INTENTION TO PURCHASE ALCOHOL BY ADULTS IN THE COUNTRY IN TRANSITION: THE EFFECTS OF HEALTH CONSCIOUSNESS, SELF-EFFICACY AND RELIGION IMPORTANCE

Mindaugas Sinkevičius*

ISM University of Management and Economics, Lithuania

Abstract. The major trend in modern societies is towards encouragement of the reduction of alcohol use; however, this is not always in line with the various contexts and occasions. Individual factors may present rather non-homogeneous groups that often exert totally opposite influence on the intention to purchase alcohol. This research aims to examine the phenomenon of adult intention to purchase alcohol in Lithuania as a country in transition influenced by an individual's health-consciousness, self-efficacy and religion importance. The nature of these factors is very different; their essence may lie in a rather individualistic concern about personal health, or can be linked with rather distant, but strong personal beliefs, priorities or lifestyles. Therefore, this research aimed to explore these effects. A total of 487 completed questionnaires were collected to perform the research. The findings reveal that health consciousness and religion importance have a significant influence on alcohol purchase intention among adults. However, self-efficacy proved to be of low influence.

Key words: health consciousness, self-efficacy, religion importance, alcohol, country in transition

1. Introduction

Bahmani-Oskooee & Kutan (2008) claim that Eastern Europe countries such as the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic are examples of emerging European economies. Although there are a few explanations to post-soviet transition, Moskalewicz (2000) emphasizes two main features: the collapse of planned economy model; and shifts in political system eliminating a single party or leader domination and introducing democracy. The transition is followed by changes in the legal system and significant transformation of existing institutions. Under such circumstances citizens of countries in transition often face instability of living standards, future uncertainty, increased rates of unemployment and poverty. Lithuania and

* Corresponding author: Mindaugas Sinkevičius, ISM University of Management and Economics, Arklių g. 18, Vilnius LT-01129, Lithuania, phone: +370 676 36853, e-mail: info@sinkevicius.lt

other states mentioned above are former transition countries that used to belong to the Soviet Union. During the very first transition years these states gradually moved from planned economy to market economy. Government interferences and various restrictions were lowered in order to increase economic competitiveness in the global market. The privatization process went on rapidly. Approximately 9 thousand Lithuanian companies changed ownership from public to private at the time of economic transition (Amdam et al., 2007). The collapse of previous political and economical systems brought about new challenges and social issues in the countries of transition. Since Lithuania restored its independence in 1990, health problems particularly related to alcohol and tobacco use have become of increased importance. Lack of legal regulations (Popova et al., 2007) and privatization of alcohol production sector played a significant effect on the production, supply and distribution of alcohol. As a result, alcohol consumption increased rapidly over the first years of Lithuania's independence, according to Statistics Lithuania.

There are constant attempts to reduce alcohol consumption in Lithuania by setting alcohol selling time regulations, restricting and banning alcohol advertisement, changing taxation. However, according to Statistics Lithuania, despite all efforts, no essential changes in alcohol consumption were reported. On the contrary, the consumption of alcohol per capita steadily increased (Figure 1). During the period from 1990 to 2010 the amount of alcohol consumed in Lithuania per capita doubled (Klumbiene et al., 2012).

It should be also noted that the number of deaths resulting from alcohol abuse is considerably higher in Eastern European countries, such as Lithuania, Latvia, Poland, in comparison to Western European region. While analysing alcohol poisoning prevalence in the former Soviet Union countries Stickley et al. (2007) concluded that cases of death due to harmful alcohol consumption at a time had reached extremely high rates. The overall drinking trends, according to Statistics Lithuania, have increased

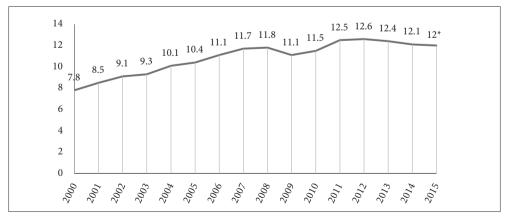


FIGURE 1. Alcohol consumption per capita in Lithuania 2000-2015 (litres of absolute alcohol)
* Preliminary data

during the last sixteen years from 7.8 litres in 2000 to preliminary 12 litres per capita in 2015. What is also specific during the period of observation is the fact that drinking became more popular among women and adolescents.

Existing insights into alcohol consumption behaviour rely on survey findings, which serve to inform statistics organizations, and often attempt to profile consumers along socio-demographic dimensions. Despite the attention given to the subject of alcohol purchase intention and related topics, the current scientific knowledge does not provide a clear understanding of how consumers manage their personal characteristics, which conclusively impacts their purchase behavior. The nature of individual factors is very different; their essence may lie in a rather individualistic concern about personal health, or can be linked with rather distant, but strong personal beliefs, priorities or lifestyles. For instance, it was observed that young adults' health intentions are guided by a dissociation from the drunk prototype (negative) and an association with the abstainer prototype (positive). Falling in-between, or being a moderate drinker and becoming more sociable, is also a preferred intention. The moderate prototype drinker in general has been associated with positive attributes, like being spontaneous and sociable, while heavy drinkers are perceived as annoying, volatile and uncontrolled (Lettow et al., 2013).

Individual factors may facilitate or impede the alcohol purchase intention, and different personal factors may present rather non-homogeneous groups that often exert totally opposite influence on the intention to purchase alcohol. This imposes a need for gathering more insights and reflections that might explain how different individual factors are related to adult alcohol purchase intention. The research that aims to analyze adult alcohol purchase intention in relation to health-consciousness, self-efficacy and religion importance is scarce. The research attempts to investigate consumer purchase decision as a phenomenon not related to cases of addiction to alcohol, a chronic habit, or alcoholism as a disease.

The paper is structured as follows. First, a brief review presents theoretical framework and proposes research hypotheses. Then methodological approach is introduced. Data sample is discussed. Third, empiric analysis of quantitative data containing 487 adult respondents is performed. Further, research results, discussion and conclusions are presented. The intended contribution is twofold. First, the research seeks to provide evidence that consumers' individual determinants, namely health consciousness, self-efficacy and religion importance, may interact with the behavioural intentions and serve as a discouragement factor in alcohol purchase. Second, whereas a vast majority of research is concentrated only on adolescence and the stimuli to consume alcohol, the current research employs a different prospective by investigating adult population. Consumer behaviour is prone to changes over time and adults might demonstrate different personal and social motives that cause stronger versus weaker intention to use alcohol. Thus, it brings additional light to the consumer behaviour related to alcohol.

2. Theoretical framework

A number of theories are involved in explaining alcohol purchase and consumption behavior. According to Lee et al. (2011), alcohol consumption is described in terms of "consistent process of acquisition, use and disposal." This research focuses only on the pre-phase of acquisition limiting itself to the intention to acquire. However, the question remains: what are the factors that stimulate and what are the motives that inhibit alcohol purchase intention in the country in transition. Consumer behavior theorists have long argued that people use products as a form of self-expression, highlighting the relationship of one's identity to a particular behavior. Behavior pertinent to alcohol consumers is varied, but a prominent factor is the inclusion of personal considerations within the consumer's decision-making process. Aertsens et al. (2009) state that personal motivations are able to shape one's behavior in a characteristic-congruent direction as far as they are activated during the pre-decisional process. While analyzing and evaluating different research perspectives, it is important to keep in mind that any type of behavior, including alcohol purchasing, contains social, cultural, economic and traditional bonds. Some research focuses on a single or a particular number of factors that might lead to alcohol purchase. However, it is wrong to assume that there is just one single cause that comprehensively explains the intentions behind alcohol purchasing. There is hardly any single factor that would explain why an individual has a higher versus lower temptation to purchase alcohol. The possible impact of one determinant on another is palpable.

It has been shown that health consciousness (individual's overall interest in issues related to general health and health-related consumption) could be negatively associated with alcohol purchase (Bui et al., 2011; Walton & Roberts, 2004). Religion importance as one's attachment to religion is yet another determinant that is thought to lead to weaker intention to purchase alcohol, since the purchase and abuse of alcohol beverages might contradict religious dogmas and be considered unacceptable behaviour within a particular religious community. Both religion importance and health consciousness are linked to certain personality traits.

Results of longitudinal studies on adolescents' alcohol purchase behavior have also shown that not all interventions designed to increase self-efficacy and to change addictive behaviors have led to the expected changes in target health behaviors or cognitions. However, it is expected that high self-efficacy could enable individuals to resist the intention of purchasing alcohol.

Alcohol purchase phenomenon is of multifaceted nature, and the decision to purchase alcohol may vary. Therefore, this research will focus on three specific determinants broadly classified as personal factors: *self-efficacy* (a conscious effort to say no to alcohol purchase), *health consciousness* and *importance of religion*, which depending on the context could be considered as a personal belief. Previous studies of these three determinants had shown either a negative or positive perceived influence towards intention. For instance, self-efficacy and personal beliefs demonstrated strong negative effect. These personal variables might interact to either further encourage or inhibit intention towards alcohol purchase. Such interactions and inhibitive influences among the determinants have not yet been largely explored.

2.1. Alcohol purchase intention and health consciousness

Lithuania's rapid transition from planned to market economy, improved economic situation and the increased household income over the past decade ensured that more people can afford not only necessities, but are able to spend more on products related to their health and cultivate healthy lifestyles. Increased health consciousness could change consumers' view towards products containing alcohol and might be a significant predictor of alcohol purchase intention.

Mai & Hoffmann (2012) have discovered that health consciousness determines individual priorities over the choice characteristics. The authors conclude that health-conscious individuals take their health into serious consideration when performing certain actions. The perception towards alcohol purchase may also affect health perceptions, i.e. the idea that alcohol is not healthy, which in turn would affect the intention to purchase alcohol. Such claims are supported by Bui et al. (2011, p. 186) that state "health consciousness is an indicator of individual overall interest in issues related to general health." The authors claim that health consciousness is stimulated by the intent to protect oneself from harmful products and a wish for social acceptance.

Health conscious individuals are more attentive to their personal health and there exists a postulate that health conscious consumers make healthier choices. For instance, Michaelidou & Hassan (2008) state that health conscious individuals are well aware of their health status and seek to maintain or improve their health. According to Hong (2009), health conscious consumers are seeking to maintain or improve their health by undertaking particular actions (e.g. engaging in healthy life activities, consuming organic food, maintaining physical health through sports). Chen (2009) researched individuals' health consciousness in relation to attitudes towards organic food and found a positive relation. The authors conclude that health conscious individuals take their health into serious consideration. Dong (2010) investigated healthy regular drinkers and found that individuals that were health conscious purchased and used less alcoholic beverages. Gould (1988) hypothesized and found support of the idea that health conscious individuals are better aware of health related information, and health consciousness will serve as a preventive mechanism. Conversely, Yoon et al. (2008) claim evidence that consumers that are health conscious do not necessarily demonstrate healthier lifestyles and better overall health.

Healthy lifestyle and alcohol drinking is hardly compatible. Therefore, in this research we hypothese that:

Hypothesis 1. There is a negative relationship between the consumer's health consciousness and alcohol purchase intention. A theoretical analysis of the relationship between health consciousness and alcohol purchase intention has provided some valuable insights claiming that individuals concerned about their health and life quality tend to use less alcohol (Lee & Thomas, 1997; Dong, 2010; Nichols et al., 2012). It has also been proven that health conscious individuals tend to choose healthier, organic, green products (Yoon et al., 2008; Chen, 2009; Mai & Hoffmann, 2012). Therefore, it is hypothesized that health consciousness is one of the personal determinants when it comes to the decision to purchase alcohol.

2.2. Alcohol purchase intention and self-efficacy

According to Bandura (1995, p. 2), self-efficacy is "beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations." Bandura (2006) identifies self-efficacy as a foundation of human agency and probably of a higher cognitive mechanism associated with behavioral choice. Self-efficacy is a phenomenon converged with individuals' beliefs in their capabilities to achieve certain goals or execute particular performances. In contrast, collectivism approach dominated Lithuanian society for a long time. That was one of the core ideas of socialism at the time of the Soviet Union. Individualism, promotion of personal qualities and strong beliefs in one's capabilities were not appreciated. Over the years in transition these values were prone to change. Individuals seek to be the architects of their own life. The ability to control provides security over undesired outcomes and enables the search for the valuable, desired ones. Self-efficacy reflects on the amount of challenges an individual can overcome. Certainly, challenges may vary widely. It is also argued that the strength of self-efficacy may vary from person to person and it is a personal rather than unified characteristic.

Luszczynska et al. (2005) claim that self-efficacy is one's belief in the ability to cope with a wide range of challenges. Alcohol is referred to as a health-harmful product and it is presumed that consumers are well aware of the harms alcohol might cause. Consequently, individuals that demonstrate high levels of self-efficacy are capable of resisting the temptation to acquire and use many harmful products. Self-efficacy is directly related to health behavior, but it also affects health behaviors indirectly through its impact on goals. Self-efficacy influences the challenges that people take on as well as how high they set their goals (e.g. "I intend to reduce my smoking" or "I intend to quit smoking altogether"). Individuals with strong self-efficacy select more challenging and ambitious goals, they focus on opportunities, not on obstacles.

Bui et al. (2011) claim that individuals with high levels of self-efficacy are capable of resisting hunger, thirst and some particular products. The same authors in their research have concluded that self-efficacy has a significant impact on greater health consciousness and both determinants play a significant role in fighting obesity. Kinard & Webster (2010) state that high self-efficacy individuals are able to resist engaging in the behaviour that might be considered harmful to their health. Jang et al. (2013) add that self-efficacy is one of the essential variables for sustaining healthy lifestyle.

Self-efficacy could also manifest itself as a risk-related behavior to avoid alcohol purchase. Although a wide range of research has established the existing relation between one's self-efficacy and the ambitions for better health, it is interesting to investigate if self-efficacy could impact alcohol purchase intention. This research hypothesizes that self-efficacy is a significant negative predictor of alcohol purchase intention.

Hypothesis 2. There is a negative relationship between the consumer's self-efficacy and the alcohol purchase intention.

2.3. Alcohol purchase intention and religion importance

It has been widely discussed and demonstrated in literature that alcohol use and religion are negatively associated (Kendler et al., 1997). Religious teachings generally promote a healthier lifestyle with respect to known risk factors and also classify alcohol or drug use as sins since they could possibly harm the body, which is believed to be the temple of the Holy Ghost (Idler et al., 2013).

Bjarnason et al. (2005) state that religion is a communal ritual that promotes a common understanding of surrounding world. Desmond et al. (2011) stress the importance to distinguish upon different dimensions of religiosity such as: church attendance and overall religion importance. Lorencova (2011, p. 181) suggests an explanation that "religiosity is participation in collective ceremonies, beliefs and activities of organized traditional religions". The scholar emphasized that religion is an integral part of certain doctrines: Buddhism, Christianity, Islam, etc.

According to Martin et al. (2003), there are studies, particularly in the field of psychology, that claim evidence on religion's influence on one's mental health condition. Several studies have concluded that individuals' religiosity and engagement in religion rituals leads to reduction of health risk related behaviours such as smoking and consuming alcohol (Preston, 1969; Idler, 1987; Benda et al., 2006). For instance, Strawbridge et al. (1997) provide evidence that church attendees are non-smokers or tend to smoke less, consume less alcohol, enjoy active social life, are more likely to engage in sports and various physical activities. All the above cases are directly related to active participation in the religious ceremonies and rituals with strong religious confession.

Benda et al. (2006) have concluded that religiousness is significantly related to alcohol consumption, use of drugs and delinquency. Similarly, Preston (1969) has concluded that non-drinkers tend to be more religion oriented than the drinkers. Kolstad & Pedersen (2000) research also concludes that individuals that abstain from the purchase and use of alcohol tend to be more religious.

This research suggests that religion importance might have a significant impact on the consumers' decisions. Over 70 per cent of the total population in Lithuania are Roman Catholics. Although the church's authority and influence diminished over the years of transition, religion importance might still play a significant role in shaping one's choices and preferences. This research hypothesizes that individuals prone to religion tend to resist alcohol purchase intention.

Hypothesis 3. There is a negative relationship between the consumer's emphasis on religion importance and the alcohol purchase intention.

3. Method

Sample

There are certain scales that help with the preliminary identification of individuals having problems with the use of alcohol. Since individuals who have alcohol problems are not the object of this research, 47 such individuals were excluded in accordance to the Sorocco & Ferrell (2006) CAGE survey results. CAGE is a four-item questionnaire and serves as the basic alcohol problem indication tool. The four items are:

Have you ever felt you should cut down on your drinking?

Have people annoyed you by criticizing your drinking?

Have you ever felt bad or guilty about your drinking?

Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (an eye opener)?

Individuals are instructed to answer *yes* or *no* to each of the questions. A positive answer scores 1, while a negative answer scores 0. If the total number of scored points equals 2 or more, it is an indication that a respondent might have potential alcohol problems.

The data (Table 1) for this research was collected on 2-16 December 2014 based on a contract with the international market research, analysis and consulting company, TNS. The questionnaire items were translated from English to Lithuanian by the author of this research. A pre-test of the survey was executed with a group of 12 colleagues to ensure that all statements were understandable. Further, a professional English-Lithuanian language translator was used to perform back translation to be able to compare those with the original. After those procedures were finished, the questionnaire was approved and forwarded to the analysis and consulting company.

A total of 487 individuals responded to a self-reported omnibus type survey. The research included the following socio-demographic determinants: gender, age, level of education and the level of monthly income.

Many authors claim a tendency that respondents underreport their drinking amounts and drinking patterns. However, this research survey did not require any specification of amount, brands or types of alcohol beverages used, therefore it is believed that respondents indicated their true intentions to purchase alcohol in the near future.

Gender	Amount	Percent	Monthly income per household member in Euros	Amount	Percent
Male	242	49.7	Less than 200	146	30
Female	245	50.3	200-400	223	45.8
Age	Amount	Percent	401-600	62	12.7
18-19	17	3.5	More than 601	0	0
20-29	88	18.1	Unspecified	56	11.5
30-39	67	13.8	Education	Amount	Percent
40-49	75	15.4	Primary	11	2.3
50-59	141	29	Major	45	9.2
60-69	64	13.1	Secondary	188	38.6
70-74	35	7.2	Higher	140	28.7
			University graduate	103	21.1

TABLE 1. Research sample profile

Independent variables

In order to measure the suggested phenomenon, the following measurement scales were used:

Consumers' health consciousness was measured using a 4-point scale by Gould (1988). (Example item: *I reflect about my health a lot*).

Consumers' religion importance was measured using a 6-point scale by Burroughs & Rindfleisch (2002). (Example item: *My religion is one of the most important parts of my philosophy of life*). The respondents were asked to evaluate the given statements of the two phenomena (health consciousness and religion importance) using a 7-point scale, where 1 meant *Absolutely disagree* and 7 meant *Absolutely agree*.

Consumers' self-efficacy was measured using a 10-point scale by Schwarzer & Jerusalem (1995). (Example item: *It is easy for me to stick to my aims and accomplish my goals*). The respondents were asked to evaluate the given statement using a 5-point scale, where 1 meant *Absolutely disagree* and 5 meant *Absolutely agree*.

Dependant variable

The consumers' alcohol purchase intention was measured using a 3-point scale by Spijkerman et al. (2004). (Example item: *To what extent do you think you will drink weekly in the future?*). The respondents were asked to evaluate the given statements using a 5-point scale, where 1 meant *Not likely* and 5 meant *Very likely*.

4. Results

To test the hypotheses, a structural equation model with LISREL 9.1 was estimated. It produced good fit (χ^2 = 494.1, *df* = 224, RMSEA = .050, CFI = .977, SRMR = .039). According to Vieira (2011), RMSEA value <0.05 indicates a good model fit. Further, in compliance with Bagozzi (1981), recommendations convergent validity was examined by looking at the t-values of Lambda-X matrix. All t-values were higher than 2.00 level, ranging from 11.87 to 47.29. As far as the reliability is concerned, all Cronbach's alphas range from .841 to .968 and are greater than the 0.7 recommended.

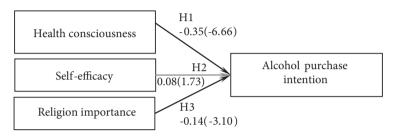


FIGURE 2. Results of testing the hypotheses

Note: standardized estimates shown (t-values in brackets).

Composite reliabilities of measurement models ranged from .84 to .91, while average variance extracted (AVE) values ranged from .50 to .64. All AVEs exceeded the squared correlation between each construct with all other constructs (Fornell & Larker, 1981). The relevant standardized parameter estimates and associated t-values are shown in Figure 2.

The findings support hypotheses 1 and 3. Health consciousness is negatively related to alcohol purchase intention ($\beta = -0.35$, p < .01), religion importance is also negatively related to alcohol purchase intention ($\beta = -0.14$, p < .01). However, no such effect is observed for self-efficacy. Surprisingly, and in contrast to hypothesis 1 and hypothesis 3, consumer self-efficacy reveals week impact on alcohol purchase intention ($\beta = 0.08$, p < .10) and is rejected.

5. Discussion

The collapse of previous political and economic systems brought about new challenges and social issues in Lithuania. Since the country restored its independence in 1990, health problems particularly related to alcohol and tobacco use have become of increased importance. Although efforts were made to reduce alcohol purchase and use, little success was achieved. Therefore, this research extends the prior research by demonstrating how personal determinants such as health consciousness, self-efficacy and religion importance interact with one's intention to purchase alcohol.

Health consciousness has a strong negative effect on alcohol purchase intention

This research has revealed that adult consumers that are health conscious tend to demonstrate a lower level alcohol purchase intention. The research results are consistent with the previous findings demonstrated in the field. At first sight this finding could be claimed to be obvious, but not necessarily. There are scientific claims that moderate alcohol drinking contributes to a person's total well-being (both physical and mental). For instance, there are claims that moderate drinking of some alcohols such as beer and spirits are linked with lower risks of developing or suffering from coronary illnesses. However, our research suggests that health-conscious individuals do not intend to purchase and drink alcohol for the health benefits.

This may be linked to the fact that alcohol is seen to be a health risk rather than a benefit. Health conscious individuals are fully aware and very much concerned about their health and quality of life, they actively engage in healthy behaviors and being-selfconscious regarding health. This knowledge could be applied in the context of the alcohol user as the reminder of the consequences of the behavior. Another way of looking at it is through the concept of social norms and deviants. Social norms, or the prevailing accepted behaviors, depend on the context and from what view a person is observing. Transition from college to adulthood is marked by the formation of a new identity and the establishment of more mature interpersonal and intimate relationships and the transition into new adult-type roles (White & Jackson, 2004). There is also a significant transition from less to more responsible social roles. This suggests that adult-like responsibilities become the new priorities and adults are now conforming to the new image expected of his age. Age also enhances awareness and consciousness in relation to alcohol purchase and resulting health risks if consumed. This finding suggests that in order to prevent or discourage people from purchasing alcohol, it is possible to put emphasis on health education and promotion of healthy lifestyles. It is not necessary to focus on the harm the alcohol may cause, instead, it is reasonable to stress behaviors that are useful for health.

Self-efficacy is a weak determinant of intention to purchase alcohol in adult population

Another interesting observation in this research is the seemingly low significance of influence that self-efficacy plays in deciding whether to purchase alcohol. A variety of studies have shown that self-efficacy predicted a strong negative intention towards alcohol purchase. There were claims that self-efficacy could advocate against alcohol purchase and use, and it was noted that the phenomenon is directly related to healthy behaviour. However, this research proved no support to the previous investigation. It could be discussed that self-efficacy may be related with an adult's maturity since there are more important things to be done than purchasing alcohol and drinking. An adult

who is a rational and responsible individual would think of his work and commitments first before engaging in alcohol related matters.

Another explanation could be an improperly selected measurement scale. Self-efficacy is a well known phenomenon that has a range of validated scales: general selfefficacy; perceived self-efficacy; various particular purpose modified self-efficacy scales. In this research general self-efficacy scale by Schwarzer & Jerusalem (1995) was used. Oei & Jardim (2007) suggested that the general self-efficacy measurement instrument is a poor predictor of alcohol purchase intention and use in comparison to the more robust and specific drinking-refusal self-efficacy measurement scale. Therefore, additional research using the specific scale could clarify the proposed influence of self-efficacy on purchase intention.

Religion importance has a strong negative effect on alcohol purchase intention

The measured influence of religion importance on alcohol purchase intention is consistent with previous research. According to several previous studies, an individual's religiosity and engagement in religious rituals leads to the reduction of behaviors that hold a high risk to one's health, such as smoking and consuming alcohol. The dominant religion in Lithuania is Christianity (77.2 per cent of the population residents indicated being Roman Catholics). Although wine is consumed in ritual ceremonies remembering the Last Supper, alcohol use leading to drunkenness is considered sinful and is inappropriate for religious individuals. Therefore, alcohol purchase and abuse might be considered unacceptable behavior for Christians.

Although individuals surveyed do not necessarily align themselves with a strong religious faith, most of them take religion into consideration. Religion importance transpires through personal perceptions and leads to weakened alcohol purchase behavioral intentions.

6. Theoretical and practical implications

Efforts have been made to reduce alcohol purchase, with only little success, however. Therefore, this research was aimed to expand upon prior research by demonstrating that the determinants: health consciousness, consumer self-efficacy and importance of religion interact with consumers' behaviour intention and serve as measures to discourage alcohol purchase.

Consumers are often described as rational decision-makers, however, they differ in their careful evaluations of what to buy. Shaw et al. (2005) conclude that personal characteristics are an important area of academic interest contributing to a better understanding of consumer behaviour. Many factors may facilitate a consumer's behaviour. Factors that discourage alcohol purchase should be investigated and later used for the creation of a policy aimed at alcohol purchase reduction. Certainly, consumers as potential alcohol buyers are different individuals and may have different motives for purchasing alcohol, other than the suggested determinants bringing additional light to a better understanding of factors that play a role in a country in transition.

Adult consumers often are well aware of the harm alcohol causes and therefore, as expected, health conscious consumers demonstrate a significantly lower intention to purchase alcohol. This finding suggests that in order to prevent or discourage the use of alcohol, it is possible to put an emphasis on health education and the promotion of healthy lifestyles. It is therefore recommended to stress behaviours that are useful for health, rather than focus on the harm that alcohol may cause.

There were claims that self-efficacy could advocate against alcohol purchase and it was noted that the phenomenon is directly related to health related behaviour. Kinard & Webster (2010) and Jang et al. (2013) and others have found direct evidence that self-efficacy is one of the essential variables in order to avoid harmful consumption practises. However, this research resulted in a weak relationship between the variables among Lithuanian adults. There may be at least two explanations for that: an error in research methodology while selecting the measurement scales or specific characteristics of the researched group. Self-efficacy is a well-known phenomenon that has a range of validated scales: general self-efficacy; perceived self-efficacy; and various particular purpose modified self-efficacy scales. In this research, the general self-efficacy scale was used and it was not specifically modified to investigate alcohol issues. Therefore, for the sake of scientific certainty, another study could be conducted to design and use an alcohol specific scale or a modified self-efficacy scale. Another explanation could be that current adults demonstrate specific characteristics formed in the previous social and economic system at the time of the Soviet Union, which in turn are related to differences in personal values and social identity. And although transition in economics and social life took place, personal values and behavior did not adapt that quickly and Lithuanian adult population demonstrate low rates of self-efficacy.

7. Limitations and future research

The research has several deficiencies. Firstly, survey data collection could have been conducted multiple times in a set period of time. This would have allowed the strengthening of the results and conclusions obtained and for the assessment of any possible inconsistencies.

Furthermore, the age of the respondents is of a wide range, from 18 to 72 years. Separating respondents into 2 to 3 age groups probably would result in slightly different results between the groups. The research performed in a selected country of transition – Lithuania, possibly limits the findings of this research. Given that only a limited amount of research exists in the field of adult alcohol purchase and consumption, this investigation provides an important insight and contribution to the scientific literature concerning the explanation of alcohol purchase intention. A relatively large data source

which was pre-screened to filter out alcohol dependents with almost equal representation of men and women also allowed for a less or altogether unbiased survey. However, despite efforts to lessen biases, this study still has a number of caveats and limitations that need to be recognized. Here, these limitations are categorized as technical.

One technical limitation is that the sample population only consists of employed adult respondents. Although this sample could give an insight into the dynamics of the alcohol related behavior of adults, it is not representative of the total national population, thus limiting the generalizability of the research. In addition, the study is only limited to the employed population with non-dependence or alcohol-related problems. However, since the survey was of the self-reported omnibus type, there are no means to detect possible personal biases (i.e. the conscious effort to lessen or even exaggerate answers as related to social stigmas), which could have implications on the interpretation of the results and conclusions of the research.

Another technical limitation of the study was its use of and reliance on self-reported data. The use of self-reporting itself has been heavily criticized in the past and has been associated with a number of inaccuracies despite recognitions that such self-assessments are the core of survey studies. Although one advantage of self-reporting is anonymity and less pressure compared to face-to-face interviews, respondents are still prone to self-enhancement and self-presentation (Paulhus & Vazire, n.d.). In such research, assumption on the credibility of the information lies on the honesty of the respondent. A large sampling population coupled with sound analytical approaches may, however, lessen these biases. In this study 487 respondents may not necessarily represent a larger part of the population but the insights gained could guarantee foundations for future research.

Another important caveat in this study is the use of determinants that belong to a broad area of social cognition, which has been shown to possibly suggest different explanations for certain constructs. In looking at these determinants, it should be carefully considered whether the one being measured is a misperception. It could also be noticed that while the sample population surveyed in this study was also of a certain economic group (i.e. employed), this variable was not explored nor included as one of the possible determinants.

8. Conclusions

This research explored adult alcohol purchase intention phenomenon in relation to health consciousness, consumers' self-efficacy and importance of religion in one's life. Most studies that attempted to understand alcohol purchase and drinking phenomenon were done on younger age populations. However, this research used data from consumers of a myriad of ages, bringing additional light to the complexity of consumer behavior related to alcohol. The phenomenon of alcohol purchase intention was analyzed from a consumer perspective, investigating how the above mentioned factors interact either encouraging or discouraging intentions to purchase. The research can be summarized with these conclusions:

This research has revealed that adult consumers who are health conscious tend to demonstrate a lower level of alcohol purchase intention. At first sight this finding could be claimed to be obvious, but not necessarily. There are scientific research based claims that moderate alcohol drinking contributes to a person's total well-being (both physical and mental). For instance, epidemiological studies have shown that individuals who have the habit of daily moderate wine consumption had lower cardiovascular mortality when compared to cases who abstain from it altogether (German & Walzen, 2000). A cup or glass of red wine is suggested to limit the initiation and progression of atherosclerosis (Szmitko et al. 2005). There are also claims that moderate drinking of other alcohols such as beer and spirits are linked to lower risks of developing or suffering from coronary illnesses (Rimm et al. 1996). However, our research suggests that health conscious individuals do not intend to purchase and drink alcohol to benefit their health.

Another interesting observation in this study is the seemingly low influence that self-efficacy plays in deciding whether or not to purchase alcohol. There were claims that self-efficacy could advocate against alcohol purchase and it was noted that the phenomenon is directly related to health behaviour. However, there was no significant evidence found to claim importance of self-efficacy to alcohol purchase intention among Lithuanian adults. Self-efficacy measured in this study could have been inhibited or overpowered by other variables more pronounced in the context of alcohol purchase intention, such as health consciousness.

Finally, it was revealed that religion importance serves as a significant stimulus for adult alcohol purchase resistance. Historically, alcoholic drinks were recognized to have played a number of roles in religion. Most religions condemn or inhibit alcohol use in their doctrines. In Christian societies religion serves as a measure to discourage alcohol purchase. These findings are similar to several studies that have shown negative correlation between religiosity and alcohol drinking (Francis et al., 2005).

Taking an aging society into account, ongoing changes in demographics requires an increased attention to the alcohol purchase behavior of adults. Although the research was restricted to investigation of only moderate alcohol consumers, it still provided interesting insights of how individuals are influenced by their personal factors and which of those demonstrated an effect on a consumer's alcohol purchase intention. The research does not only yield insights on the psychology and social understanding of alcohol purchase behavior but also provides opportunities for institutions and concerned individuals to focus on the right agencies to prevent, control or mitigate the use of alcohol.

References

Aertsens, J., Verbeke, W., Mondelaers, K., & van Huylenbroeck, G. (2009). Personal determinants of organic food consumption: a review. *British Food Journal*, 111(10), 1140-1167.

Amdam, R. P., Lunnan, R., & Ramanauskas, G. (2007). FDI and the Transformation from Industry to Service Society in Emerging Economies: A Lithuanian - Nordic Perspective. *Engineering Economics*, 51(1), 21-28.

Bagozzi, R. (1981). Evaluating structural equation models with unobservable variables and measurement error: a comment. *Journal of Marketing Research*, 18(8), 375-81.

Bahmani-Oskooee, M., & Kutan, A. (2008). Are devaluations contractionary in emerging economies of Eastern Europe? *Economic Change and Restructuring, Springer*, *41*(1), 61-74.

Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-Efficacy Beliefs of Adolescents, Ch.* 14, 307-337.

Bandura, A. (Ed.) (1995). Self-efficacy in changing societies. New York: Cambridge University Press.

Benda, B. B., Pope, S. P. & Kelleher, K. J. (2006). Church Attendance or Religiousness. *Alcoholism Treatment Quarterly*, 24(1-2), 75-87.

Benda, B.B. (1997). An examination of a reciprocal relationship between religiosity and different forms of delinquency within a theoretical model. *J. Res. Crime Delinq.* 34, 163-186.

Bjarnason, T., Thorlindsson, T., Sigfusdottir, I. D., & Welch, M. R. (2005). Familial and religious influences on adolescent alcohol use: A multilevel study of students and school communities. *Social Forces*, 84(1), 375-390.

Bucholz, K. K. & Robins, L. N. (1989). Sociological research on alcohol use, problems, and policy. *Annual Review of Sociology*, 15, 163-186.

Bui, M., Kemp, E., & Howlett, E. (2011). The Fight Against Obesity: Influences of Self-Efficacy on Exercise Regularity. *Journal of Nonprofit & Public Sector Marketing*, 23, 181-208.

Burroughs, J. E. & Rindfleisch, A. (2002). Materialism and Well-Being: A Conflicting Values Perspective. *Journal of Consumer Research*, *29*, 348-370.

Chen, M. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165-178.

Coeffec, A. (2010). Big five-factor contributions to addiction to alcohol. *E Consulte*, Doi : 10.1016/j.encep.2010.03.006.

Desmond, S. A., Soper, S. E., & Kraus, R. (2011). Peers, and Delinquency: Does Religiosity Reduce the Effect of Peers on Delinquency? *Sociological Spectrum*, *31*, 665-694.

Dong, Y. (2010). Semiparametric Binary Random Effects Models: Estimating Two Types of Drinking Behavior. *Munich Personal RePEc Archive*, 25425, 1-10.

Einhorn, D. (2015). Health consciousness invades the alcohol industry: will the trend last? Born2Invest, retrieved on April 7, 2015 from < http://born2invest.com/cdn/health-consciousness-invades-the-alcohol-industry-will-the-trend-last/>.

Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

Francis, L. J., Fearn, M., Lewis, C. A. (2005). The Impact of Personality and Religion on Attitudes toward Alcohol among 16-18 year olds in Northern Ireland. *Journal of Religion and Health*, 44, 267–289.

German, J.B. & Walzen, R.L. (2000). The health benefits of wine. *Annual Review of Nutrition, 20,* 561-593.

Goode, E. (2007). Drugs in American Society. ISBN: 9780073401492. p. 58-83.

Gould, S. J. (1988). Consumer Attitudes Toward Health and Health Care: A Differential Perspective. *Journal of Consumer Affairs*, 22, 96-118.

Hong, H. (2009). Scale Development for Measuring Health Consciousness: Re-conceptualization. 12th Annual International Public Relations Research Conference, Holiday Inn University of Miami Coral Gables, Florida.

Idler, E. L. (1987). Religious Involvement and the Health of the Elderly: Some Hypotheses and an Initial Test. *Social Forces*, *66*, 226-238.

Idler, E.L., Musick, M.A., Ellison, C.G. et al. (2013). Measuring multiple dimensions of religion and spirituality or health research. *Research on Aging*, 25(4), 327-365.

Jang, S. A., Rimal, R. N., & Cho, N. (2013). Normative Influences and Alcohol Consumption: The Role of Drinking Refusal Self-Efficacy. *Health Communication*, 28(5), 443-451.

Kendler, K. S., Gardner, C. O., & Prescott, C. A. (1997). Religion, psychopathology and substance use and abuse: A multimeasure, genetic-epidemiologic study. *American Journal of Psychiatry*, 154, 322-329.

Kinard, B. R., & Webster, C. (2010). The Effects of Advertising, Social Influences, and Self-Efficacy on Adolescent Tobacco Use and Alcohol Consumption. *The Journal of Consumer Affairs*, 44(1), 24-43.

Klumbiene, J., Kalasauskas, D., Petkeviciene, J., Veryga, A., & Sakyte, E. (2012). Trends and Social Differences in Alcohol Consumption during the Postcommunist Transition in Lithuania. *The Scientific World Journal*, 2012:615183. doi:10.1100/2012/615183

Kolstad, A., & Pedersen, W. (2000). Adolescent Alcohol Abstainers: Traditional Patterns in New Groups. *Acta Sociologica*, 43, 219-233.

Lee, A.K. & Thomas, K.G. (1997). The Role of Health Consciousness in Predicting Attention to Health Warning Messages. *American Journal of Health Promotion*, *11*, 186-193.

Lee, M., Roux, D., Cherrier, H., & Cova, B. (2011). Anti-consumption and consumer resistance: concepts, concerns, conflicts and convergence. *European Journal of Marketing*, 45(11/12), 1680-1687.

Legal alcohol consumption per capita. Official Statistics Portal. Retrieved November 6, 2016 from ">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.stat.gov.lt/en/statistiniu-rodikliu-analize?id=1464&status=A>">http://osp.status=A>">http://osp.status=A>">http://osp.status=A>">http://osp.status=A>">http://osp.status=A>">http://osp.status=A>">http://osp.status=A>">http://os

Lettow, B., Vermunt, J. K., Vries, H., Burdorf, A., & Empelen, P. (2013). Clustering of drinker prototype characteristics: What characterizes the typical drinker? *British Journal of Psychology*, 104, 382-399.

Lorencova, R. (2011). Religiosity and spirituality of alcohol and marijuana users. *Journal of psychoactive drugs*, 43(3), 180-187.

Luszczynska, A., Scholz, U., & Schwarzer, R. (2005). The General Self-Efficacy Scale: Multicultural Validation Studies. *The Journal of Psychology*, 139(5), 439-457.

Mai, R., & Hoffmann, S. (2012). Taste Lovers vs. Nutrition Fact Seekers: How Health Consciousness and Self-Efficacy Determine the Way Consumers Choose Food Products. *Journal of Consumer Behaviour*, 11(4), 316-328.

Martin, T., Kirkcaldy, B., & Siefen, G. (2003). Antecedents of adult wellbeing: Adolescent religiosity and health. *Journal of Managerial Psychology*, *18*, 453-470.

Michaelidou, N., & Hassan, L. M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32, 163-170.

Moskalewicz, J. (2000). Alcohol in the countries in transition: the Polish experience and the wider context. *Contemporary Drug Problems*, 27(3), 561-592.

Nichols, M., Scarborough, P., Allender, S., et al. (2012). What is the optimal level of population alcohol consumption for chronic disease prevention in England? Modelling the impact of changes in average consumption levels. BMJ Open, 2. pii: e000957. doi: 10.1136/bmjopen-2012-000957.

Oei, T. P. S. & Jardim, C. L. (2007). Alcohol expectancies, drinking refusal self-efficacy and drinking behaviour in Asian and Australian students. *Drug and Alcohol Dependence*, 87(2-3), 281-287.

Paulhus, D.L. & Vazire, S. (n.d.). The self-report method. *In* W.R. Robins, R.C, Fraley, & R.F. Krueger (Eds.). *Handbook of research methods in personality psychology* (pp. 224-239). New York: Guildford.

Paunomen, S.V. & Ashton, M.C. (2001). Big five factors and facets and the prediction of behavior. *Journal of Personality and Social Psychology*, *81*(3), 524-539.

Popova, S., Rehm, J., Patra J., & Zatonski, W. (2007). Comparing alcohol consumption in central and eastern Europe to other European countries. *Alcohol and Alcoholism*, 42(5), 465-473.

Preston, J. D. (1969). Religiosity and Adolescent Drinking Behavior. *The Sociological Quarterly*, 10(3), 372-383.

Rimm, E.B., Klatsky, A., Grobbee, D. & Stampfer, M.J. (1996). Review of moderate alcohol consumption and reduced risk of coronary heart disease: is the effect due to beer, wine or spirits? *The BMJ*, 312, 731. doi: http://dx.doi.org/10.1136/bmj.312.7033.731.

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

Shaw, D., Grehan, E., Shiu, E., Hassan, L., & Thomson, J. (2005). An exploration of values in socially acceptable consumer decision making. *Journal of Consumer Behavior*, 4(3), 185-200.

Sorocco, K. H., & Ferrell, S. W. (2006). Alcohol use among older adults. *Journal of General Psychology*, 133(4), 453-467.

Spijkerman, R., Van den Eijnden, R.J.J.M., Vitale, S. & Engels, R.C.M.E. (2004). Explaining adolescents' smoking and drinking behavior: the concept of smoker and drinker prototypes in relation to variables of the theory of planned behavior. *Addictive Behaviors*, *29*, 1615-1622.

Stickley, A., Leinsalu, M., Andreev, E., Razvodovsky, Y., Vågerö, D., & McKee, M. (2007). Alcohol poisoning in Russia and the countries in the European part of the former Soviet Union, 1970-2002. *European Journal of Public Health*, 17(5), 444-449.

Strawbridge, W. J., Shema, S. J., Cohen, R. D., & Kaplan, G. A. (1997). Frequent Attendance at Religious Services and Mortality over 28 Years. *American Journal of Public Health*, 87(6), 957-961.

Szmitko, P.E. & Verma, S. (2005). Red wine and your heart. *Circulation*, 111, e10-e11.

Thun, M.J., Peto, R., Lopez, A.D. et al. (1997). Alcohol consumption and mortality among middle-aged and elderly US adults. *The New England Journal of Medicine*, 337, 1705-1714.

Vieira, A. L. (2011). Interactive LISREL in Practice. SpringerBriefs in Statistics ISSN 2191-544X.

Walton, K. E., & Roberts, B. W. (2004). On the relationship between substance use and personality traits: Abstainers are not maladjusted. *Journal of Research in Personality*, *38*, 515-535.

White, H.R. & Jackson, K. (2004). Social and psychological influences on emerging adult drinking behavior. *Alcohol Research & Health, 28,* 12-190.

Yoon, S., Lalwani, A. K., & Vargas, P. (2008). Not Me or Not Them?: The Role of Culture in Discrepant Effects of Health Communication on Self and Others. *Advances in Consumer Research*, 35, 737-738.