Responsible Party program 2015-2016: Evaluation & Efficiency

Final Evaluation Report

This report has been written by Pierre Maurage and Valérie Dormal, working in the Laboratory for Experimental Psychopathology (Université catholique de Louvain) as a part of the Responsible Party Program Evaluation.

The report is part of the scientific program of the "Fondation pour la Recherche en Alcoologie".

Please address all correspondence to:

Pierre Maurage

Laboratory for Experimental Psychopathology
Université catholique de Louvain
10, place Cardinal Mercier
1348 Louvain-la-Neuve
Belgium
Email: pierre.maurage@uclouvain.be

Table of Contents

EXECUTIVE SUMMARY

Background

Responsible Party (RP) is the first pan-European alcohol-related prevention program for students, created by Pernod Ricard (PR) as part of its Corporate Social Responsibility policy, and dedicated to raising awareness about the risks of excessive alcohol consumption among young adults. The main feature of the program is the organisation and promotion of RP events for students, where promotional tools and gadgets are used to inform the participants and promote the RP messages. Importantly, the RP events are non-branded.

In order to implement the program, PR has developed a partnership with the Erasmus Student Network (ESN), in operation since 2010, and has made a commitment to the European Alcohol and Health Forum, created by the European Commission, to reach 60,000 students in two years.

Aims & Methods

The following Final Evaluation Report presents quantitative and qualitative data analyses related to the RP program. The report is based on the analysis of students' evaluation questionnaire conducted between September 2015 and June 2016.

The report assesses the overall design of the program and its implementation, as well as the appreciation of the program by the students attending the events. The final report's conclusions and recommendations for improvement are made on the basis of all the data available, including feedback from the students, the PR affiliates and the ESN representatives.

Key Figures

- **10,274** participants (including 3,888 exchange students) from **66** different countries (including 41 European countries) filled in the questionnaire.
- **40.2 %** of students drank alcohol at least 2 to 3 times per week and the average consumption of alcohol per week was **8.6** units.
- Overall, Exchange students drank **1.5** times more alcohol than Local students
- **1545** students have attended at least one RP event and **92%** of respondents consider the tips given by the program very good, leading most of them to potentially modify their drinking behaviour during the parties (**60%**).

Main results

- Exchange students = Adapted target population for RP, as they are particularly exposed to excessive alcohol consumption
- RP program = is positively perceived by students.

= efficiently brings information to students about alcohol consumption, tips and tools to reduce the negative outcomes of excessive consumption and to adapt their drinking behaviour.

= does not bring about by itself an effective modification of alcohol consumption in general or during parties among students.

Conclusions & Limitations

- **Is the targeted population relevant?**

YES. Collaborating with ESN and aiming to reach a maximum of exchange students seems highly accurate as this population showed a significant larger and more frequent alcohol consumption compared to local students.

Moreover, the number of RP events and thus the number of students exposed to the program are constantly increasing, and the high participation rate in the questionnaire suggested that students are very concerned by the question of alcohol consumption and heavy drinking behaviours.

- **Have the main objectives of the program been fulfilled?**

YES and NO. The peer-to-peer approach and the distribution of gadgets appear to be efficient methods of: (1) providing information on the negative consequences of excessive alcohol consumption and to (2) convincing the students to adapt their behaviour when drinking (e.g. drinking more water, planning a safe trip home, avoiding unprotected sex). Therefore, the objectives of raising awareness of alcohol-related dangers and harm reduction seem to have been achieved.

However, it seems difficult to have a real impact on actual alcohol consumption, and no effective decrease in consumption in general or during parties was observed for the students who participated in a RP event compared with those who did not.

➔ See Recommendations 2

- **Does RP function optimally during events?**

YES and NO. As mentioned above, peer-to-peer approach and distribution of tips, water and gadgets was perceived positively by students and they considered the RP program to be a useful prevention program.

However, there is a large variability between countries, sections and events regarding the organization and content of the RP implementation, and standardized training for the Ambassadors is needed in order to ensure that the appropriate and relevant message is conveyed during the party. Similarly, gadget distribution has to be accompanied by the

appropriate message, and relevant gadgets having a direct link with the main aims of the program (raising awareness and harm reduction) should be prioritized.

➔ See Recommendations 1

- **Is the collaboration between ESN and PR efficient?**

YES and NO. As Pernod Ricard and ESN both have decentralised structures, both organisations work at national and local levels (i.e. Pernod Ricard affiliates and ESN national and local sections). While communication between local and global PR levels seems very good, in some sections, a lack of stability and communication problems between PR affiliates and ESN team were noted. Clear guidelines and improvement of the relation between the collaborators are needed to promote good development of RP events.

➔ See Recommendations 3

- **Methodological limitations**

(1) Sample bias

- Students were invited to participate in the study (via Facebook announcements or emails; voluntary-based procedures), and therefore the sample was not randomized. Moreover, the survey broadcasting was uncontrolled and uncentralized.

- Sample representativeness: There are large differences across countries, and representativeness is thus not assured.

- Reward motivation can cause bias in the sample.

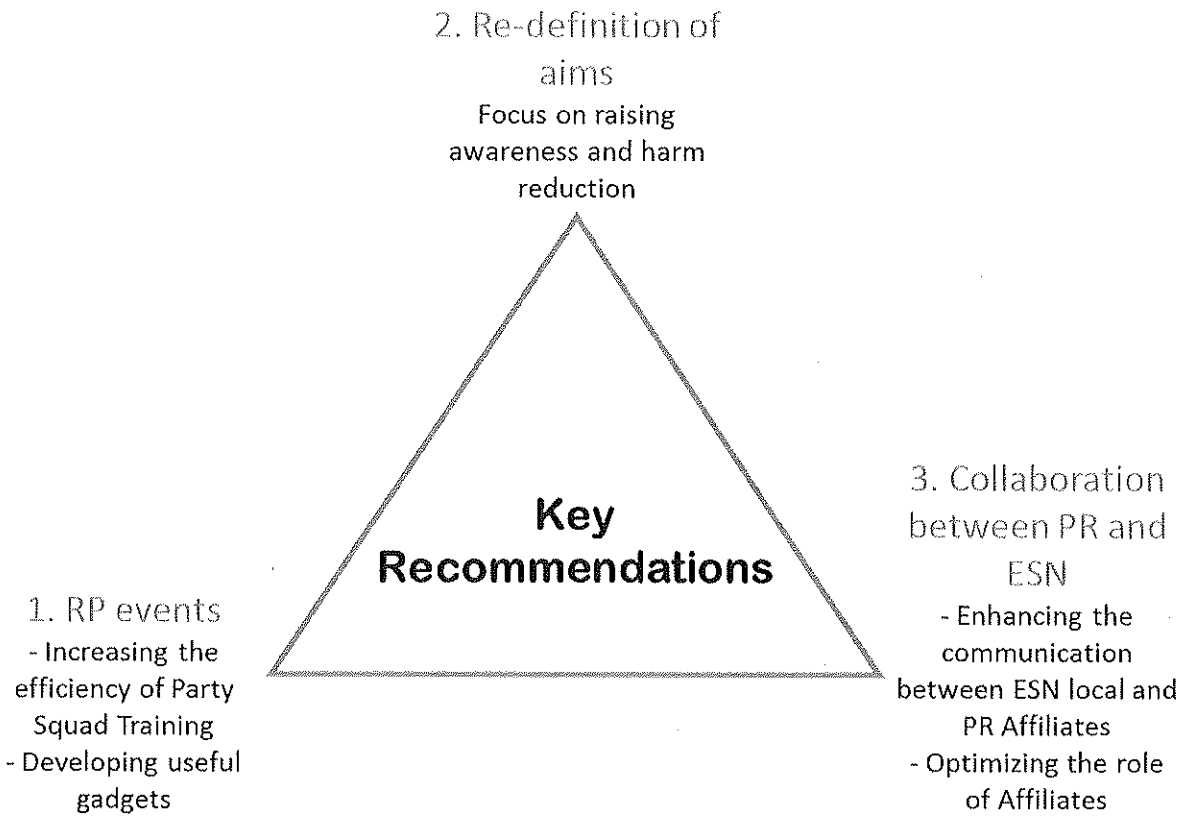
- There are potential differences between respondents and non-respondents (socio-economic status, involvement in ESN).

(2) Measurement bias

- This survey was based on self-reported information provided by students which may represent some sort of bias, since participants may not be reliable in reporting their own behaviour (memory biases, notably related to alcohol-consumption).

- Language impact (native vs. foreign).

Main recommendations



1. Enhance the efficiency of the Party Squads

- Standardizing Party Squad members' recruitment and training.
- Distinguishing training from party.
- Focusing training on the message delivered (and less on the gadgets).
- Developing and using more relevant and interactive gadgets.

2. Redefine the aims of the RP program and/or extend target populations

- Focusing the program on harm reduction and raising awareness, without aiming at directly reducing consumption.
- Extending the program towards other organisations (not only exchange students) and/or other places (not only during parties).
- Extending the program to prevention (younger targets, other tools).
- Changing the program name to stick with PR core values (e.g. Drink with style).

3. Enhance the collaboration between ESN and PR at local and global levels and optimize the involvement of PR Affiliates

- Promoting coordination and communication with ESN RP team (e.g. team building workshops) (Global).
- Proposing transition workshop and training at the beginning of each year to initiate and reinforce the links between ESN representatives and PR Affiliates (Local).
- Encouraging ESN to propose a provisional calendar of RP events at the beginning of each year.
- Proposing compulsory (online) training (at least regarding RP knowledge).
- Systematizing the online report (short and focused) after each RP event.
- Clearly distinguishing marketing and CSR roles.
- Offering a lighter toolkit to lower the workload of PR Affiliates for RP.

Responsible Party Program: Evaluation & Efficiency

1. Introduction and background to the program

Responsible Party (RP) is a prevention program jointly developed in European countries by the Erasmus Student Network (ESN) and Pernod-Ricard (PR). It has been operating since 2010. RP capitalizes on peer-to-peer interactions during parties, as the responsible drinking messages are delivered by a previously trained "Party Squad" composed of ambassadors. These RP ambassadors, recruited among students, approach their fellow students directly during parties. This helps to maximize the program's efficiency, making sure that the right message has been disseminated to raise awareness among young adults. Importantly, RP parties are non-branded parties. This collaboration ensures the success of the program, one that is carried out in 26 countries at a local and a national level, with the support of the International Board of ESN and of Pernod Ricard local affiliates.

The RP program targeted as a priority adult students participating in European student exchange programs (e.g., Erasmus). Targeting young European exchange students is particularly relevant as they are an at-risk target, and it is necessary to provide them with information on harmful drinking and specifically on binge drinking. When students are in a foreign country, they use parties as a way to socialize with other people, and inappropriate alcohol consumption can occur on these occasions. During this period, they define themselves as 'carpe diem people', meaning that they want to enjoy their stay as much as they can. The RP program, based on the peer to peer system, is implemented with an innovative and collaborative approach in order to confront this issue.

RP initially had three central aims, namely (1) raising awareness about the dangers of excessive alcohol consumption; (2) proposing harm-reduction tools to reduce the negative consequences of acute excessive alcohol consumption; (3) reducing the intensity and frequency of alcohol consumption, and particularly binge drinking habits, among students.

Since 2015, the program has been evaluated by an independent third party – researchers from the Psychological Sciences Research Institute of the Université catholique de Louvain (UCL, Belgium). This final report combines quantitative and qualitative analyses, and includes recommendations on possible improvements to the program as well as on its implementation and evaluation.

2. Evaluation approach: Methodology and procedures

2.1 Aims and methodology

The evaluation of the RP program was conducted during the 2015-2016 academic year and most importantly consisted in the development, data collection and analyses of an online questionnaire for European students aiming to evaluate the efficiency of the program, and specifically its impact on alcohol knowledge among students, on the reduction of the negative effects related to excessive alcohol consumption, and on the modification of consumption behaviours.

The aim of the students' questionnaire was twofold: (1) to explore alcohol consumption habits among young adults studying in European Universities, and in particular to measure the changes observed in this consumption during the exchange stay abroad; (2) to evaluate the efficiency and validity of the Responsible Party program, i.e. to explore whether this program fulfills the aims described above. The target population was defined as European students, with a special focus on Exchange students.

2.2 Data collection tool

The methodological approach consisted of **two online surveys**, with the first survey launched at the beginning of the academic year (T1), targeting exchange students who did not attend the Responsible Party program, and the second one launched at the end of the exchange stay or about 6 months later (T2), targeting the same sample of students (Fig. 1). The survey was created and carried out by means of an on-line survey application, *Qualtrics*, and was available in four languages (English, French, Spanish and Italian).

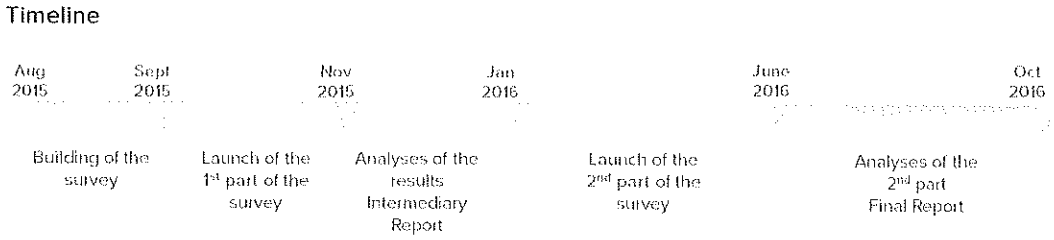


Fig. 1: Timeline of the RP questionnaire launch phases.

A. PART ONE (T1)

The first part of the questionnaire was available between September and November 2015.

It was designed to investigate the following four aspects:

- local and exchange students' demographic information
- students' drinking habits and use of other substances
- students' personality-psychological dimensions

- students' knowledge of and attendance at responsible parties

In the online survey, the **first section** investigated demographic data including students' gender, age, nationality, as well as their field of studies, university, country where they were in an exchange, and the duration of their exchange program.

The **second section** included questions investigating students' drinking habits and use of other substances. Alcohol consumption was specifically assessed by the AUDIT (Alcohol Use Disorder Identification Test) questionnaire and by questions referring to "binge drinking" behaviour. AUDIT is a standard test used to assess alcohol consumption habits referring to hazardous drinking, harmful drinking or alcohol dependence (Saunders et al., 1993a;b). This tool was developed based on WHO criteria for alcohol consumption and the resulting score is used to determine the level of danger of the consumption pattern. Questions about "binge drinking" behaviour assessed the consumption rate, the number of years of alcohol consumption, the frequency of episodes of drunkenness and usual consumption during the previous six months.

The **third section** was composed of two validated questionnaires assessing a number of psychological factors directly related to alcohol consumption: drinking motivation and impulsivity. The Drinking Motives Questionnaire-Revised (DMQ-R) assessed the motivations to drink alcohol according to the Cooper model (1994) and targeted the motivations of improvement (which characterizes consumption as a way of experiencing positive emotions), social order (which refers to consumption in order to increase social benefits), compliance (drinking alcohol to avoid negative evaluations by others) and of anxiety/depression coping (drinking alcohol to deal with anxiety affects and/or depression). The second questionnaire was the UPPS-P Impulsive Behaviour Scale (Billieux et al., 2012), a 20-item scale that measures five facets of impulsivity: positive urgency, negative urgency, lack of premeditation, lack of perseverance, and sensation seeking.

Finally, the **fourth section** evaluated students' knowledge of, participation in and personal opinion about the RP Program.

B. PART TWO (T2)

The second phase of the survey was launched at the end of the exchange stay (for Erasmus students) or 6 months after the first phase (for Local students). Each participant was individually contacted by email.

The second phase of the survey had exactly the same structure (i.e. the four sections), except that the UPPS questionnaire was replaced by the Alcohol Quality of Life Scale (AQoLS), a 34-item questionnaire measuring health-related quality of life, specifically in relation to alcohol consumption (Luquiens et al., 2014; 2015).

3. Findings - Main results

3.1 First phase

In this section, a summary of the data collected during the first phase of the questionnaire will be presented. First, a description of the sample and data concerning the alcohol consumption habits of European students in terms of frequency, intensity and consumption pattern will be described. Then, the results about RP program attendance and the perception of this program by students will be developed.

a. Socio-demographic data

The broadcast of the questionnaire link via Internet and social networks allowed us to reach a total of 10274 respondents, including 3888 exchange students (37.8% of total sample). Within the total sample, a majority of women (6484 women and 3790 men, 63% and 37% respectively) and an age range from 18 to 35 years (with an average of 22.17 ± 2.4 years) were observed. For exchange students, a similar distribution was found for gender (59% women, 41% men) and age (range: 18-35 years; mean: 21.9 ± 2.2 years).

Regarding geographical distribution, many European countries were represented (Fig. 2) as well as some countries outside Europe. Participants came from 66 different countries, including 25 countries outside Europe. The three most represented cities were Zagreb (422 participants), Istanbul (393 participants) and Warsaw (353 participants).

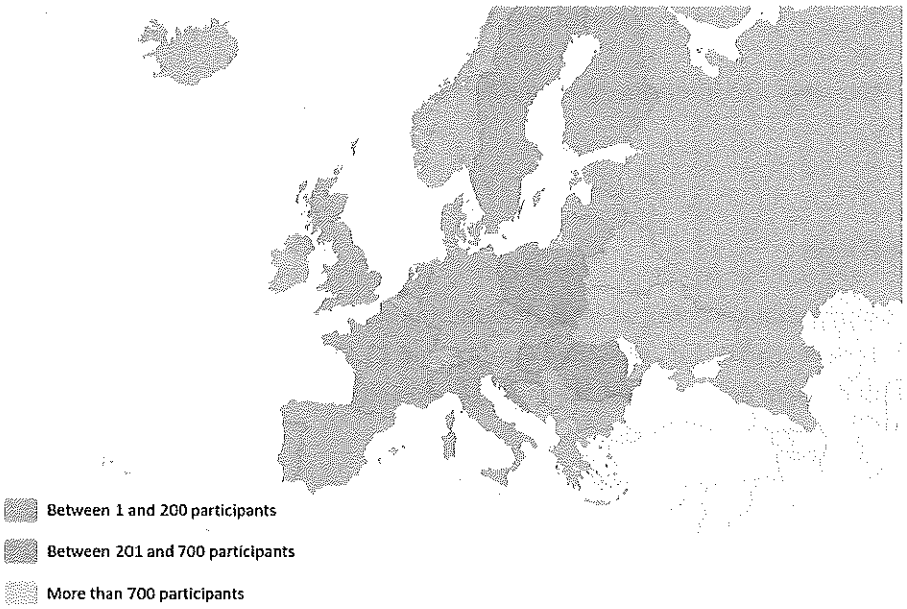


Fig. 2: Geographical distribution of participants for the 1st part of the RP questionnaire. The 3 most represented countries were Poland (1007 participants), Croatia (762 participants) and Romania (748 participants).

Regarding exchange students, these came mostly from Spain (477 participants), France (463 participants) or Germany (376 participants; Table 1) and made their exchange stay mainly in Poland (415 participants), Sweden (308 participants) and Hungary (233 participants).

Table 1: Number of exchange students as a function of origin country.

Country of origin	Nr of participants
Spain	477
France	463
Germany	376
Italy	329
Turkey	308
Poland	172
The Netherlands	154
Hungaria	146
Portugal	128
Romania	107
Slovakia	107
Belgium	103
Czech republic	78
Lithuania	57
USA	56
United Kingdom	56
Slovenia	48
Greece	43
Austria	42
Bulgaria	42
Finland	42
Ireland	41
Brazil	40

b. Frequency and intensity of alcohol consumption

- **Global level**

96% of the sample drank alcohol at least once during the previous six months. As described in Table 2, 0.4% of students had never consumed alcohol, and 11.5% drank alcohol four or more times a week. Among students who drink alcohol, the average consumption is 8.6 units/doses per week.

Table 2: Alcohol consumption frequency among students

Consumption frequency	Percentage	Number of participants
Never	0.4	40
1x / month	9.2	90
2 to 4x /month	38.7	3826
2 to 3x /week	40.2	3974
4 or + / week	11.5	1137
	Mean	**Standard deviation**
Mean number of doses/week	8.65	10.1
Consumption speed	**Percentage**	**Number of participants**
< 1 dose / hour	9.7	996
1 dose / hour	27.1	2787
2 doses / hour	35.9	3684
3 doses / hour	16.7	1711
> 3 doses / hour	6.9	707
Consumption of more than 6 doses per occasion	**Percentage**	**Number of participants**
Never	17.8	1827
Less than 1x / month	31.1	3200
1x / month	26.2	2692
Every week	20.3	2086
Every day or almost every day	0.8	80

It also seems interesting to consider the "binge drinking" consumption mode, a common habit in academic circles. There is currently no clear definition of binge drinking, but based on the existing literature, we may propose that it characterizes a pattern of alcohol consumption consisting in drinking large quantities within a short time interval (Keller et al., 2007). This kind of behaviour is also characterized by the speed at which people drink alcohol and by the rapid onset of drunkenness. For healthy adults in general, drinking more than 5 drinks on any day or 21 per week (4 drinks on any day or 14 per week for women) is considered "at-risk" or "heavy" drinking. Binge drinking is a pattern of alcohol consumption characterized by repeated alternations between intense periods of alcohol intake and abstinence (Crego et al., 2009).

When we look at the rate of consumption, a significant proportion of students (35.9%) drank on average two units per hour. Regarding the frequency with which students consumed more than six drinks on one occasion, about 18% never did, over 20% did so every week and less than 1% did so every day. Finally, students consumed alcohol for the first time on average at the age of 15 years (Fig. 3).

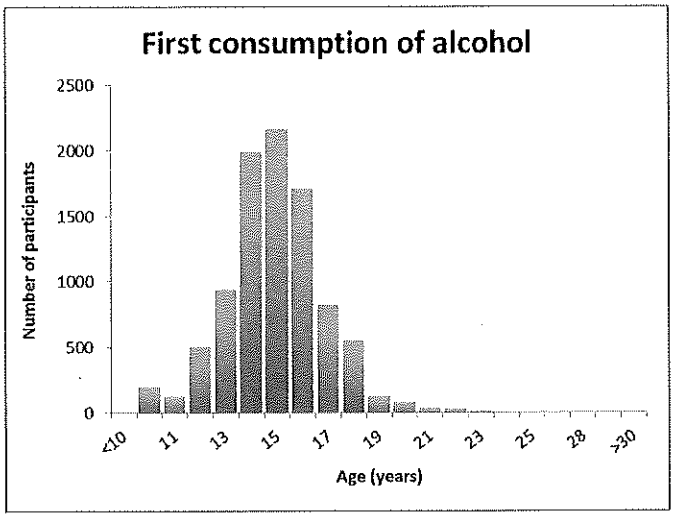


Fig.3: Distribution of participants according to the age of first episode of alcohol consumption

- **Men/Women differences**

In general, we observed that men drank alcohol more frequently (Fig. 4; Table 3) and more intensely than women (Table 3).

Table 3: Frequency and amount of alcohol consumption by gender

Consumption Frequency (%)	Men	Women
Never	0.5	0.3
1x / month	6.2	10.4
2 to 4x /month	29.5	41.7
2 to 3x /week	42.5	36.5
4 or + / week	16.9	7.7
	Men	Women
Mean number of doses/week	11.39	5.92

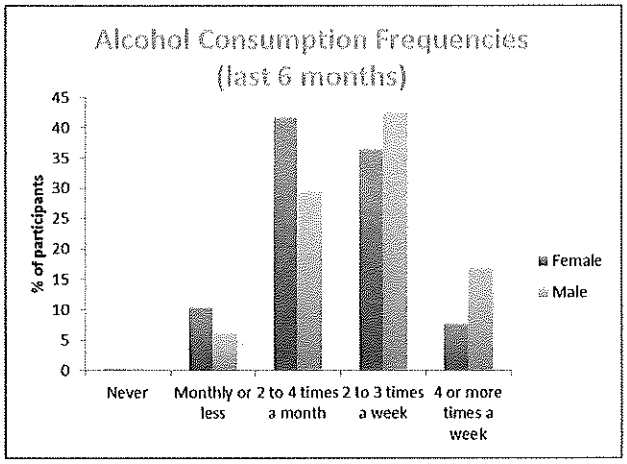


Fig. 4: Mean alcohol consumption frequency by gender

- **Local/Exchange students differences**

Overall, Exchange students drank on average more frequently and larger amounts than local students (Table 4). Exchange students drank more beer and spirits and less wine compared to local students (Fig. 5).

Table 4: Frequency and amount of alcohol consumption as a function of student type (Local vs. Exchange)

Consumption Frequency (%)	Local students	Exchange students
Never	0.4	0.4
1x / month	10.9	5.5
2 to 4x /month	41.2	30.7
2 to 3x /week	34.5	45.6
4 or + / week	9.2	14.2
	Local students	**Exchange students**
Mean number of doses/week	6.6	10.1

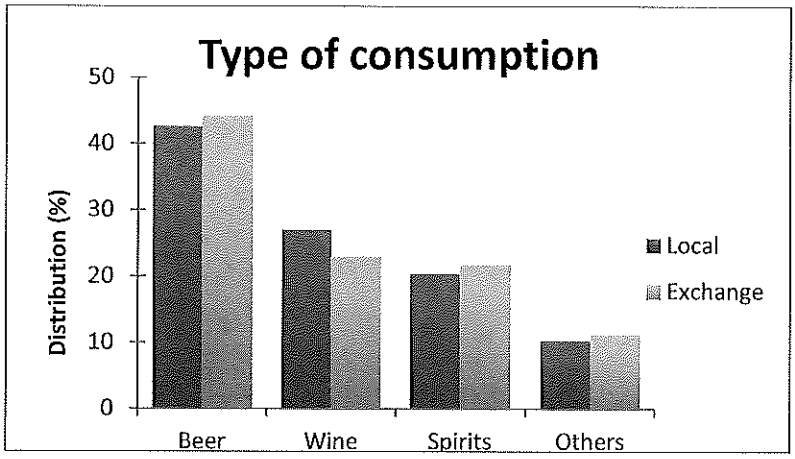


Fig. 5: Distribution of alcohol consumption by beverage type among local and exchange students

When we compare the mean score on the AUDIT (Alcohol Use Disorder Identification Test), exchange students showed higher scores compared to local students (Table 5). In addition, 39.7% of exchange and 36.6% of local participants presented a risky drinking behaviour (AUDIT score between 8 and 15), whereas 6.9% of exchange students presented a possible alcohol dependence (AUDIT score greater than 20; Table 5). Similarly, the mean Binge Drinking score is higher for exchange students (mean score: 22.98) than for local students (mean score: 19.04; Table 5 and Fig. 6).

Table 5: Mean AUDIT and Binge Drinking scores and repartition of students as a function of student type (local vs. exchange)

	Local students	**Exchange students**
Mean AUDIT score	9.7	10.8
Proportion of participants with a AUDIT score	**Local students**	**Exchange students**
Between 8 and 15 = Hazardous consumption	36.6	39.7
Between 16 and 19 = Harmful consumption	6.4	8.1
Superior to 20 = Possible dependance	4.8	6.9
	Local students	**Exchange students**
Mean Binge Drinking score	19.04	22.98
Proportion of participants with a Binge Drinking score	**Local students**	**Exchange students**
< 16 = Non-Binge drinker	51.9	46.1
Between 16 and 24 = Moderate Binge drinker	25.2	20.8
> 24 = Intense Binge drinker	22.9	33.1

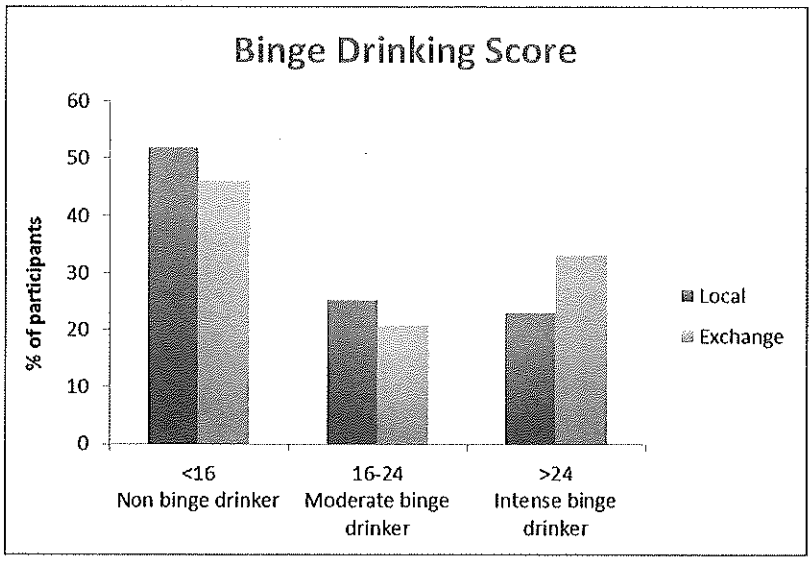


Fig. 6: Distribution of Binge Drinking scores as a function of the student type (local vs. exchange)

Regarding the impulsivity questionnaire scores (UPPS), no overall difference was revealed between the local (mean score: 44.4) and exchange (mean score: 43.8) students. However, significant correlations were observed between impulsivity score and alcohol consumption measures (i.e., AUDIT score and mean number of units per week; Table 6) for both local and exchange students.

Table 6: Correlations between impulsivity score (UPPS) and alcohol consumption measures (AUDIT score and mean number of alcohol units per week) as a function of student type (local vs. exchange)

	Correlations	UPPS Score	AUDIT Score	Nb Alcohol Doses/Week
Local	UPPS Score		.298*	.058*
	AUDIT Score			.519*
	Nb Alcohol Doses/Week			
Exchange	UPPS Score		.354*	.135*
	AUDIT Score			.538*
	Nb Alcohol Doses/Week			

Finally, differences between drinking motivation were observed: exchange students drank more for social order reasons, to avoid negative judgments from their peers and to seek positive sensations induced by alcohol consumption (Fig. 7).

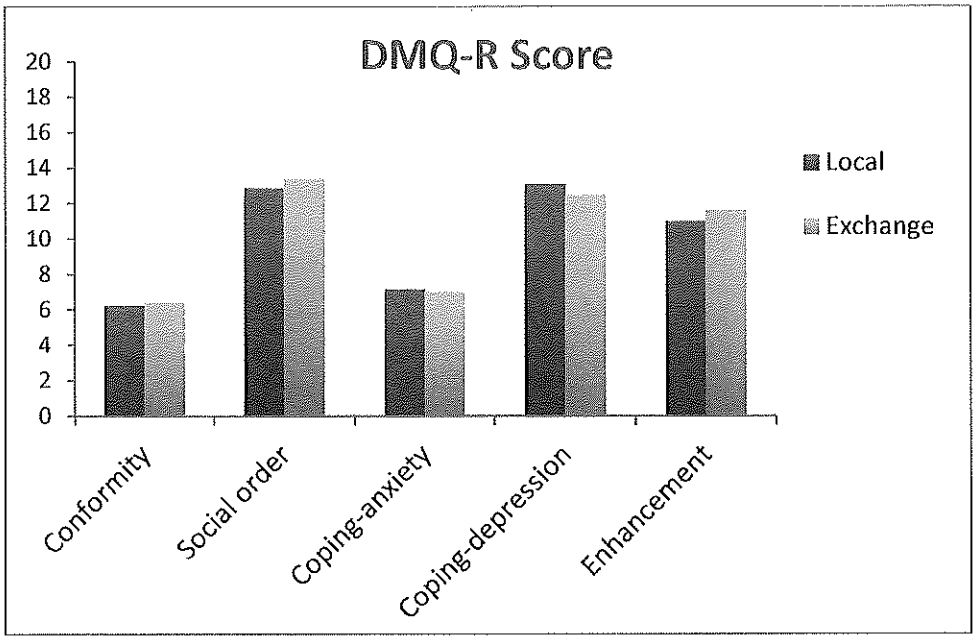


Fig. 7: Drinking motivation scores for the five sub-scales evaluated by the DMQ-R questionnaire as a function of students type (local vs. exchange)

- **Differences across countries**

A comparison of alcohol consumption in the 21 countries with the highest participation rate was made. First, local students from France (mean score= 19.4), the Netherlands (mean score= 18.9) and Belgium (mean score= 17.9) showed the highest binge drinking scores (Fig. 8) and the mean number of alcohol units per week was higher in The Netherlands (mean= 8.9 units), Turkey (mean= 8.5 units) and Belgium (mean= 8.3 units; Table 7).

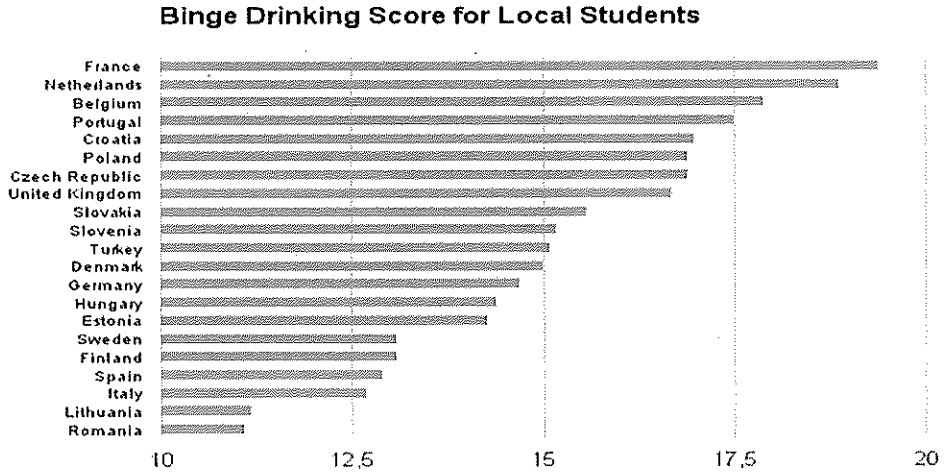


Fig. 8: Mean binge drinking score of local students for the most representative countries.

Table 7: Mean number of alcohol units per week for local and exchange students as a function of country.

	Local	Exchange
Netherlands	8.9	11.5
Turkey	8.5	8.7
Belgium	8.3	8.4
Czech Republic	8.2	10.9
France	8.1	7.7
Poland	7.3	13.1
Denmark	7.1	9.1
Portugal	7.1	9
Germany	6.9	9.4
Estonia	6.9	10.6
Italy	6	13.5
United Kingdom	5.9	5.8
Hungary	5.9	11.2
Croatia	5.8	9.7
Sweden	5.6	8.6
Spain	5.6	8.7
Slovakia	5.3	11.9
Slovenia	5.3	15.5
Romania	5	11.8
Lithuania	4.9	11.3
Finland	4.9	9.5

For the exchange students, the highest mean binge drinking scores were observed in Slovenia (mean score= 23.1), the Netherlands (mean score= 21.8) and Lithuania (mean score= 21.3; Fig. 9), while Slovenia (mean= 15.5 units), Italy (mean= 13.5 units) and Poland (mean= 13.1 units) were the three countries where exchange students drank the highest mean number of alcohol units per week (Table 7).

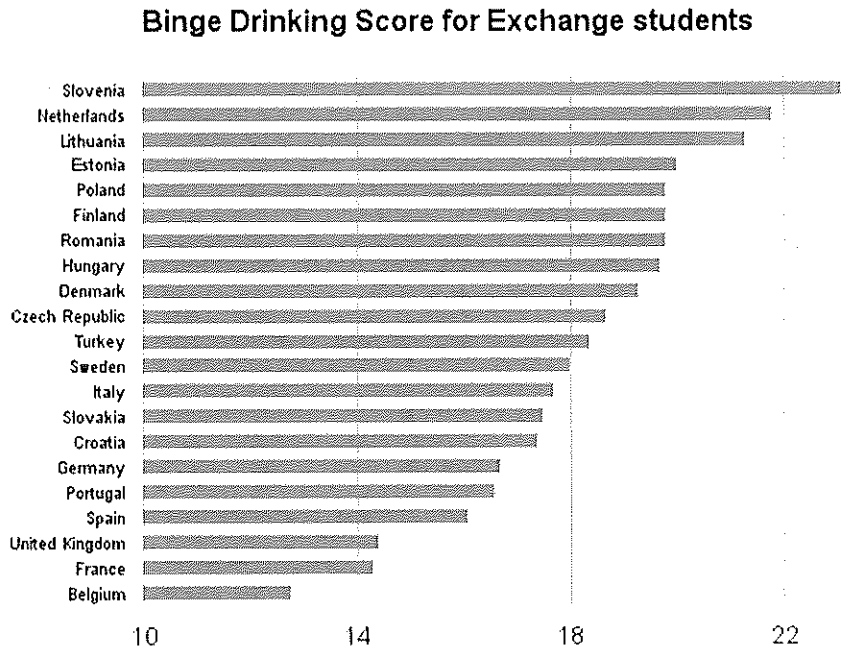


Fig. 9: Mean binge drinking score of exchange students for the most representative countries.

Finally, exchange students who drank larger quantities of alcohol per week came from Turkey (mean= 15.4 units), United Kingdom (mean= 14 units) and Belgium (mean= 12.2 units). Larger binge drinking score were observed in exchange students from the Netherlands (mean score= 22.9), France (mean score=22.7), and United Kingdom (mean score= 22.1; Fig. 10).

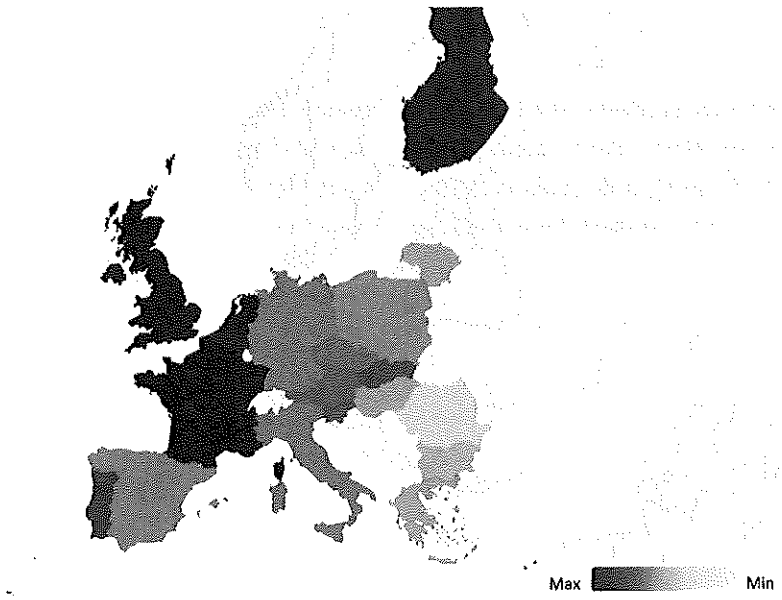


Fig. 10: Geographical distribution of binge drinking score for exchange participants as a function of their country of origin. The dark green color represents the highest scores.

c. Responsible Party program evaluation

30% of the students (2,971 students including 740 in exchange stay) were aware of the Responsible Party program. Among these 30%, 52% had already attended one of these events (1545 students; Fig. 11). Students identified the presence of the Responsible Party program at a party thanks to distributed gadgets (33.3%), posters and flyers (31.3%) and to the presence of the Party Squad (29.2%).

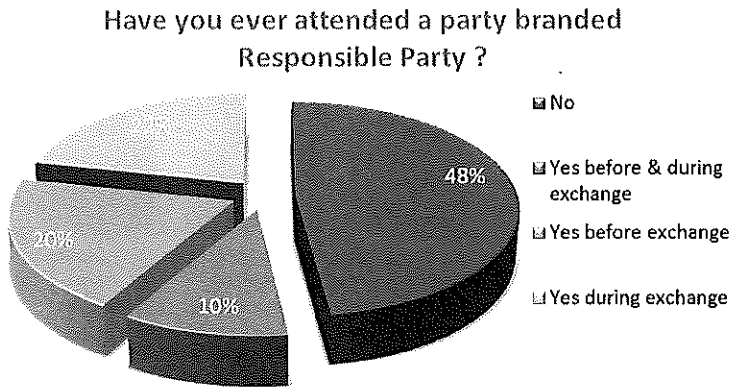


Fig. 11: Distribution of students as a function of their participation to a Responsible Party.

For these students, Responsible Party is primarily a program providing information on alcohol consumption (91% of participants strongly agreed) and supplying tools to control their consumption (more than 60% of the participants completely agreed).

Finally, the majority of students fully or partially agreed with the idea that the Responsible Party program taught them something new about alcohol consumption, informed them about the negative consequences of excessive alcohol consumption and changed their opinion on alcohol consumption (Fig. 12). Conversely, their opinions were moderate regarding the question of whether this program actually changes their behaviour when drinking and is effective in reducing their alcohol consumption (Fig. 12).

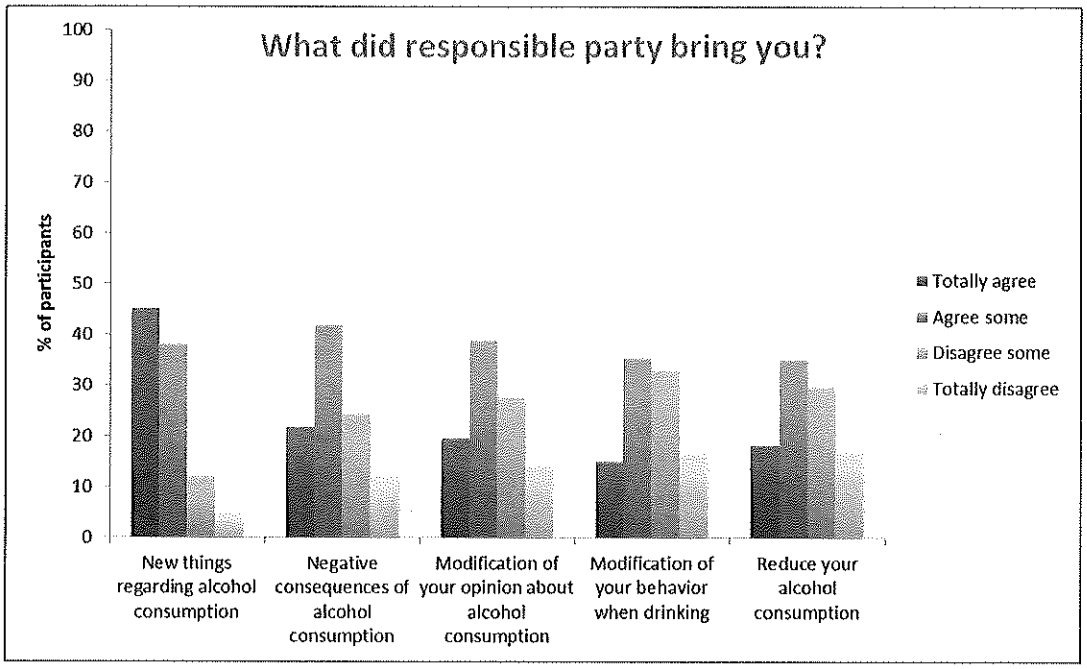


Fig. 12: Distribution of answers for the question "What did Responsible Party program bring you?"

3.2 Second phase and comparison with the first phase

All the participants of the first phase of the questionnaire who gave their email address were contacted again and invited to complete the second phase of the questionnaire. In this section, a summary of the demographic data of the sample collected during the second phase of the questionnaire will be presented. Direct comparisons between the two phases were performed in order to compare the alcohol consumption habits of students before and after their exchange stay. The impact of the Responsible Party program on both opinions about alcohol consumption and on effective consumption were also explored.

a. Socio-demographic data

A total of 4567 participants completed the second phase of the online questionnaire, including 1562 exchange students. Within the total sample, a majority of women (3025 women and 1542 men, 66% and 34% respectively) and an age range from 15 to 46 years (with an average of 22.2 ± 2.6 years) were observed.

Regarding geographical distribution, participants came from 52 different countries and the three most represented countries for the local students were Turkey (362 participants), Croatia (293 participants) and Romania (258 participants), while the three most represented countries for the exchange students were Poland (152 participants), Sweden (103 participants) and Hungary (88 participants; see Table 8 for a more complete list).

Table 8: Number of participants in the second phase as a function of country and type of student

Local students		Exchange students	
Country	Number of participants	Country	Number of participants
Turkey	362	Poland	152
Croatia	293	Sweden	103
Romania	258	Hungary	88
Poland	240	United Kingdom	84
Hungary	183	Turkey	81
Italy	169	Netherlands	77
Netherlands	150	Croatia	75
France	127	Spain	67
Slovakia	104	Romania	65
Czech Republic	95	Denmark	64
Portugal	93	Italy	64
Lithuania	88	France	63
Slovenia	80	Portugal	60
Germany	78	Finland	59
UK	70	Lithuania	59
Belgium	66	Germany	58
Bulgaria	59	Slovakia	46
Spain	53	Belgium	40
Sweden	52	Czech Republic	35
Denmark	51	Greece	30

b. Frequency and intensity of alcohol consumption

- **Global level**

Only 2.5% of students never consumed alcohol, more than 30% drank alcohol two to three times a week and 8.8% consumed four or more times per week. Among students who drank alcohol, the average consumption over the week was 6.7 units.

- **Local/Exchange students differences**

Overall, similar differences between local and exchange students were observed: exchange students on average drank more frequently (Fig.13) and in larger amounts than local students (Table 9).

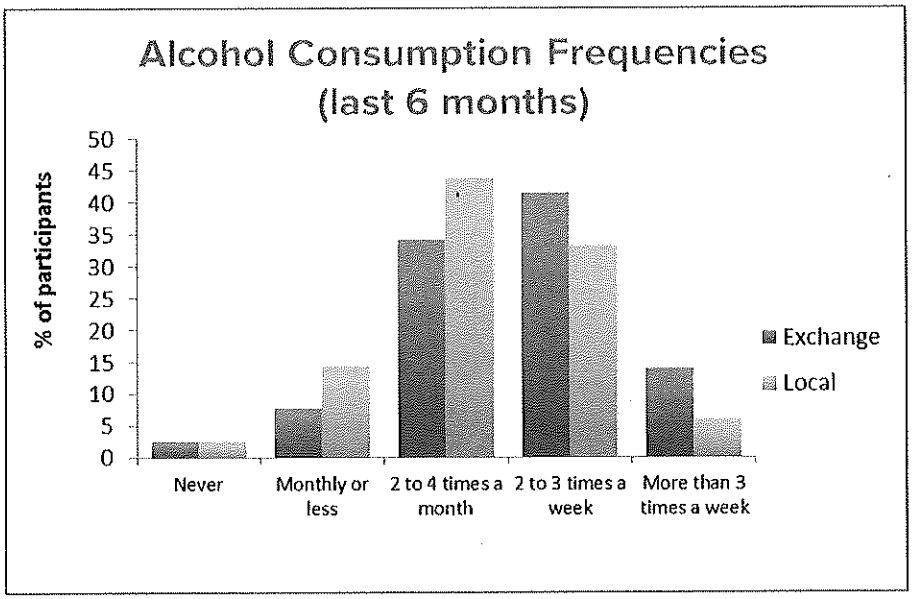


Fig. 13: Frequency of alcohol consumption as a function of type of students (local vs exchange) for phase 2

No significant difference in terms of speed of consumption were observed between exchange and local students (Table 9), while the frequency at which students consumed more than six drinks on one occasion was significantly higher for the exchange students (i.e., about 20% of exchange students did so every week; Table 9).

Table 9: Alcohol consumption frequency of exchange and local students for the second phase.

	Exchange students	Local students
Mean number of doses/week	8.1	5.9
Consumption speed (%)		
< 1 dose / hour	8.1	11.3
1 dose / hour	30.5	30.5
2 doses / hour	37.7	35.2
3 doses / hour	16.6	15
> 3 doses / hour	4.2	4.9
Consumption of more than 6 doses per occasion (%)		
Never	17.2	20.9
Less than 1x / month	33.9	40.6
1x / month	25.4	23.3
Every week	20.1	12.4
Every day or almost every day	0.8	0.3

Globally, no difference was observed between local and exchange students on the global Alcohol Quality of Life score (mean score for exchange= 7.71; mean score for local= 8.15) A comparison on each subscale revealed a significant difference only for the Relationship component (e.g. "I have neglected people close to me"), with a larger score for the local students (mean score= 1.53) compared to the exchange students (mean score= 1.32; Fig. 14).

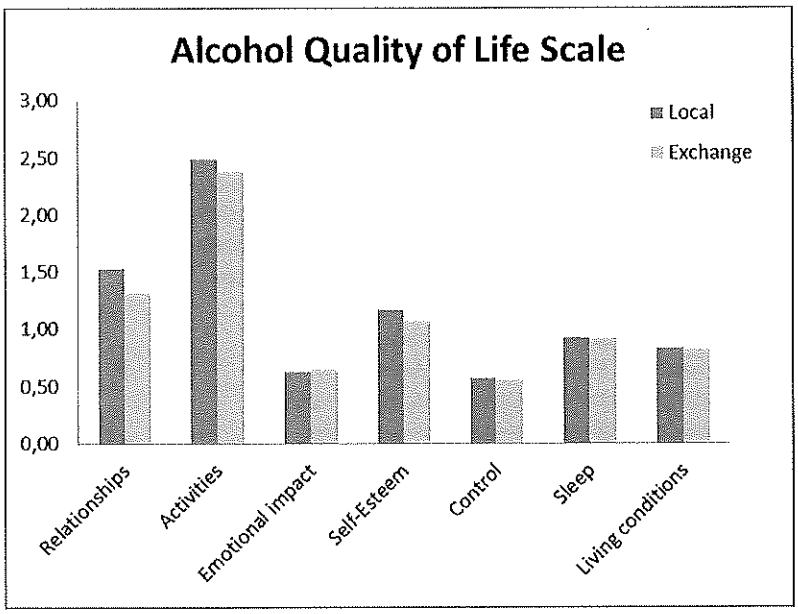


Fig. 14: Mean score for each subscale of the Alcohol Quality of Life Scale as a function of student type (local vs exchange)

- **Differences across countries**

The comparison of binge drinking scores in the 18 countries with the highest participation for phase 2 revealed higher scores for local students in Slovenia, the Netherlands and the United Kingdom. Moreover, exchange students who had larger binge drinking scores carried out their exchange stay in Poland, Hungary and Lithuania (Fig. 15) and came from Spain, Belgium and France.

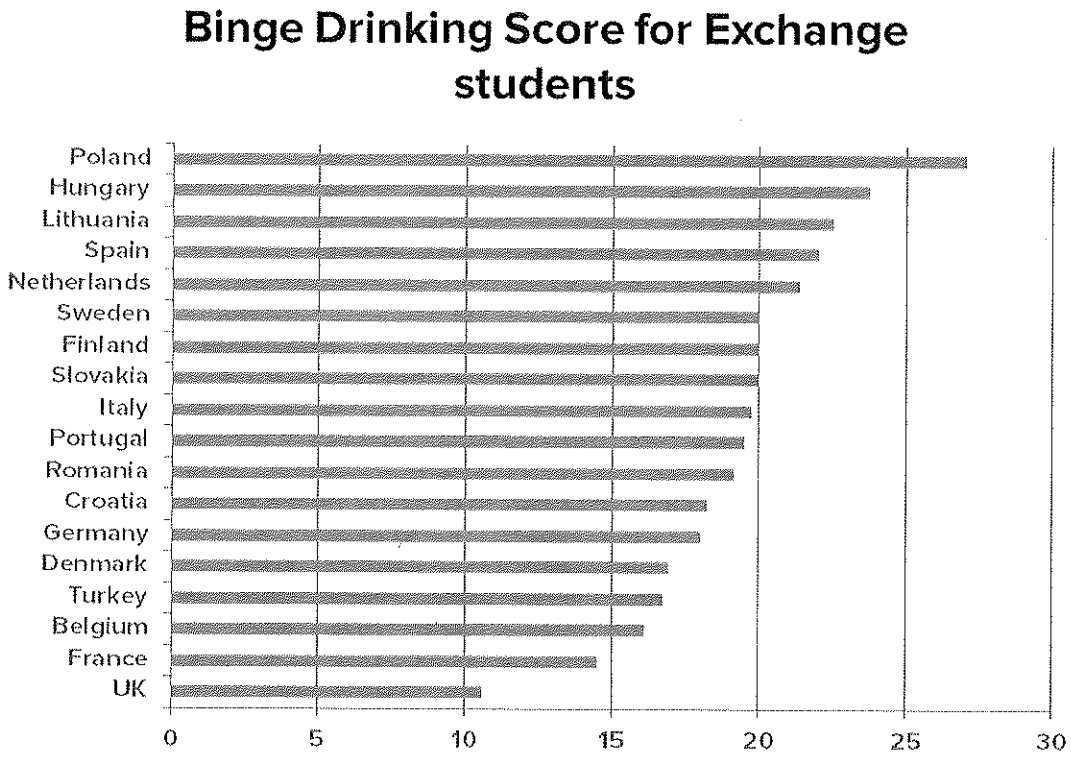


Fig. 15: Mean binge drinking score for exchange students for the most representative countries in phase 2.

- **Comparison of alcohol consumption between Phases 1 & 2**

First, when we compare the mean number of alcohol units drunk per week, a global reduction between phase 1 & 2 was observed (mean phase 1= 7.7; mean phase 2= 6.7). This reduction was present both for exchange and local students. However, exchange students (mean phase 2= 8.1) still drank more than local students (mean phase 2= 5.9) in phase 2 (Fig. 16).

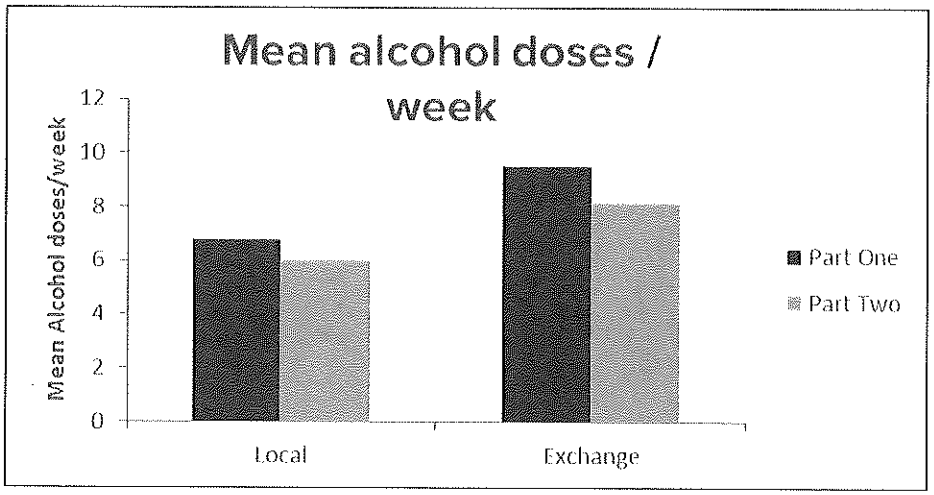


Fig. 16: Mean alcohol units drunk per week as a function of student type (local vs exchange) and questionnaire phase (1 vs 2).

Similar results were observed for the AUDIT score: mean score was higher in phase 1 compared to phase 2 for both local (mean phase 1= 9.95; mean phase 2= 9.31) and exchange students (mean phase 1= 10.89; mean phase 2= 10.55). However, for the Binge Drinking score, a decrease was observed between phase 1 and 2 for the local students (mean phase 1= 17.5; mean phase 2= 16.0), while no significant difference was observed for the exchange students (mean phase 1= 20.5; mean phase 2= 20.1; Fig. 17).

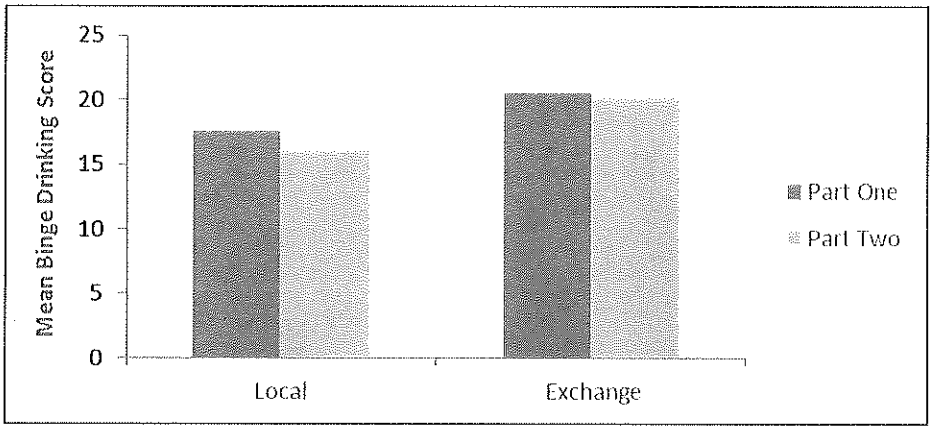


Fig. 17: Mean Binge Drinking score as a function of student type (local vs exchange) and questionnaire phase (1 vs 2).

c. Responsible Party program evaluation

- **Global level**

In phase 2, 49% of students (2159 students including 715 in exchange stay) were aware of the RP program and 27% had attended at least one of these events (1171 students including 420 in exchange stay; Fig. 18). Students identified the presence of the Responsible Party program at a party thanks to distributed gadgets (64.8%), posters and flyers (62%), distribution of water (57.7%) and the presence of the Party Squad (61.8%).

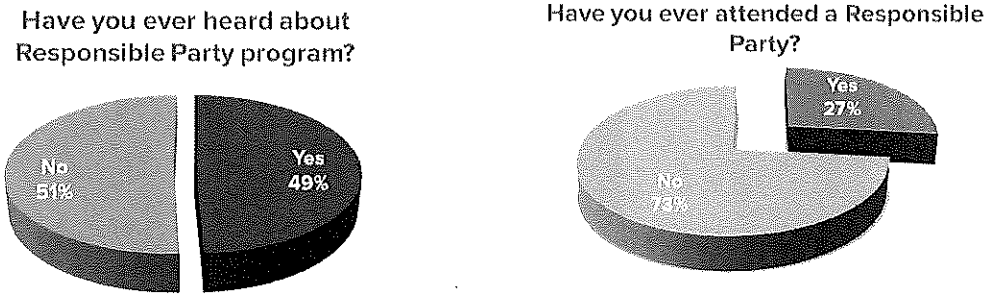


Fig. 18: Proportion of students knowing the RP program (left panel) and having participated in a RP (right panel) in phase 2

For students who had attended a RP, the program mainly amounted to a program giving tips for responsible alcohol consumption (59.9% of participants strongly agreed). The majority of students considered the program to be a useful prevention program (47.7% of participants strongly agreed and 39.8% agreed some). They also fully or partially agreed with the idea that the RP program had modified their drinking behaviour (e.g. drinking more water during parties; 18.5% of participants strongly agreed and 39.4% agreed partially; Fig. 19).

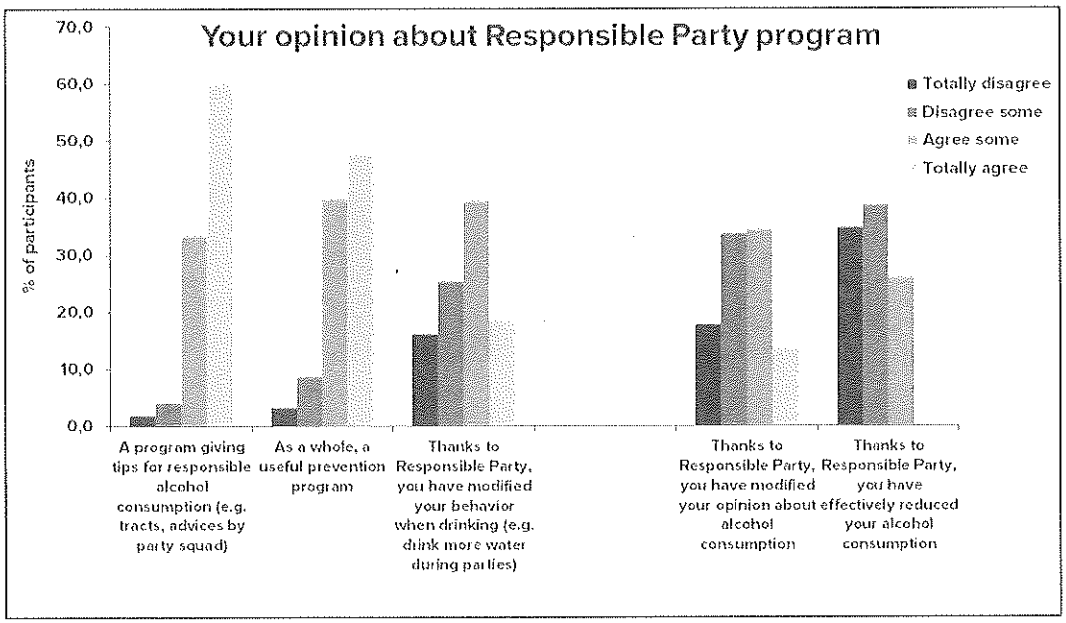


Fig. 19: Distribution of answers concerning the opinion of students about the RP program in phase 2

However, their opinions were less positive in terms of whether this program actually changed their opinion about alcohol consumption (33.7% of participants disagreed some and 17.8% totally disagreed) and reduced their alcohol consumption (38.6% of participants disagreed some and 34.8% totally disagreed; Fig. 19).

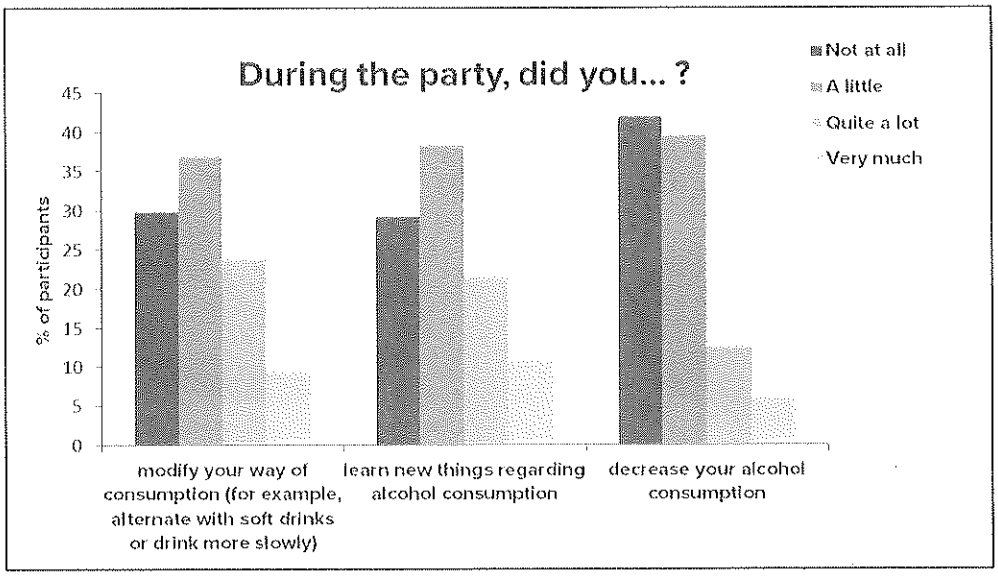


Fig. 20: Distribution of answers concerning the impact of RP program during the party in phase 2

Finally, when asked about the specific impact of RP during the party, students reported a modification of their mode of consumption ["a little", 36.9% of participants, or quite a lot, 23.8% of participants (Fig. 20)]. They also mentioned having learned something new regarding alcohol consumption (38.2% of participants). However, the majority of participants did not decrease their alcohol consumption during the party (41.9% of participants), while 39.5% slightly decreased it (Fig. 20).

- **Comparison of alcohol consumption as a function of participation in RP**

The direct comparison of mean alcohol consumption among students who participated or did not participate in at least one RP revealed no significant difference concerning the mean binge drinking score (score for participants= 17.7; for non-participants= 17.3; Fig. 21). Moreover, the mean Audit score was larger for the participants (mean score= 10.3) than for the non-participants (mean score= 9.4; Fig. 20). Similarly, the mean number of alcohol units per week was also significantly larger for the participants in RP (mean= 7.3 units) compared to the non-participants (mean= 6.5 units; Fig. 21).

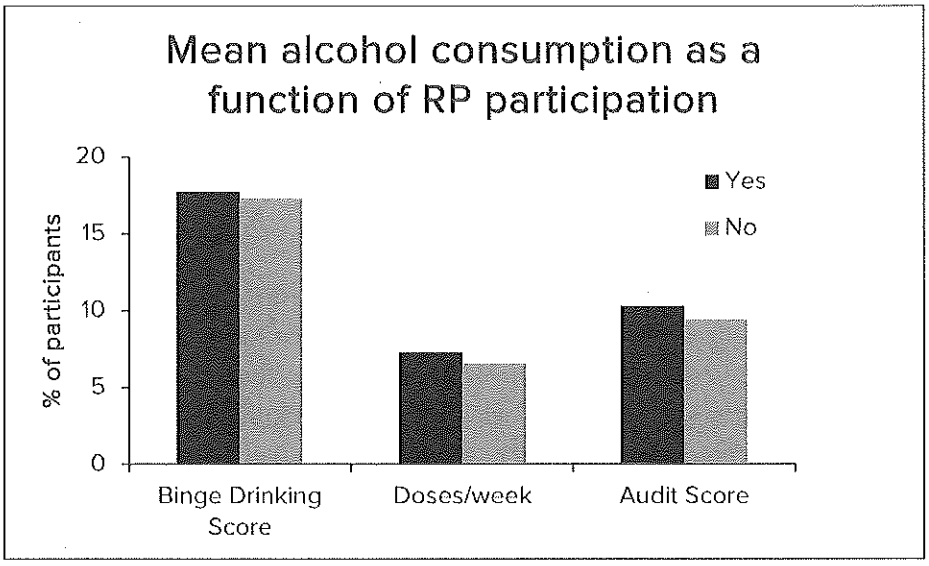


Fig. 21: Mean alcohol consumption as a function of RP participation in phase 2

3.3 Conclusions, limits and recommendations

- **Main Results of the survey**

Observation n°1 = Binge drinking behaviours are very present among European students. About 50% of our sample can be considered as moderate or intense binge drinkers. Moreover, exchange students drink larger quantities of alcohol than local students, and more frequently.

The development of RP, aiming to reach a maximum of exchange students in collaboration with ESN, therefore seems highly relevant and has to be encouraged in the future, as the targeted population is appropriate.

Recommendation = Diversifying RP targets.

Even if the target appeared highly relevant, one possible strategy to reach a larger number of people with the program is to develop complementary partnerships with other student organisations in order to extend the target to local students, as the current program mostly focuses on Erasmus students, ignoring a very large population of students. Moreover, offering information to younger students/adolescents (e.g., by directly offering prevention programs in secondary schools) could be an appropriate way to sensitize young people to excessive alcohol consumption and to develop the prevention features of the program, especially as studies have shown that the earlier the awareness, the stronger the effect on actual alcohol consumption.

Observation n°2 = The alcohol consumption of exchange students seems particularly high in certain European countries, notably Slovenia, Poland, Hungary and Lithuania.

Recommendation = Intensifying RP events in more "vulnerable" countries.

The data obtained for each country should help PR Affiliates and ESN teams to organize more RP events in these specific countries and to locally adapt the intensity and frequency of the program's implementation.

Observation n°3 = Exchange students drank alcohol mainly for the positive outcomes induced by alcohol consumption: (1) to meet other people and socialize, (2) to avoid negative judgments from their peers and (3) to seek positive sensations.

Recommendation = Adapting the RP prevention messages.

It could be interesting to take into account these specific drinking motives to develop more acceptable prevention messages, closer to the concerns of young exchange students (see for example the "Drinking. Do it properly" campaign in Australia, which could be adapted to promote wise drinking while simultaneously avoiding overpraising drinking). RP could also propose alternative non-drinking activities and events to promote socializing and to diversify the sources of interests. Beyond supplying information about the consequences of alcohol consumption, RP could also constitute a program offering entertaining or cultural alternatives to obtain the positive outcomes sought by students, without consuming alcohol.

Observation n°4 = 4567 participants completed the second phase of the survey, corresponding to 44.4% of the total sample.

This respectable percentage of participation suggests a real interest in this survey and in the issue of excessive alcohol consumption from European students.

Observation n°5 = The comparison of alcohol consumption between phase 1 and 2 revealed a global decrease of consumption in both exchange and local students. However, differences between the two groups were still present in phase 2, with exchange students drinking more often and a larger quantity of alcohol than local students.

The global decrease of consumption observed between phase 1 and 2 could be due to the period of data collection. The first phase was carried out at the beginning of the academic year (i.e. between September and November), while the second phase corresponds to the second semester,

social networks (Facebook, Twitter, ...) should be planned and regular reminders should be posted in national and/or regional platforms.

Adaptation for each academic calendar as a function of country should be offered and consequently, an early opening (mid-august) of the questionnaire should be considered. Moreover, the planning of two launch phases (i.e. 1st and 2nd semester) could help to increase the number of participants.

Observation n°2 = Weak participation rates for some countries.

Recommendation = Encouraging each country by fixing a quota of participants per country for local and exchange students, which would help to increase motivation for the questionnaire's distribution and to obtain representative results for all European countries.

closer to the final exam period. Fluctuations in alcohol consumption were frequently observed in students as a function of the academic calendar and could therefore explain the reduction in alcohol consumption observed in the sample.

Recommendation = Changing the timing of the different phases of data collection.

As one goal of the survey is to evaluate the impact of exchange stay on alcohol consumption, it could be interesting to obtain data at different moments of the exchange stay, e.g. before, during and after the exchange stay. Taking into account the exam periods could also be important because it could influence students' alcohol consumption.

Observation n°6 = In the total sample, 1545 students had attended a RP event. Globally the RP program was well perceived and seen to be a useful prevention program providing (1) information on the negative consequences of excessive alcohol consumption, (2) tools to control consumption and (3) tips to modify drinking behaviour (e.g. drinking more water during party). However, in the students' opinion, the program did not help to reduce their alcohol consumption in general or during the party. This last result was confirmed by the direct comparison of effective alcohol consumption of students who had participated and those who had not participated in a RP event, as no difference was observed between the two groups. Together, these results suggest that RP reached two of its principal objectives, namely harm reduction and raising awareness, but not the third one (reducing effective alcohol consumption).

Recommendation = Adapting the RP aims.

The RP program should be refocused on the two main goals of the program (i.e. "raising awareness" and "harm reduction") and the objective of actual reduction of excessive alcohol consumption among students should be abandoned as it appears impossible to achieve within the framework of this program.

- ## Implementation of the survey

Observation n°1 = Distribution of the survey was not optimal.

Only a few answers were collected at the beginning of the launch period; the majority of answers were obtained at the end of the period (i.e. November) and therefore did not correspond to the real beginning of the exchange stay. This led to a loss of time and efficiency.

The first phase of the questionnaire was available only at the beginning of the first semester. Students whose exchange stay was in the second part of the year were not reached by our questionnaire.

Recommendation = Optimizing questionnaire distribution (coordination, communication, involvement of ESN and PR Affiliates).

Systematic contact and presentation of the questionnaire for each ESN section and/or university authority should be made before the launch of the questionnaire. Advertising campaigns on