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Published in:
Health Policy

Publication date:
2011

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):

van der Sar, R., Brouwers, E. P. M., van de Goor, L. A. M., & Garretsen, H. F. L. (2011). The opinion of adolescents and adults on Dutch restrictive and educational alcohol policy measures. *Health Policy*, 99(1), 10-16. <http://hdl.handle.net/10411/15743>

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Contents lists available at ScienceDirect

Health Policy

journal homepage: www.elsevier.com/locate/healthpol

The opinion of adolescents and adults on Dutch restrictive and educational alcohol policy measures

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ARTICLE INFO

Keywords:

Opinion
Alcohol
Policy
Adolescents
Survey

ABSTRACT

Objectives: The main objective of this study is to explore the opinion of 16–22-year olds on alcohol policy measures compared to the opinion of adults older than 22 years.

Methods: Data was collected in 2008 by using a Dutch panel. This panel was based on a representative probability of households with 8280 members of 16 years and older. The study had a cross-sectional design and questionnaires were filled out through internet.

Results: According measures related to the availability of alcohol, the 16–18- and 19–22-year olds are significantly more negative about these policy measures than the respondents older than 22 years. Educational measures were more popular than restrictive availability measures among all three groups, and the opinions of the groups differed significantly from each other. Own alcohol use seemed to be the main predictor for the opinion on restrictive availability measures.

Conclusions: The 16–22-year olds are more negative regarding restrictive availability measures and educational measures than adults older than 22 years, and the restrictive availability measures are less popular than the educational measures among the adolescents.

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1. Introduction

Although prevalence rates of drinking patterns are decreasing in the Netherlands, the prevalence of alcohol consumption is still high, especially among Dutch 15–24-year olds [1]. Sixty-nine percent of Dutch 15–16-year olds had drunk alcohol during the last 30 days, and 16% of those who had drunk alcohol within the last 30 days had been drunk [2].

This high prevalence might be due to the tolerant social-cultural context regarding drinking alcoholic beverages in the Netherlands. Drinking alcoholic beverages is seen and experienced as enjoyable. Because of this, teenagers have

a tolerant attitude towards drinking [3]. Dutch adults also have tolerant attitudes towards alcohol consumption. For example, 84% of the parents reported that their children drank their first alcoholic beverage at home [4].

Politically, alcohol use in the Netherlands is seen as a citizens' responsibility rather than a government's responsibility [3,5], although this attitude seems to be changing. In 2005 the Dutch Ministry of Health, Welfare and Sports announced new policy measures to reduce alcohol abuse among adolescents. The measures to achieve this encompassed stricter regulations in regard to the minimum age of 16 years for drinking beer and wine, stricter regulations for the minimum age of 18 years for drinking spirits, more focus on minimum drinking age through educational programmes in schools and, through the involvement of parents, more focus on alcohol-related harm, and the participation of adolescents in the development of alcohol-related policy through the National Youth Committee [6]. In 2007, other policy measures concerning alcohol use among

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adolescents were proposed by the Ministry of Health, Welfare and Sports. The general aim was to prevent adolescents from drinking before 16 years of age, to decrease the prevalence of alcohol consumption and to reduce alcohol-related harm [7].

In order for this policy to work, support for these alcohol policy measures is of importance. Moreover, because this policy targets adolescents, it is necessary to explore not only the opinion of the adult population, but also the opinion of the specific target group itself. There are two reasons for this. First, being aware of the opinion of adolescents gives policy makers the chance to take their opinion into account when developing alcohol policy for young people. This could increase the chance of success of the measures taken. Secondly, only limited research into the public opinion on alcohol-related policy measures has been done. Most of the opinion-related surveys on alcohol policy measures have been done among an adult population (>18 years) and only occasionally among adolescents and young adults. For example, a study in the United States and Canada showed that policies that control access to alcohol (increasing tax, reducing outlets and shorter hours of sale) were not popular among an adult population (aged >18 years) [8]. The Eurobarometer report showed that restrictive measures that affect young EU citizens (15–24 years) in their alcohol consumption are not popular, e.g. price increase, lower BAC limit for young drivers, increasing minimum drinking age [5]. However, factors that were previously found and were positively associated with the adult public opinion on restrictive alcohol policy measures were female sex [9–11], low own alcohol use [8–10,12], and greater age [8,9]. Knowing that greater age influences opinion, it would be of interest to study the differences between the opinion of adolescents and the opinion of adults on alcohol policy measures.

In addition to the socio-demographic factors such as age, gender and own alcohol use, not much is known about other factors that might impact on the opinion on alcohol policies, in particular those of adolescents. Students have been found to be against restrictive measures such as raising the minimum drinking age and price increases [9]. Among the 12–30-year old Dutch adolescents and young adults the prevalence of drinking increases as they become older, and then declines after 25 years of age [13]. This might be due to the change in social roles; they finish their studies and start working [13]. Concerning urbanisation rate, trends from 1997 to 2005 indicated that the prevalence of alcohol consumption is lower in extremely urbanised areas than in very, moderate, or slightly urbanised areas among the Dutch population [1]. Since it is known that own alcohol use, age and gender correlate with the opinion on alcohol policy measures among adults and that social roles and urbanisation rate is related to alcohol consumption, all these factors are taken into account as possible predictors of the opinion among adolescents on alcohol policy measures.

In this survey, the main objective is to explore the opinion of 16–22-year olds on alcohol policy measures, compared to the opinion of adults older than 22 years. Policy measures that are considered are those that restrict the availability of alcoholic beverages (physically and

financially) and educational measures to prevent adolescents drinking heavily. Furthermore, this study addresses whether factors such as own alcohol use, gender and age might also influence opinion on restrictive availability measures among 16–22 years olds as it does among adults. Social roles, political preference and urbanisation rate are included as explorative factors that might impact the opinion among adolescents. It is hypothesised that (1) 16–22-year old adolescents are more negative regarding restrictive availability and educational alcohol policy measures than adults (>22 years) and (2) that policy measures that restrict the availability of alcoholic beverages are less popular than educational measures among the 16–22-year olds.

The research questions of this study are: (1) what is the opinion of the 16–22-year old adolescents regarding restrictive availability measures and educational measures? (2) Are there differences between the opinions of 16–22-year olds and those of adults (>22 years) on restrictive availability measures and educational measures? (3) Do socio-demographic variables such as gender, social roles, political preference, urbanisation rate, age and own alcohol use impact the opinion of the 16–22-year olds on restrictive availability measures and educational measures?

2. Material and methods

Three types of alcohol policy measures were investigated in this survey [14,15]: (1) education and information related measures such as school-based education and public information campaigns; (2) addressing the availability of alcohol, e.g. happy hours, selling alcohol pops in supermarkets, selling other alcoholic beverages in supermarkets, selling alcohol in sport canteens; prohibition of alcohol use, and (3) pricing policies, such as increasing price of alcoholic beverages.

The age range of the adolescents has been defined between 16 and 22 years because it includes the Dutch legal minimum drinking age of 16 years for beer and wine and the minimum age of 18 years of spirits, making it possible to differentiate between the opinions of both groups. Twenty-two years has been set as the maximum age to define the group of adolescents including both adolescents who are still students and adolescents who have started working in a full-time job and changed their social role.

2.1. Sampling and data collection

This cross-sectional survey was conducted in November 2008. Data was collected by an internet survey using a Dutch panel (Longitudinal Internet Studies for Social Sciences, LISS). The LISS panel is based on a representative probability sample of households and has been developed by CentERdata, which is a research institute specialised in collecting panel data (see <http://www.lissdata.nl/lissdata/>). The households were selected through random sampling from community registers by Statistics Netherlands. The panel consists 8280 panel members of 16 years and older.

Table 1

Statements categorised into alcohol policy measures.

Availability	Happy hours in bars and discos should be prohibited Supermarkets should not sell alcopops, e.g. breezers Supermarkets should not sell any alcoholic beverages at all Alcohol should not be sold in places like sport canteens where youth under 16 congregate Alcohol should be prohibited
Education	The government should pursue alcohol campaigns The government should pursue alcohol education programmes in schools
Pricing	The price of alcohol should be increased

2.2. Measurements

2.2.1. Dependent variables

The opinion on restrictive availability measures, educational measures and the pricing measure were scored on a five-point Likert scale ('1' totally disagree, '2' disagree, '3' neither agree nor disagree, '4' agree and '5' totally agree). These are shown in Table 1.

2.2.2. Independent variables

Own alcohol use, urbanisation rate, political preference, gender, age and social roles were defined as independent variables. Social roles have been inferred from daily activity of the respondents and therefore this has been defined as daily activity.

Alcohol consumption

Alcohol consumption was measured using five questions according the Quantity Frequency method (QF) [16,17]: (1) 'How often did you drink alcoholic beverages last 30 days?', (2) 'If you drink on weekdays (Monday through Thursday), on how many days of these 4 days, on average, do you drink?' (3) 'How many glasses do you drink on average in a weekday?' (4) 'If you drink during the weekend (Friday through Sunday) how many days, on average, do you drink in a weekend day?' (5) 'How many glasses do you drink on average in a weekend day?'. Respondents were classified as abstainers if they had never drunk alcohol. Weekly alcohol use was assessed by multiplying number of drinking week days with number of glasses in a week day and for weekend days multiplying number of drinking weekend days with number of glasses in a weekend day. The respondents were classified in categories due to the alcoholic units drunk within 1 week (<1 drink a week, 1–5 drinks a week, 6–20 drinks a week, >20 drinks a week) [13].

Urbanisation

Urbanisation rate was divided into five categories from 1 'very strongly urbanised' to 5 'not urbanised'.

Daily activities

Daily activities were placed into six categories: as 'paid employment', 'student' 'seeking a first job' 'does not work/does voluntary work', 'does something else' and 'is too young, does not have any daily activities'.

Political preference

Political preference was asked as 'If there were elections for the Lower House today, which party would you vote for?' The respondents could choose one of the political parties, or 'I would not vote', 'I am not entitled to vote', 'other labour party', 'blank', 'I do not want to tell' and 'I do not know'. To make this variable interpretable, the labour parties were categorized into left-wing (Groenlinks, SP and PvdA), conservatives (VVD, PVV, Proud of Holland) and centre or Christian-democratic parties (CDA, CU, SGP). All other categories were identified as missing, except the 'I do not know'-category.

Age

Age was categorised into '16–18 years', '19–22 years', and '>22 years'.

2.3. Statistical analysis

To examine the internal consistency of the three target areas availability, education and pricing the 8 items were subjected to oblique principal component analysis (PCA) using SPSS version 17 (Kaiser–Meyer–Olkin measure of sampling adequacy >0.5, Bartlett's Test of sphericity <0.05). Subsequently, Cronbach's alphas were calculated for the components indicated by PCA. Reliability above 0.7 was considered as acceptable [18]. The scales were used to explore differences in opinion between the different age categories on restrictive availability measures, educational measures and the pricing measure. ANOVA was used to explore significant differences between the different age groups on the opinion on restrictive availability measures and educational measures. Tukey HSD was used as post hoc test. Standard multiple regression analyses were conducted to eliminate factors impacting on the opinion on restrictive availability measures and educational measures of the 16–22-year olds. Dummy coding was used to convert the categorical variables such as daily activities, political preference, weekly alcohol use, gender and the age group 16–22 years into dummy variables. Respondents belonging to a particular category were assigned code 1. All other respondents in this category were coded as 0. In total, five dummies were created for daily activity (paid employment, seeking a first job 'does not work/does voluntary work, does something else, goes to school or university), three for political preference (left-wing, centre/Christian-democrat, conservatives) and three for weekly alcohol use (0–5 drinks a week, 6–20 drinks a week, >20 drinks a week). Men and the 16–18-year olds were coded as 1. The category 'is too young, does not have any daily activities' of the daily activity variable, 'does not know who to vote for' of the political preference variable and, 'never used alcohol' of the alcohol use variable, served as reference groups for these categorical variables.

3. Results

In total, 5616 (67.8%) respondents filled out the questionnaire of which 5568 (67.2%) were complete and 48 (0.6%) were incomplete. Of the 5616 respondents, 536 were between 16 and 22 years old, 258 were between 16 and 18

Table 2

Gender, urbanisation rate, alcohol consumption, political preference, daily activity of respondents (%).

	16–18 years	19–22 years	>22 years
Gender			
Men	47.3	43.2	45.8
Women	52.7	56.8	54.2
Total	100	100	100
Urbanisation			
Very strongly urbanised	9.3	15.1	13.0
Strongly urbanised	22.5	23.0	26.4
Urbanised	20.5	22.3	22.9
Slightly urbanised	25.6	24.5	22.3
Not urbanised	22.1	15.1	15.4
Total	100	100	100
Alcohol consumption			
<1 drink a week	1.2	0.0	0.4
1–5 drinks a week	31.4	33.7	31.0
6–20 drinks a week	32.9	32.2	35.5
>20 drinks a week	9.4	15.9	10.6
Never used alcohol	7.5	5.2	5.5
Has used but does not drink regularly	17.6	13.0	17.0
Total	100	100	100
Political preference			
Left-wing	26.9	21.8	30.3
Centre/Christian-democrats	13.4	17.0	27.0
Conservatives	17.9	19.7	18.8
Don't know	41.8	41.5	23.9
Total	100	100	100
Daily activity			
Paid employment	2.7	18.7	76.4
Seeking first job	0.4	0.4	0.3
Student	96.1	77.3	1.8
Does not work/does voluntary work	0	2.2	20.8
Has other activities	0.4	0.7	0.7
Is too young does not have any daily activities	0.4	0.7	0.0
Total	100	100	100

years old, 278 were between 19 and 22 years old and 5080 respondents were older than 22 years. Table 2 shows the percentages of respondents' gender, weekly alcohol consumption, urbanisation rate, political preference and daily activity, categorised by age groups.

PCA identified two components with eigen values > 1, explaining 41.5% and 60.6% of the variance, respectively [19]. As a result of the PCA, two components were created: availability measures (6 items) and educational measures (2 items). Pricing was included in the availability component. Therefore, in this study pricing is seen as a restrictive availability measure. The Cronbach's alpha of the availability scale was 0.845 and for the education scale 0.753.

Table 3 presents the mean scores of the opinion on the restrictive availability measures and educational measures of the respondents within the different age groups. Concerning the first research question, the 16–18-year olds and the 19–22-year olds disagreed with the restrictive availability measures. They were most negative about prohibition of alcohol and banning the sale of any alcoholic beverages at all in supermarkets. The adolescents agreed with the educational measures and these measures were scored higher than the restrictive availability measures. The mean scores of both age groups did not differ signif-

icantly from each other except from the statement that the government should pursue alcohol campaigns ($F(2, 5585) = 29.303, p = 0.000$).

Comparing the scale mean scores of the three age categories, there was a statistically significant difference at p -level < 0.01 on the opinion scores on the availability measures ($F(2, 5594) = 190.310, p = 0.000$). The mean scores of the 16–18- and 19–22-year olds differed significantly from the respondents older than 22 years. All respondents in all three age categories disagreed with restrictive availability measures, although the opinion became more positive with increasing age. A significant difference in the opinion on educational measures was also found between the three age categories ($F(2, 5594) = 36.952, p = 0.000$). All respondents within all age categories agreed with educational measures and the scores increased with age.

Comparing the mean scores of the three age categories on item-level, significant differences between the three age groups were found with a significant p -value ($p = 0.000$) for all F -ratios of all items separately at a significance level of $p < 0.01$. The 16–18 and 19–22-year olds scored significantly lower on all items separately than the adults, which validate the mean scale availability scores and the mean scale education scores.

Results of the regression analysis are presented in Table 4. The model has been used to explore the predictors of the opinion of the 16–22-year olds on both restrictive availability measures and educational measures. According to the restrictive availability measures, the model explained a significant amount of variance ($R^2 = 0.237$, Adjusted $R^2 = 0.192, F(14, 239) = 5.296, p = 0.000$). All three dummy variables of alcohol use significantly predicted the opinion of restrictive availability measures negatively, indicating that alcohol consumption influences the opinion on availability measures. The educational measures were not predicted by the model as showed in Table 4. The model presented did not explain a significant amount of variance ($R^2 = 0.056$, Adjusted $R^2 = 0.001, F(14, 239) = 1.013, p = 0.441$). However, age was significant, indicating that 19–22 years olds were more positive about educational measures than the 16–18-year olds.

4. Discussion

The aim of this study was to explore the opinion of the 16–22-year olds on measures that restrict the availability of alcohol and educational measures that aim to prevent adolescents drinking heavily, compared to the opinion of adults (>22 years) on these measures. This study indicates that the 16–22-year olds were less positive about restrictive availability measures and educational measures than adults (>22 years), and that alcohol consumption seems to be the strongest predictor of the opinion on restrictive availability measures.

Measures restricting the availability of alcohol were not popular among either the 16–18-year olds nor the 19–22-year olds. The adolescents disagree more with the restrictive availability measures than with the educational measures. Regarding the restrictive availability measures, the adolescents disagree most with prohibiting alcohol and banning the sale of any alcoholic beverages in supermar-

Table 3

Results ANOVA on availability measures and educational measures of 16–18-year olds, 19–22-year olds and older than 22 years (1 = totally disagree to 5 = totally agree).

	16–18 years	19–22 years	>22 years
Availability	2.16 ^{*,c} (±0.80) N = 256	2.21 ^{*,c} (±0.78) N = 277	2.91 ^{*,a,b} (±0.82) N = 5064
The price of alcohol should be increased	2.09 (±1.06) ^{*,c} N = 255	2.17 (±1.06) ^{*,c} N = 276	2.61 (±1.08) ^{*,a,b} N = 5054
Happy hours in bars and discos should be prohibited	2.34 (±1.02) ^{*,c} N = 256	2.27 (±1.08) ^{*,c} N = 277	3.29 (±1.15) ^{*,a,b} N = 5048
Supermarkets should not sell alcopops, e.g. breezers	2.27 (±1.06) ^{*,c} N = 256	2.43 (±1.13) ^{*,c} N = 276	3.38 (±1.18) ^{*,a,b} N = 5059
Supermarkets should not sell any alcoholic beverages at all	1.96 (±0.95) ^{*,c} N = 256	2.12 (±1.07) ^{*,c} N = 276	2.78 (±1.17) ^{*,a,b} N = 5042
Alcohol should not be sold in places like sport canteens where youth under 16 congregate	2.63 (±1.14) ^{*,c} N = 256	2.64 (±1.20) ^{*,c} N = 276	3.42 (±1.19) ^{*,a,b} N = 5052
Alcohol use should be prohibited	1.68 (±0.83) ^{*,c} N = 256	1.64 (±0.75) ^{*,c} N = 276	2.00 (±0.81) ^{*,a,b} N = 276
Education	3.80 ^{*,b,c} (±0.78) N = 256	3.99 (±0.67) ^{*,a,c} N = 277	4.14 (±0.65) ^{*,a,b} N = 5064
The government should pursue alcohol campaigns	3.72 (±0.88) ^{*,b,c} N = 256	3.93 (±0.77) ^{*,c,a} N = 277	4.07 (±0.76) ^{*,a,b} N = 5050
The government should pursue alcohol education programmes in schools	3.93 (±0.86) ^{*,c} N = 256	4.05 (±0.74) ^{*,c} N = 276	4.20 (±0.7) ^{*,a,b} N = 5053

^a 16–18 years.

^b 19–22 years.

^c >22 year.

^{*} $p < 0.01$.

Table 4

Multiple regression analysis predicting public opinion towards alcohol policy measures among 16–22-year olds.

Policy measures	N = 253	B	β	t	p
Availability	Independent variables				
	(Constant)	3.106		5.123	.000
	Gender	-.076	-.048	-.800	.424
	Age category 16–22	.102	.065	1.077	.283
	Urbanisation rate	-.005	-.008	-.128	.898
	Political preference				
	Dummy left-wing	.067	.036	.567	.571
	Dummy central/Christian-democrat	.077	.036	.585	.559
	Dummy conservatives	-.189	-.095	-1.482	.140
	Daily activity				
	Dummy work paid employment	.216	.086	.346	.730
	Dummy seeking first job	.132	.010	.139	.890
	Dummy does not work/ does unpaid work	-.679	-.091	-.923	.357
	Dummy does something else	1.401	.133	1.623	.106
	Dummy goes to school or university	.148	.064	.241	.810
	Alcohol use				
	Dummy 0–5 drinks a week	-.966	-.599	-5.256	.000 [*]
	Dummy 6–20 drinks a week	-1.259	-.778	-6.814	.000 [*]
	Dummy >20 drinks a week	-1.343	-.610	-6.359	.000 [*]
Education	(Constant)	3.686		5.858	.000
	Gender	-.084	-.057	-.853	.394
	Age category 16–22	.199	.135	2.026	.044 [*]
	Urbanisation rate	-.023	-.040	-.616	.538
	Political preference				
	Dummy left-wing	-.076	-.043	-.618	.537
	Dummy central/Christian-democrat	.152	.076	1.106	.270
	Dummy conservatives	-.054	-.029	-.410	.682
	Daily activity				
	Dummy work employment	-.009	-.004	-.014	.989
	Dummy seeking first job	.639	.053	.646	.519
	Dummy does not work/ does unpaid work	-.490	-.070	-.643	.521
	Dummy does something else	.505	.051	.564	.573
	Dummy goes to school or university	.095	.044	.150	.881
	Alcohol use				
	Dummy 0–5 drinks a week	.215	.143	1.127	.261
	Dummy 6–20 drinks a week	.109	.072	.567	.571
	Dummy >20 drinks a week	.091	.044	.417	.677

^{*} Significant with $p < 0.05$.

kets. However with an 25% price increase, young European citizens in general would buy fewer alcoholic beverages than the EU average [5]. This might indicate that although young people disagree with these kinds of restrictive measures, they would probably buy fewer alcoholic beverages if prices increase. In contrast to the restrictive availability measures, educational measures to prevent adolescents drinking heavily were more popular. Comparing the adolescents' on both types of measures with the opinion of adults, both types of measures are more popular among the adult population. This indicates that age seems to influence positively the opinion on alcohol policy measures. However, this finding is more applicable to the restrictive availability measures than to the educational measures.

The fact that educational measures are more popular than restrictive availability measures is in line with Giesbrecht and Greenfield, who reported that educational measures are popular among an adult population [8], which can also be concluded from our study. However, providing information and education, especially school-based education, is not effective in reducing alcohol-related problems [14,20]. More effective measures to reduce alcohol consumption are raising the price of alcoholic beverages and restricting the sale of alcohol [14,20–22], but these measures are relatively unpopular [8]. A possible reason why measures related to access to alcoholic beverages are unpopular could be that many people, i.e. all drinkers, are affected when these measures are introduced [3]. This assumption is in line with findings of Giesbrecht et al. [10] and Giesbrecht and Greenfield [8] who found that the drinking pattern predicts views on some alcohol-related policy topics. This study underlines these conclusions.

One of the research questions was to explore predictors of the opinions of the 16–22-year olds on the restrictive availability measures and educational measures. Alcohol consumption seems to impact the opinion on restrictive availability measures of the 16–22-year negatively olds and appears to be the strongest predictor. This is in line with Giesbrecht et al. and Giesbrecht and Greenfield [8,10] who found that the drinking pattern predicts views on some alcohol-related policy topics and showed that, in particular, the level of consumption has the greatest explanatory power among an adult population. According to the respondents who never drink alcohol and served as a reference group, drinkers are more negative towards restrictive availability measures than non-users. Political preference, daily activity and urbanisation rate do not seem to play any role. The opinion of the 16–22-year olds on educational measures are not explained by daily activity, gender, political preference, urbanisation rate or being aged between 16 and 22 years. It seems that other factors might play a role in predicting the opinion of the 16–22-year olds. The fact that the opinion on educational measures could not be explained by these variables could be due to the fact that educational measures do not really affect people because everybody agrees with these kinds of measures.

From a political point of view, these results can be meaningful in directing policy measures to prevent adolescents drinking heavily. Knowing that alcohol use seems to predict the opinion on restrictive availability measures, interven-

ing on alcohol use will target not only the alcohol use itself, but also their opinion on these measures. This assumes that it is important to focus on decreasing the prevalence of alcohol consumption among adolescents because it will also affect their opinion on restrictive availability measures.

There are some limitations to this study. The items are measured on a 5-point Likert scale and the third range was 'neither agree nor disagree'. This score can be rated as 'I do not know' or as score between disagree and agree. This might bias the opinion scores. In this study this category is interpreted as a score between agree and disagree, but it is not certain how the respondents interpreted this category. Another limitation is the design of the study. It is a cross-sectional survey and therefore nothing can be said about causality. Also selective non-response could cause a problem when examining alcohol consumption in a survey [23,24], as is done in this survey. Besides that, the alcohol consumption is based on self-reporting, which means that the amount of drinking is not necessarily the true amount of alcohol consumed. Despite this concern, self-reported questionnaires tend to give better valid data than interviews in which respondents have to give their answers verbally [25]. Regarding the scale to interpret the opinion on educational measures, it consisted of only two items which is relatively low. As the Cronbach's alpha was above 0.7, the scale has been used to calculate a general score of the opinion on educational measures. Finally, this study examined the opinion on some restrictive availability measures and educational measures. This does not cover the opinion on alcohol policy in general. Therefore it is worthwhile to investigate the opinion of adolescents on alcohol policy measures further.

5. Conclusions

Based on the results of this study the two hypotheses can be confirmed; the adolescents are more negative towards restrictive availability measures and educational measures than adults, and the restrictive availability measures are less popular than the educational measures among adolescents.

Conflict of interest

None.

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