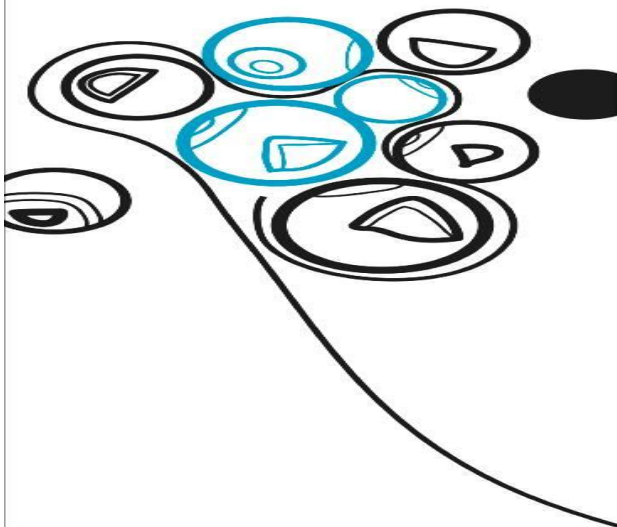


**EXPANDING THE FOCUS OF ID CHECK FOR
AGE VERIFICATION:**

**FACTORS INFLUENCING ATTENDANTS'
BEHAVIOR IN ID VALIDATION IN
COMPLIANCE WITH SALES LEGISLATION
OF AGE-RESTRICTED PRODUCTS**

Adedapo Tunmise Aladegbaiye
s1539574



14th of August, 2015



UNIVERSITY OF TWENTE.

**Expanding the Focus ID Check for Age Verification:
Factors Influencing Attendants' Behavior in ID Validation in Compliance
with Sales Legislation of Age-restricted Products**

MASTER THESIS

Adedapo Tunmise Aladegbaiye (s1539574)

GRADUATION COMMITTEE

Dr. J.J. van Hoof

Dr. A.D. Beldad

FACULTY Behavioral Sciences

MASTER SPECIALIZATION Corporate and Organizational Communication

GRADUATION DATE 14th of August, 2015, Enschede.

UNIVERSITY OF TWENTE.

Table of Contents

Abstract	1
Introduction	2
Literature Review	5
False Identity Documents	5
Methods of ID validation	5
Important features for ID validation using DPA.....	6
Factors influencing attendants' behavior in ID validation.....	6
Method	14
Design	14
Sampling procedure and techniques	14
Instrument	14
Predictors and Reliability of Scales	16
Pretest.....	18
Respondents	18
Demographics	18
Results	20
Discussions	25
Limitations and Implications	28
Conclusion	29
Acknowledgements	30
References	31
Appendices	36
Appendix A: Questionnaire	36
Appendix B: Introductory note on Postcards	54

Abstract

Compliance with sale legislation of age-restricted products to prohibit accessibility of minors inculcates the importance of identity document (ID) validation, because it is legally imperative that valid IDs are the required and acceptable means for identification of persons in legal and social transactions. This impliedly calls on ingrained responsibility of vendors in ensuring they only accept valid documents for the purpose of age verification. Studies have also revealed that false ID ownership by adolescents contributes to heavy consumption, increased perceived accessibility and increased perceived availability of these risky products. Therefore, this research employed a 35-item online questionnaire to probe the factors that influence ID validation behaviors of 164 attendants, who work at various outlets where alcohol, tobacco products and gambling products are being sold in nine of the twelve provinces in the Netherlands. Using multiple linear regressions, results show that training quality has positive effect on attendants' actual behavior, self-reported behavior, proficiency and ability in validating IDs. Time constraint negatively influences attendants' self-reported behavior, but positively influences their ability to validate IDs. Sanction has a positive influence on both self-reported behavior and ability to validate IDs. Social influence was found to be a positive predictor of attendants' proficiency in validating IDs. These imply that there is need for more refined training to upgrade the knowledge and skills of vendors and improve their time management for ID validation. Higher enforcement might also improve compliance and curb negative social influence which encourages deviance. Policy should also emphasize the importance of ID validation during ID checks when selling age-restricted products.

KEY WORDS: ID validation behavior, Attendants, Age-restricted products, Age verification, ID check

Introduction

In many countries, there are strict regulations for the production, sale and consumption of age restricted products such as alcohol (beers, wines and liquor), tobacco products (cigarettes, cigars, cigarette tobacco, "rollies", snuff and chewing tobacco) and gambling products (scratch cards and lottery tickets). This is because these products are considered "risky" as consumers are liable to their addictive tendencies and/or health vagaries, both psychological and physiological, as well social problems, especially when they start consuming them at an early age (Adams, Jason, Pokorny & Hunt, 2009; Cummings et al., 1998; Diemert et al., 2013; Paschall, Grube & Kypri, 2009; Winters & Lee, 2008). To forestall these problems, and limit youth accessibility to these products, some countries have enacted laws which prohibit sales of these products to persons below certain minimum ages which vary amongst countries. Compliance with these legislations is also enforced through periodic compliance checks by government agencies (Levy & Friend, 2000; Lubman, Hides, Yucel & Toumbourou, 2007).

In the Netherlands, the law does not permit sales of these age restricted products to persons below 18 years of age. Government policy specifies that attendants who sell alcohol, tobacco products and gambling products must ask for "proof of age" from persons who are not unmistakably old enough. And the retail industry uses 25 years of age as the reference (Gosselt, Van Hoof & De Jong, 2012). Moreover, there has been a progressive increase in Identity Document (ID) check by vendors, from 24% in 2007 (Gosselt, Van Hoof, De Jong & Prinsen, 2007), it increased to 46% in 2009 (Gosselt, Van Hoof, Baas & De Jong, 2011), to 44% in 2011 and 54% in 2013 (Van Hoof et al, 2014). Nevertheless, extant studies reveal that adolescents are still able to purchase these products even when they show their real IDs displaying their dates of birth (Levinson, Hendershott & Byers, 2002; Van Hoof & Gosselt, 2013; Van hoof, Gosselt & De Jong, 2010; Van Hoof & Velthoven, 2014; Van Hoof et al., 2015). Compounding this problem of ID-handling, vendors might also find it difficult to match Photo-ID with the bearer (Kemp, Towell & Pike, 1997; Megreya & Button, 2008) since they probably encounter many people every day who present various types of ID. These are the issues in compliance that researchers and policy makers mostly focus on. However, a rather important issue in the age verification process that is left unattended, but which is equally crucial is ID validation.

Often, ID validation is performed by personnel working under various government law enforcement agencies, such as the police, immigration, customs, security intelligence and bureaus etc. when verifying individuals' identities. They are authorized to inspect IDs presented to confirm if they are false or not because false identification is regarded as a crime. Moreover, it is basically a legal requirement that persons use and accept legitimate IDs during legal and social transactions. Most countries have established and enforced laws which prohibit impersonation, forgery and fraud, under which false ID usages are covered. While false IDs is criminal, accepting such IDs without appropriate inspection contributes to facilitating a crime, especially when it could have been prevented (Guidance to False ID, 2012). Therefore, vendors selling age-restricted products are equally responsible to confirm if the ID presented is not false before accepting it as proof of age and identity.

False IDs include fake IDs illegally obtained; expired IDs, IDs borrowed from other people or IDs which have been altered in some ways (Martinez, Rutledge & Sher, 2007; Schwartz et al., 1998). In addition, while countries like the United States have adopted the use of technological devices such as ID scanners to validate customers' IDs and verify their ages (Krevor et al., 2003; Monk & Kuklinski, 2006), such technologies are still not widely used in the Netherlands: hence, their obscurity in literature and research on compliance. Therefore, sales outlets which are legally expected to *identify* customers and *verify* their ages before sale of age-restricted products, and which do not have supportive validation technologies, would still currently rely on their vendors to physically evaluate IDs presented by customers for

verification purposes (Gosselt et al., 2011; St-Pierre et al., 2011). But to the undiscerning attendant, who has no aiding devices, determining which IDs are valid or false poses a crucial problem to this legal expectation. Even where remote age verification systems are used, privacy laws in the Netherlands forestalls comparison of presented IDs with governments databases; hence, enhancing the probability of false IDs *bypassing the system* (Van Hoof & Van Velthoven, 2014).

Moreover, research has also revealed that minors use false identification to circumvent the age verification system in order to obtain these age-restricted products (Martinez & Sher, 2010; Wechsler et al., 2002), while other popular “decoy” methods adopted include secondary purchases by older people and online ordering (Wisconsin Alcohol Policy Project, 2013). Martinez and Sher (2010) in their study on methods of fake ID procurement by underage students ($N=1098$) found that 21 per cent confirmed to possessing fake IDs, 93.5 per cent of which have used them. Schwartz et al. (1998) in their study of 911 underage students found that 39 per cent confirmed making attempts to buy alcohol with at most 14 per cent using false IDs. Eighty percent of their respondents also confirmed they knew that people who were using false IDs were breaking the law.

Studies have also shown that false IDs owned and used by underage persons may contribute to increased access to age-restricted products (Gruenewald & Treno, 2000), increased perceived availability (Martinez, Rutledge & Sher, 2007) and predicts heavy consumption (Martinez & Sher, 2010). Durkin and colleagues (1996) also found a strong association between frequency of alcohol consumption and use of false IDs in underage college students. Furthermore, Wechsler et al. (2002) discovered that of the 51 per cent of underage students who drink alcohol, 18 per cent confirmed having used false IDs in their alcohol purchase. Other works have also discovered that students who possess false IDs are more likely use alcohol, tobacco products and gambling products than their peers (Durkin, Wolfe & Philips, 1996). Also, in their study on fake ID ownership and heavy drinking in 1,547 underage college students, Martinez, Rutledge & Sher (2007) found that there was a spike in the ownership of fake IDs within the first two years of college, as there was an association between the ownership of fake IDs and accessibility to alcohol.

In addition, during sales of age restricted products, the essential customer’s information to a vendor would be the photo- to determine facial consonance with the customer and the date of birth- to provide information on the current age of the customer. These features, nevertheless, do not suppose in any way the validity of the ID itself, because a false identity document directly nullifies any information contained therein even if they are true information about the bearer (False ID Guidance, 2012). This means that in compliance with sales legislation, ID check connotes more than just determining if the customer is old enough to purchase the product, it also inculcates validation of the proof of age document the customer presents. The behavior of vendors during ID check for age verification and ID validation is important because either or both could influence the sales decision to sell age-restricted products to minors.

Considering the effect of false ID usage by this susceptible group of adolescents, the underlying issue in this area of interest is to determine the different factors that influence the behaviors of vendors to validate IDs within the scope of age verification, and how this translates to underage persons’ access to age restricted products. Therefore, validation issues are ideally in in two folds: (i) Determining the authenticity of the ID- whether it is actually a genuine, legally acceptable means of identification issued by an established legal authority or a false one illegally obtained, and (ii) Determining if the information contained therein, are actually those of the customer at the point of sale.

Against this background, there is cogent need to shift the paradigm of ID check from age verification alone towards ID validation. This *focus expansion* of age verification procedure to purposively include ID validation might serve as positive intervention towards higher compliance with sales legislation of age-restricted products, especially in preventing this susceptible group of adolescents from accessing risky products. But it is important to determine the factors that might influence attendants’ behavior to validate

IDs or not. Therefore, the central research question for this study is: **what are the factors that influence vendors' behaviors when validating IDs during ID check for age verification when selling age restricted products?**

This work is unique not only because ID validation is usually overlooked in policy and research, but it also explores why ID validation is important in the issue of compliance with age verification legislation. This study could help improve vendors' knowledge and skills in ID check, and could help refine as well as expand training portfolio in ID handling. It also contributes to the literature and theory on behavior and compliance.

Literature Review

Validation of identity document is important because only genuine ID documents are legally allowed to be presented by persons when needed or received by the demanding party. And by inference from past studies, under age persons with false IDs are more likely to consume more age-restricted, risky products and are, therefore, more susceptible to the health and social hazards associated with such heavy consumption (Adams, Jason, Pokorny & Hunt, 2009; Winters & Lee, 2008). Therefore, thorough validation of ID could forestall sales of age-restricted products to this vulnerable group in the first place when it becomes important to first check and confirms validity of the document; more attention might then be given to determine if the customer is of legal age to purchase the product. However, it is important for attendants to know and understand what constitutes a false ID based on some important features.

False Identity Documents

Many researchers such as Schwartz, Farrow, Banks & Giesel (1998) and Martinez, Rutledge & Sher (2007) have extended false IDs to include:

- ID illegally obtained (e.g. black market), with false or true information about the bearer
- ID belonging to a person but used by another person (borrowed ID)
- ID with information that have been purposively changed in any form (altered ID)
- ID which has expired

On the other hand, government agencies in some countries such as UK's Home office False ID Guidance, Dutch's National Agency for Identity Data (NDIC), and UK's National Document Fraud Unit specify the requirements that make up an authentic and acceptable ID in their policy documents.

Based on their descriptions there are four important parts that a valid ID must have:

- It must be a legally issued document by a recognized established authority and not obtained by illegal means such as purchase on black market, or informally via the internet.
- The information contained in it must be those of the person presenting it i.e. it must not be a borrowed ID.
- The ID must still be current i.e. must not have expired as expired documents are legally not allowed for transactions.
- The information contained therein must have not been altered in any way as this renders the document invalid.

Therefore, for the purpose of this study, false ID is defined as an unacceptable and invalid ID which is illegally obtained or borrowed or altered or expired, but which is owned or presented by a person for use as if it were legal in its issue and true of information contained. However, acceptable IDs would include, but not restricted to, national citizen (ID) cards, international passports, residence permits, driver's licenses and military IDs. This research is interested in how the vendors can determine real IDs from false ones, and the factors that influence such behavior during the sales procedure of age restricted products. To achieve this, attendants employ different methods to validate IDs.

Methods of ID validation

Although ID validation methods have not been categorized in research or literature before, there are ideally two methods available to vendors to validate IDs. The attendant can check the information on the ID himself or herself, relying on the senses of sight and touch or he/she uses electronic devices such as ID

scanners to determine its validity. However, this study will explore how attendants validate IDs by themselves in the absence of electronic tools.

Denotative Physical Assessment (DPA): Vendor's Actual Behavior, self-reported behavior, proficiency and ability

ID check is the overall behavior to ask and inspect an ID, usually to verify age. It is important to distinguish this from the act of checking features on the ID to determine if it is a valid one before accepting it as proof of age and identity. The behavior of vendors to validate IDs by themselves relying only on their senses of sight and touch is referred to in this study as denotative physical assessment.

Specifically, DPA can be defined as the physical evaluation of salient elements or features of the presented ID by the vendor to determine or estimate its validity for acceptance as a proof of identity and age. These elements can either be seen with naked eyes or felt by hand. And when they do these assessments, attendants make mental estimations to determine if they can accept the document even before or as they verify customer's age. However, there are salient factors that could facilitate or compromise not only the observable behavior to validate, but also their perceptions on ID validation behavior; the breadth and depth of their ability to validate; and their proficiency to do this action by themselves without the aid of any devices. Therefore, in this study, *Actual behavior*- is the observable behavior of vendors to validating IDs from denotative physical assessment. *Self-reported behavior* is not observable, but based on the self-report of vendors on exhibiting the behavior. *Proficiency* is the perception of vendors on their capacity to validate IDs by themselves (without aid from tools or devices, such as ID scanners). *Ability* is made up of vendor's self-rating of the necessary skills and knowledge they need to validate IDs efficiently and successfully.

Important features for ID validation using DPA

While validating features vary from ID to ID depending on the requisite design of each document, there are still some basic and standard elements IDs must have to be valid for social and legal transactions. Some of these features could easily be seen with the naked eye, or felt by hand, but others require certain devices such as black light, scanners, fluorescents, and microscope to see. However, this study is interested only in those features that can realistically be seen or felt by vendors who have no supportive tools to validate IDs.

Following the guidelines of the National Agency for Identity Data (2014) for Dutch IDs, UK's Home Office Basic Guide to Forgery Awareness (2014) and False ID Guidance (2012), the following are considered important features for validation purposes using DPA: type of ID, name of issuing authority (including logo and seals), photo(s), expiration date, document number, MRZ and security features (Kinegram, hologram, tactile relief, ghost image and water mark).

The expected behavior is for the attendant to check these features using DPA and, therefore, make mental estimations if the ID is valid or not before accepting it. This behavior, however, could be influenced by several factors abstracted from literature. Therefore, what are those factors that could influence the behavior of attendants during the validation procedure of IDs either positively or negatively?

Factors influencing attendants' behavior in ID validation

Attitude, self-efficacy and social influence

Research has shown that attitude, self-efficacy and social influence are key predictors of behavioral intention, behavior and behavior change (Ajzen, 1985, 1991, 2005, 2007; Ajzen, Albarracin & Hornik, 2007; Armitage & Conner, 2001; Bandura, 2006; Fishbein & Ajzen, 1975, 2010). These three factors are amongst the prominent influencers of behavior as depicted in the theory of reasoned action and theory of planned behavior. From their meta-analysis of 185 independent studies, Armitage and Conner (2001)

posited that Theory of Planned Behavior explains 11 per cent of actual behavior in situations where research were self-reports and that other variance in behavior could be explained by other factors including circumstantial limitations like volitional controls.

Attitude has been described as a behavioral predisposition towards an object that allows us to predict behavior (Zint, 2002). In the theory of planned behavior, Ajzen (1985, 2005) examined the predictive power of attitude on behavior, which he argued is usually predicated on behavioral intentions. The attitude of vendors towards age verification has a strong impact on their behavior, because the right attitude is necessary not only to understand the importance of the behavioral outcome but to be motivated to behave that way. So if they evaluate that behavior as positive then they are likely to perform it. In ID checks there are ideally multi-levels of attitudes that are intertwined: attitude to ask for an ID, attitude to check and verify the age, attitude to validate the document. However, attitude to verify age and validate ID, already inculcates asking and checking an ID. But age verification is the ultimate goal of ID check; this means this conscious effort to verify age has an influence over the entire validation procedure. A vendor who does not believe in ID check or one who believes but does not check ID already defeats the validation process in the first. It can, therefore, be assumed that attitude towards age verification has some considerable influence on ID validation. Likewise the attitude towards validation is anchored on the importance vendors attach to it.

Self-efficacy, which is described as person's belief of his/her capacity to perform behaviors that yield a desired outcome (Bandura, 1997) has been considered by scholars as a strong predictor of behavior (Ajzen, 2007; Fishbein & Cappella, 2006). This concept states that a person can control his/her own motivation and behavior based on his/her belief to being capable of doing so. This conviction can be a motivator for vendors not only in verifying customer's age but in validating the ID if they perceive themselves as having the capacity to execute those expected behaviors when needed.

Social influence (subjective norms and normative norms) has also been posited by scholars as having influence on behavior. People not only generally consider what "significant others", such as management and colleagues, expect from them, but also observe how those "others" behave (Bandura, 2002; McAlister, Perry & Parcel, 2008; Miller, 2005). Chiaburu & Harrison (2008) in their meta-analysis research, found out that peers influence, not just the perceptions and attitude of co-workers but also their performance and behavior. This confirms the findings of Felps, Mitchell, & Byington (2006) that social influence can be both a positive and negative predictor of behavioral outcomes at the workplace. In the context of this study, management expectation as well as behavior of colleagues could be considered the social influence a vendor considers which could influence his/her behavior to either validate IDs or not. If the management attaches strong importance to age verification and ID validation and makes efforts to facilitate and encourage compliance, such expectation might influence whether or not the vendor actually behave accordingly. Also, if other colleagues positively comply with the rule, then deviance will likely be disapproved, reported or even penalized. Therefore, social influence at the workplace might have an effect on attendants' behavior to validate IDs.

From the above, the following hypotheses are developed:

- | | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Hypothesis 1a(i)-1a(iv):</i> | Positive attitude of attendants towards age verification has a positive influence on denotative physical assessment (i) actual behavior, (ii) self-reported behavior, (iii) proficiency and (iv) ability for ID validation |
| <i>Hypothesis 1b(i)- 1b(iv):</i> | Positive attitude of attendants towards ID validation has a positive influence on denotative physical assessment (i) actual behavior, (ii) self-reported behavior, (iii) proficiency and (iv) ability for ID validation |

Hypothesis 2a-2d: Self efficacy has a positive influence on denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation

Hypothesis 3a-3d: Positive social Influence of attendants has a positive influence on denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation

Monitoring and Sanction: Enforcement concepts in the Table of Eleven

The Table of Eleven Model has been a guide to determine the level of compliance with legislation or rules by policy makers and management. It has also been adopted as the compass for many studies on compliance. Although it has eleven dimensions, it is broadly divided into two categories: the spontaneous compliance category, which predicts behavior in the absence of enforcement (Ostrovskaya & Leentvaar, 2011) and the enforcement category, which limits the choice for non-compliance (Elffers, Heijden & Hezemans, 2003). The enforcement concept is anchored on continuous inspection (monitoring) and imposition of sanctions which are considered highly preventive measurement to encourage deterrence (Derevensky et al., 2004; Ostrovskaya & Leentvaar, 2011; Silberman, 2000). Research has also shown that the popular explanation for non-compliance is usually due to insufficient monitoring mechanism and low enforcement of sanction (Eggert & Lokina, 2010; Livernois & McKenna, 1999; Mitchell, 1996; Sparrow, 2000; Vandenberg 2003; Winter & May 2001; Zaelke et al., 2005). Studies have also revealed that deterrence can actually anticipate the spontaneous compliance concept which rivets more on the preconditions that could determine if a person complies or not such as knowledge of rules, cost/benefits of compliance, extent of acceptance, respect for authority and non-official control (Ostrovskaya & Leentvaar, 2011, *see also* Table of Eleven, 2004). Elffers, Heijden & Hezemans (2003) also found that deterrence is one of the strong factors that explain self-report of compliance with regulatory laws, the other factors being social norms and benefit for non-compliance. In addition, Cummings and colleagues (1998) and Wagenaar, Toomey & Erickson (2005) in their studies discovered that enforcement has a significant effect on compliance with legislations on alcohol and tobacco respectively. The National Research Council (2013) also reported that increasing enforcement on retailers who sell age restricted products can restrict accessibility of minors to these products by 40 per cent.

However, the effect of deterrence on behavior has been found to diminish over time. Age compliance check for alcohol and cigarette sales was found to reduce usually two weeks after an enforcement action is taken, while deterrent effect following sanction largely diminished after three months (National Research Council Report, 2013; Wagenaar, Toomey & Erickson, 2005). According to Etiegni, Ostrovskaya, Leentvaar, & Eizinga (2011), this means that there is need for an effective and continuous enforcement mechanism to ensure compliance with rules.

Monitoring

Although not explicitly categorized in the Table of Eleven, monitoring has been considered a very strong predictor of compliant behavior. Monitoring includes both official and social control for compliance, which covers four of the six dimensions of enforcement, which are: risk of being reported, risk of inspection, selectivity and risk of detection. People might adjust their behaviors in line with the perceived risks of being reported for non-compliance. This monitoring action by others, such as colleagues at the workplace, can be considered a strong predictor of compliant behavior if it most likely that deviance will be reported to authority. For example a waiter in a restaurant or cashier at the supermarket who is aware he or she will be reported by colleagues if he or she does not verify age or validate ID is most likely to comply. Likewise the risk of inspection by authority to check if rules are broken can also have influence on target's behavior. For example, it is not unusual to see cameras at outlets that monitor attendants' behaviors and interactions with customers. In addition, the risk of actually being detected also has a

possible influence on behavior regardless of the monitoring mechanism put in place (Ostrovskaya & Leentvaar, 2011). Therefore, an attendant that knows he or she is being monitored might still not comply if there is low chance of being detected for deviance. For instance, an attendant who is aware of the rules to verify age, and who knows he or she is being observed from a camera in the outlet might actually ask for an ID, just for the camera to record that action, but might not really check the ID to verify the age. This is still deviance because the purpose of age verification has been defeated. Selectivity is also another factor under monitoring which involves close inspection of rule violators (both past and potential offenders) more than those rule abiders. The extent of this monitoring by authority can shape an attendant's behavior in compliance with ID validation/age verification procedures.

Hypothesis 4a-4d: Monitoring has a strong positive influence on denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation

Sanction

The last two factors in the Table of Eleven cover the likely repercussion for non-compliance. As noted earlier, using false IDs is criminal in most countries and accepting it translates to aiding a crime and ignorance of the law is never an excuse for deviance. The 2011 Solicitors Regulators Authority (SRA) report on the perception of firms on compliance shows that most of the employees in the 200 organizations researched had a general fear of sanction for non-compliance. Selling age-restricted products to underage persons could attract punishment for the outlet directly from government authorities and the actual attendant who breaks the rule might also be sanctioned by the management (National Research Council Institute, 2013; Posner, 1996). Even if the outlet is not detected for deviance by government, a deviating attendant might still receive sanction from management if detected. However, the chances of receiving sanction either way could be weighed in by attendants to determine their behavior. If the risk of receiving sanction is low, even after being detected by colleagues, management or government, the attendant might still not comply (Etiegni, Ostrovskaya & Eizinga, 2010). Moreover another factor that is also considered is the severity of the sanction. If the price for deviance is high the attendant might be more inclined to comply than when the sanction is negligible (Etiegni, Ostrovskaya & Eizinga, 2010; Ostrovskaya & Leentvaar, 2011; Vandenbergh, 2003). Different penalties are issued to offenders by government. It could include fines, restriction, suspension/withdrawal of license or even jail time as it is in Belgium and Italy (International Centre for Alcohol Policy, 2015). Diemert et al. (2013) found out that warnings and public prosecution of repeat offenders improved compliance with tobacco sales to minors in Australia. The Netherlands has a substantial amount of fine that the defaulting outlet pays. The outlet on the other hand might also issue some penalties to the erring attendant, which could be suspension, queries, poor appraisals or even loss of job.

Therefore, the following hypothesis is constructed.

Hypothesis 5a-5d: Sanction has a positive influence of denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation

Reward

At the other end of the sanction continuum is reward. While sanction is the price for deviance, reward could be the price for compliance. Although this concept is not part of the Table of Eleven, many scholars have argued on the importance of reward as a motivator for positive behavior and performance. (Hafiza, Shah & Jamsheed (2011), maintained that reward has a positive influence on motivations of people to behave in a positive way. Brun & Dugas (2008) discovered that intrinsic reward such as recognition could boost positive behavior of employees. Eisenberger and Cameron (1996) in their study on intrinsic rewards

concluded that rewards that convey social significance increase motivation to behave positively. Ozutku (2012) and Stajkovic & Luthans (2001), discovered that reward has a significant effect over employees overall results (performance). Just as in sanction, the chances of being rewarded for compliance as well as the attractiveness of the reward can influence the behavior of attendants towards ID validation. Diemert and colleagues (2013) noted that rewards such as positive feedback to vendors and congratulatory letters improved compliance of vendors with youth access laws, especially in small communities. However, management might also reward staff for good performance, which could be reflected in financial rewards, promotions, appraisals, positive evaluations, awards, recognitions and other benefits (Ajila & Abiola, 2004; Deeprose, 1994; Reio and Callahan, 2004). It can be deduced, therefore, that behavior of attendants can be influenced by reward (Evans, 2001; Khan, Zarif & Khan, 2011).

Hypothesis 6a-6d: Reward has a positive influence of denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation

Familiarity with ID Type and ease of inspection

In most countries, policy documents as well as training portfolios usually specify the kind of IDs that are acceptable for social and legal transactions. Often, such acceptable documents are government-issued, which are usually also acceptable in other countries. In the Netherlands, for example, government-issued IDs to citizens include Dutch ID cards, Driver's licenses and passports. Foreign nationals residing for longer periods than three months could be issue residence permits, but their foreign passports are also acceptable documents for identification. These IDs are usually specified in policy documents, as well as training materials. Nevertheless, it is possible to conclude that vendors in the Netherlands might be more familiar with the Dutch IDs, since the law mandates everyone 14 years and above to carry valid IDs. Although there very few studies on familiarity of IDs, in their study on redesigning Photo IDs to ensure higher match between photo and person, White, Burton, Jenkins & Kemp (2014) found that vendors were able to easily match photo to persons when the subjects were familiar people then unfamiliar ones. Familiarity made the comparison easy.

Familiar IDs could, therefore, be easier to inspect for validation than unfamiliar documents because attendants might already know where to check the relevant information they need for ID validation and age verification. But unfamiliar documents could be a constriction to their behavior to comply with the legal directives.

Hypothesis 7a-7d: Ease of checking familiar IDs has a positive influence of denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation.

Training

Knowledge of rules is also an important concept in the Table of 11. Moreover, it has been argued by scholars that training is one of the means to create awareness and knowledge on the importance of compliance (Gosselt, van Hoof & De Jong, 2012; Wagenaar, Toomey & Erickson, 2005). Training ensures the staff gets not only the knowledge of the law, rule or policy but also the requisite skills to exhibit the expected behavior. Furthermore, Shaheen, Naqvu & Khan (2013) posited that adequate training optimizes performance which they argued is an outcome of behavior. Most countries that regulate alcohol, tobacco and gambling products usually mandates that outlets train their attendants on the requisite knowledge and skills required to comply with age verification in addition to other behavior such as not serving alcohol to an obviously intoxicated customer. In their study on successful initiatives on the

vagaries of alcohol, tobacco, gambling, speeding and mental health, Stead et al. (2009) found that knowledge accentuated by training through transferrable learnings has a strong influence on attitude and behavior of persons engaged in risky behaviors.

In the United States and the United Kingdom, the scope of such training for both managers and attendants are clearly defined. The US, for example, has the General Code of Practice Guidelines (GCOP, 2013) for licensees of alcohol to train their attendants on acceptable practices related with handling and sale of alcohol. Some training will specify acceptable documents as well as how to check valid IDs. The UK's False ID guidance (2012) particularly specifies training covering types of false IDs and important elements on acceptable IDs which attendants could inspect. Attendants are expected to take these trainings usually at the beginning of the job. The guidelines also present how much training they get, but not how well they are trained not just on age verification but also on ID validation. There are other special directives on important trainings for door staff for license premises such as clubs and casinos. Inadequate training for vendors might further constrain the validation procedure of IDs. A properly trained vendor should have the requisite skill and knowledge on the importance of ID validation, on how to check some specific features to validating the ID before verifying the age. But with the rarity of ID validation in research and literature in the Netherlands, trainings are biased towards age verification than ID validation, although policy documents specifies accepting valid IDs only by encouraging attendants to check carefully for valid ones.

Gosselt et al. (2012) and Howard-Pitney et al. (1991) concluded that training has little influence on compliance, while Wagenaar, Toomey & Erickson (2005) also discovered that limited training (low quantity) had minimal effects on compliance with underage alcohol sales. However, these studies did not consider extensive and continuous training strategies as well as depth of the contents. The quantity and quality might have been issues for the little effect discovered. However, Usman (2014) in his study found out that the quantity and quality of training employees in supermarkets receive has impact on their behavior and performance. Therefore, training might have influence over attendants' behavior in not just how often or how much it is given but in how well it is developed and structured in content to fit the desired need.

Hypothesis 8a(i)-8a(iv): High training quantity has a positive influence on denotative physical assessment (i) actual behavior, (ii) self-reported behavior, (iii) proficiency and (iv) ability for ID validation.

Hypothesis 8b(1)-8b(iv): High training quality has a positive influence on denotative physical assessment (i) actual behavior, (ii) self-reported behavior, (iii) proficiency and (iv) ability for ID validation.

Cognitive load

Cognitive load is one of the key suggestions of White, Kemp, Jenkins, & Burton(2014) on factors that could influence proper matching of person to photo, which is also a security feature for validation purposes according to most policy documents on IDs (*see* National Agency for Identity Data, 2014). By employing their suggestion beyond the validating act of photo-to-person matching, cognitive load could also affect the entire ID check process. This is because a typical ID has so much information. Some information are about the bearer such as name, gender, photo, date of birth, place of birth, signature and residential address. Beyond these, other information are ideally security features about the issuing authority, place of issue, issue number, seal/logo, Machine Readable Zone (MRZ), expiration date of ID, electronic chip, ultra-violet printing, micro-prints, ghost imaging, holographic seals, holographic logos and holographic issuing authority name, silver screening etc. These are not easily duplicated and vendors could check for validation purposes. In fact, most important information about the bearer, the issuing

authority and the card are also usually set in the security features which are visible to the naked eyes if some simple checks are done. Nevertheless, it could still be a lot of information for the brain to process within the short time vendors have to attend to customers. In addition, vendors might have other distractions from their colleagues, supervisors, customers that might contribute to the cognitive load they experience during ID checks (White, Kemp, Jenkins, & Burton, 2014).

Therefore, cognitive load could discourage them in the first place to check for validity and even for proficient vendors it might make them to either ignore the ID validation procedure and go directly towards age verification and/or photo to person matching exercise or make them subjectively select some validating features they consider important to determine ID's validity. Even at that, he or she would still have to make decisions on which security features to select for validation.

In addition, most cheap, poor quality IDs usually lack the security features that genuine IDs have, because these features are created with sophisticated technology which are expensive to procure by private individuals (Gruenewald & Treno, 2000). Moreover, the assumption is that an underage person in possession of a false identity document will not want to pay a fortune to get high-quality fake IDs just because they want to buy alcohol and/or tobacco products and/or gambling products. Such dark investments usually have more sinister purposes. Therefore, it can be safely assumed that a false ID owned by an underage person will likely be cheap, low-quality IDs if obtained illegally, or borrowed or has expired or has minor alterations on it (Martinez, Rutledge & Sher, 2007). Therefore, except for photo to person matching, which has been scientifically determined as difficult (White, Kemp, Jenkins, & Burton, 2014), it should be relatively easy to identify an invalid ID with careful scrutiny of some key features without mental and physical "noise".

Hypothesis 9a-9d: Cognitive load has a negative influence on denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation.

Time Constraint

Little studies have been done to consider how time affects ID check, even though in reality, little time is accorded this process (whenever it takes place). White, Kemp, Jenkins, & Burton (2014) also proposed that time-constraint can indeed have influence over photo matching. Moreover, since people have different temperaments, asking for ID might be rather uncomfortable for the vendor as well as the customer who might get angry on refusal to purchase product or for being asked many times when purchasing the product (Gosselt et al., 2012).

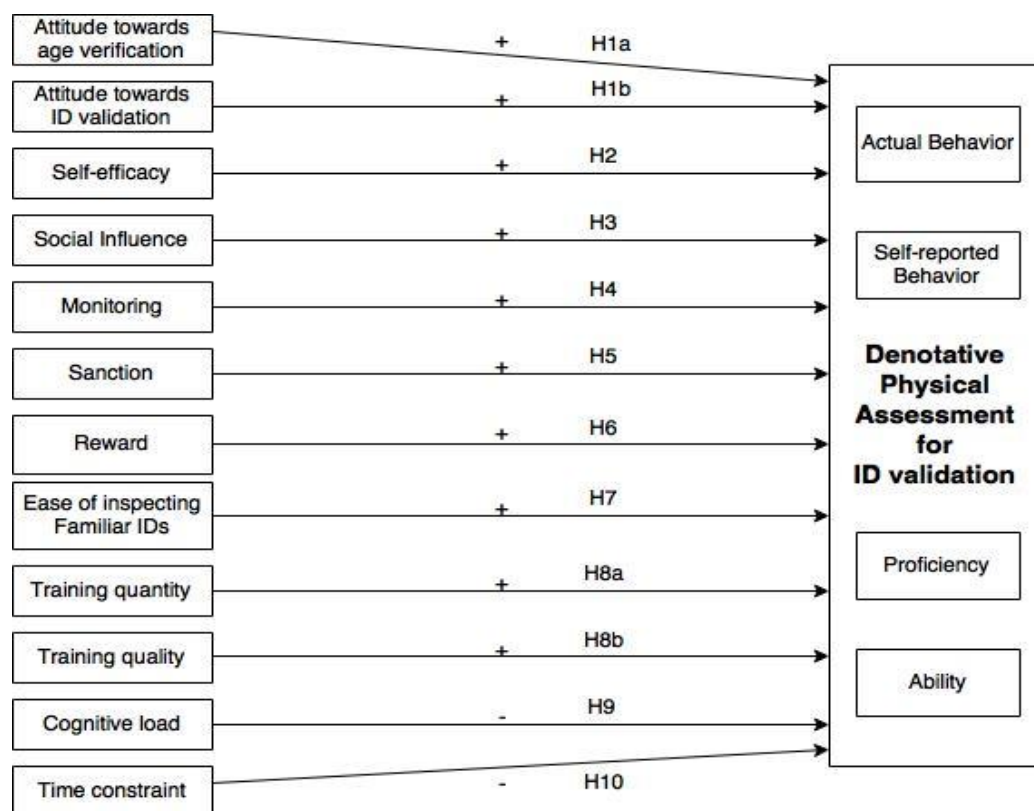
Management would usually expect friendly interaction between the customer and the attendant, but the expectation is anchored more on the attendant being effective within a limited timeframe, so other customers are not kept waiting. Also, vendors usually have little time to attend to customers. This is because the customer does not expect to be held longer than is necessary. In a supermarket, for example, they just want the seller to scan the products, get their bill, pay for the products and be on their way. Cashiers are under more pressure to attend to them on time, especially at peak hours when there is usually a queue. So when it comes to the point of checking ID for age verification, another factor that might influence vendor's intention to comply in the first place is time. Customers might also grow impatient especially if there is a long queue intensifying time pressure, and rather than follow legal guidelines to ask for ID for age check, vendors might be tempted to ignore the procedure altogether. But for the vendor that does ask for ID, time pressure might also make them ignore the validity of the ID and go straight to verifying age. Also, the attendant might indeed ask for IDs but not really inspect it. Therefore, the more time the vendor spends on checking an ID, the more likely he/she will be able to validate the ID before verifying identity and age of customer.

Hypothesis10a-10d: Time constraint has a negative influence on denotative physical assessment (a) actual behavior, (b) self-reported behavior, (c) proficiency and (d) ability for ID validation

Figure 1 shows the influence of the predictors over DPA of IDs by attendants in order to validate them.

Figure 1

Model of factors influencing denotative physical assessment for ID validation



Method

This study examined the factors that influence the behavior of attendants that sell alcohol, tobacco products and gambling products pertaining to ID validation during ID check for age verification before selling those products. This section explicates the approaches initiated to generate data from the target population.

Design

The survey method was employed for this study and was distributed online using Qualtrics online tool. This method is useful to pull a large number of responses across different outlets of the target population since they are wide and varied in this investigation. Online recruitment of participants also made collection and collation of data relatively easy from a widespread population of the target group.

Sampling procedure and techniques

To ensure higher representation of the population, the areas covered for distribution were purposively selected as careful attempt was made to ensure the survey was spread across the geographical regions of the Netherlands. Nine out of the 12 provinces of the country were covered which are: Groningen, Friesland, North Holland, South Holland, North Brabant, Utrecht, Overijssel, Gelderland and Limburg. For accessibility to the target group, and since there are no databases for comprehensive list and contacts of vendors (attendants) in the Netherlands; convenience sampling was, therefore, done to recruit respondents for the study since they are more accessible at their focal outlets. As strategy, 1500 postcards with brief introduction to the research interest and link to the online survey were made and distributed to attendants across the country. In addition, this method was appropriate because respondents vary based on the outlet they work since the scope of this study is relatively wide, covering different outlets where alcohol, tobacco and gambling products are being sold all over the country. Vendors were approached directly at their respective outlets and given the postcards in person at initial contact. With permission, their contacts were obtained when necessary.

As noted earlier, the focal outlets for this study constitute places where age-restricted products are being sold directly by attendants to customers. This ensures reliability of responses because sellers in these situations can directly ask and check for IDs of customers when need be. The following are the general outlets which were determined to cover all possible avenues where these age restricted products can be obtained and consumed either on premises or off premises: Supermarkets/Grocery stores, "Borrelshop"(liquor section of the supermarket which is secluded from the main shop floor) Liquor stores, Tobacco shops/Kiosks, Cafeterias, Bars, Pubs, Restaurants, Sports Canteens and Fuel Stations. Casinos and clubs were excluded from the study because most ID checks are not done by the attendants or sellers but by other persons who do not directly sell age-restricted products to the customers, but might check IDs only to admit people into the venue. They, therefore, cannot supply responses that are reliable.

To intensively widen the scope of recruitment, emails with links to the survey were also sent to the official emails of some outlets. Facebook posts with the survey link were also placed on the Facebook walls of some of the focal outlets. This was also posted on Facebook walls of universities, colleges and schools of applied sciences in the Netherlands. This was done because some of the outlets are located on campus grounds, and some students also work there as well as at some of the other focal outlets in this study interest.

Instrument

A 35-item questionnaire was constructed to generate data for analysis. However, the novelty of this study interest, multiplicity of the predictors and operationalization of the dependent variables warranted construction of mostly relatively original items for the constructs in this investigation. Items were,

however, structured following guidelines presented by Leeuw, Hox & Dillman (2008) for constructing original questionnaires. In addition, items were constructed based on important abstractions from the literature.

For the dependent variable, DPA *Actual Behavior*, features on familiar IDs- Dutch driver's license and Dutch ID- were segmented and *regionalized* (on ID) for selection based on validating elements they contained by trailing the security feature guidelines presented by the National Agency for Identity Data (2014) for Dutch passports and Dutch ID cards.

Although there were other features on the IDs, such as date of birth, which could also be selected as features examined during an ID check, only those features pertaining to ID validation are collated as data. The Dutch ID had 11 validating elements that could be clicked, while the Driver's license had 10 validating features that could be selected. Table 1 contains the validation features on the Dutch ID card and the Driver's License that could be selected.

Table 1

Features for validation on Dutch ID and Driver's License

Dutch ID Card	Driver's License
Type of ID	Type of ID
Photo1	Photo
Photo2	Expiration date 1
Expiration date	Expiration date 2
ID number	ID number
Kinegram	Kinegram
MRZ	Security feature 1
Document number on MRZ	Security feature 2
Security feature 1	Security feature 3
Security feature 2	Security feature 4
Security feature 3	-

Note. MRZ= Machine Readable Zone

These IDs were displayed on screen and respondents could click on as many parts on the IDs as possible that stimulate a representation of the elements they look at during ID checks at their jobs in reality. Scores were attached to the features for validation. Composite scores were generated from the featured clicked on both IDs from an overall possible score of the 21 which is a sum of the validating features on both IDs.

On a 5-point Likert scale (1 = strongly disagree, 2=disagree, 3= neither agree nor disagree, 4=agree, 5=strongly agree), one, close-ended item was created for each the other dependent variables that measures the *Self-reported behavior* of vendors towards ID validation and their *Proficiency* to perform validation. *Ability* to validate IDs by themselves was rated on a scale of 0-100%. Table 2 contains items for these dependent variables.

Table 2***Items for Self-Reported Behavior, Proficiency and Ability***

<i>Dependent Variable</i>	<i>M</i>	<i>(SD)</i>	<i>Item</i>
Self-reported Behavior	4.10	(.71)	I validate IDs (not about verifying age) when selling alcohol/tobacco products/gambling products
Proficiency	3.97	(.75)	I can validate IDs by myself (without using devices) when selling alcohol/tobacco products/gambling products
Ability	6.98	(1.69)	On a scale of 0-100% I would rate my ability to validate IDs as....

To compare the outcomes and measure consistency of results, actual behavior was measured using features of the IDs displayed on screen early in the survey, while items for self-reported behavior, proficiency and ability were displayed towards the end of the survey.

Predictors and Reliability of Scales

Since this study is relatively novel for its area of interest, for the 12 predictors, at least 4 items on a Likert scale of 1 to 5 (1 = strongly disagree, 2=disagree, 3= neither agree nor disagree, 4=agree, 5=strongly agree) were originally constructed although abstractions were dependent on critical review of literature. But for Attitude towards ID validation and attitude towards age verification which had 5 items each, all other predictors had four items each. After Cronbach's alpha was calculated some items were excluded to increase reliability of the scales.

Reliability was sufficient for Attitude towards ID validation ($\alpha = .91$) Attitude towards age verification ($\alpha = .85$), Social influence ($\alpha = .72$), Monitoring ($\alpha = .74$) and Reward ($\alpha = .87$). To increase reliability, an item each was removed for Training Quality ($\alpha = .73$), Cognitive Load ($\alpha = .72$) and Sanction ($\alpha = .78$). Two items were, however, excluded for Training Quantity ($\alpha = .84$).

Self-efficacy ($\alpha = .60$) was determined to be a formative construct, because it is a composite variable i.e. the composing items build up into its very essence (Bandura 1997), and composite indicators were exogenously determined (Simonetto, 2011). Low inter-correlation between items is of little impact as that was expected. The defining factors as well as end result of denotative physical assessment is to know if vendors are able to determine if an ID is not borrowed, fake, altered or expired. Being able to estimate each disparate yet distinct factor in terms of behavior, within this study, builds into the construct of self-efficacy and not the construct being divisible into those items, as is the case in reflective constructs. Therefore, though not internally consistent all items were retained due to their central importance to the study.

Reliability coefficient was poor for Time constraints (.63), and Ease of inspecting Familiar IDs (.57) was most unreliable. Nevertheless, because they are relevant factors for the study, an item that best captures the essence of each the constructs from the composite indicators was selected by two independent persons and retained for analysis.

Table 3 shows the items for each of the constructs alongside their reliability, means and standard deviations.

Table 3*Items Constructed for the Predictors including Cronbach's Alpha, Means and Standard Deviations*

Construct	α	M	(SD)	Items	(N=164)
1. Attitude towards age verification	.85	4.28	(.52)	Age verification is important. It is important I verify age even when customers are impatient. It is important I verify age even when customers are rude. It is important I verify age even when customers are aggressive. It is important I verify age even when there is a long queue.	
2. Attitude towards ID validation	.91	3.93	(.82)	ID validation is important. It is important I validate IDs even when customers are impatient. It is important I validate IDs even when customers are rude. It is important validate IDs even when customers are aggressive. It is important I validate IDs even when there is a long queue.	
3. Self-efficacy	.60	3.96	(.59)	I can determine if the ID belongs to the customer. I can determine if the ID is fake. I can determine if the ID has been altered. I can determine if the ID has expired.	
4. Social influence	.72	3.95	(.66)	Management expects me to validate IDs. Management encourages me to validate IDs. My colleagues think ID validation is important. My colleagues encourage me to validate IDs.	
5. Monitoring	.74	3.91	(.74)	Management has strict monitoring system on my compliance with ID validation. There are cameras in the outlet through which I am being monitored by management on my compliance with ID validation. The outlet is being monitored on compliance with ID validation by government. I am being monitored on my compliance with ID validation by my colleagues.	
6. Sanction	.78	3.70	(.98)	If I don't comply with ID validation it will negatively affect my performance evaluation. The sanction for not complying with ID validation is severe at my outlet. The chances of receiving sanction for non-compliance at my outlet is high.	
7. Reward	.87	3.40	(1.18)	I receive financial compensation when I comply with ID validation. I get positive appraisal from management when I comply with ID validation. The reward for complying with ID validation is very attractive at my outlet. I get good performance rating for compliance with ID validation.	
8. Training quantity	.84	3.90	(.91)	I have received adequate training(s) at my sales outlet on ID validation. The training(s) I received on ID validation was sufficient. I train myself more than the training(s) organized by the outlet I still need more training on ID validation	
9. Training quality	.73	4.01	(.64)	The training(s) I received on ID validation was important. The training(s) I received on ID validation was useful . The training(s) I received on ID validation was of high quality. It was difficult to understand the content of the training(s)	
10. Cognitive load	.72	3.70	(.84)	Interactions with customers distract me I find the information on ID confusing There is just too much information to process on IDs Although there is a lot of information on ID, I know exactly what to look for	
11. Ease of inspecting familiar IDs	.57	4.07	(.78)	I find it easy to validate IDs I am familiar with because I know exactly what to look for I accept only IDs I am familiar with because they are easy to validate Unfamiliar IDs are difficult to validate Unfamiliar IDs in different languages are difficult to validate	
12. Time constraint	.63	3.70	(1.06)	I spend less time validating IDs whenever there is a long queue of customers There is not enough time to validate IDs ID validation takes a lot of time I spend the same amount of time on validating ID during both busy and less busy hours	

Other follow up questions were included in the questionnaire to probe certain areas of this study though not directly linked to the developed hypotheses, but which could give more clarity and interpretation to the results. Some items were also constructed to set the context in which the construct were being measured for increased reliability on the responses. Items for demographics were also constructed, with regards to age, gender and experience, though not tested for analysis (*refer to the appendices for these items*).

In addition, a validating item was included at the start of the survey as a criterion for inclusion of valid responses. On a scale of 1 to 5 (1=Not at all, 2=Rarely, 3=Sometimes, 4=Often, 5= All the time), respondents were asked how frequently they check IDs before selling alcohol, tobacco products and/or gambling products. All respondents who chose “not at all” were automatically excluded from the research because it is on ID check. Such respondents are not reliable.

Pretest

To ensure higher quality control of the items, refine the instruments and test viability of the channels of recruiting the respondents, a pretest was conducted on a small sample of the population. Twenty vendors in Enschede (province of Overijssel) were approached; their email addresses were obtained and the survey link was subsequently sent to them. In total, nine responses were achieved. Interviews were conducted when allowed on the structure of the questionnaire, wordings, ease of understanding the questions and possibility of multiple interpretations. Appropriate corrections were implemented before the actual survey was executed.

Respondents

Vendors (attendants) are the integral respondents for this study, because they directly sell the products to the consumers and are, therefore, expected to do ID check before sale of age restricted products when necessary. Inclusion criteria was that they must currently work in the Netherlands at the focal outlets; be able to speak and read Dutch, since the questionnaire was in Dutch. They were of both genders.

There were a total of 266 respondents for the survey. 82 respondents failed the validation question asked at the beginning of the questionnaire, while 40 questionnaires were incomplete. Therefore, 102 responses (38%) were excluded from the data. 164 completed questionnaires constituted the final data that were analyzed.

Demographics

There was a widespread response from all over the country which indicates higher reliability of data for the target group. Specific demographics analysis show an even spread in respondents' gender with 83 (51%) male and 81 (49%) female. Their ages range between 17 and 61 years (Mean= 27.9). Most of the respondents (57%) were between the ages of 20 and 29 years, while 68 per cent were less than 30 years. In addition, 89 % of respondent have had at least one year experience at outlets where age-restricted products are sold. Further breakdown shows that there was a fairly balanced response from attendants currently working at outlets where age-restricted products are consumed on premise (52%) compared to off premise (48%). This increases reliability of the data. Table 4 shows the demographics of the respondents included in the data.

Table 4*Demographics of respondents*

Gender	Number of respondents	%
Male	83	51
Female	81	49
Age		
17-19	18	11
20-29	93	57
30-39	34	21
40-49	14	8
50-59	3	2
60-61	2	1
Province		
Groningen	22	13
Friesland	9	5.5
North Holland	14	8
South Holland	26	16
North Brabant	14	8.5
Utrecht	14	8.5
Overijssel	37	22.5
Gelderland	11	7
Limburg	11	7
Others	6	3
Experience		
less than 6 months	5	3
6-12 month	13	8
1-5 years	74	45
5-10 years	50	30
10-15 years	12	7
15-20 years	8	5
more than 20 years	2	1
Outlet	% Current	% Past
Supermarkt/grocerystore	29	50
Tobacco shop/kiosk	7	7
Cafeteria	9	32
Bar/Pub	18	41
Restaurant	20	35
Sports Canteen	3	12
Filling Station	3	1
Liquor Store	6	9
BorrelShop	3	6
Others	1	6

Note. Age distribution is based on the recorded range of 17-61 years. Province distribution is based on provinces covered during the field work. Responses were, however, recorded from all over the country. *Current* are the outlets respondents presently work at where age-restricted products are being sold. *Past* are the previous outlets vendors have worked at where age-restricted products were sold.

Results

To test the hypotheses, multiple linear regressions were carried out four times, each to measure the effect of the predictors on the actual behavior, self-reported behavior, proficiency and ability to validate IDs. The results are collated with analyzed results from other follow up questions for possible explanation of the outcomes. Also, in a multiple regression model, it is important that two or more variables are not highly correlated. Therefore, a correlational analysis was done to ensure that there is no multi-collinearity amongst the variables, which might affect results. Correlation result confirms that predictors were not highly correlated.

Comparing the mean scores, there is a significant mean-score difference between the DPA actual behavior measured and self-report assessments of that behavior. From the composite score on a continuous scale of 0-21 generated to measure *Actual Behavior*, the results show low scores for the variable ($M= 4.3537$, $SD= 2.15$) compared to mean of the scale measurements for *Self-reported* behavior of DPA ($M=4.10$, $SD= .71$) and *Proficiency* of DPA ($M=3.97$, $SD=.75$) which scored high, while mean score was highly moderate for *Ability* of DPA ($M=6.98$, $SD= 1.69$). This indicates a strong association of mean scores within the self-assessments of DPA. This distinction has significant impact on the outcome of the regression analyses conducted on each dependent variable. Correlation was also positive but statistically insignificant between actual behavior and the other dependent variables. However, there was positive and significant relationship ($p<.001$) between Self-reported behavior and Proficiency (.46); Self-reported behavior and Ability (.27) and proficiency and ability (.48).

Table 5 shows the correlations amongst all variables. Table 6 shows the results of the effects of the predictors on actual behavior, self-reported behavior, proficiency and ability.

Table 5

Bi-variate Correlations between the Four Main Outcome Variables and the Independent Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. DPA-Actual Behavior	1															
2. DPA-Self-Report Behavior	.020	1														
3. DPA-Proficiency	.053	.460**	1													
4. DPA-Ability	.115	.274**	.480**	1												
5. Attitude- Age verification	.129	-.021	.039	-.047	1											
6. Attitude- ID validation	.070	.032	.161*	.175*	.078	1										
7. Time Constraint	.008	.032	.141	.160*	.081	.110	1									
8. Self-efficacy	-.009	.076	.063	.259**	.043	.057	.176*	1								
9. Social influence	.072	.222**	.329**	.365**	.154*	.109	.081	.404**	1							
10. Monitoring	.075	.139	.233**	.417**	-.011	.036	.067	.361**	.539**	1						
11. Reward	-.041	.194*	.233**	.333**	-.039	-.001	-.019	.252**	.286**	.420**	1					
12. Training quantity	.092	.186*	.196*	.358**	.046	.146	.003	.116	.285**	.326**	.407**	1				
13. Training quality	.209**	.290**	.393**	.502**	.054	.244**	.130	.201**	.395**	.533**	.367**	.508**	1			
14. Cognitive Load	-.012	.023	.154*	.333**	.103	.009	.100	.324**	.244**	.337**	.465**	.370**	.395**	1		
15. Familiarity	.145	-.089	.174*	.343	.085	.151	.137	.237**	.092	.372**	.210**	.131	.282**	.402**	1	
16. Sanction	-.008	.255**	.228**	.405**	.009	-.052	.029	.315**	.468**	.494**	.398**	.335**	.374**	.201**	.195**	1

Note. * $p<.05$ ** $p<.001$

Table 6

Multiple linear regressions result showing effects of all independent variables on Actual behavior, self-reported behavior, proficiency and ability

Dependent variable & Predictors	R	R ²	Adjusted R ²	SE	F Change	Beta	t	Sig.
1. Actual behavior							1.488	.139
Training quality	.209	.043	.038	2.109	7.364	.209	2.714	.007
Attitude to age verification						.118	1.542	.126
Attitude to ID validation						.021	.259	.796
Ease of Insp. Familiar IDs						-.020	-.252	.801
Self-efficacy						-.054	-.681	.497
Social influence						-.013	-.152	.880
Monitoring						-.051	-.555	.580
Reward						-.136	-1.654	.100
Training quantity						-.019	-.214	.831
Cognitive Load						-.112	-1.346	.180
Time constraint						.093	1.166	.245
Sanction						-.100	-1.214	.227
2. Self-Reported Behavior							8.313	.000
Training quality	.290	.084	.079	.678	14.898	.276	3.412	.000
Time constraint	.340	.116	.105	.668	5.758	-.204	-2.667	.018
Sanction	.384	.147	.131	.658	5.876	.192	2.424	.016
Attitude to age verification						-.020	-.272	.786
Attitude to ID validation						.006	.078	.938
Ease of Insp. Familiar IDs						.019	.257	.797
Self-efficacy						.010	.122	.903
Social influence						.059	.680	.498
Monitoring						-.047	-.491	.624
Reward						.076	.923	.357
Training quantity						.011	.131	.896
Cognitive Load						-.057	-.680	.497
3. Proficiency							4.060	.000
Training quality	.393	.154	.149	.689	29.582	.312	4.038	.000
Social influence	.436	.190	.180	.676	7.079	.205	2.661	.009
Attitude to age verification						-.010	-.139	.889
Attitude to ID validation						.066	.904	.367
Ease of Insp. Familiar IDs						.086	1.197	.233
Self-efficacy						-.099	-1.278	.203
Monitoring						-.075	-.811	.419
Reward						.071	.918	.360
Training quantity						-.028	-.342	.733
Cognitive Load						-.023	-.291	.771
Time constraint						.074	.995	.321
Sanction						.020	.247	.805
4. Ability							.735	.023
Training quality	.502	.252	.248	1.468	54.644	.360	5.071	.000
Time constraint	.585	.342	.330	1.386	8.494	.196	2.914	.004
Sanction	.554	.307	.298	1.418	12.719	.232	3.337	.000
Attitude to age verification						-.086	-1.344	.181
Attitude to ID validation						.077	1.138	.257
Ease of Insp. Familiar IDs						.082	1.258	.210
Self-efficacy						.078	1.127	.261
Social influence						.133	1.775	.078
Monitoring						.065	.769	.443
Reward						.086	1.184	.238
Training quantity						.099	1.312	.192
Cognitive Load						.087	1.182	.239

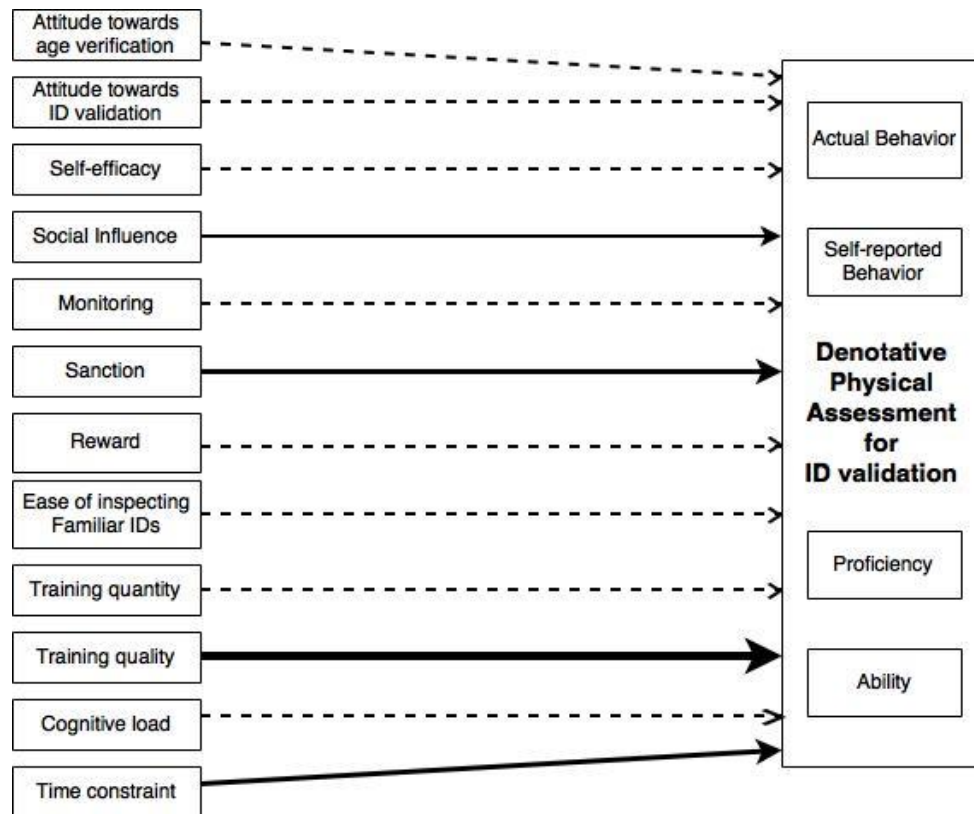
Note. Results are based on the stepwise method of analysis on multiple linear regressions. Significant factors are set in bold.

The following results are the outcomes for the constructed hypotheses that were tested.

- H1a:** Although 68% of respondents confirm they check IDs, the expectation for this hypothesis was that positive attitude towards age verification would have positive influence on Actual Behavior, Self-Reported Behavior, Proficiency and Ability. However, the result rejects the hypothesis, because the direct effect of the predictor was not statistically substantiated ($p=.125$, $.786$, $.889$ and $.181$ respectively), across all effect models, and was therefore not significant.
- H1b:** The assumption was that positive attitude towards ID validation would positively influence Actual Behavior, Self-Reported Behavior, Proficiency and Ability. The outcome rejects the hypothesis because the significance level was unreliable across all models ($p=.796$, $.938$, $.367$ and $.257$ respectively). Therefore, no significant effect was found.
- H2:** The prediction here was that self-efficacy will positively influence attendants' actual behavior, Self-Reported Behavior, Proficiency and Ability. Follow up analysis reveal that 71% of respondents have no supportive tools for ID check. This confirms that majority of outlets depend on DPA to validate IDs and this is anchored on the self-efficacy of the vendors.
- The results, however, proves otherwise because self-efficacy was statistically insignificant across all models ($p=.497$, $.903$, $.203$ and $.261$ respectively).
- H3:** The expectation was that positive social influence would positively influence attendants' Actual Behavior, Self-Reported Behavior, Proficiency and Ability. The results rejects the hypothesis for Actual Behavior ($p=.880$), Self-Reported Behavior ($p=.498$) and Ability ($p=.078$) because findings were statistically insignificant. However, a significant effect was found for Proficiency ($(R^2=.190)$ $b=.205$, $SE=.088$, $p<.05$). This hints that social influence in the workplace might impact vendors' perception on how they are able to validate IDs by themselves without using electronic devices.
- H4:** Monitoring was predicted to have a strong positive influence on Actual Behavior, Self-reported Behavior, Proficiency and Ability. No effect was found as the results were statistically insignificant across all four models ($p=.580$, $.624$, $.419$ and $.443$ respectively). The hypothesis is rejected.
- H5:** This hypothesis predicts that sanction would have a strong positive influence on Actual Behavior, Self-Reported Behavior, Proficiency and Ability. A moderate degree of significance was discovered for the effect of Sanction on Ability ($(R^2=.307)$ $b=.232$, $SE=.120$, $p<.001$) and Self-Reported Behavior ($(R^2=.147)$ $b=.192$, $SE=.057$, $p<.05$). By inference, this means that fear of sanction has some considerable influence on vendors' self- assessment to validate and ability to validate IDs. There was no statistical significance for Actual Behavior ($p=.227$) and Proficiency ($p=.805$).
- H6:** Reward was hypothesized to positively predict Actual Behavior, Self-Reported Behavior, Proficiency and Ability. No significant effect was obtained across all models ($p=.100$, $.357$, $.360$ and $.238$ respectively). The hypothesis is therefore rejected.
- H7:** Ease of checking familiar ID types was expected to be a strong motivator for validation, because it was assumed familiar documents are easy to validate than unfamiliar ones, because they already know what features they need to consider to validate those IDs. Further analyzed results from follow-up questions show that 99% of respondents mostly accept Driver's License and Dutch ID, while 91% reported to accept both Dutch and foreign passports, and 62% accept residence permit. Further analysis of features selected between familiar and unfamiliar ones

shows a significant difference between the numbers of features selected as more features were considered for validation for the unfamiliar IDs. on familiar IDs, respondents claim to check mostly the ID type (95%) and the photo (81%). However, on unfamiliar IDs they reported to check not just the ID type (95%) and the photo (83%), but also the Ghost image(72%), and expiration date (61%). these results suggest that familiarity of ID type does have an influence on features selected for validation. However, the regression analysis results found no significant influence of this predictor on Actual Behavior ($p=.801$), Self-Reported Behavior ($p=.797$), Proficiency ($p=.233$) and Ability ($p=.210$). The hypothesis is rejected.

- H8a:** It was expected that the quantity of trainings vendors have received would positively predict their Actual Behavior, Self-Reported Behavior, Proficiency and Ability. The analysis of the follow up questions in the survey shows that 93% of respondents had received some training on ID check, 92% of which were trained on both Drivers License and Dutch ID mostly to check the photo (88%), type of ID (74%) and security features (53%). Further analysis reveal that 57% of respondents had online training with 45% reported to have had some training on ID validation at the beginning of their jobs. Only 14 % confirmed to having continuous training while 7% of respondents said they have not received any training. The result shows that the effect of training quantity was insignificant across all models ($p= .831, 896,733$ and $.192$ respectively) for the dependent variables.
- H8b:** The quality of training pertaining to capturing the essence of behavior to validate based on the content was predicted to have an influence over Actual Behavior, Self-Reported Behavior, Proficiency and Ability. Analyses of follow up questions show that 92% of respondents receive training on both Driver's license and Dutch ID card and less on other types of IDs such as foreign passports (43%) and resident permit (21%). Most respondents reported to be trained only on checking the type of ID (88%), photo (74%) and security feature (53%).The results confirm that training quality does predict the behavior across all models but with some differing degree of significance respectively ($b=.698, SE=.257, p<.05$), ($b=.303, SE=.089, p<.001$), ($b= .312, SE=.90, p<.001$), ($b=.360, SE=.187, p<.001$). The hypothesis can be said to be supported.
- H9:** Cognitive load was expected to be a negative predictor for Actual Behavior, Self-Reported Behavior, Proficiency and Ability. Results reveal that Cognitive load has no statistically significant influence on all the dependent variables ($p=.180, .497, .771$ and $.239$ respectively). The hypothesis is, therefore, rejected.
- H10:** Time constraint was predicted to negatively and significantly influence Actual Behavior, Self-Reported Behavior, Proficiency and Ability. Further analysis from follow up questions also reveals that 68% of respondents spend between 5 and 15 seconds on ID check. This further affirms the hypothetical expectation. Time constraints, however, was only confirmed as a negative predictor for Self-Reported Behavior (($R^2=.116$) $b= -.136, SE=.51, p<.05$), while it was positive but also strong predictor for Ability (($R^2=.342$) $b=.196 SE=.107, p<.05$). There was no effect found for Actual behavior ($p=.245$) and Proficiency ($p=.321$) due to statistical insignificance.

Figure 2*Effect of the predictors on Denotative Physical Assessment for ID validation*

Note. Training quality had significant effect on all dimensions of DPA. Time constraint and Sanction had effect on both Self-reported behavior and Ability. Social influence only had an effect on proficiency.

Discussions

Validation of IDs constitutes a dynamic mix of both conscious and subconscious actions on the part of the vendor who has relatively minimal time to estimate if he or she can accept the document or not. Consciousness in this regard is anchored on what is considered important in the entire ID check process. The conscious purpose can be argued to be age verification, since that is the ultimate goal of asking for an ID in a situation where customer's age is doubted. However, widening the scope of ID check towards ID validation approaches terrains that are much more subconscious but all the same important. But it can be said to be mostly a means to an end (age verification) and not elevated as an end in itself (ID validation). The distinction between these two important sides of the same coin becomes even more blurred where attendants have no devices that can help in the ID validation/age verification processes, since most of the respondents reported to having no supportive tools.

While particular efforts were engineered to make this distinction clear, the results of the actual behavior measure from the IDs displayed on the screen show a higher bias for age verification than ID validation. An explanation could be that most respondents could only relate with the conscious and ultimate purpose of ID check (age verification) more vividly than the subconscious requirements for validation. Therefore, they might attach superficial importance to ID validation. To corroborate this fact, the results of their self-reported behavior of DPA, and relative assessments show that they affirm to checking elements on ID that validate it as acceptable, even when they did not select them on the IDs displayed earlier on in the survey. This might account for the reason the overall model that tests the predicting power of the predictors fails because ID check might be simply defined as age verification which is the ultimate goal.

Attendants' attitudes towards ID validation and age verification as well as self-efficacy were discovered to have no effect on their behavior to validate IDs. A possible explanation could be the argument of Azjen (1991) that attitudes and self-efficacy influence behavior only through behavioral intentions, which was not studied in this work. Interestingly, self-efficacy, on the other hand, was positively related with all other predictors, although result was not significant for training quantity. This means the more training a vendor receives does not necessarily improve their efficacy to validate IDs or their expectation of a desired outcome in doing so. The value of knowledge and skills attained rather than the amount of training might be of more import to the perceived behavioral control vendors have over ID validation.

In literature, the impact of subjective norm and informal control (peer pressure) was mostly pointed to influence individual intention than their actual behavior (Armitage & Connor, 2001; Ostrovskaya & Leentvaar, 2011). This study attempted to see if social influence from colleagues and management's expectations could influence behavior directly in the aspect of vendors validating IDs by physically assessing their features. The only notable effect social influence has on Denotative Physical Assessment is on the self-assessment of the respondents' *proficiency* in validating IDs. This means that attendants might perceive themselves as capable to validate by themselves without the aid of supportive tools if they believe others expect that of them or they see their colleagues exhibiting that behavior. This translates that being able to validate efficiently is pointed more in the direction of perceived behavioral control and desire which varies widely from actually doing so, as argued by Azjen (2005) in his clarification between behavioral intention and behavior and between perceived behavioral control and self-efficacy.

Monitoring was discovered not to have any significant effect on attendant's behavior. While monitoring results suggest that attendants are being monitored, in reality they might actually not be. This is one of the short-comings of self-reports results in surveys. Detection might be relatively minimal. They, therefore, might not comply. This corresponds with the findings of Ostrovskaya & Leentvaar (2011), that monitoring might have little effect on compliance if it is non-existent or if the chance of detection is low.

Sanction was also a notable factor for consideration. Sanction has been considered a major motivator for compliance because it enhances deterrence, which is a functional enforcement effort, for likely non-compliance (Heyes, 2000; Sparrow, 2000; Zaelke et al., 2005). Findings confirm that sanction has some impact on the self-reported behavior of the attendants as well as the self-perception of their ability to behave that way. This corroborates the findings of Etiegni, Ostrovskaya & Eizinga (2010) and Ostrovskaya & Leentvaar (2011) who discovered that sanction is a strong intervention for compliance with stated rules. Elffers, Heijden & Hezemans (2003) also argue that sanction has the most effect on compliant behavior because it contributes the most to deterrence. This might mean that some consideration is accorded sanction while determining other factors that might motivate or impede their behavior to validate IDs. But the definition of “sanction” is not clear even in the results. It was determined that sanction could be from government on the outlet for non-compliance or the management on the attendant. Most vendors are aware of the sanction attached to non-compliance with age verification before selling age restricted products, but they might not be able to dissipate that from the sanction attached to not validating IDs. This might be because ID validation is not generally emphasized in training, research or policy, since speculations are anchored generally on verifying age. This might push ID validation procedure more towards subconscious actions taken by attendants when verifying age during sales than a purposive end on its own.

Reward also was discovered not to have any effect on validation behavior. This contradicts the findings of Evans (2001), Khan, Zarif & Khan (2011) and Milsome (2001) who discovered that reward has a positive effect on behavior. A possible explanation could be the rewards- either intrinsic or extrinsic for compliance either with age verification or ID validation from both government and management is not appreciable enough to motivate compliance. Perhaps more attractive rewards such as cash, recognitions or even awards could stimulate higher compliance. Diemert et al. (2013) also noted that reward for compliant outlets such as recognition and commendation letters had an improvement on behavior in small communities. However, it was relatively difficult to determine respondents from small communities in this because it had a wide coverage of The Netherlands. This could have affected the outcome. Moreover, compliance is a legal expectation, following a rule. While deviance is sanctioned, compliance is its own reward.

Training quality rather than the quantity was found to be positively influencing behavior. This corroborates with the findings of Usman (2014) who discovered that training has an influence on behavior and performance of employees at the workplace. However, these results contradict the findings of Gosselt et al. (2012) who found that training has minimal effects on compliant behavior beyond creating awareness on the importance of compliance. This trails the findings of Howard-Pitney et al (1991) that training has no effect on behavior. Wagenaar, Toomey & Erickson (2005) discovered that low quantity of training had minimal effects on compliance with underage alcohol sales. These studies did not clearly indicate a distinction between how much training attendants get and the quality of that training. In addition, Training quality was remarkably visible across the models, and results also show that attendants have received some training on both age verification and ID validation, usually online at the beginning of the job. However, the training usually covers IDs they are familiar with. This might affect that behavior when they are confronted with unfamiliar IDs. The fact that respondents chose more validating features for unfamiliar IDs makes the relevance of training more important.

However, the quality of the content is highly significant because that is where the essence of ID validation can be captured, emphasized and pushed towards a more purposive and conscious action on the parts of the vendors. Training can be a considerate predictor of that behavior if it is highly refined on the importance on validation in age verification processes and not a muddled-up element for consideration during the process. Apart from this, training quality could also predict their desire to validate IDs as well influence their ability and proficiency in doing so. A well designed and implemented training program

could help attendants improve their self-perceptions on their ability, proficiency and positive behavior to validate IDs and indeed verify customer's age.

How much time an attendant has to check an ID has an impact on the depth and breadth of the validation process. The result of the self-reported behavior confirms that time-constraints to some extent affects attendants' behavior to validate IDs or not. This problem can be realistically seen because customers do not expect to spend too much time in transactions with attendants to obtain the products they want and attendants are under pressure, especially during busy hours to attend to customers as quickly as possible. ID check might not just extend the pressure of time, but might be affected by the pressure of limited time as well. However, their ability to dispense the expected behavior highly reflects on their ability to validate efficiently within the restricted time. The results, however, show that while time constraint is a negative predictor for self-reported behavior, it actually positively predicts ability of vendors to validate IDs. What features vendors consider to validate IDs within a short time compared to when they have more time could not be determined in this study and this could be a limitation for the work. However, results show that attendants might still be *able* to validate IDs regardless of the time-frame. Most respondents reported to spend at most 15 seconds on ID check. How much of this is dedicated to ID validation could not be determined in this study. It is possible that such distinctions might not be measured in the sequence of time allotted to age verification against time given to ID validation. A possible explanation could be that time itself is not considered a problem in the process or perhaps it is when they are confronted with time constraints that they develop the consciousness to quickly validate. It could also be an indication of their perception on personal efficiency to manage time while validating IDs during ID checks

Cognitive load and ease of inspecting familiar IDs also did not have any influence on denotative physical assessment. This might be because such factors do not affect behavior directly but through other factors. For instance, Cognitive load was significantly related with self-efficacy, social influence, monitoring, reward, sanction, training quality and training quantity. These variables might play important roles in determining how vendors handle the pressure of both mental and physical distractions during validation procedures. If they have received the right and adequate training for it, and they believe the perceived outcome is desirable, they might intend to validate; or they might just consider what normative and social norms dictate in that instance or probably weight their actions against likely sanctions or reward. Also, Ease of inspecting familiar IDs was positively related to both cognitive load and self-efficacy. This might indicate that vendors selecting more security features to check on unfamiliar IDs, is a testament to their perceptions of self-efficacy. Likewise, it could mean that familiarity might likely help when vendors face mental pressure from numerous items on IDs as well as physical distractions from others.

In addition, since some effects were found, perhaps time-constraints, social influence, training quality and sanction might be actually part of what some authors call "circumstantial limitations" that defeats the proposition that only intention leads to behavior because factors arise in situations where persons do not have volitional control over the behavior (Sheeran & Orbell, 1999; Sutton, 1998). However, another possible explanation could be that these predictors might not indicate the actual behavior of vendors with ID check but their desire to execute that behavior. Therefore, it might be possible that *Intention* rather than behavior might be influenced by the predictors.

This study also noted other interesting results, though outside the objective of this work. Firstly, it confirms that there is an increase in ID check with two-third of respondents reporting to asking for IDs. How they handle the ID when checking was also interesting. Only half of the respondents confirm to not just asking for ID but collecting it from customers and checking it themselves. Others reported to checking while customer holds it up or checking while ID is inside the wallet or pouch. The way vendors handle ID could have an impact on the validation procedure: a vendor who collects and checks ID for himself or herself, while the ID is not in a wallet or pouch, is more likely to be able to inspect the document properly and notice if anything is out of place.

Limitations and Implications

This study has a few limitations, the first being the dearth of literature on ID validation and false ID usage by minors, especially in the Netherlands. This narrows the study's scope and depth of probity because such insights are relevant for studies on behavior. Literature is tilted more in the direction of ID check for age verification. Also, the results of surveys on behavior are at best provisional because self-reports are generally not as reliable as experimental designs which could measure causality or observations which depicts more realistic results. The IDs shown on screen to stimulate actual behavior might not really capture the essence of that behavior. For one, it is particularly difficult to heighten the effect of some security features such as the kinegram, tactile reliefs, hologram and microprints which an attendant can readily see and feel on real IDs. A different design employing real IDs might serve this purpose better. Also, respondents may not be familiar with the name tags of the security features on paper and might find it difficult to relate it with what they know in reality when they handle IDs.

In addition, while this study is exploratory in nature, the design attempted to capture actual behavior with the depiction of familiar IDs on screen, it is rather difficult to know exactly what goes on in the minds of the respondents on the features they selected on screen, in-depth interviews could give more insight on this obscure area.

The design of this work had a wide scope covering different outlets where age restricted products are being sold all over the Netherlands. This gives more of an overview than a specific research on compliance with sales legislation on a particular outlet category or a comparison of these two categories. The results might be different for outlets where products are bought and consumed on premises (such as cafeteria, restaurant, bar, pub) and where the customer spends more time, compared to outlets where products are consumed off premises and where customer spends less time interacting with attendants.

This research has some relevance for theory and practice. It has shed some light on the issue of ID validation as an important and distinct part of ID check for age verification. Also, although there are few studies on false ID usage by minors, there have been little studies that consider the perspectives of attendants while handling false IDs. This study has done that. While results veer mostly from actual behavior, there might be need to study the factors that affect behavioral intentions to validate IDs. This exploratory study could also lay the groundwork for future studies on ID validation.

To gain more insights into this area of interest, there might be need for more experimental designs especially with features selected on the IDs for validation. Eye-tracking experiments could determine what features are selected and in what order they were selected. Cognitive load, familiarity and time constraints could be used as intervention to see what features are selected during different time-frames, using both familiar and unfamiliar IDs and including different physical and mental noise as stimuli. Other studies could confirm if vendors could really differentiate acceptable IDs from unacceptable ones either through content analysis of the features or experiments where features are varied. In-depth interviews could help fill the gap as to "why" vendors behave the way they do. Not only will this give insight into their likelihood to comply, it could reveal the challenges they face during ID checks that impedes their behavior to validate IDs or even verify age. This work also used familiar IDs to measure actual behavior towards validation, a different design could compare both familiar and unfamiliar IDs and estimate attendants' behavior in those instances.

Demographics, such as age, gender, experience, level of education and location were not considered in the analysis of this study. Future studies could investigate what influence these factors have on ID validation. Prospective studies could also consider more specific ID validation enquiry on a particular age-restricted product rather than a general study on alcohol, tobacco products and gambling products.

Apart from studying behavior, future studies could consider other factors that could influence behavior such as intention and attitudes on ID validation. There could be need to also do a comparative study on

compliance between outlets that have supportive tools and those that depend on denotative physical assessment. More research is also needed in this area to understand the factors that might influence their adoption and use as alternative means of validating IDs and verifying age of customers. Research is also needed on the pattern and use of false ID by underage persons in the Netherlands in obtaining age restricted products.

This study has some relevance for practice. First, policy could attempt to be more specific on the requirements of vendors to accept only valid IDs. Most policy documents only mentioned that attendants accept valid IDs but does not spell out what this connote to the vendors. They should explicate the essence as well as the behavioral procedures necessary for vendors to validate IDs during sales of age restricted products. Policy should pay close attention to the quality of the training programs attendants receive at their various outlets. Training is also very important as the starting point to create awareness on the importance of ID validation and how it differs from age verification. This study also discovered that some vendors accept personalized OV Chip-card as proof of identity and age, even though it not specified in policy as acceptable ID. Relevant skills and knowledge needed to validate should be included in a well-designed training scheme, with refreshment trainings occasionally undertaken. Such trainings could cover more ID types beyond familiar IDs. Time management for ID check could also be covered in training. Attendants could be trained on the salient features they could consider to quickly validate IDs without wasting time.

Most attendants do not have supportive tools and with the inadequacy of training quality, there might be need for technological assistance to help with the process. And with all the likely constrictions that could affect the validation procedure and ID check in total, it is important outlets adopt the use of supportive systems, tools and devices, which could not only make the procedure less cumbersome but more effective. Van hoof, Gosselt & De Jong (2010) recommended the use of remote age verification which they discovered was very effective for compliance. This could be adopted as it not only solves most of the problems with ID validation; it ensures compliance with the ultimate goal of ID check- age verification. Likewise, ID scanners, which can be used to quickly validate IDs and display results for the vendor to make sales decision, could also be adopted. The MRZ information could be scanned, the photo displayed on the POS screen, information saved on the chip on IDs could also be seen on screen. The age is automatically calculated and the expiration date noted. This could make the entire ID check procedure more efficient and leaves little room for non-compliance. There are various ID scanners that are very handy and mobile which could be used in places like restaurants and others which could be installed on the POS at outlets like supermarkets and grocery stores.

There might also be need for more enforcement on the part of government and management. Apart from compliance checks occasionally done, management could be encouraged to take proactive steps for more internal monitoring and sanction to control behavior of attendants. Workplace social influence can be influenced with sanction. Since results confirm that attendants do observe and mimic what others do in the workplace, there might be need for more scrutiny of vendors' actions with ID check, not just from a camera but occasional checkups at workstations or closer observations by management and supervisors.

Conclusion

Although numerous researches have been conducted, each having its own recommendations for improvements, compliance with sales legislations continues to be an issue in the Netherlands. ID validation, lurking in the shadows of obscurity, continues to fan the embers of deviance with these legal expectations to restrict access of susceptible minors to age-restricted products. This study attempted to investigate the factors that could influence the behavior of vendors when flipping the coin of ID check: to verify and/or validate IDs. The quality of training, time-management, continuous enforcement and social influence might likely contribute to compliance with ID validation. Nevertheless, the discovery that very few factors had minimal effects on attendants' behavior to validate IDs suggest that there is more need to

dig deeper into this uncharted field of interest to discover other salient factors that could improve compliance. The starting point would be to elevate knowledge on the importance of ID validation in policy, theory and practice; and ensure all actors in this crucial issue run with all the knowledge they have and use them accordingly. This might, perhaps, be the needed intervention to improve vendors' behavior on ID validation, and ultimately age verification.

Acknowledgements

I would like to appreciate the University of Twente for giving me the opportunity to study within its walls. It has been a memorable and deeply enriching experience. I am particularly grateful to my supervisors, Dr. Joris van Hoof and Dr. Ardion Beldad, for their guidance, advice and insights that kitted me for this study. You have added great value to my knowledge and skills. My profound gratitude also goes to my Dutch friends Lisette Kijn, Margot Niezen, Desire Niezen Jaap Sloombeek and Hanne Oosterhuis for their help in translating my questionnaire to Dutch. You are all simply amazing. I also appreciate the love, advice and support of my international friends Gabriel Huluba, Sabrina Kaul, Chely Bramiana and Ahmed Yibrie. You all mean a lot to me. To my family, saying thank you a million times does not equal the love, support and encouragement I get from you. I would not have gone far on my own. You are all invaluable to me.

References

- Adams, M.L., Jason, L.A., Pokorny, S., & Hunt, Y. (2009). The relationship between school policies and youth tobacco use. *Journal of School Health*, 79, 17–23.
- Ajila, C. & Abiola, A. (2004). Influence of Rewards on worker's performance in an organization. *Journal of Social Science*, 8(1), 7-12
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In Kuhl, J. & Beckmann, J. (Eds.), *Action control: From cognition to behavior*. New York: Springer-Verlag.
- Ajzen, I. (1991). The theory of planned behavior: Some unresolved issues. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I. (2005). *Attitudes, personality, and behavior* (2nd. Edition). Milton-Keynes, England: Open University Press / McGraw- Hill.
- Ajzen, I., Albarracín, D., & Hornik, R. (Eds.) (2007). *Prediction and change of health behavior: Applying the reasoned action approach*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY Freeman.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-Efficacy Beliefs of Adolescents*, 307–337. Retrieved at <http://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=>
- Brun, J.P. & Dugas, N. (2008). An analysis of employee recognition: Perspectives on human resources practices, *The International Journal of Human Resource Management*, 19(4), 716-730, DOI: 10.1080/09585190801953723
- Chiaburu, D.S., Harrison, D.A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, 93(5). 1082-1103.
- Cummings, K.M., Hyland, A., Saunders-Martin, T., Perla, J., Coppola, P.R., Pechacek, T.F. (1998). Evaluation of an enforcement program to reduce tobacco sales to minors. *Journal of Public Health*, 88(6), 932-6.
- Deeproose, D. (1994). *How to recognize and reward employees*. New York: AMACOM. 62-77.
- Diemert, L., Dubray, J., Babayan, A. & Schwartz, R. (2013). Strategies affecting tobacco vendor compliance with youth access laws: A review of literature. *Ontario Tobacco Research Unit Report*.
- Durkin, K.F., Wolfe, T.W., & Phillips, D.W. (1996). College students' use of fraudulent identification to obtain alcohol: An exploratory analysis. *Journal of Alcohol and Drug Education*, 41(2), 92–104.
- Eggert, H. & Lokina L. (2010). Regulatory compliance in Lake Victoria fisheries. *Environment and Development Economics*, 15(2), 197–217.
- Eisenberger, R., and Cameron, J. (1996). Detrimental effects of reward. *American Psychologist*, 51(11), 1153-1166.

- Eisenberger, R., Pierce, W.D., & Cameron, J. (1999). Effects of reward on intrinsic motivation—negative, neutral and positive: Comment on Deci, Koestner and Ryan (1999). *Psychology Bulletins*, 125(6), 677-695.
- Elffers, H., Van der Heijden, P. & Hezemans, M. (2003). Explaining regulatory non-compliance: a survey study of rule transgression for two Dutch instrumental laws, applying the randomized response method. *Journal of Quantitative Criminology*, 10(4), 409-439.
- Etiegni, C. A., Ostrovskaya, E., Leentvaar, J., & Eizinga, F. (2011). Mitigation of illegal fishing activities: Enhancing compliance with fisheries regulation in Lake Victoria (Kenya). *Regional Environmental Change*, 11(2), 323–334. <http://doi.org/10.1007/s10113-010-0134-4>
- Evans, D. (2001) in Kituyi, I., Musau, N. & Thinguri, R. (2014). An evaluation of the effectiveness of school based reward systems in enhancing teacher performance in secondary schools in Kenya. *International Journal of Education and Research*, 2(4), 436-474.
- Felps, W., Mitchell, T.R., Byington, E. (2006). How, when and why bad apples spoil the barrel: Negative group members and dysfunctional groups. *Research in Organizational Behavior*, 27, 175-222.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press- Taylor & Francis.
- Gosselt, J.F., Van Hoof, J.J., Baas, N. & De Jong, M.D.T. (2011). Effects of a national information campaign on compliance with age restrictions for alcohol sales. *Journal of Adolescent Health*, 49, 97-98.
- Gosselt, J.F., Van Hoof, J.J., De Jong, M.D.T. (2012). Why should I comply? Sellers' accounts for (non-) compliance with legal age-limits for alcohol sales. *Substance Abuse Treatment, Prevention and Policy*, 7(5). Retrieved from <http://www.substanceabusepolicy.com/content/7/1/5>
- Gosselt, J.F., Van Hoof, J.J., De Jong, M.D.T. & Prinsen, S. (2007). Mystery shopping and alcohol sales: Do supermarkets and liquor stores sell alcohol to underage customers? *Journal of Adolescent Health*, 41, 302–308.
- Gruenewald P.J. & Treno A.J. (2000). Local and global alcohol supply: Economic and geographic models of community systems. *Journal of Addiction*, 95, 537–549.
- Hafiza, S.N., Shah, S.S., & Jamsheed, H. (2011). Relationship between reward and employee's motivation in the non-profit organizations of Pakistan. *Business Intelligence Journal*, 4 (2), 327-334.
- Heyes, A. (2000). Implementing Environmental Regulation: Enforcement and Compliance. *Journal of Regulatory Economics*, 17, 107–129.
- Howard-Pitney, B., Johnson, M.D., Altman, D.G., Hopkins, R. & Hammond N. (1991). Responsible alcohol service: a study of server, manager, and environmental impact. *Journal of Public Health*. 81, 197–199. doi: 10.2105/AJPH.81.2.197
- International Centre for Alcohol Policy (2015). What happens if you break the Law? Compiled report. Retrieved from <http://www.icap.org/policytools/toolkits/responsiblehospitalityguides/aservers>
- Kemp, R., Towell, N., & Pike, G. (1997). When seeing should not be believing: Photographs, credit cards and fraud. *Applied Cognitive Psychology*, 11, 211–222.
- Khan, S., Zarif, T. & Khan, B. (2011). Effects of recognition-based rewards on employees' efficiency and effectiveness. *Journal of Management and Social Sciences*, 7(2), 2-7

- Krevor, B., Capitman, J.A., Oblak, L., Cannon, J.B. & Ruwe, M. (2003). Preventing Illegal Tobacco and Alcohol Sales to Minors through Electronic Age-Verification Devices, A field effectiveness study. *Journal of Public Health*, 24, 251–268. doi: 10.2307/3343372
- Leeuw, E.D., Hox, J.J. & Dillman, D.A. (2008). *International Handbook of Survey Methodology*. 113-136 retrieved at <http://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd>
- Levy, D.T., Chaloupka, F. & Slater, S. (2000). Expert opinions on optimal enforcement of minimum purchase age laws for tobacco. *Journal of Public Health Management and Practice*, 6(3):107-114.
- Levinson A.H., Hendershott S., Byers T.E. (2002). The ID effect on youth access to cigarettes, *Tobacco Control*, 11(4), 296-299.
- Livernois, J. & McKenna, C.J. (1999). Truth or consequences: Enforcing pollution matters with self-reporting. *Journal of Public Economics*, 71, 415-440.
- Lubman, D.I., Hides, L., Yu'cel, M., & Toumbourou, J.W. (2007). Intervening early to reduce developmentally harmful substance use among youth populations. *Medical Journal of Australia*, 187(7), 22–25. Retrieved from http://www.mja.com.au/public/issues/187_07_011007/lub10281_fm.pdf
- Martinez, A.J., Rutledge, P.C. & Sher, K.J. (2007). Fake ID ownership and heavy drinking in underage college students: Prospective findings. *Journal of Psychology of Addictive Behavior*, 21(2), 226-232.
- Martinez, J.A. & Sher, K.J. (2010). Methods of “fake ID” obtainment and use in underage college students. *Psychology of Addictive Behavior*, 35, 738-740.
- McAlister, A., Perry, C. and Parcel, G. (2008). How individuals, environments, and health behaviours interact: Social Cognitive Theory. *Health Behaviour and Health Education: Theory, Research and Practice*. 97-121. Retrieved from http://sanjeshp.ir/phd_91/Pages/References/health%20educ
- Megreya, A. M., & Burton, A. M. (2008). Matching faces to photographs: Poor performance in eyewitness memory (without the memory). *Applied Journal of Experimental Psychology*, 14, 364–372
- Miller, K. (2005). *Communications theories: perspectives, processes, and contexts*. New York: McGraw-Hill
- Mitchell, R.B. In Cameron, J., Werksman, J., & Roderick, P. (Eds.) (1996). Compliance theory: An overview. *Improving Compliance with International Environmental Law*, 1, 3-28
- Monk, B. C. & Kuklinski, T. T., (2006). *Validation and verification apparatus and method*. Assuretec Systems, United States.
- National Agency for Identity Data (2014). Features of Dutch passports and Dutch identity cards. Ministry of the interior and Kingdom Relations.
- National Document Fraud Unit (2014). Recognizing Fraudulent Identity Documents (an overview): Basic Guide to Forgery Awareness. Retrieved at <https://www.google.nl/url?sa=t&rct=j&q=&esr>
- Ostrovskaya, E. & Leentvaar, J. (2011). Enhancing compliance with environmental laws in developing countries: Can better enforcement strategies help? *Environmental Compliance and Sustainable Development*, 2, 379-402.

- Ozutku, H. (2012). The influence of intrinsic and extrinsic rewards on employee results: An empirical analysis in Turkish manufacturing industry. *Business and Economics Research Journal*, 3(3), 29-48.
- Paschall, M.J., Grube, J.W. & Kypri, K. (2009). Alcohol control policies and alcohol consumption by youth: A multi-national study. *Journal of Addiction*, 104, 1849–1855. doi: 10.1111/j.1360-0443.2009.02698.x.
- Posner, E.A. (1996). The regulation of groups: The influence of legal and non-legal sanctions on collective action. *The University of Chicago Law Review*, 63, 133-197.
- Reio, G. T. & Callahan, J. L. (2004). Affect, curiosity, and socialization-related Learning; a path analysis of antecedents to job performance, *Journal of Business and Psychology*, 19, 3-22.
- Schwartz, R.H., Farrow, J.A., Banks, B. & Giesel, A.E. (1998). Use of false ID cards and other deceptive methods to purchase alcoholic beverages during high school. *Journal of Addictive Diseases*, 17(3), 25-33.
- Shaheen, A., Naqvi, S.M.H. & Khan, M.A. (2013). Employees training and organizational performance: Mediation by employees performance. *Interdisciplinary Journal of Contemporary*
- Sheeran, P., & Orbell, S. (1999). Augmenting the theory of planned behavior: Roles for anticipated regret and descriptive norms. *Journal of Applied Social Psychology*, 29, 2107-2142.
- Silberman, J.D. (2000). Does environmental deterrence work? Evidence and experience say “yes”, but we need to understand how and why. *Environmental Law Report*, 30(7), 10523–10536
- Simonetto, A. (2011). Formative and reflective models to determine latent construct. Retrieved from <http://meetings.sis-statistica.org/index.php/sm/sm2012/paper/view/2338/184>
- Solicitors Regulators Authority (2011). Research report on attitudes to regulation and compliance in legal services. Retrieved from <http://www.sra.org.uk/sra/how-we-work/reports.page>
- Sparrow, M.K. (2000). *The regulatory craft: controlling risks, solving problems, and managing compliance*. Brookings Institution Press, Washington.
- Stajkovic, A.D. & Luthans, F. (2001). Differential Effects of Incentive Motivators on Work Performance. *Academy of Management Journal*, 4 (3), 580-590.
- Stead, M., Gordon, R., Holme, I., Moodie, C., Hastings, G. & Angus, K. (2009). Changing attitudes, knowledge and behavior: A review of successful initiatives. *Joseph Rowntree Foundation Report*.
- St-Pierre, R.A., Derevensky, J.L., Gupta, R. & Martin, I. (2011) Preventing lottery ticket sales to minors: factors influencing retailers' compliance behavior. *International Gambling Studies*, 11(2), 173-191, DOI: 10.1080/14459795.2011.579142
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28, 1317- 1338.
- The Table of Eleven: A versatile tool (2004). Law Enforcement Expertise Centre of the Dutch Ministry of Justice, The Hague. Retrieved from www.it11.nl.
- The National Research Council Institute (2013). Operating Alcohol Age Compliance Checks in Wisconsin. retrieved from <https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=>
- United Kingdom Home Office (2012). False ID Guidance. Retrieved from [https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjABahUK](https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjABahUKEwj89u)

- Usman, O.S. (2014). Assessment of training and development and its effects on employees' job performance in Yaba College of Technology. *Afro Asian Journal of Social Sciences*, 5(5), 16-28.
- Vandenbergh, M.P. (2003). Beyond elegance: a testable typology of social norms in corporate environmental compliance. *Stanford Environ Law Journal*, 22(1), 55–144.
- Van Hoof, J.J., Gosselt, J.F. (2013). Underage alcohol sales—it only takes a minute: A new approach to underage alcohol availability. *Journal of Studies on Alcohol and Drugs*, 74(3), 423-430.
- Van Hoof, J.J., Gosselt, J.F. & De Jong, M.D.T (2010). Shop floor compliance with age restricts for tobacco sales: Remote versus in-store age verification. *Journal of Adolescent Health*, 46(2), 197-199
- Van Hoof, J.J., Roodbeen, R.T.J., Krokké, J., Gosselt, J.F. & Schelleman-Offermans, K. (2015). Alcohol sales to underage buyers in the Netherlands in 2011 and 2013. *Journal of Adolescent Health*. Manuscript accepted for publication.
- Van Hoof, J.J., Van Velthoven, B.C.J. (In press). Remote age verification to prevent underage alcohol sales. First results from Dutch liquor stores and the economic viability of national adoption. *International Journal of Drug Policy*.
- Wagenaar, A.C., Toomey, T.L. & Erickson, D.J.. (2005). Complying with the minimum drinking age: Effects of enforcement and training interventions. *Alcohol*, 29, 255–262. doi: 10.1097/01.ALC.0000153540.97325.3A.
- Wechsler, H., Lee, J.E., Nelson, T.F. & Kuo, M.(2002). Underage college students' drinking behavior, access to alcohol and the influence of deterrence policies: Findings for the Harvard School of Public Health College Alcohol Study. *Journal of American College Health*, 50(5), 223–236.
- White, D., Burton, A. M., Jenkins, R. Kemp, R. (2014). Redesigning photo-ID to improve unfamiliar face matching performance. *Applied Journal of Experimental Psychology*, 20(2), 166-173.
- Winters, K.C., & Lee, C.-Y.S. (2008). Likelihood of developing an alcohol and cannabis use disorder during youth: Association with recent use and age. *Drug and Alcohol Dependence*, 92, 239–247. doi:10.1016/j.drugalcdep.2007.08.005
- Winter, S.C. & May, P.J. (2001). Motivation for compliance with environmental regulations. *Journal of Policy Analogy Management*, 20, 675–698.
- Wisconsin Alcohol Policy Project (2013). Alcohol Age Complainece Checks. Retrieved from https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCEQFjAAahUKEwit_fn7_NjGAhVDxxQKHjYpC9k&url=https%3A%2F%2Flaw.wisc.edu%2Fwapp%2Falco
- Zaelke, D., Kaniaru, D. & Kružiková, E. (2005). Making Law Work. *Environmental Compliance and Sustainable Development*, 2, 379-402.
- Zint, M. (2002). Comparing three attitude-behavior theories for predicting science teachers' intentions. *Journal of Research in Science Teaching*. 39(9), 819-844.

Appendices

Appendix A: Questionnaire

Alvast bedankt voor het deelnemen aan dit onderzoek. Deze vragenlijst is alleen bedoeld voor onderzoek en andere academische doelen. Uw antwoorden zijn strikt vertrouwelijk en uw anonimiteit wordt gegarandeerd. Beantwoord de vragen zo nauwkeurig als mogelijk. Het beantwoorden van deze vragenlijst zal ongeveer 10 minuten duren.

Q1 Ik controleer een identiteitsbewijs als ik alcohol, tabak of kansspellen verkoop.

- ☐ Nooit (1)
- ☐ Zelden (2)
- ☐ Soms (3)
- ☐ Vaak (4)
- ☐ Altijd (5)

If Nooit Is Selected, Then Skip To End of Survey

Q2 Welke van de volgende identiteitsbewijzen laten klanten zien als ze gevraagd worden zich te identificeren? (Meerdere opties mogelijk)

- ☐ Rijbewijs (1)
- ☐ Identiteitskaart (2)
- ☐ Nederlands paspoort (3)
- ☐ Buitenlands paspoort (4)
- ☐ Andere buitenlandse identificatie (5)
- ☐ Verblijfsvergunning (6)
- ☐ Studentenkaart (7)
- ☐ Persoonlijke OV chipkaart (8)
- ☐ Anders, namelijk (9) _____

Q3 Welke van de volgende identiteitsbewijzen accepteert u van klanten in uw winkel? (Meerdere opties mogelijk).

- ☐ Rijbewijs (1)
- ☐ Identiteitskaart (2)
- ☐ Nederlands paspoort (3)
- ☐ Buitenlands paspoort (4)
- ☐ Andere buitenlandse identificatie (5)
- ☐ Verblijfsvergunning (6)
- ☐ Studentenkaart (7)
- ☐ Persoonlijke OV chipkaart (8)
- ☐ Anders, namelijk (9) _____

Q4 Klik op de kenmerken op deze identiteitsbewijzen die u controleert in uw dagelijks handelen in uw winkel



Q5 Klik op de kenmerken op deze identiteitsbewijzen die u controleert in uw dagelijks handelen in uw winkel



Q6 Hoe hanteert u identiteitsbewijzen voor controle?

- ☐ Ik controleer helemaal niet (1)
- ☐ Ik controleer het identiteitsbewijs terwijl de klant het toont in een hoesje of portemonnee (2)
- ☐ Ik controleer het identiteitsbewijs terwijl de klant het toont maar zonder hoesje of portemonnee (3)
- ☐ Ik neem het identiteitsbewijs aan van de klant en controleer het in het hoesje of de portemonnee. (4)
- ☐ Ik neem het identiteitsbewijs aan van de klant en controleer het zonder hoesje of portemonnee. (5)

Q7 Hoe lang bent u gemiddeld kwijt aan het controleren van een identiteitsbewijs?

- ☐ 0-5 seconden (1)
- ☐ 5-10 seconden (2)
- ☐ 10-15 seconden (3)
- ☐ 15-20 seconden (4)
- ☐ 20-25 seconden (5)
- ☐ 25-30 seconden (6)
- ☐ 30-40 seconden (7)
- ☐ 40-50 seconden (8)
- ☐ 50-60 seconden (9)
- ☐ meer dan 60 seconden (10)

Q8 Welke hulpmiddelen heeft u als ondersteuning bij het controleren van leeftijden en identiteitsbewijzen in uw winkel? (Meerdere antwoorden mogelijk)

- ☐ Geen (1)
- ☐ Herinnering in het kassa-systeem (2)
- ☐ ID scanner (3)
- ☐ Age print cards (4)
- ☐ Age viewers (5)
- ☐ Anders, namelijk: (6) _____

Q9 Dit deel gaat over kenmerken van identiteitsbewijzen waardoor u ze accepteert als geldig voordat u de leeftijd controleert.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Het controleren van leeftijd is belangrijk (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik de leeftijd controleer, zelfs als de klanten ongeduldig zijn (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik de leeftijd controleer, zelfs als de klanten onbeleefd zijn (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik de leeftijd controleer, zelfs als de klanten agressief zijn (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik de leeftijd controleer, zelfs als er een lange rij staat (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Dit deel gaat over kenmerken van identiteitsbewijzen waardoor u ze accepteert als geldig voordat u de leeftijd controleert.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Het controleren van de geldigheid van een identiteitsbewijs is belangrijk tijdens het controleren van de leeftijd van een klant (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik het identiteitsbewijs controleer, zelfs als de klanten ongeduldig zijn (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik het identiteitsbewijs controleer, zelfs als de klanten onbeleefd zijn (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik het identiteitsbewijs controleer, zelfs als de klanten agressief zijn (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is belangrijk dat ik het identiteitsbewijs controleer, zelfs als er een lange rij staat (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Dit deel gaat over de hoeveelheid training die u hebt ontvangen over hoe om de identiteit te controleren alvorens ze te aanvaarden als geldig.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Ik heb genoeg training, georganiseerd door mijn werkgever, gehad over het controleren van identiteitsbewijzen (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb mezelf meer getraind dan de training die ik ontvangen heb van mijn werkgever (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De training in het controleren van identiteitsbewijzen was voldoende (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb meer training nodig om identiteitsbewijzen te kunnen controleren (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Mijn training in het controleren van identiteitsbewijzen bestaat uit (Meerdere opties mogelijk).

- ☐ Een eenmalige sessie aan het begin van mijn werkzaamheden, georganiseerd door mijn werkgever. (1)
- ☐ Een handleiding, gekregen aan het begin van mijn werkzaamheden, georganiseerd door mijn werkgever. (2)
- ☐ Een verwijzing naar Online training (3)
- ☐ Herhalende activiteiten, georganiseerd door mijn werkgever. (4)
- ☐ Continue activiteit, georganiseerd door mijn werkgever (5)
- ☐ Anders, namelijk (6) _____

Q13 In welke van de volgende identiteitsbewijzen heeft u training gehad? (Meerdere opties mogelijk)

- ☐ Rijbewijs (1)
- ☐ Identiteitskaart (2)
- ☐ Nederlands paspoort (3)
- ☐ Buitenlands paspoort (4)
- ☐ Andere buitenlandse identificatie (5)
- ☐ Verblijfsvergunning (6)
- ☐ Studentenkaart (7)
- ☐ Persoonlijke OV chipkaart (8)
- ☐ Anders, namelijk: (9) _____

14 Mijn training in het controleren van identiteitsbewijzen bevatte het volgende (Meerdere opties mogelijk).

- ☐ Het controleren van de foto op het identiteitsbewijs. (1)
- ☐ Het controleren van het type identiteitsbewijs (2)
- ☐ Het controleren van de vervaldatum van het identiteitsbewijs (3)
- ☐ Het controleren van de echtheidskenmerken van het identiteitsbewijs. (4)
- ☐ Het controleren of het identiteitsbewijs echt is. (5)
- ☐ Het controleren of er gerommeld is met het identiteitsbewijs (6)

Q15 Dit deel gaat over de kwaliteit van de opleiding die je hebt ontvangen over hoe om de identiteit te controleren voordat ze te aanvaarden als geldig.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
De training die ik gevolgd heb in het controleren van identiteitsbewijzen was belangrijk (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De training die ik gevolgd heb in het controleren van identiteitsbewijzen was bruikbaar (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De training die ik gevolgd heb in het controleren van identiteitsbewijzen was van hoge kwaliteit (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het was moeilijk om de inhoud van de door mij	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

gevolgde trainingen te begrijpen (4)					
--------------------------------------------	--	--	--	--	--

Q16 Dit deel gaat over de mentale druk die u ervaart wanneer u identiteitsbewijzen controleert.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Interacties met klanten leiden me af en beïnvloeden mijn vermogen identiteitsbewijzen goed te controleren (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er staat te veel informatie op een identiteitsbewijs om deze te kunnen controleren (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind de informatie op identiteitsbewijzen verwarrend om te controleren (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hoewel er veel informatie op een identiteitsbewijs staat weet ik precies waar ik moet kijken om het identiteitsbewijs te controleren (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 Dit deel gaat over de tijd die u besteed aan het controleren van identiteitsbewijzen.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Als er een veel klanten wachten besteed ik minder tijd aan het controleren van identiteitsbewijzen (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er is te weinig tijd om zowel een identiteitsbewijs te controleren en de leeftijd (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het controleren van identiteitsbewijzen duurt lang en klanten kunnen ongeduldig zijn. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik besteed evenveel tijd aan het controleren van identiteitsbewijzen in drukke en rustige periodes in de winkel (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 Welke van de volgende kenmerken controleert u om iemands identificatie te valideren als het identiteitsbewijs u bekend voorkomt? (Meerdere opties mogelijk)

- ☐ Het type identificatie (1)
- ☐ De geldigheidsdatum (2)
- ☐ Foto (3)
- ☐ Document nummer (4)
- ☐ Kinegram/object dat van kleur verandert op identiteitskaart (5)
- ☐ Hologram (6)
- ☐ Reliëf dat je kunt voelen (7)
- ☐ Ghost image / spookbeelden (8)
- ☐ Watermerk (9)
- ☐ Laser beelden (10)
- ☐ UV fluoriserende beelden (11)
- ☐ Micro-print (12)

- ☐ Chip (13)
- ☐ Anders, namelijk (14) _____

Q19 Welke van de volgende kenmerken controleert u om iemands identificatie te valideren als het identiteitsbewijs u niet bekend voorkomt? (Meerdere opties mogelijk)

- ☐ Het type identificatie (1)
- ☐ De geldigheidsdatum (2)
- ☐ Foto (3)
- ☐ Document nummer (4)
- ☐ Kinegram/object dat van kleur verandert op identiteitskaart (5)
- ☐ Hologram (6)
- ☐ Reliëf dat je kunt voelen (7)
- ☐ Ghost image (8)
- ☐ Watermerk (9)
- ☐ Laser beelden (10)
- ☐ UV fluoriserende beelden (11)
- ☐ Micro-print (12)
- ☐ Chip (13)
- ☐ Anders, namelijk: (14) _____

Q20 Dit deel gaat over uw perceptie met betrekking tot het controleren van onbekende identiteitsbewijzen.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Ik accepteer alleen identiteitsbewijzen waarmee ik bekend ben omdat ze makkelijk te valideren zijn (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het makkelijk om identiteitsbewijzen te valideren waarmee ik bekend ben omdat ik precies weet waar ik naar moet kijken (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onbekende identiteitsbewijzen zijn moeilijk te valideren omdat het meer tijd kost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

om te vinden wat ik nodig heb (3) Onbekende identiteitsbewijzen zijn vooral moeilijk te valideren als ze in een taal zijn die ik niet begrijp (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Q21 Dit deel gaat over uw eigen inschatting van uw vermogen om te bepalen of een identiteitsbewijs geldig is of niet.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Ik kan vaststellen of het identiteitsbewijs van de klant zelf (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik kan vaststellen of het identiteitsbewijs verlopen is (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik kan vaststellen of er veranderingen zijn aangebracht op het identiteitsbewijs (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik kan vaststellen of het identiteitsbewijs nep (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22 Dit deel gaat over de invloed van collega's die u ervaart op het gebied van het controleren van identiteitsbewijzen.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Het management vindt identiteitscontrole belangrijk, dus ze verwachten van mij dat ik identiteitsbewijzen controleer. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het management moedigt me aan om identiteitsbewijzen te controleren (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn collega's vinden identiteitscontrole belangrijk (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn collega's sporen me aan identiteitsbewijzen te controleren (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23 Dit deel gaat over de monitoring op de naleving van de regels voor het controleren van identiteitsbewijzen in uw winkel.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Het management van mijn winkel heeft een streng controlesysteem of ik identiteitsbewijzen controleer (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik geloof dat er camera's in de winkel zijn die het management gebruikt om in de gaten te houden of ik identiteitsbewijzen controleer (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik geloof dat de winkel in de gaten wordt gehouden door de overheid of identiteitsbewijzen hier gecontroleerd worden (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik geloof dat ik door mijn collega's in de gaten wordt gehouden of ik identiteitsbewijzen controleer (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24 Dit deel gaat over uw perceptie over de mogelijkheid om gestraft te worden voor de niet-naleving van de regels.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
Mijn functioneringsgesprek wordt negatief beïnvloed als ik identiteitsbewijzen niet controleer (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De sancties voor het niet nakomen van het controleren van identiteitsbewijzen zijn streng in mijn winkel (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De kans op sancties is groot bij mijn winkel als ik niet controleer op identiteitsbewijzen (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben niet bang voor sancties, omdat de kans gepakt te worden op het niet controleren van identiteitsbewijzen laag is in mijn winkel (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25 Dit deel gaat over uw perceptie over de mogelijkheid om beloond te worden voor naleving.

	Zeet mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeet mee eens (5)
Ik ontvang een financiële vergoeding als ik identiteitsbewijzen controleer (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik krijg positieve reacties van het management als ik identiteitsbewijzen controleer (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De beloning voor het controleren van identiteitsbewijzen is erg aantrekkelijk in mijn winkel (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik krijg een goede prestatiewaardering als ik identiteitsbewijzen controleer (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 Dit deel gaat over uw totale beoordeling van uw vermogen om op correcte wijze identiteitsbewijzen te controleren.

	Zeer mee oneens (1)	Mee oneens (2)	Neutraal (3)	Mee eens (4)	Zeer mee eens (5)
I controleer identiteitsbewijzen als ik alcohol/tabakartikelen/kansspellen verkoop (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het makkelijk identiteitsbewijzen te valideren als ik ze zelf controleer (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q27 Gelieve aan te geven hoe vaak u id's controleert (niet de leeftijd) bij de verkoop van alcohol / tabak / kansspellen verkoop

- ☐ 0-10% (1)
- ☐ 10-20% (2)
- ☐ 20-30% (3)
- ☐ 30-40% (4)
- ☐ 40-50% (5)
- ☐ 50-60% (6)
- ☐ 60-70% (7)
- ☐ 70-80% (8)
- ☐ 80-90% (9)
- ☐ 90-100% (10)

Q28 In wat voor bedrijf werkt U nu precies als verkoper?

- ☐ Supermarkt (1)
- ☐ Borrelshop (2)
- ☐ Tabakswinkel/kiosk (3)
- ☐ Cafetaria (4)
- ☐ Bar/kroeg (5)
- ☐ Restaurant (7)
- ☐ Sportkantine (8)
- ☐ Benzinestation (9)
- ☐ Slijterij (10)
- ☐ Anders, namelijk: (11) _____

Q29 In welk van deze bedrijven heeft U eerder gewerkt als verkoper?(Meerdere opties mogelijk)

- ☐ Supermarkt (1)
- ☐ Borrelshop (2)
- ☐ Tabakswinkel/kiosk (3)
- ☐ Cafetaria (4)
- ☐ Bar/kroeg (5)
- ☐ Restaurant (7)
- ☐ Sportkantine (8)
- ☐ Benzinestation (9)
- ☐ Slijterij (10)
- ☐ Anders, namelijk: (11) _____

Q30 Hoe lang heeft U bij elkaar gewerkt bij deze bedrijven?

- ☐ Minder dan 6 maanden (1)
- ☐ 6-12 maanden (2)
- ☐ 1-5 jaar (3)
- ☐ 5-10 jaar (4)
- ☐ 10-15 jaar (5)
- ☐ 15-20 jaar (6)
- ☐ Meer dan 20 jaar (7)

Q31 Wat is uw geslacht?

- ☐ Mannelijk (1)
- ☐ Vrouwelijk (2)

Q32 Hoe oud bent U?

Q33 Opmerkingen:

Q34 Kruis deze optie aan als U de resultaten van dit onderzoek wilt ontvangen.

☐ Check (1)

Q35 Email

Appendix B: Introductory note on Postcards

Beste verkoper,

In uw winkel heeft u regelmatig te maken met het vaststellen van leeftijden van klanten die alcohol, tabak of kansspellen komen kopen. Omdat u expert op dit gebied bent zouden wij graag uw mening willen weten over dit proces.

Wij zouden het heel erg waarderen als u ons zou willen helpen met dit onderzoek naar leeftijdsverificatie en ID-validering. Ga naar de volgende link in uw browser om te beginnen

www.utwente.nl/cw/research

Door mee te doen aan dit onderzoek kunt u kans maken op een waardebon van 10 of 20 euro.

Alvast hartelijk bedankt voor uw medewerking!

Met vriendelijke groet,

Adedapo Tunmise, Aladegbaiye

Dr. Joris van Hoof

Dr. Ardion Beldad

UNIVERSITEIT TWENTE.

DANKJEWEL

UNIVERSITEIT TWENTE.