceived as a threshold for visiting on-premise locations. For off-premise locations, nearly all groups (N=29) described strict age verification at grocery and liquor stores, in particular at liquor stores: minor respondents did not succeed in purchasing beverages if the age conditions were not met. Therefore, respondents were not likely to try to purchase beverages at off-premise locations if they were not old enough: they would feel ashamed in front of vendors, other customers and peers, which could be linked to the determinant peers' attitude (social availability). For purchases on the Internet, respondents with online purchase experience described the ease of ordering with a total lack of age verification. Most of the respondents with no online purchase experience expected no age verifications and regarded the lack of age verification as an advantage (N=12). Nevertheless, some respondents worried about the different possibilities for online age verification: they feared that age and purchase was controllable by personal bank information (e.g. PayPal accounts) or other methods (e.g. age verification at delivery moment). This fear was caused by the fact that respondents were well informed about the legal restrictions to alcohol use and purchase: concerning on-premise locations, respondents were not allowed to bring own drinks but were obligated and had no other possibility to buy beverages at on-premise

locations. Moreover, some respondents feared police controls after the (illegal) purchase at on- and off-premise locations, which could lead to a punishment for offending the legal prescriptions.

To overcome the strict age verifications at off-premise locations or enter on-premise locations, some respondents described the possibility of using of a false ID, adjusting their year of birth to an adults', or borrowing the ID from older friends or siblings. However, most of the respondents were not intending to use a false ID for alcohol purchases due to expected legal consequences. Other described tricks for purchasing alcohol included taking a motorbike helmet to an off-premise location. By this, adolescents appeared old enough for the legal age limit for driving a moped (requires minimum age of 16 years) or motorcycle (requires minimum age of 18). A second mentioned technique was asking vendors for wrapping up the purchases as a gift. By this it seemed that the beverages were destined for another person. For entering on-premise locations, *"someone else takes your coat with you, gets a ticket at the wardrobe for your coat, walks back towards the entrance and gives the ticket to you. Then you could say to the security staff that you've already been checked and had entered before. Then you can just pass. It works"* (girl, 15, higher general secondary education). Finally, adjusting the personal age to meet age requirements was also mentioned as an option for online shopping: entering false data to gain anonymity was regarded as an advantage.

Physical availability of alcohol

Table 4 summarizes the number of mentioned positive and negative comments concerning physical availability for each purchase possibility. The total numbers of comments showed that respondents wrote more comments, especially negative, for the Internet than for the other two purchase possibilities. Despite the lack of experience with online ordering for most of the respondents, they regarded the waiting time between product order and product receipt as the most important threshold to ordering online (N=15) of all four availabilities. Respondents considered online ordering as difficult and unpractical with no possibility for spontaneous purchases: “..[during the delivery time] you can walk to the grocery store for several times” (girl, 16 years, higher general secondary education). Furthermore, they were afraid that the order would be delayed or got stuck anywhere, which would even increase the delivery time. Therefore, grocery and liquor stores were more attractive to most of the respondents: “you just can walk to it. [...] At the grocery store you can pick it up easily” (boy, 14 years, pre-university education). If the delivery time was not important, it would be attractive to order great amounts of beverages at once, otherwise, supermarkets provided an appropriate product assortment and were very time efficiently: “If you just go to the grocery store, you can fill your car completely within one hour” (boy, 16 years, higher general secondary education). On-premise locations featured the shortest time frame and were considered as very convenient: drinks could be refilled quickly and

be consumed quite immediately, even if waiting in a queue was necessary.

The product variety was described as a strong advantage of off-premise locations and the Internet, especially in contrast to on-premise locations. The offered assortment influenced the choice for a specific premise: respondents described a regular purchase of specific imitation products with low prices at off-premise locations and based the choice for a store on its (cheaper) product assortment. Hence, the code ‘product variety’ is applicable for both cheap and expensive products. Moreover, other (non-alcoholic) products could be obtained at grocery stores simultaneously. Concerning the Internet, nearly all respondents assumed that a great assortment would be provided. Respondents with online purchase experience were likely to buy beverages on the Internet because of exclusive or special products, that could not be purchased at on- or off-premise locations and were appropriate for a specific occasion or as a present: “Ordering online is rather something for a party, if you want to give a special, nice drink” (girl, 15 years, lower vocational education).

The proximity referred to the physical distance of premise locations and the alcoholic beverages. For online shopping, respondents appreciated that they could stay at home, especially advantageous for people living far abroad. Nevertheless, most of the respondents were not likely to order online: “Honestly, I never thought that way about the Internet. It didn’t come up to me because there’s always a grocery store nearby” (girl, 17, pre-university education),

Table 4: Overview obtained comments for physical availability

	On-premise	Off-premise	Internet	Total number of comments
Product variety	Neg: "You cannot buy liquors with high ethanol content" N=1 / Session: 2	Pos: "Great assortment / more choice" N=12 / Sessions 1; 4; 6; 8; 9; 11; 12; 14)	Pos: "Great assortment / more choice / more exclusive and special products" N=10 / Sessions: 1; 2; 5; 7; 11; 12)	N=36 / 100% Negative: 2 / 5.6% Positive: 34 / 94.4%
	Pos: "Always enough drinks available" N=1 / Session: 3	Pos.: "You can purchase greater amounts" N=4 / Sessions: 1; 4; 12 Pos.: "You can take more/other products during one purchase" N=2 / Sessions: 8; 14	Pos.: "You can purchase greater amounts" N=5 / Sessions: 4; 9; 11	
Waiting time	Pos: "You can drink it immediately" N=7 / Sessions: 3; 4; 6; 10; 11; 12	Neg: "Limited choice of beverages" N=1 / Session 2	Neg: "Delivery time" N=15 / Sessions: 1; 2; 3; 4; 5; 9; 11; 14	N=29 / 100% Negative: 18 / 62.1% Positive: 11 / 37.9%
	Neg: "Takes a long time" N=1 / Session: 1	Pos.: "Doesn't take much time" N=2 / Session: 11; 12 Neg: "You have to wait long before you can drink it" N=2 / Sessions: 1, 9		
Proximity	Pos.: "Close / Convenient to buy drinks" N=3 / Session: 4; 11; 14	Neg: "You have to walk in public with your purchases" N=3 / Session: 12	Pos: "You don't have to walk to the shop / can stay home / no effort" N=12 / Sessions: 3; 4; 5; 8; 9; 11; 12)	N=19 / 100% Negative: 3 / 15.8% Positive: 16 / 84.2%
	Pos.: "If you're thirsty you can easily buy drinks" N=1 / Session: 4			
Delivery policy	n.a.	n.a.	Neg: "Insecure" N= 6 / Sessions: 3; 4; 11; 12) Neg.: "Lot of hassle" N=2 / Sessions: 11; 14	N=8 / 100% Negative: 8 / 100% Positive: 0 / 0%
Location for consumption	n.a.	Pos: "You can take it with you" N= 3 / Sessions: 1; 3; 14	n.a.	N=3 / 100% Negative: 0 / 0% Positive: 3 / 100%
Opening hours	n.a.	Neg: "Shops are not opened until late" N=1 time / Session: 1	Pos: "Always open" N=1 / Session 1	N=2 / 100% Negative: 1 / 50% Positive: 1 / 50%
Total number of comments	N = 14 / 100% Neg.: N= 2/ 14.3% Pos.: N= 12 / 85.7%	N = 32 / 100% Neg.: N= 7/ 21.9% Pos.: N= 25 / 78.1%	N = 51 / 100% Neg.: N= 23/ 45.1 % Pos.: N= 28 / 54.9 %	N=97 / 100% Negative: 32 / 33% Positive: 65 / 67%

which indicated a high proximity in the living environment. Others remarked: "I can go by bike to the grocery store within 5 minutes" (girl, 17

years, pre-university education), but "[...] if you need to go far by bike, it's not practical. You have to take all with you on the bike" (girl, 16 years,

lower vocational education). Some respondents preferred the closest shop for this reason, but in general the extent of age verification or the product price were more important than the outlet density. Especially younger respondents remarked that they had to walk in public to reach grocery stores and feared police controls on their way to it. In general, respondents were willing to travel a longer distance to overcome the obstacles of expected age verification and (high) product price. Therefore, the proximity is related to the legal restrictions and the product price.

Although the delivery option of the Internet provided some advantages to the respondents, it involved disadvantages as well: “[ordering online] is a threshold because it’s so complicated” (boy, 14 years, higher general secondary education). Especially the delivery moment itself was found to be critical if parents, who not appreciated alcohol consumption, were at home as well and relational consequences could be following. Additionally, “Why would you put such much effort in buying drinks? You can get something on your way, at gas stations or somewhere else” (girl, 14 years, lower vocational education). Instead of waiting for the package delivery, most of the respondents would rather ask other persons to buy beverages at grocery stores if they themselves were not able to purchase it due to the age limits.

While beverages at on-premise locations have to be consumed at the same place, purchased products from off-premise locations and the Internet make consumption at different locations possible. Respondents remarked this as an advantage: beverages were often consumed

at respondents’ home or their friends’ home before going out (predrinking). Afterwards, adolescents did not feel the need to purchase many drinks at on-premise locations and could save money by this. Consequently, this concept is strongly linked to the economic availability and the alcohol consumption behaviour of adolescents.

Finally, the opening hours of off-premise locations were regarded as a negative aspect: respondents considered the openings hours of grocery and liquor stores as limited. Because Internet would always be accessible, respondents regarded it as a completion to off-premise locations, minding that they had to take the delivery time into consideration and spontaneous purchases were inhibited.

Social availability of alcohol

Table 5 summarizes the number of mentioned positive and negative comments concerning social availability for each premise. The total numbers of each premise showed that the social availability of on-premise locations was regarded as very positive, while the Internet was regarded as most negative. A strong influencing factor for this evaluation was the personal contact with other customers, which was described positively for on-premise locations by many respondents. Negative aspects of contact with other customers referred to the addition of substances or drugs to their drinks and, if alcohol consumption was practiced secretly, the possibility of meeting acquaintances at both off- and on-premise locations: respondents were afraid of the relational consequences with their parents.

Table 5: Overview obtained comments for social availability

	On-premise	Off-premise	Internet	Total number of comments
Personal contact with other customers	<p>Pos.: <i>"Sociable"</i> N=15 / Sessions: 1; 2; 4; 8; 9; 10; 11; 12; 14)</p> <hr/> <p>Neg.: <i>"Something can be put in your drink"</i> N=5 / Sessions: 3; 4; 8; 9; 10</p> <hr/> <p>Neg.: <i>"You can meet acquaintances"</i> N=2 / Session: 12</p> <hr/> <p>Neg.: <i>"Impractical due to the crowd"</i> N=1 / Session: 4</p>	<p>Neg.: <i>"You can meet acquaintances"</i> N=2 / Session: 8; 12</p>	n.a.	<p>N=30 / 100% Negative: 15 / 50% Positive: 15 / 50%</p>
Peers' attitude	<p>Pos.: <i>"You don't drink cola on a party" / "It's a matter of course"</i> N=6 / Sessions: 2; 3; 9; 11</p> <hr/> <p>Pos.: <i>"Atmosphere"</i> N=4 / Sessions: 5; 11; 13</p> <hr/> <p>Pos.: <i>"Going wild, alcohol can support this"</i> N=2 / Sessions: 11; 12</p> <hr/> <p>Pos.: <i>"Engage in behaviours of others"</i> N=1 / Session: 12</p>	<p>Pos.: <i>"No pressure"</i> N=1 / Session: 12</p>	<p>Neg.: <i>"Lazy people buy on the Internet"</i> N= 1 / Session: 6</p>	<p>N=15 / 100% Negative: 1 / 6.7% Positive: 14 / 93.3%</p>
Personal contact with vendors	<p>Neg.: <i>"Not always reliable"</i> N=1 / Session: 11</p>	<p>Pos.: <i>"Reliable / You know what you're buying"</i> N=2 / Sessions: 4; 9</p> <hr/> <p>Pos.: <i>"You can let wrap it up nicely"</i> N=1 / Sessions: 2</p> <hr/> <p>Pos.: <i>"Expertise"</i> N=1 / Session: 11</p>	<p>Neg.: <i>"You don't know if it's reliable"</i> N=6 / Sessions: 3; 4; 9; 12</p> <hr/> <p>Neg.: <i>"Product can be fake / You don't know they've put in it"</i> N=3 / Sessions: 8; 9</p>	<p>N=14 / 100% Negative: 10 / 71.4% Positive: 4 / 28.6%</p>
Parental attitude	n.a.	<p>Neg.: <i>"You have to hide it from your parents"</i> N=1 / Session: 12</p>	<p>Neg.: <i>"Parents could be at home during delivery / Parents could see it"</i> N=7 / Sessions: 8; 12; 13)</p> <hr/> <p>Pos.: <i>"Possible but then no home delivery"</i> N=1 / Session: 13</p>	<p>N=9 / 100% Negative: 8 / 88.9% Positive: 1 / 11.1%</p>
Secondary purchasing	<p>Pos.: <i>"Other people could get it for you"</i> N=2 / Sessions: 8; 13</p>	<p>Pos.: <i>"Friends are older than 16 or 18" / "Others can purchase it"</i> N=2 / Session: 8</p> <hr/> <p>Neg.: <i>"An older friend has to go with you for the purchase"</i> N=2 / Session: 13</p>	<p>Pos.: <i>"Your parents can purchase it"</i> N=2 / Sessions 11; 12</p>	<p>N=8 / 100% Negative: 2 / 25% Positive: 6 / 75%</p>

Shoulder tapping	Pos: "There are enough people about 16/18" N=1 / Sessions: 13	n.a.	n.a.	N=1 / 100% Negative: 0 / 0% Positive: 1 / 100%
Total number of comments	Total N = 40 / 100% Neg.: N= 9 / 22.5 % Pos.: N= 31 / 77.5 %	Total N = 12 / 100% Neg.: N= 5 / 41.7 % Pos.: N= 7 / 58.3 %	Total N = 20 / 100% Neg.: N= 17 / 85 % Pos.: N= 3 / 15 %	N=77 / 100% Negative: 36 / 46.8% Positive: 41 / 53.2%

Therefore, the parental attitude was perceived as a threshold for purchasing alcohol at all purchase possibilities, if parents inhibited alcohol consumption. For off-premise locations, respondents would have to hide beverages at home and expected a negative reaction from their parents, if the alcohol purchase was discovered. For the Internet, respondents feared that parents would see the payment on bank statements or note the package delivery. Some respondents had even no permission of their parents to use online shopping with their bank account. Respondents, who were not allowed to drink preferred consumption at other places, like their friends' home, for this reason. In contrast, parents, who allowed their children to consume alcohol, often engaged in secondary purchasing to buy alcohol for their children.

The peers' attitude concerning alcohol consumption was the second most mentioned determinant (total N=15) and was especially important for on-premise locations: respondents considered on-premise locations as very sociable and a perfect opportunity for going wild. It was regarded as natural to consume alcoholic products, which would be a part of the attraction of on-premise locations and would contribute to the ambience. Nevertheless, peer pressure for obligatory alcohol consumption was not described by a great part of the respondents. Only some of the respondents indicated to

consume alcohol for joining the behaviour of their peers' behaviours at on-premise locations, but they felt less obliged to purchase alcohol at off-premise locations. Concerning online purchases, respondents had a strong opinion about other customers: only "lazy people" (girl, 15 years, lower vocational education) would buy on the Internet because of the home delivery option and less physical effort.

Respondents described the personal contact with vendors at on-premise locations as superficial: the crowded locations led to less age verifications and a higher chance of receiving beverages, which was considered as a positive outcome. By definition, 'vendors' included only personnel selling beverages but respondents characterized another important group: security staff at the entrance of on-premise locations determined whether respondents were able to enter. Knowing security staff personally led to less age verifications and enabled entering on-premise locations without age verifications. For off-premise locations, personal contact with vendors was described as more intense: respondents would provide from vendors' expertise about beverages and from other advantages, like wrapping up the purchase as a gift. Moreover, respondents expected vendors of off-premise locations to sell reliable products of high quality. Personal contact with vendors during online shopping was not applicable.

Respondents judged this as a less reliable condition that withheld them from online alcohol purchase: substances could be added to the products or bottles could contain other kinds of liquids.

The possibility of secondary purchasing by others was evaluated as an advantage of all purchase possibilities: respondents described it as easy to ask older friends or even parents to buy beverages at festivals or grocery or liquor stores. Therefore, this concept was closely related to the parental and peers' attitude that approved minor alcohol consumption. In contrast to secondary purchasing, shoulder tapping was less preferred and only used at on-premise locations to ask random older people for buying a drink.

Summary of the results

The results of the previous analysis show that adolescents' choice between the purchase possibilities was strongly influenced by determinants of the economic, legal and physical availability. The extension of the availability theory to the Internet and the qualitative research method enabled a detailed comparison of the three purchase possibilities and investigated differences and similarities between the three premise locations. Table 6 lists the four most important availabilities for each purchase possibility (see Appendix 6 for the full table) to accentuate the differences and similarities: it is noticeable that the first two determinants for on- and off-premise locations are the same but judged reversely. For the Internet, especially the

physical availability is important, followed by the economic availability.

Following aspects are essential for the summary of the results: first, respondents considered the product price as the most important determinant for purchasing beverages at on- and off-premise locations. The product price had a direct influence on the drinking behaviour: the high price at on-premise locations led to less alcohol purchases and less alcohol consumption. Therefore, adolescents favoured off-premise stores due to a lower product price and the possibility of purchasing low-priced imitation products, which often led to predrinking before going out and was described as a common habit to save money on alcoholic drinks. For online purchases, the product price was considered very important as well: adolescents expected additional costs, which would lead to a higher total product price.

Second, the most important aspect for online purchases is the waiting time (physical availability): the delivery of products inhibited spontaneous purchases and required planned shopping behaviour. Respondents regarded the waiting time between purchase and consumption as much higher than for on- and off-premise locations.

Third, the legal availability was found to be an important threshold to alcohol purchases: the extent of age verification determined the choice for specific premise locations. Especially at off-premise stores, the strict age verification was perceived as a big threshold to adolescents. For on-premise locations, respondents experienced poor age verifications, although multiple age

verification moments were possible (entrance, bar). For the Internet, a total lack of age verification was mentioned. Additionally, respondents mentioned the possibility of entering adjusted personal data to gain anonymity on the Internet and fulfil order conditions. Respondents who had no experiences with online shopping were insecure about the precise process of age verification but did expect some kind of age verification by use of modern technologies or private information of payment options.

Fourth, to overcome the legal restrictions of on- and off-premise locations, respondents used diverse methods and tricks, for example taking a motor helmet with them to the store. Additionally, secondary purchasing by older friends or parents was described as an effective method to obtain alcoholic drinks as well. Therefore, secondary purchasing is closely related to the parental attitude concerning alcohol purchase, which is found to be an important mediating factor for adolescents' alcohol consumption and buying behaviour. Especially for online orders, respondents

described a negative link to the parental attitude: they expected that parents would see the delivered package or would be at home during the delivery moment.

Finally, respondents doubted the reliability of online vendors due to lacking personal contact and the appropriate product delivery of the orders. The positive characteristics of the delivery option included logistical benefits and the high proximity of products, which was regarded as the second most important determinant for purchasing on the Internet.

As an overall judgement, respondents regarded ordering online as complex and difficult with many obstacles. The predictions of STAP (2011) are not confirmed with this study: although some respondents described the missing age verification as an advantage (4th most important determinant), most of the minor respondents considered the Internet not as a serious option for purchasing beverages. They preferred the Internet not upon the missing age verification (legal availability) as assumed before, but rather on its product variety and proximity (physical availability).

Table 6: Overview of the most mentioned comments for each purchase possibility

	On-premise	Off-premise	Internet
1st important determinants	Economic availability (Product price – negative)	Economic availability (Product price – positive)	Physical availability (Waiting time - negative)
2nd important determinants	Legal availability (Age verification - positive)	Legal availability (Age verification - negative)	Physical availability (Proximity - positive)
3rd important determinants	Social availability (Peers attitude -- positive)	Physical availability (Product variety - positive)	Economic availability (Add. costs - negative)
4th important determinants	Physical availability (Proximity - positive)	Product characteristics (positive)& Legal availability (legal restrictions - negative)	Legal availability (positive) & physical availability (product variety - positive)

Other factors

Besides the four kinds of availabilities, respondents remarked other important aspects for alcohol purchase and consumption as well: the product characteristics and the extent of alcohol consumption of adolescents were mentioned during the focus group discussions. Table 7 summarizes the number of positive and negative comments concerning product characteristics and alcohol consumption for each premise. First, respondents regarded in particular the product characteristics as important: compared to off-premise locations, the advantage of on-premise locations was that beverages are cooled and tasty, but often had a bad quality due to a mix with water. Additionally, on-premise locations would sell only glasses with a small beverage quantity but for a higher product price and often worse product quality, leading to an imbalance of the price and quality relationship. For off-premise locations, the product packaging, which enabled the transport of great amounts of alcohol to other places and the storage for later consumption, even after the opening the bottle, was described as an advantage. For the Internet, product characteristics played a role as well: respondents were afraid that the bottle could break after heavy impacts and regarded the product characteristics as a threshold to online ordering.

The second topic concerned the alcohol consumption: some respondents were not satisfied with the responsibility of vendors at on-premise locations: vendors would only control the age of customers but not the amount of consumed alcoholic drinks. Therefore, they

wanted a better supervision on the extent of alcohol consumption. Besides, they remarked the consequences of predrinking: by purchasing beverages at off-premise locations, adolescents would drink more alcohol and exceed their limits. Especially during going out, the drunkenness of peers was received as annoying and negative.

Age groups

The Dutch legislation classified adolescents into two age groups until December 2013: adolescents younger than 16 were not allowed to purchase any kind of alcohol, while adolescents between 16 and 18 were allowed to purchase beverages up to 15.5% ethanol content. The focus groups confirmed the expected differences between both age groups: older respondents were more experienced with buying beverages up to 15.5% ethanol content at off-premise locations than younger respondents. They favoured the grocery store upon the other purchase possibilities and described it as easy and fast to go to the grocery store because they met the legal conditions for buying wine and beer. The same expectations were fulfilled for on-premise locations: older respondents visited on-premise locations more frequently than younger respondents and indicated to consume beverages with high percentages more often than younger respondents.

Second, as an outcome of the legal restrictions, respondents between 13-15 years consumed beverages often at 'private peer group settings' or at home. Additionally, they engaged more often in 'secondary purchasing' and asked in particular older friends or siblings to purchase

beverages. One respondent described both aspects:

“It’s just a room with couches and a bar. All the girls have to pay 5 euros; there are enough persons who are 16. You can drink what you want. It sounds stupid but sometimes we go there. It’s not our own room. We’re invited then and they buy it [drinks]. [...] you can sit there before going out. Nobody sees if you drink something” (girl, 15 years, higher general secondary education).

Third, especially younger respondents considered the short waiting time between product ordering and consumption as important to prevent legal consequences: *“if you buy something at the supermarket, you have to walk on the streets and could meet the police. Maybe*

it would not happen, if you put it in your bag but you never know” (boy, 15, pre-university education). Moreover, younger respondents worried about meeting acquaintances or friends at off- and on-premise locations who could inform their parents about the (prohibited) beverage purchase/consumption. Due to the parental attitude, consuming alcohol at home was no option either: parents restricted alcohol consumption to younger respondents in many cases, while older respondents often commented to drink together with their parents and to ask their parents for secondary purchasing.

Table 7: Overview obtained comments for alcohol consumption and product characteristics

	On-premise	Off-premise	Internet	Total number of comments
Product characteristics	Pos: <i>“Tasty”</i> N=4 / Sessions: 8; 9; 12; 14	Pos.: <i>“You can take it with you”</i> N=3 / Sessions: 2; 3; 14	Neg: <i>“The bottle can break during delivery”</i> N=1 / Session: 8	N = 18 / 100% Neg.: N= 6 / 33.3 % Pos.: N= 12 / 66.7 %
	Pos: <i>“You cannot take it with you”</i> N=1 / Sessions: 4	Pos.: <i>“You don’t have to drink it at one time”</i> N=2 / Sessions: 3; 12		
	Neg: <i>“Bad quality at festivals”</i> N=2 / Sessions: 1; 2	Pos.: <i>“You get whole bottles”</i> N=2 / Session: 12		
	Neg.: <i>“You get small amounts”</i> N=1 / Session: 12	Neg: <i>“It’s not cold”</i> N=2 / Session: 14		
Alcohol consumption	Neg: <i>“The amount of alcohol consumption is not controlled”</i> N=1 / Sessions: 4	Neg: <i>“People predrink and exceed their (drinking) limits”</i> N=1 / Sessions: 4	n.a.	N = 4 / 100% Neg.: N= 4 / 100 % Pos.: N= 0 / 0 %
	Neg: <i>“Alcohol is bad for you”</i> N=1 / Session: 2	Neg: <i>“Alcohol is bad for you”</i> N=1 / Session: 2		
Total number of comments	N = 10 / 100% Neg.: N= 5 / 50 % Pos.: N= 5 / 50 %	N = 11 / 100% Neg.: N= 4 / 36.4 % Pos.: N= 7 / 63.6 %	N = 1 / 100% Neg.: N= 1 / 100 % Pos.: N= 0 / 0 %	N = 22 / 100% Neg.: N= 10 / 45.5 % Pos.: N= 12 / 54.5 %

Fourth, younger respondents were less experienced with online shopping and had less knowledge of online paying methods. They expected verifications of personal

information and age using the online buying methods, for example by PayPal or personal bank account information. Besides, respondents indicated that their parents had

supervision to the bank accounts and bank statements. Often specific parental admission had to be given to enable online banking by minors. In contrast, older respondents were less worried about the parental attitude. They remarked the delivery time and the reliability of online sellers as negative aspects. In general, neither younger nor older respondents were likely to use the Internet as a frequent purchase possibility: younger respondents indicated some essential factors that inhibited online ordering, while older respondents favoured off-premise locations for the frequent purchase. Only for special and very exclusive products, older respondents saw advantages of online ordering.

Gender

Gender differences were obvious for the extent of alcohol consumption: first, girls described to consume less alcoholic beverages than boys, but instead they consumed especially beverages with a high alcohol percentage, like cocktails and strong liquors. Male respondents indicated to consume beer most of the times. The characteristics of their alcohol consumption influenced the alcohol purchase behaviour: according to the respondents, girls drink fewer beverages and feel a lower need to buy alcoholic drinks because of predrinking, the product price and more concerned attitude to alcohol consumption than boys.

Second, it seemed that gender influenced the success or failure of beverage purchases: respondents mentioned that purchasing

beverages or even entering on-premise locations (discotheques, bars) would often be easier for girls due to a more grown-up appearance, additionally *“there’s a preference for girls, I think. It is always easier for girls. At the other club especially foreign guys are controlled but girls can just pass without showing their ID at all”* (girl, 17 years, higher general secondary education). If the respondents expected age verification by vendors, female respondents were likely to borrow identification cards from other persons (e.g. family members, friends) to enter on-premise locations. In contrast, the younger appearance of minor male respondents led to less access to on-premise locations and less success of purchasing beverages at off-premise locations. Therefore, boys asked their parents to purchase beverages regularly (secondary purchasing). In general, many the adolescents’ parents were likely to purchase beverages for their children.

Third, boys seemed to have mixed opinions about ordering online: on the one side, more boys than girls indicated to have previously ordered beverages online, which could lead to the assumption that boys are more likely to engage in online shopping of alcohol than girls. On the other side, both boys and girls considered placing an online order and searching on the Internet for products as more effort than purchasing drinks at off-premise locations. Nearly all respondents preferred the grocery store above the Internet because of a shorter time frame; additionally, girls due higher product reliability as well.

Educational level

Respondents from three Dutch education levels participated in this study: lower vocational education (VMBO), higher general secondary education (HAVO) and pre-university education (VWO). Respondents with pre-university education perceived differences between low and high educational levels: in their opinion, a higher education would lead to higher alcohol consumption, less peer pressure and a higher starting age of consuming beverages. This research confirms that the entrance year of adolescents with higher education is positively related to alcohol purchase: during the data collection multiple high schools had difficulties to provide pupils on pre-university educational level between 13 and 15 years, who had bought beverages before. Besides, the respondents from this focus group were more concerned about purchasing and drinking beverages secretly than respondents from lower educational levels. The perception that lower education levels included higher peer pressure, could not be confirmed: respondents from lower vocational education level (VMBO) described to take care for each other if peers had consumed too much alcohol. Additionally, they regarded alcohol not as necessary to have fun and had mixed opinions

concerning alcohol consumption: some respondents engaged in weekly alcohol consumption, while others had stopped consuming alcohol due to bad experiences that happened to themselves or peers. These respondents pleaded for more monitoring of the actual extent of alcohol consumption in addition to age verification. Moreover, they were aware that excessive alcohol consumption had negative consequences on their body and preferred to drink small amounts of beverages or even no amounts. Therefore, educational level differences could not be clearly confirmed for the extent of alcohol consumption.

Concerning the legal restrictions to adolescents, it seemed that minor respondents from in particular higher educational levels (higher general secondary education/HAVO and pre-university education/VWO) used more tricks (e.g. using a motor helmet) and made more complex plans (e.g. concerning the wardrobe) to overcome age verification and purchase alcohol, as described previously in the paragraph of legal availability.

Discussion

The current study examines the determinants that adolescents regarded as important for selecting different premise locations for alcohol purchase. This study is the first research project that investigates adolescents' purchase preferences on a conceptual level by the use of the availability theory and that compares alcohol purchases at on-premise locations, off-premise locations and on the Internet with each other. Furthermore, the opinions and experiences with online alcohol purchase of adolescents are a contribution to existing research on current purchase possibilities. Various studies have investigated alcohol purchase at on- and off-premise locations previously: the four kinds of availability are identified as reliable predictors for alcohol purchase (Van Hoof, Reijlink & Van Dalen, 2010; Gosselt, 2011; Van Hoof, 2010). Therefore, this study applies the availability theory to the Internet and evaluates the appropriateness of the availability theory, taking specific characteristics of the Internet into consideration by additional theory, for example, home delivery options (Chen et al, 2014) and online access options (Kim & Hwang, 2012; Chen et al, 2014).

Based on the theoretical framework, important determinants for on- and off-premise locations are extended to the Internet and compared with each other. The respondents used most of the established factors to describe the perceived advantages and thresholds of the purchase possibilities: they were particularly experienced with buying beverages at on- and

off-premise locations and less experienced with online alcohol purchase.

Previous studies have investigated the specific determinants and their relationships by *quantitative* studies. However, this qualitative research with the 'experts' of minor alcohol purchase, the adolescents themselves, shows that not all determinants are important to them. In contrast to earlier research results, some previous research results and theoretical assumptions can not be confirmed by this study: the number of stores in the neighbourhood (Halonen et al, 2013; Schneider & Gruber, 2013), the option to indicate different delivery addresses (Chen et al, 2014; Pozzi, 2013) and multiple moments of age verification (Williams & Ribisl, 2012) are not described as influencing determinants for the choice between different purchase possibilities. Although several previous studies do indicate a strong relationship between the number of alcohol outlet stores and alcohol consumption (Liang & Chikritzhs, 2011; Stanley, Henry & Swaim, 2010; Van Hoof, 2010), respondents do not directly mention the number of stores as relevant but rather the proximity to the stores and beverages. During the focus group sessions it became clear that at least one on- and off-premise location in the close living environment has been available, which is satisfactory for the respondents. For online purchases, the option of different delivery addresses (Chen et al, 2014) is not mentioned during the discussion groups: respondents link the delivery option only to their home address, which is considered negatively and unpractical, especially due to determinants of social

availability (parental attitude) and physical availability (proximity of off-premise locations).

In order to answer the research question, it can be concluded that determinants of, in particular, economic, legal and physical availability are more important to adolescents for purchasing beverages than the aforementioned aspects: as assumed, the high product price at on-premise locations (economic availability) limits beverage purchases (De Jong, De Ricco & Schneider, 2010). Therefore, adolescents engage in predrinking (Williams & Schmidt, 2014) to profit from financial savings: beverages are often purchased at off-premise stores to consume at home before going out. For off- and on-premise locations, the product price is considered the most important determinant. For the evaluation of the Internet, the product price does play a role as well: in contrast to previous studies that predict a high appeal of online alcohol sales due to cheap alcohol prices (Williams & Schmidt, 2014), adolescents are not convinced that they save money by ordering online: the addition of delivery costs leads to a higher total price than purchasing alcohol in retail stores.

Concerning the experiences with age verification at off-premises, the results of this study are very different from earlier mystery shopping studies (Gosselt, 2011; Van Hoof & Krokké, n.d.): respondents perceive it as difficult to purchase beverages at grocery and liquor stores due to strict age verification by vendors (legal availability), which is described as an important threshold to alcohol purchase. Reasons for these results can be mystery shopping research focuses in particular on the

compliance of vendors and does not take the experiences and opinions of adolescents into account. Moreover, the chance of possible age verification and feeling of shame, if minors do not succeed in beverage purchasing, prevents many adolescents of even trying to purchase beverages at off-premise locations. Therefore, they are likely to engage in secondary purchasing by parents and others or to apply specific tricks to appeal older as the legal age limit for alcohol purchases.

For the Internet, previous studies for other age restricted risk products found that adolescents use online shopping to overcome the strict age verification in retail stores (Mutschler, Diehl & Kiefer, 2007; Fix et al, 2006). Therefore, it was assumed that the Internet would be an attractive purchase possibility as well. The research results show that respondents confirm the easy access to age-restricted alcoholic beverages (Williams & Schmidt, 2014), although some of the adolescents, especially younger respondents, with no online purchase experience expect at least an undefined kind and time of age verification and are withheld by it. Respondents who had experiences with online alcohol purchases knew better and were likely to buy beverages on the Internet, but rather occasionally instead of frequently. They appreciated the physical advantages of home deliveries (Liu & Forsythe, 2010; Pozzi, 2013) and great product variety. Simultaneously, the 'waiting time' (Gupta, Su & Walter, 2004), which is part of the physical availability, is regarded as the most important constraint on online purchasing.

In addition to the existing factors obtained from the theoretical framework, two other determinants are important to the adolescents: first, the product characteristics (taste, packaging) influence adolescents' buying behaviour and are fundamental to differentiate between the three purchase possibilities. Previous research about the influence of product characteristics on alcohol purchase motives are studied for light (0.0% ethanol) or low-alcoholic beverages (Chrysochou, 2014; Saliba, Ovington & Moran, 2013) and can be further analysed for detailed investigation of specific preferences of adolescents. Second, some adolescents, in particular abstinent respondents, consider the extent of alcohol consumption important as well: they remark the negative consequences of predrinking and extensive alcohol consumption. Previous studies confirm the relationship between alcohol purchase by adolescents and their alcohol consumption (Jackson et al, 2014). Both added determinants are related to physical ease, which seems to be important for purchasing and consuming beverages: the product characteristics, like coolness or packaging, enable pleasant alcohol consumption or handy product transport to other places, while the extent of alcohol consumption is related to less physical well-being either caused by the adolescent himself (e.g. a hangover afterwards) or caused by others (e.g. drunken people with disturbing behaviour). Nevertheless, the motives of abstinent adolescents are not studied in detail up to now.

Finally, age and education influence the buying behaviour for alcoholic beverages. The

comparison of age levels shows that adolescents from higher educational levels tend to make more deliberated plans for purchasing alcohol and entering on-premise locations, which can be an interesting topic for further research. As expected, boys consume more beverages than girls (Delfos, 2011). Concerning the purchase options, girls are more likely to visit on- and off-premise locations and have a more reserved attitude to buying alcohol online.

In general, it can be concluded that adolescents do not prefer the Internet for regular alcohol purchases: additional costs, the long waiting time and parental attitude are the most important thresholds to online alcohol purchases, although the assumptions based on research on other risk products (Mutschler, Diehl & Kiefer, 2007) and based on the statistics, that describe a growth in online purchase behaviour among the Dutch population (CBS, 2012), are comprehensible. Theoretically, reasons for these outcomes can be related to the limited financial resources of adolescents and the feared relational consequences with parents (Kamarulzaman, 2011). The long waiting time of products is considered as a threshold due to aspects of the physical availability: the proximity of off-premise locations, in particular grocery stores, enables higher local access to alcohol (Young, Macdonald and Ellaway, 2012; Van Hoof, Reijlink & Van Dalen, 2010; Young, Macdonald & Ellaway, 2013) and leads to a shorter waiting time between product purchase and consumption. The derived conceptual summary of the results showed that the various determinants of the four kinds of availability are

not equally important and do not have equal impact on influencing the choice between the purchase possibilities.

Theoretical & practical implications

This study provides interesting results with added value for existing theory. Due to the qualitative approach, it differs with from previous studies for investigating adolescents' purchase preferences. The results show that not all previously studied determinants of availabilities are relevant to adolescents. Even more, this study categorizes various thresholds and motivators for purchasing beverages based on their importance and the purchase possibilities, extended by the Internet, which leads to a completion of the availability theory. The study results enable a conceptual ranking of the most important aspects of alcohol availability and help gaining a better understanding of modern purchase options of alcohol.

The practical implications of this study refer especially to the investigation of adolescents' purchase motives. It becomes clear that adolescents do not consider the Internet as a serious purchase option for beverages, but rather prefer other ways and tricks to obtain beverages. Therefore, this study advises policy makers not to prioritize on restriction development for online alcohol purchase channels but rather on changes in economic and legal availability and the attitude of parents and adolescents concerning alcohol use.

Strengths and limitations

The chosen research method and the study design are very suitable for interviewing young adolescents: respondents used the cards to brainstorm and discuss with each other, which led to a good course of the discussion for most of the focus groups and a relaxed atmosphere during the discussion sessions. The respondents of each focus group were selected from the same class. Therefore, pupils knew each other already and could tell about (common) experiences in an easy-going manner. Most of the respondents spoke open and freely about their experiences and thoughts, which indicated a high level of trust during the discussions. Besides, the used cards during the discussion enabled a visualization of respondents' thoughts, which provided advantages for the researcher (more structure during the interviews, direct asking for more explanation) and for the progress of the discussion: respondents could easily compare the three purchase possibilities and the written comments with each other.

Nevertheless, some critical aspects of this study have to be mentioned. First, the time frame of data collection required quite long time: starting in May 2013 and finishing in December 2013, data collection was interrupted by the summer holidays in the months July and August, which led to an unintended break of data collection and the need to work with pupils of two different high school years. Ideally, respondents should be from the same high school year to guarantee the highest comparability of the focus group discussions. In addition to the delay caused by summer holidays,

many high schools were not willing to participate in this research project, which made the data collection more difficult and extended the period of data collection.

Second, as mentioned before, educational levels are related to alcohol purchase: for the younger respondents with highest educational level (VWO), only one focus group could be composed. Other prospects of the same age and educational level often did not match the condition for taking part in the focus group: high schools could not provide pupils who had previously purchased alcohol at minimal one of the purchase possibilities. Only two other schools could provide qualified respondents for this group, but their pupils were afraid that parents would get to know about their alcohol purchase/consumption. Therefore, they were not willing to participate in this study. As a consequence, adolescents of 14/15 years and with pre-university education are less represented in this study than other peers.

Third, other persons (contact persons, mentors, teachers of high schools) were responsible for the selection of respondents. Although the requirements for respondent selection and the study design were communicated clearly, problems concerning respondent pre-selection occurred: the age of the respondents and their experiences with alcohol purchases were not checked correctly by all other persons and led to some unusable data and the necessity of extra focus group discussions.

Fourth, only a few respondents (N=10) had experiences with online alcohol purchase.

Many of the respondents were not aware of the possibility to purchase beverages on the Internet. Therefore, the results concerning Internet purchase were primarily based on expectations about the process of online ordering instead of actual experiences, which can be important for the description of some very practical determinants, like the experience with different paying methods. Nevertheless, respondents used most of the developed determinants to describe their purchase preferences.

Further research

This study provides interesting and useful results, which can be used as starting points for further research. First, the availability theory of on- and off-premises was used as a theoretical framework for this study. The results show that many determinants of the four kinds of availabilities are relevant for the Internet. Further quantitative research could be used to investigate the relationships between different determinants more exactly, analyse the relationships between the factors and confirm the results of this study.

Second, this is the first study that investigates the opinions and experiences of adolescents of three actual purchase possibilities for alcohol. All respondents of this study are experienced with alcohol purchasing, most of them with buying beverages at off- and on-premise locations but not with online alcohol purchase. Therefore, they reflected the Dutch population of adolescents properly: about 12,5% of alcohol consuming respondents once have ordered beverages online (STAP, 2011).

Nevertheless, it could be interesting to focus only on adolescents who have experience with online alcohol purchase and analyse the online alcohol purchase in more detail. The disregarded factors for online purchases could play a role for adolescents with much alcohol online purchase experience. Perhaps other determinants of the different kinds of availability will be discovered as well.

Third, in contrast to previous mystery shopping research, many adolescents experienced minor alcohol purchase, at especially off-premise locations, to be difficult. To purchase alcohol nonetheless some respondents described the use of specific tricks for buying alcohol or entering on-premise locations, especially adolescents from higher educational levels are likely to apply more tricks for purchasing beverages and entering on- and off-premise locations. Nevertheless, no generalizations concerning the used tricks can be made because focusing on the purchase tricks during the data collection was not possible. Therefore, further research could study these interesting tricks for investigating other possibilities of minor alcohol purchase.

Fourth, the Dutch legislation concerning age limits and alcohol purchase was changed after the data collection of this study: since 2014, Dutch adolescents under the age of 18 are not allowed to purchase or possess beverages. Further research could especially focus on the group of adolescents with an age of 16 and 17 years, who were allowed to buy soft alcoholic drinks up to December 2013. It could be assumed that these adolescents, who once were allowed

to purchase alcohol and nowadays are not, have different opinions concerning the purchase possibilities. Moreover, the vendor compliance to the new legislation could be an interesting topic as well.

Conclusions

This study is a relevant addition to previously executed research. Following study highlights and outcomes are important with regards to previous research results and interesting for further research investigations. This study summarizes:

- An update of the availability theory with the online purchase possibility to modern developments and a conceptual comparison to conventional purchase possibilities;
- That determinants of the availability theory differ in importance to adolescents;
- That the Internet is not considered as a serious purchase possibility for alcohol purchases;
- That (expected) age verifications were perceived as very strict at off-premise locations;
- That differences in educational levels are reflected in the planning to purchase alcohol: students from higher educational levels tend to create more deliberated plans.

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Appendix 1: Informational letter for the schools

Geachte heer, mevrouw,

Mijn naam is Tanja Strump en ik ben master studente van de opleiding 'Communicatiewetenschap' aan de Universiteit Twente. In het kader van mijn afstudeeronderzoek ben ik op zoek naar scholieren die aan mijn onderzoek mee willen en kunnen werken. Mijn afstudeeronderzoek zal gaan over jongeren en de aankoop van alcohol.

Tegenwoordig biedt het internet allerlei mogelijkheden om producten te kopen, één daarvan is het bestellen van alcohol via internet. Uit onderzoek en statistieken blijkt dat jongeren gemakkelijk alcohol via internet kunnen bestellen en deze mogelijkheid steeds meer door jongeren wordt gebruikt. Dit onderwerp is echter tot nu toe nauwelijks onderzocht.

Omdat alcohol onder jongeren heel populair is maar de consequenties van alcoholgebruik sterk negatief kunnen zijn, is een verdere analyse van het koopgedrag noodzakelijk. Daarom is de doelstelling van dit onderzoek om de verschillende factoren die bij het aankoopproces van alcohol een rol spelen in kaart te brengen. Hierbij zullen het kopen van alcohol in de winkel, in de horeca en via internet met elkaar worden vergeleken. Deze factoren kunnen uiteindelijk worden vertaald naar methoden om de (online) alcoholaankoop van jongeren tegen te houden en kunnen als preventieve maatregel worden ingezet. Op basis daarvan kunnen uiteindelijk effectieve strategieën worden ontwikkeld die op dit aankoopgedrag inspelen. Dit onderzoek is door de ethische commissie van de Universiteit Twente goedgekeurd. Een wetenschappelijke publicatie van dit onderzoek zal om die reden worden opgevolgd.

Voor dit onderzoek ben ik op zoek naar scholieren op VMBO, HAVO en VWO niveau (of oud-leerlingen met deze vooropleiding) tussen 14 en 19 jaar die weleens alcohol hebben gekocht, indien mogelijk ook via internet. In een zogenaamd focus groep gesprek (een soort discussiegroep) met gemiddeld acht jongeren zullen tijdens één uur ervaringen en meningen over de (online) alcoholaankoop worden uitgewisseld. De focus groep zal op een interactieve manier worden gehouden (brainstormsessie, interactief discussiëren).

De gegevens van de jongeren zullen uiteraard anoniem worden behandeld en verwerkt. Omdat ook minderjarige kinderen tot de doelgroep behoren, is voor de ouders een informatiebrief opgesteld. Mochten de ouders bezwaren tegen de deelname van hun kind bij dit onderzoek hebben, dan kunnen ze contact met mij opnemen.

Ik hoop dat ik uw interesse in dit onderzoek heb kunnen wekken. Graag verneem ik of u open staat voor een deelname aan dit onderzoek en zou ik verdere details in een persoonlijk gesprek willen toelichten.

Met vriendelijke groet,

Tanja Strump (BSc)
Master studente Corporate Communication University of Twente
Mail: t.strump@student.utwente.nl

Appendix 2: Informational letter for the parents

Beste ouder, beste ouders,

Mijn naam is Tanja Strump en ik ben master studente van de opleiding 'Communicatiewetenschap' aan de Universiteit Twente. In het kader van mijn afstudeeronderzoek zal ik met scholieren tussen de 14 en 17 jaar werken die weleens alcohol hebben gedronken en/of hebben gekocht.

Tegenwoordig biedt het Internet allerlei mogelijkheden om producten te kopen, één daarvan is het bestellen van alcohol via een website. Uit onderzoek blijkt dat jongeren gemakkelijk alcohol via Internet kunnen bestellen, echter ontbreekt er onderzoek naar de mening van jongeren over deze mogelijkheid. Doelstelling van dit onderzoek is de motieven van jongeren in kaart te brengen die uiteindelijk wel of niet tot een alcoholaankoop via internet zouden kunnen leiden. In een zogenaamd focus groep gesprek (een soort discussiegroep) met gemiddeld acht jongeren zullen tijdens één uur ervaringen en meningen over de (online) alcoholaankoop worden uitgewisseld. Dit gesprek zal door een videocamera worden opgenomen. Uiteindelijk zal ik op basis van deze gegevens een aanbeveling kunnen geven welke factoren een stimulerende of beperkende invloed op de (online) aankoop hebben. Deze factoren kunnen worden vertaald naar methoden om de (online) alcoholaankoop van jongeren tegen te houden en kunnen als preventieve maatregel worden ingezet. Een wetenschappelijke publicatie van dit onderzoek zal worden opgevolgd.

Alle persoonlijke gegevens van uw kind zullen anoniem worden behandeld. In het finale verslag zullen geen volledige namen worden genoemd maar slechts citaten. Tevens zal het opgenomen gesprek alleen voor mijzelf ter inzage dienen en slechts voor de data-analyse worden gebruikt. Na de analyse worden de opnames vernietigd.

Hebt u verder nog vragen over de afloop van het onderzoek? Via onderstaande contactinformatie ben ik bereikbaar en zal u vragen graag beantwoorden.

Mocht u niet willen dat uw kind aan bovenstaand onderzoek zal deelnemen, verzoek ik u vriendelijk om met mij contact op te nemen via onderstaande contactinformatie.

Met vriendelijke groet,

Tanja Strump
Master studente Corporate Communication University of Twente
Mail: t.strump@student.utwente.nl

Appendix 3: Topic list

1. Voorstellen onderzoeker (voorbeeld van het verhaal, ongeveer 5 minuten)

“Mijn naam is Tanja. Ik ben studente aan de Universiteit Twente, 23 jaar en bezig met het afronden van mijn master Communication Studies. Allereerst wil ik jullie alvast ontzettend bedanken voor jullie deelname. Jullie helpen mij daarmee heel erg. Voor mijn afstudeeropdracht zal ik een aantal discussiegroepen organiseren. Het zal over het kopen van alcohol gaan. Dus waarom kopen jullie alcohol en vooral hoe? Waar lopen jullie tegenaan? Daarom heb ik jullie (de jongeren) uitgenodigd. Jullie zijn dus de experts en ik kan nu van jullie leren 😊. Het is voor mij de eerste keer dat ik een focus groep organiseer en ik ben waarschijnlijk net zoals jullie heel benieuwd hoe het zal verlopen. Zoals ik al zei zijn jullie de experts vandaag. Daarom zal ik ook eerder vragen gaan stellen in plaats van dingen te vertellen. Jullie mogen dus op elkaars antwoorden reageren en met elkaar praten. Mocht je een vraag ongemakkelijk vinden of geen antwoord willen geven omdat het te persoonlijk is, mag dat uiteraard ook. Maar jullie hoeven absoluut niet bang ervoor te zijn dat jullie ouders van het gezegde op de hoogte gesteld zullen worden. Ik ben verplicht om alle informatie voor mezelf te houden. Alles zal dus binnen deze ruimte blijven en wordt geheel vertrouwelijk behandeld. De camera achter mij is dient ervoor om onze bijeenkomst op te nemen en is puur voor mezelf. Ik moet het gesprek namelijk uittypen en vervolgens analyseren. Uiteindelijk zal ik een verslag schrijven over de uitkomsten van deze discussie groepen. Het zou kunnen dat er citaten worden gebruikt maar uiteraard zonder vermelding van de naam etc. Hebben jullie tot zo ver vragen?”

2. Voorstellingsronde deelnemers (5 minuten)

“Het lijkt me handig als we even een korte introductieronde (naam, leeftijd) houden. Tevens kan iedereen zijn naam op het kaartje schrijven. Dit maakt het straks makkelijker.”

3. Aanleiding onderzoek en onderlinge discussie in kleine groepjes (ongeveer 10 minuten)

“Zoals genoemd gaat het onderzoek over jullie ervaringen met alcoholaankopen. Tegenwoordig kan dit niet alleen maar in de supermarkt of gewone winkel, maar ook via internet. Hiervoor zijn er speciale websites / online winkels die een levering aan huis aanbieden, soms in combinatie met eten. De betaling wordt dan via internet, bv. iDeal of creditcard, afgerond.

Voor deze discussie maken wij onderscheid tussen drie verschillende mogelijkheden om alcohol te kopen:

- Kopen in een bar/kroeg – drank wordt gelijk opgedronken (afbeeldingen laten zien)
- Kopen in een supermarkt/slijterij – drank wordt gekocht voor een later consumptiemoment (afbeeldingen laten zien)
- Kopen via internet – drank wordt gekocht voor een later consumptiemoment (afbeeldingen laten zien)

Ik heel benieuwd naar jullie ervaringen met alcoholaankopen en jullie mening erover. Daarom wil ik graag samen met jullie alle opties voor het kopen vergelijken. Waarom zouden jullie een bestelling via internet wel aantrekkelijk vinden / anders geformuleerd: wat beschouwen jullie als voordelen om op internet alcohol te gaan kopen? Waarom zouden jullie een bestelling via internet niet aantrekkelijk vinden / anders geformuleerd: wat zijn de nadelen van een online bestelling van alcohol? Hiervoor heb ik alvast een tabel opgesteld (verwijzen naar tabel), die wij samen straks verder gaan invullen. De eerste kolom betreft voordelen van het kopen in een kroeg/bar/discotheek, de tweede kolom betreft het kopen in een supermarkt/slijterij/tankstation, de derde categorie betreft het kopen via internet. Jullie krijgen straks een aantal kaartjes waarop jullie de voor- en nadelen kunnen opschrijven. Jullie mogen samen in groepjes van twee overleggen. Probeer dan jullie eigen mening op te schrijven maar ook hoe andere mensen het misschien zouden kunnen ervaren..... Is het voor zo ver voor jullie duidelijk? Dan mogen jullie nu eerst even voor 5 minuten met elkaar overleggen: er zijn geen goede of foute antwoorden, alle gedachten over een categorie die jullie naar binnen schieten mogen jullie opschrijven op deze kaartjes. Als jullie daarmee klaar zijn, kunnen jullie de kaartjes op de tabel plakken. Als jullie geen vragen meer hebben, mogen jullie nu met elkaar even gaan overleggen.”

4. Bespreking kaartjes

- Algemene vragen:
 - Zouden jullie dit kaartje willen toelichten?
 - Wat vinden de andere groepen ervan?
 - Hoe zit dat in vergelijking met het kopen via internet/de winkel?
 - Is dit aspect ook van toepassing bij het kopen via internet/de winkel?
 - Kun je het iets meer toelichten?
 - Dus met andere woorden.....
 - Gelden deze factoren ook net zo goed voor een fysieke aankoopssituatie, dus een winkel/supermarkt? Of zijn er verschillen?

Vragen om content aan te vullen (mits ontbreekt):

- *Vragen met oog op Physical (woon- en leefomgeving):*
 - *Hoe beoordelen jullie de mogelijkheid om op elk tijdstip van de dag alcohol te kopen? Maken jullie daar gebruik van? Wat vinden jullie ervan dat men 24/7 op internet alcohol kan bestellen?*
 - *Als je aan het kopen via internet denkt, heb je ook te maken met bezorging op locatie en bezorgtijden. Wat vinden jullie daarvan? Hoe zit dat met jullie ouders bijvoorbeeld?*
 - *Hoe beoordelen jullie van de tijd tussen het kopen zelf en drinken?*
 - *Hoe beoordelen jullie de lokale toegankelijkheid? Hoe zit dat met internet (in feite altijd toegankelijk)*
 - *Hoe beoordelen jullie het aantal van aankooplocaties bij jullie in de buurt?*
- *Vragen met oog op Social (Contact met andere mensen):*
 - *Hoe ziet het contact met de verkoper eruit als jullie alcohol gaan kopen?*
 - *Hoe ziet het contact met andere klanten eruit als jullie alcohol gaan kopen?*
 - *Hebben jullie weleens alcohol laten kopen door iemand anders (secondary purchasing EN/OF shoulder tapping)?*
 - *Zou dat voor het kopen via internet ook gelden?*
- *Vragen met oog op Economic (Prijs)*
 - *In hoeverre speelt voor jullie de prijs van de alcohol een rol bij het kopen?*
 - *Gaan jullie bijvoorbeeld naar meerdere winkels om prijzen met elkaar te vergelijken? Hoe zou dat met het kopen via internet zijn?*
 - *Hoe gaan jullie de alcohol betalen? Zijn er verschillende mogelijkheden om te betalen?*
 - *Zijn er misschien nog extra kosten die erbij komen (fooi/verzendkosten)?*
 - *Als jullie aan de prijs denken, waarom zouden jullie op internet alcohol willen bestellen? Wat zou volgens jullie een voordeel/nadeel kunnen zijn?*
→ minimaal aantal producten
- *Vragen met oog op Legal (Leeftijdscntrole):*
 - *Als jullie alcohol willen kopen, zou er normaalgesproken altijd jullie leeftijd gecontroleerd moeten worden. Hebben jullie daar ervaringen mee? Hoe gaat dat precies in zijn werk? Ook in de horeca/online?*
 - *Hoe beoordelen jullie de regelmaat van de leeftijdscntrole?*
 - *Wanneer wordt er precies om jullie leeftijd gevraagd? Alleen met het kopen van alcohol of ook als jullie naar binnen willen?*
 - *Zijn er volgens jullie manieren om de leeftijdscntrole te ontwijken? Bijvoorbeeld, dat iemand anders voor jullie de alcohol gaat kopen?*
 - *Hoe zou volgens jullie een leeftijdscntrole via internet eruit zien? Kunnen jullie verschillende mogelijkheden bedenken?*
- Dus kort samengevat, X factoren zou jullie stimuleren om het via internet te kopen en Y factoren zou jullie ervan weerhouden?
- Zouden jullie de online aankoopmogelijkheid als vervanging voor een winkel gebruiken?

- Zou het kopen via internet nu, nadat we een aantal voor- en nadelen op rij hebben gezet, een serieuze optie zijn die jullie zouden overwegen om te gaan doen?

5. Afronding (5 minuten):

“Ik denk dat we tot nu toe een heel aantal punten hebben besproken. Zijn er nog dingen die jullie hierover willen vertellen omdat ze nog niet genoemd zijn? Ontbreken er nog belangrijke dingen? Ten slotte wil ik aan jullie vragen om deze korte vragenlijst in te vullen. Dit is belangrijk voor mijn omschrijving van jullie als doelgroep. Ik vind zelf dat wij een hele interessante discussie hebben gehad en ik ben nu erachter gekomen wat jullie mening en ervaringen ten opzichte van alcoholaankopen zijn. Ik dank jullie van harte dat jullie mij zo veel verteld hebben en zo goed hebben meegewerkt!”

Appendix 4: Short survey

1. Wat is jouw geslacht?
 - Man
 - Vrouw

2. Hoe oud ben je?
_____ jaar

3. Wat is jouw postcode?

4. Ben je gelovig?
 - Rooms-katholiek
 - Protestant
 - Islam
 - Jodendom
 - Niet gelovig
 - Anders: _____

5. Hoe vaak heb je eerder alcohol gekocht op een locatie om gelijk op te drinken (bv. kroeg, bar, discotheek, café, festival, concert, etc.)? Geef dit voor iedere kolom aan.

	Laatste 7 dagen	Laatste 30 dagen	Laatste jaar
Geen enkele keer			
Soms			
Vaak			
Heel vaak			

6. Hoe vaak werd er tijdens deze aankopen jouw leeftijd gecontroleerd? Geef dit voor iedere kolom aan.

	Laatste 7 dagen	Laatste 30 dagen	Laatste jaar
Geen enkele keer			
Soms			
Vaak			
Heel vaak			

7. Hoe vaak heb je eerder alcohol gekocht op een locatie om mee te nemen (bv. supermarkt, slijterij)? Geef dit voor iedere kolom aan.

	Laatste 7 dagen	Laatste 30 dagen	Laatste jaar
Geen enkele keer			
Soms			
Vaak			
Heel vaak			

8. Hoe vaak werd er tijdens deze aankopen jouw leeftijd gecontroleerd? Geef dit voor iedere kolom aan.

	Laatste 7 dagen	Laatste 30 dagen	Laatste jaar
Geen enkele keer			
Soms			
Vaak			
Heel vaak			

9. Heb je ooit eerder alcohol gekocht via het internet?

- Ja
- Nee (**ga verder met vraag 10**)

9.1 Hoe vaak heb je eerder alcohol gekocht via internet? Geef dit voor iedere kolom aan.

	Laatste 7 dagen	Laatste 30 dagen	Laatste jaar
Geen enkele keer			
Soms			
Vaak			
Heel vaak			

9.2 Hoe vaak werd er tijdens deze online aankopen jouw leeftijd gecontroleerd? Geef dit voor iedere kolom aan.

	Laatste 7 dagen	Laatste 30 dagen	Laatste jaar
Geen enkele keer			
Soms			
Vaak			
Heel vaak			

10. Op welke dag(en) drink je *doordeweeks* alcohol? (meerdere antwoorden mogelijk)

- Maandag
- Dinsdag
- Woensdag
- Donderdag
- Ik drink geen alcohol doordeweeks (**ga verder met vraag 12**)

11. Hoeveel glazen drink je gemiddeld *doordeweeks*?

- Eén tot twee glazen
- Drie tot vijf glazen
- Zes tot tien glazen
- Meer dan elf glazen

12. Op welke dag(en) drink je *in het weekend* alcohol? (meerdere antwoorden mogelijk)

- Vrijdag
- Zaterdag
- Zondag
- Ik drink geen alcohol in het weekend (**ga verder met 14**)

13. Hoeveel glazen alcohol drink je gemiddeld *in het weekend*?

- Eén tot twee glazen
- Drie tot vijf glazen
- Zes tot tien glazen
- Meer dan elf glazen

14. Waar drink je alcohol? (meerdere antwoorden mogelijk)
- Thuis
 - Bij vrienden
 - Op straat
 - Discotheek
 - Bar/café
 - Sportvereniging
 - School
 - Jeugdcentrum
 - Muziekvereniging
 - Carnaval
 - Festival
 - Concerten
 - Anders: _____
15. Wat is jouw favoriete drank (alcohol bevattend)?
16. Welke soort alcohol drink je regelmatig?
17. Heb je nog opmerkingen over dit onderwerp of dit onderzoek?

Appendix 5: Code scheme

Code	Sub code	Definition	Premises
Physical availability	Opening hours	Refers to the opening hours of on-premises (bars, restaurants, disco's) and off-premises (supermarkets, liquor stores) and to the possibility of ordering online 24/7	On-premise Off-premise Off-premise (internet)
	Time frame between purchase and consumption	Includes the time period between actually buying the product and the opportunity of drinking it. Refers to on-, off-premise and internet.	On-premise Off-premise Off-premise (internet)
	Different locations of product delivery possible	Purchased products on the internet can be delivered to different destinations. The customer can define the destination.	Off-premise (internet)
	Consumption at different places after receipt	Purchased products can be taken and consumed at different locations after the purchase.	Off-premise Off-premise (internet)
	Proximity	Refers to the physical distance between on- and off-premise and the location of the customers. Refers also to the accessibility of electric devices for entering online off-premises.	On-premise Off-premise Off-premise (internet)
	Product variety	Refers to the availability of products,	On-premise Off-premise Off-premise (internet)
	Number of stores	Refers to the number of stores in the physical area of the customer, independently from the distance to the stores.	On-premise Off-premise
	Delivery policy	Refers to the delivery policies of online shops (e.g. national or local delivery options)	Off-premise Off-premise (internet)
Social availability	Personal contact with vendors	Refers to face-to-face contact between customer and vendor in the purchase situation	On-premise Off-premise
	Personal contact with other customers	Refers to face-to-face contact between customers (known and unknown) in the purchase situation	On-premise Off-premise
	Secondary purchasing	Refers to the purchase of alcohol by a known person for the (underage) customer	On-premise Off-premise Off-premise (internet)
	Shoulder tapping	Refers to the possibility of asking a unknown person to buy the beverage	On-premise Off-premise Off-premise (internet)
	Parental attitude	Refers to negative or positive appreciation of parents regarding alcohol purchase and consumption.	On-premise Off-premise Off-premise (internet)

	Peers' attitude	Refers to negative or positive appreciation of peers regarding alcohol purchase and consumption.	On-premise Off-premise Off-premise (internet)
Economic availability	Product price	Refers to the price of the alcoholic drink	On-premise Off-premise Off-premise (internet)
	Price comparisons	Refers to the possibility of comparing specific product prices from various products among different and equal kinds of premises	On-premise Off-premise Off-premise (internet)
	Paying methods	Refers to the possibility of paying the products on different ways	On-premise Off-premise Off-premise (internet)
	Expectation that products are cheap	Refers to the customers' expectation that products are low priced	Off-premise (internet)
	Minimum purchase quantity	Refers to the expectation that a minimum product quantity has to be purchased	Off-premise Off-premise (internet)
	Additional costs	Refers to the expectation that extra costs additional to the product price will be asked. Extra costs could be asked for different reasons, e.g. delivery	On-premise Off-premise Off-premise (internet)
Legal availability	Legal restrictions for customers	Refers to the specific legal restrictions for selling and purchasing alcoholic drinks	On-premise Off-premise Off-premise (internet)
	Regular age verification	Refers to the age verification of the (underage) customer when purchasing beverages	On-premise Off-premise Off-premise (internet)
	Multiple moments of age verification	Refers to the possibility of verifying the age for multiple times at one premise	On-premise Off-premise Off-premise (internet)
	Different kinds of age verification possible	Refers to the different possibilities of verifying the customers' age	On-premise Off-premise Off-premise (internet)
Other	<i>Alcohol use</i>	Refers to the general alcohol consumption	On-premise Off-premise
	<i>Product characteristics</i>	Refers to general features of the beverage, e.g. temperature	On-premise Off-premise Off-premise (internet)

Appendix 6: List of determinants

	On-premise	Off-premise	Internet
1st important determinants	Economic availability (Product price – negative)	Economic availability (Product price – positive)	Physical availability (Waiting time - negative)
2nd important determinants	Legal availability (Age verification - positive)	Legal availability (Age verification - negative)	Physical availability (Proximity - positive)
3rd important determinants	Social availability (Peers attitude -- positive)	Physical availability (Product variety - positive)	Economic availability (Add. costs - negative)
4th important determinants	Physical availability (Proximity - positive)	Various determinants including <ul style="list-style-type: none"> - Product characteristics (positive) - Legal availability (legal restrictions - negative) - Economic availability (product price - positive) - Physical availability (product variety – positive) 	Legal availability (positive) & physical availability (product variety - positive)
5th	Social availability (Peers attitude – positive)	Various determinants including <ul style="list-style-type: none"> - Economic availability (negative) - Legal availability (age verification - negative) - Physical availability (waiting time – positive & negative) - Social availability (contact with vendors – positive) - Legal availability (secondary purchasing – negative & positive) 	Social availability (Contact with vendors– negative)
6th	Social availability (Personal contact with customers – negative)	Various determinants including <ul style="list-style-type: none"> - Economic availability (product price – positive) - Legal availability (age verification – positive) - Physical availability (Proximity – positive) - Physical availability (product variety - negative) - Physical variety (opening hours – negative) - Social availability (parental attitude – negative) - Social availability (peers attitude – positive) 	Physical availability (delivery option – positive)

- Social availability
(contact with vendors
– positive)

7 th	Social availability (Contact with customers – positive)	Legal availability (age verification – negative)
8 th	Legal availability (age verification – negative & secondary purchasing – positive) & physical availability (proximity – positive)	Economic availability (product price – negative & positive) & Social availability (contact with vendors – negative)
9 th	Various determinants including <ul style="list-style-type: none"> - Social availability (contact with vendors – negative) - Legal availability (restrictions – negative) - Social availability (contact with customers – negative) - Legal availability (sec. purchasing – positive) - Social availability (peers attitude – positive) 	Various determinants including <ul style="list-style-type: none"> - Economic availability (product price – positive) - Social availability (contact with vendors – positive) - Social availability (sec. purchasing – positive)
10 th	Various determinants including <ul style="list-style-type: none"> - Economic availability (add. Costs – positive) - Legal availability (age verifications – positive & negative) - Physical availability (waiting time – negative) - Physical availability (Proximitmy – positive) - Physical availability (product variety – negative & positive) - Social availability (peer pressure – negative) - Social availability (contact with vendors – 	Various determinants including <ul style="list-style-type: none"> - Economic availability (product price – positive) - Legal availability (age verifications – positive & negative) - Physical availability (opening hours – positive) - Social availability (Peers attitude – negative)

- negative)
 - Social availability
(shoulder
tapping –
positive)
-

Appendix 7: Examples Card Game

