













# Suggest the Ageven Tool to prevent alcohol and tobacco consumption in adolescence. First results in a experimentation conducted in the Korea French School

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# **Summary**

Suggest the Ageven Tool to prevent alcohol and tobacco consumption in adolescence. Tool tested in French School in Korea

The prevention program of alcohol use must, therefore, focus on the adolescent peer group's steerability. It should reduce this steerability by developing the adolescent ability to resist the peer pressure. That it appeals to youth about the peers' influence, persuasion strategies and loss of autonomous from peers' external influence by an objective analysis. This reasoning is based on the quest for expensive autonomy in adolescence. It instils the idea that autonomy can be threatened by group dynamics.

#### **KEY WORDS**

AGEVEN SHEET; PREVENTION; PSYCHOACTIVES SUBSTANCES, ADOLESENCE; "SELF-REFLECTION";

#### **Introduction:**

In front of the growing rate of tobacco and alcohol use among adolescents from 1990s, these substances became a recognized social problem in South Korea<sup>1</sup> during this period (Shin & Delva, 2004)<sup>2</sup>. The request for the effective prevention tools by the Korean Government and medical specialists of the field is strong. The purpose is to prevent precocity addiction to tobacco, cancer, cardiovascular disease caused by smoking and health problems (ethylic coma, etc.) and public safety (criminal behaviour, public drunkenness, violence, etc.) caused by drunkenness (vodka, beer or sojù). Excessive alcohol is a practice widely circulated in youth.

However, these psychoactive substances continue to spread among young people. Peer's influence on consumption is one of the main factors that explain substances psychoactive consumption during adolescence. To reduce the peer influence on teenagers' consumption, this article presents a prevention method proposal: the "self-reflection" and its Ageven sheet tool. This proposal encourages adolescents to consider objectively the situation they live so that they become aware of the friends' role in their behaviours and their choices. The aim is to mobilize individual reflection on the pressure effects and the peers' influence on their psychoactive substances consumption. The method wants to sensitize them to the peers' group influence and the loss of autonomy linked to the group dynamics. Indeed, the friends' social influence has a consistent effect in test and the psychoactive substances consumption in adolescence. However, objectifying their current situation requires a

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<sup>&</sup>lt;sup>1</sup>http://www.researchgate.net/profile/Jun Hong2/publication/227414038 Alcohol and tobacco use among South

<sup>&</sup>lt;sup>2</sup>Shin, D. & Delva, J. (2004). A study of the relationship between parental alcohol problems and alcohol use among adolescent females in Republic of Korea. *J Prev Med Public Health*, *37*, 232-237.

deconstruction process in which the youth introduces an objective and critical distance with the situation and experience that they live. During this process, teenagers need to put distances from the past but also from the present situation through the removal of emotional states and the subjective experiences of being able to project into the future. To promote this process, we use a special support: the Ageven sheet. No study has mobilised this tool for prevention approach and none has evaluated its effectiveness among high school students. This article is an opportunity to assess the effectiveness of this tool. This methodological proposal is the starting point to provoke a reflection to use this tool for preventive purposes.

This article focuses on this prevention method purpose. It present results of an experiment carried out in the Seoul French High school in Korea in May 2015. This article shows to what extent and in what procedure, this method purpose could be effectiveness among Korean teenagers? That means how the self-reflection and its Ageven tool could prevent the development of a products addiction and initiate or consolidate the approach of stopping or reduction of the consumption? How a prevention program targeting the friends' influence can act on both the inexperienced and consumers people? Through this study, the purpose of this article wants to show the interest to lead program prevention in scholar context and to consider the interest of the program that sensitive adolescents to peer's influence on risk taken.

#### 1. Contextualisation

Many measures were put in place: the law prohibits underage drinking (under 18 years old). And there are Policies and measures to control and restrict the hours for sales alcohol or current alcohol tax system. The sojù was also the subject of important prevention

campaigns against violence due to excessive consumption of this product since 2012. It is the same for cigarette consumption. Smoking is the social norm for adult men in Korea (KASH, 2012)<sup>3</sup>. According to the Korea national Health & Nutrition Examination Survey (2010) the smoking rate among adult men (plus 19 years old) was 80% in 1980. This rate decreases to 48.3% in 2010 (against 6,3% for women adults). There are non-smoking Campaigns (Exclusion of smoking scenes from TV and movies, anti-smoking activities by Mass Media since 2002 (broadcasts on the dangers of smoking), prohibiting of selling cigarettes to minors under 19 years since 1995. Anti-smoking activities and the rising price of cigarettes were organized in universities campuses (which are addressed to smokers and non-smokers). And among high school student, the KASH (Korean Association on Smoking or Health) sets up regularly smoking cessation program to reduce and prevent tobacco addiction development and to help the consumer stop their consumption. This program speaks to students, parents and their children: « KASH provides evidence-based educational programs for smoking cessation as well as smoking prevention for adolescents in different age groups (.) This 12-week program provides educational sessions and individual counselling services for both students and their parents » (KASH, 2012: p7). The purpose is to develop the self-efficiency; to give advice to compensate the urge of smoking of program is based on self-awareness, to speak about reason that led to smoke, friend influence, to remind health risks etc. The interventions take form of educational game, collective exchange and discussion around friends' social influence, consumption motivations. The goal is to prevent the psychoactive substances use, addiction and risk taken.

<sup>&</sup>lt;sup>3</sup> Korean Association on Smoking and Health, 2012. Tobacco Free World, Tobacco Free Korea. KASH 15p.

However, despite the measures in Korea, cigarette continues to spread among teenagers. The smoking rate among the youth has been gradually on the rise from 1980 to 2008, especially among the boys in junior high school (KASH, 2009).

And although these measure to regulate alcohol consumption, adolescents have more and more access to hard liquor. Among adolescents aged thirteen and over, 4.3% have reported alcohol as users in 1998, and this rate increased to 10.1% in 2005 (Sung Hong et al, 2011)<sup>4</sup>. Despite the underage drinking (under 19 years old) prohibited by law, adolescents have access to hard liquor. According to the Korean Adolescent Health Behaviour Online Survey (2011), the first drinking experience was 13 years old. And, The star products Sojù and Homaek (a mixture of sojù and beer) in Korea are widely circulated in youth from 16 to 18 years. Despite they drink less than adults, they engage more in risky drinking (Asante, Chun, Yun & Newell: 2014<sup>5</sup>).

To explain this behaviour, we have to present the context of this country. Korea has a high level of alcohol consumption. The World Health Statistics 2013 reported that alcohol consumption by Korean adults older than 15 years or equal to this age is 14.8 liters, twice as much as the world median of 6 litters. These results highlight that Policies and measures to control and restrict alcohol sales are ineffective in Korea (Seo, Seonwha et al., 2014)<sup>6</sup>. The high rate is due to a drinking culture centred on excessive alcohol. Drinking alcohol permits to create a social link. It allows developing relationships with friends, family members or co-workers. Drinking alcohol is used to bond with friends, family, or

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<sup>&</sup>lt;sup>4</sup> Jun Sung Hong, Na Youn Lee, Andrew Grogan-Kaylor, Hui Huang, (2011) Alcohol and tobacco use among South Korean adolescents: An ecological review of the literature, *Children and Youth Services Review*, Volume 33, Issue 7, July, Pages 1120-1126, ISSN 0190-7409, http://dx.doi.org/10.1016/j.childyouth.2011.02.004. (http://www.sciencedirect.com/science/article/pii/S0190740911000405)

<sup>&</sup>lt;sup>5</sup>Asante L.S, Chun S., Yun M.,Newell M. (2014). « Social supply of alcohol to Korean high school students: a cross-sectional International Alcohol Control Study », BMJ Open. 2014; 4(1). doi: 10.1136/bmjopen-2013-003462 <sup>6</sup>Seonwha S., Chun S., Newell M. & Yun M. (2014). « Korean public opinion on alcohol control policy: A cross-sectional International Alcohol Control study ». Health Policy, Vol. 119, Issue 1, 33 – 43

colleagues. This social influence is even stronger in Korea because relationships are guided by the confusionists' values that reinforce the importance of group awareness and interdependent sense of self over individual concerns. (Sung Hong et al., 2012: p1122).

A question arises from this observation: what factors are associated to the substances psychoactive consumption among Korean adolescents?

# 1.1 Family environments and parental behaviour: the first source of cigarette and alcohol consumption in adolescence.

A body of research shows that family or parental behaviour can be a predictor factor of substance consumption Risk taken is associated with parental behaviours as conflictual parental relation, bad communication (Jang, Cho & Yoo, 2011<sup>7</sup>; Ahn & Lee, 2009<sup>8</sup>; Butters, 2002<sup>9</sup>, Brown et al. (1987)<sup>10</sup>). Also, in this country where alcohol is a cultural norms family is the first place for leaning and the place where children begin building the relation with alcohol. It is the place when children "children may learn what they believe to be acceptable behaviour regarding alcohol use" (Ahn Jang, 2011: p128). Family (parents, grand parents) alcohol use can orientate, influence adolescent drinking behaviour (Kim, Kwak, & Yun 2010<sup>11</sup>; Rohner & Pettegrel, 1985<sup>12</sup>). This alcohol consumer environment

<sup>&</sup>lt;sup>7</sup> Jan S.A., Cho N. & Yoo J. (2011). Understanding the antecedents of Korean high school students' drinking refusal self-efficacy: parental influence, peer influence, and behavior. *Glob J Health Sci*.Dec 29;4(1):10-21. doi: 10.5539/gjhs.v4n1p10.

<sup>&</sup>lt;sup>8</sup> Ahn, H. Y., & Lee, J. H. (2009). Survey on adolescents knowledge and attitudes as related to temptation toward cigarette smoking. *Journal of Korean Academy of Child Health Nursing*, 15, 367–374.

<sup>&</sup>lt;sup>9</sup> Butters, J. E., (2002). Family stressors and adolescent cannabis use: Pathway to problem use. *Journal of Adolescence*, 25, 645-654.

<sup>&</sup>lt;sup>10</sup> Brown, Sandra A.; Creamer, Vicki A.; Stetson, Barbara A (1987). Adolescent alcohol expectancies in relation to personal and parental drinking patterns. *Journal of Abnormal Psychology*, Vol 96(2), May 1987, 117-121. http://dx.doi.org/10.1037/0021-843X.96.2.117

<sup>&</sup>lt;sup>11</sup> Kim, E., Kwak, D.–. H., & Yun, M. (2010). Investigating the effects of peer association and parental influence on adolescent substance use: *A study of adolescents in South Korea. Journal of Criminal Justice*. doi:10.1016/j.jcrimjus.2009.11.003.

determines furthermore the peer selection. This means that adolescents who already drink alcohol or smoke cigarette may select friend with other teenagers with the same behaviour (Bandura & Enett, 1994). Besides family drinking environment and parental behaviour, friends' influence is associated with excessive alcohol consumption in adolescence.

# 1.2 The friends influence in drinking problems.

Despite of family is the first place when representation towards alcohol is built, most of researches show also that friends take an important place in development of psychoactive substances uses in adolescence. Friends exert pressure in multiple effects like smoking or drinking alcohol Borsari & Carey, 2001). The peer pressure is one of risk factors associated with alcohol consumption and drinking problems (Kim & Cho, 2012<sup>13</sup>). The peers' influence is based on the need to be in the relationship between youth. Therefore, it turns around the confidence that youth have in their friends. The peers' influence is also part of a group dynamic. It is exercised through the taunts, critics (Evans & Raines, 1990<sup>14</sup>). The consumption responds to specific objectives: to be close friends, to be in the friends' circle or to create friendship (Asante, Chun, Yun & Newell: 2014<sup>15</sup>). The need for a group member, a peers' recognition, and to exist in the friends' eyes are significant indicators at this age. The peers' influence and the need for membership are in competition. All these

<sup>&</sup>lt;sup>12</sup> Rohner, R.P., & Pettengill, S.M. (1985). Perceived parental acceptance-rejection and parental control among Korean adolescents. Child Development, 56, 524-528.

<sup>&</sup>lt;sup>13</sup> Kim GE, Cho NA (2012), "The effects of drinking environment on the degree of youth drinking-moderating effects on the interaction of parents and adolescents". Korean J Youth Stud; 19:45–6

<sup>&</sup>lt;sup>14</sup> Evans, R. I., & Raines, B. E. (1990). Applying a social psychological model across health promotion interventions. In J. Edwards, R. S. Tindale, L. Heath, & E. J. Posavac (Eds.), Social influence processes and prevention (pp. 143-158). New York: Plenum.

<sup>&</sup>lt;sup>15</sup> Asante L.S, Chun S., Yun M., Newell M. (2014). « Social supply of alcohol to Korean high school students: a cross-sectional International Alcohol Control Study », BMJ Open. 2014; 4(1). doi: 10.1136/bmjopen-2013-003462

dimensions are indicators of vulnerability for this population. This step may contribute to destabilize the individuals according to their stories and their family experiences.

In the light of the literature, we can see the interest to develop the resist ability against the wish "to do as friends" and against the pressure from peer group consumers of psychoactive substances. The prevention actions could act at the risk of influence level because adolescence presents a real vulnerability. The issue is important, particularly in stimulating their capacity to resist peer pressure.

To reduce the peer influence in the psychoactive substance use in youth, we propose a singular prevention method. This method is called "Self-reflection". We will present it in the second parts.

# 2. Theorical background

Many programs are implemented to develop psychosocial skills to support the youth resistance against the peers' social influence.

The approach we are proposing is based on the "Social influence" model developed by Mc Guire (1964<sup>16</sup>). This model aims preventing the smoking in youth. Anchored on the social inoculation theory, the "Social influence" approach proposes reducing the influence effects coming from the close friends while developing ability to withstand pressure and risk behaviour in the youth (Evan 1984<sup>17</sup>). To develop his theory, Mc Guire draws an analogy in the field of health. The starting point of this theory concerns the immune system mechanisms of the body to a virus. In fact, Mc Guire develops the idea that it is possible to

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<sup>&</sup>lt;sup>16</sup> McGuire, W. J. (1964) Inducing resistance to persuasion, In L. Berkowitz (ed.) *Advances in experimental social psychology* (Volume 1, pp. 192-229), New York: McGraw-Hill

<sup>17</sup> Evans R. I. (1984). A social inequalities attataged to 14 (1984).

<sup>&</sup>lt;sup>17</sup> Evans, R. I. (1984). A social inoculation strategy to deter smoking in adolescents. In J. D. Matarazzo, S. M. Weiss, J. A. Herd, N. E. Miller, & S. M. Weiss (Eds.), Behavioral health: A handbook of health enhancement and disease prevention (pp. 765-774). New York: *Wiley* 

stimulate the person resistance against any attempts by persuasion and influence. To do this, this approach offers a "refutation" defence and provides to the individuals counter arguments that they can use to combat the individuals who are trying to persuade or influence them.

Moreover, the suggested approach is similar to the "Social inoculation" approach. Indeed, it tries to immunize or to arm youth against social influence by peer consumers. However, it invites the public in a self-reflection process and analysis of its own situation. It would be a type of "Social inoculation" by self-reflection whose objective would be to strengthen in them the motivation to resist the peers and their influence effects by the awareness of their vulnerability. The second part describes this approach.

# 2. 1 Proposal for a method of prevention

# 2.1.1 The "self-reflection" method

The method proposal wishes to focus on the dynamics of the peer group's social pressure from the peer group to consume the products. It encourages teenagers to learn self-responsibility for oneself. The method is based on two factors: the awareness of the social influence from the network friendly and the risk of loss of autonomy. The argument of the freedom loss, and autonomy linked to the group dynamic may lead adolescents to resist the attempt from outside influences. This may affect its autonomy or crush its capabilities to act independently (in outside interference from others). This reasoning instils the idea that independence may be threatened by group dynamics. It could be a strong argument to encourage adolescents to combat the attempts from their friends' influence. This approach can be effective when the young can discern the peers' persuasion attempts and the effect of this influence on the choices that they have to make. It means that the resistance to the

peers' influence reinforces when adolescents recognize the influence strategies developed by their friends (development trust, teasing, collective incentives, enhancement of the products effects, underestimates of the health risks, etc.). To assist in this exercise, the suggested method invites participants in the critical analysis of their life course including their relationship to products. These aspects are joined on the "self-reflection" method.

This exercise implies that participants must operate at a distancing layout, a step back from their experiences, to realize a critical analysis of their own situation. The "self-reflection" highlights the capabilities of the public involvement to stimulate awareness of the peers' influence through their situation, and their experience. The objective is to push to an assumption of responsibility for their health for their future. This practice gives to youth the means to identify the influence and pressure to consume from friends. Indeed, this reasoning draws its essence from the concept that this location would be a trigger for resistance to this influence. In some way, it would arouse the desire of not to give into the product offerings, and to learn how to manage friends' subsequent solicitations.

In sum, the method proposal invites youth to build an objective analysis of the friends' influence in the relation with the substances. To achieve awareness of the friends' place in consumer choices, the suggested method appealed to "self-reflection". This interactive method centred on the group discussion, addresses participants on these dimensions (influence) by using their own experience and through an objective analysis. Indeed, it may be difficult for a young person to recognize that friends have influenced him or to identify objectively the friends' role in consumption. To help participants to make a deconstruction, to recognize influences, I use a singular tool: the Ageven sheet.

#### 2.1.2 Purpose of Ageven sheet

Created during the World Fertility Surveys in the 1970s to seize women's reproductive history, the "Ageven" sheet is a biographical data collection tool very often used by demographers to analyse the working life, the motherhood, fertility calendar, etc.

This sheet is presented in the form of a chronological grid on which time markers (the age, year, etc.) are included in rows and biographical dimensions selected for the survey in the columns (marital status, number of children, etc.).

According to Antoine et al. (1987)<sup>18</sup>, this method allows the investigator to assist the participant to replace in a time context the events experienced relative to each other and to locate them temporally in terms of age and calendar. This sheet is usually designed as a dating aid to complete correctly a questionnaire that is alone operated. However, we suggest exploiting it for preventive purposes in two work's axes. We will use this sheet as support accompanying the participants in the self-reflection process, on its relation to itself and its relation to others and to mark them to raise awareness of the peers' role in the products consumption.

For use in prevention, the Ageven Sheet modules are composed of eight thematic modules. Two are relative to participants' alcohol and tobacco consumption; how about friend consumption, and about parent's consumption. Other modules are about significant events associated with negative emotions (see the model of the Ageven in annex section).

The setting-up of self-reflection method and its Ageven tool in a prevention intervention in a scholar context takes the form of a workshop called "My story, me and others" workshop. This anonymous tool filling is easy. The participants complete each cell by using the

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<sup>&</sup>lt;sup>18</sup> Antoine Philipe, Bry Xavier, Diouf Pap Demba (1987), « La fiche 'AGEVEN', un outil pour la collecte des données rétrospectives. Techniques d'enquête » ; 13(2) : 173-181

keywords that reflect the living situation. To facilitate memorization, teenagers have to begin by providing recent informations (actual informations) and gradually back to the oldest periods. Concerning participants and friend course consumption, the Ageven sheet suggests a system of coloured stickers affixed to the cells where the labels will replace the answers that participants should note on the sheet. The stickers with different colours represent substances mode of consumption such as yellow stickers for a repeated type of use (one use by week) or red stickers for the daily consumption.

By scheduling different events and changes, the Ageven sheet should permit them to critically analyse the events sequence and objectively their own situation. This critical eye notably should allow them to become aware of the role of friends or family events in their consumption development. Therefore, this critical look may encourage them to consider an approach in order to stop or to reduce their consumption. Then, a collective discussion could be an opportunity to discuss the friends' contribution in their consumption course, persuasion strategies put in place by friends during the test and the products consumption. To assess the effectiveness and the impact of "My story, me and others" workshop including the Ageven tool, the participants responded to an evaluation questionnaire at the end of the intervention.

# 2.1.3 Problematic and hypothesis

Several questions animate this study: Does the Ageven sheet allow awareness of friends' social influence in the relation with the products? Does recognizing the friends' role in different stages of consumption is a strong argument to initiate an approach of stopping or reducing the consumption among users? Or is it a help to consolidate the approach of stopping or reduction? Does it motivate the inexperienced to not consume the products? To

determine its effectiveness, the study verifies the following hypothesis:

- Hypothesis 1: Engage young audience about the friends' influence on consumption would be a stronger argument, and more convincing that providing them information about the risks (health, social, legal) associated with the products consumption.
- Hypothesis 2: The Ageven sheet would be for consumers a tool, which promotes awareness of the friends' social influence in the psychoactive substances consumption approach.
- Hypothesis 3: Awareness of the friends' influence among consumers can lead to a reduction or stopping the approach of the consumption.
- Hypothesis 4: The proposed method would have a positive impact on youth at the beginning of consumption (occasional consumers who have not developed a daily consumption) and those who consider an approach to stop the consumption before the intervention. It would contribute to adverse intentions to consume the products. Awareness would also strengthen the intention to stop or reduce of the youth of those who previously envisaged this approach.
- Hypothesis 5: All of the intervention would also have a positive impact on nonconsumers. It would reinforce the desire to not consume products.

To verify the effectiveness of this method, we conducted an experiment with youth students during a school prevention intervention. The second part presents the results of the experimentation of this method among high school students in Korea.

# 3. Methodology

# 3.1 Population

To study the effectiveness of "Story, me and other" workshop, we conducted an experiment among all students of French high school in Seoul. This school is an educational institution that is entirely approved by the French National Ministry of Education. It welcomes expatriate French and Korean native students. We have chosen to study junior and senior student because it is during this age that French teenager develop psychoactive substances consumption (Spilka & Le Nézet, 2013<sup>19</sup>). To study all the high school level is useful for observing effectiveness among students at different school levels. This intervention was lead among consumers and non-consumers. This experiment allows knowing how these different profiles welcome this method.

#### 3.2 Process

Our intervention was lead among middle and high school students. All pupils and their parents were informed of my intervention. An official information letter form the director of the establishment had been given to them. The intervention was lead in the classroom during student's school life. It took two parts: one part is dedicated to the workshop in which we discussed with participants about the role of a friend in tobacco and alcohol consumption. This first session took 45-50 minutes. Before beginning the session, we have asked participants to write their opinion on tobacco and alcohol or word that they associate with these substances on post-it note that I have distributed to them. This question permits to know if their opinion has evolved during the session. To introduce the session by "My

<sup>&</sup>lt;sup>19</sup>Spilka, S., Le Nezet, O (2013). Alcool, tabac et cannabis durant les « années lycée ». *Tendance 89*, OFDT, p. 8. Link: http://www.ofdt.fr/ofdtdev/live/publi/tend/tend89.html

story, me and other" workshop, we have sought to know the reasons why a normal adolescent drinks alcohol, has drunkenness and smokes tobacco. Then, we have continued questioning about their friends consumption course and about their friends contribution. To support discussion, we asked the participant to fill in the Ageven sheet. We mentioned that the sheet is an innovative and experimental prevention tool. We specified that the Ageven sheet is an anonymous tool, which permits an understanding of their consumption course by comparing their own consumption course with those of their friends. This comparison permits to facilitate an awareness of friends' influence on substances consumption. After completing each cell, we have approached the role that the friends can play in the drugs consumption. Participants were asked to compare their substances course (consumption or non-consumption) with their loved ones (friends and relatives) to observe the similarities or differences. Then, they have to connect these courses with the biographical events (relationship quality with parents, feeling of proximity, big events). In the second part, we distributed a questionnaire to evaluate, measure the workshop effectiveness.

#### 3.3 Instrumentation to evaluate effectiveness of the AGEVEN tool

The aim of this questionnaire is to measure the level of the friend's influence awareness questionnaire and to assess the impact of this awareness in relation to the psychoactive substances. The filling took 5-7 minutes. The questionnaire contains three parts. The first parts are about tobacco, alcohol consumption or no consumption. The second part assesses the satisfaction of participants with "My story, me and others" workshop. In this part, we evaluate the workshop effects on awareness of the others' influence, on their choices and their behaviour. The third part measures the consequences of the workshop on their

attitudes concerning the psychoactive substances, on their current intentions to test substances, limit or stop the consumption.

The questionnaire ends by questioning the current opinion of the participants about the psycho actives substances. By comparing these responses to those given at the start of the session, we will know if the session has contributed or not to evolve their opinion. This study presents the data questionnaires results.

#### 3.4 Method of data analysis

We conducted a quantitative analysis to study the effectiveness of the Ageven tool. The data from this evaluation were collected by using Excel software. The exploitation of this data requires the construction of a variables code dictionary from the survey. This procedure is used to avoid entering incorrect, inconsistent information in the data. Once the seizure is completed, the data is exported to statistical software SPSS (Statistical package for the social sciences). This software allowed conducting statistical analyses of available data from the survey.

We used the traditional descriptive analysis tools for studying the characteristics of our sample such as age, smokers, non-smokers rate, and measuring friend's influence awareness with the Ageven tool. The bivariate analysis permits to study the relationship between awareness and current intentions. It also allows comparing the percentage of psychoactive substance opinion at the start and at the end of the intervention.

# 3.5 Ethical considerations

This survey raises ethical questions about respect and rights of youth participants. We applied the ethical principles of Research Ethics Committee to meet the challenges relating to consent, rights, and privacy of participants.

Before distrusting the questionnaire, we underlined the anonymous voluntary and not obligatory nature of the experiment. Indeed, they have the right to refuse or agree to participate in the study. We have mentioned answering honestly and that there is no right and wrong answer. We have, therefore, ensured that respondents have a complete understanding of the research object and of their participation consequences in the research process. We have explained the research object and mentioned that their data will be used for statistical purposes to assess quantitatively the intervention influences on future practice. We explained that the interest of their participation is to quantify the "My story, me and others" workshop effectiveness.

#### 4. Results

# 4.1 Description of the sample

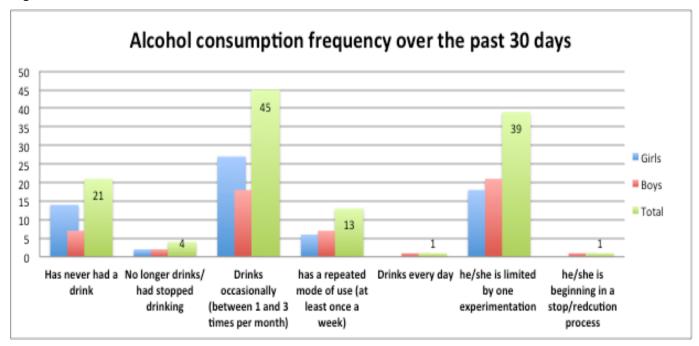
The sample is composed of 124 high and medium school students: 26 are in 4ème, 29 in 3ème, 22 in 2<sup>nd</sup>, 24 in 1ère and 23 are senior high school. There are 67 girls and 57 boys. The average age is 15.5 years old.

At the time of the experimentation, our population are more non-consumers. Among the participants, 45% (n=56) had never smoked tobacco, 17% (n=21) had never drunken alcohol and 54% (n=67) has never had drunkenness. There are more inexperienced girls than inexperienced boys: 57 % of girls (n=32) had never smoke tobacco against 42.9% (n=24) for boys. Concerning alcohol, this rate is respectively of 11.3% (n=14) for girls and 5.6% (n=7) for boys. Concerning drunkenness, this rate is respectively of 56.7% (n=38) for girls and 43.3% (n=29) for boys.

However, during their lifetime, the majority of participants experimented or consumed at least one of these substances (alcohol or tobacco). When we count the number of participants who limited to a test, who stopped their consumption and who developed actually a repeated (frequency of use with at least one to three time by week), occasional (frequency of use with at least one to three time by month) or regular (all days) mode of consumption, the sample is composed of 109 actual and former consumers (had stopped consumption or who had limited to an experimentation). Among these consumers: 68 are or were cigarettes consumers (35 are girls and 33 are boys), 103 are or were alcohol consumers (53 are girls and 50 are boys), and 57 have or had incidence of drunkenness (29 are girls and 28 are boys).

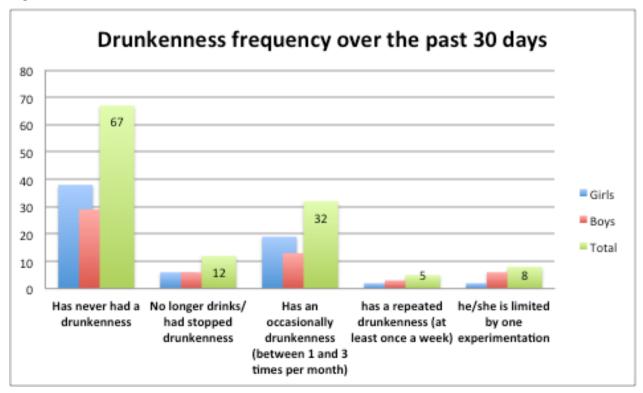
The students consume more alcohol than cigarette: only 16.9% has never experienced alcohol against 31.5% (n=39) who had limited themselves to one drink. After first use, they the students (36.3%) (n=45) tend to become occasional consumers (see Figure 1).

Figure 1



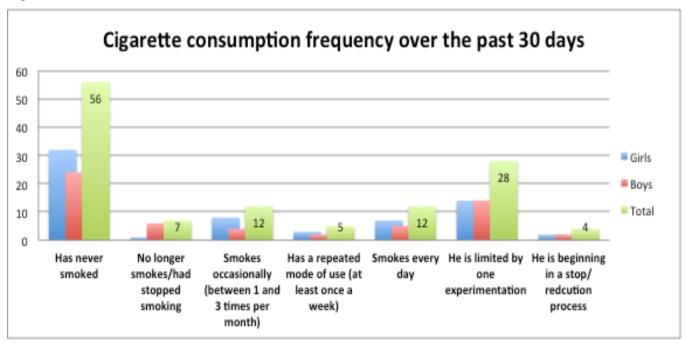
The same case is observed for the episodes of drunkenness. After a first drunkenness experimentation, 25.8% (n=32) of students developed occasional episodes of drunkenness. Only 9.7% (12) had stopped drunkenness (see Figure 2).

Figure 2



However, when they experienced tobacco, the students limited themselves often to this experimentation 22.6% (n=28). If they had continued, (9.7%, n=12) developed an occasional mode of consumption and 9.7% (n=12) a daily use (see Figure 3).

Figure 3



The majority of the inexperienced participants do not plan to experiment tobacco and alcohol later. Among the inexperienced (n= 78), 70.5% (n=55) do not want to try these substances, 29,4% (n=23) intent to try it. The whole intervention seems to play a part in this plan.

Table n°1 Distribution of participants who intent to try cigarette, cannabis and alcohol later

Non concerned (consumers)		N	0	Y	Total	
%	n	%	n	%	n	%
15,6	43	19,9	55	8,3	23	100

(No response: n=3)

When we questioned participants if the intervention contributes to not experimenting later, it appears that this intervention seems to explain the choice of some non-consumers.

Among the non-consumers (inexperienced and participants who limited to an experimentation) who responded to this question (n= 54), 55.5% (n=30) said that the intervention contribute "a little" or "a lot" to not experiment the substances later against 44.4% (n=24) said that the intervention does not explain why they do not want to try these substances.

Table 2 Intervention dissuades participants from trying cigarette, cannabis and alcohol

Non concerned (consumers)		N	0	Yes, a	little	Yes,	Total	
%	n	%	n	%	n	%	n	%
23,9	66	8,7	24	8	22	2,9	8	100

(No response: n=4)

For the consumers or non-consumers, the whole intervention brought convinced messages. 8% (n=22) said having been convinced by the intervention. None was "non convinced". If we compare the participant's interest in the three workshops, we observe that the first workshop has been "very convinced" for participants: 18.1% (n=50) said that they are "very convinced", and 18.5% (n=51) responded to be "convinced". For the "My story, me and other" workshop, the rate of participants who responded to be "very convinced" is 10.5% (n=29), and 19.6% said to be "convinced" against 8% (n=22) who said that they did not feel concerned by this workshop.

#### How has the intervention convinced the consumers?

The "My story, me and other" experimental workshop seem to be effectiveness among consumers. Among 109 consumers (who has limited to one experimentation or who developed a occasional repeated and regular mode of consumption): 65,1% (n=71) reported that the Ageven sheet encouraged or reinforced the idea to stop or reduce their

consumption, against 38 who responded in the negative. Among this profile, 29,3% (n=32) responded that the Ageven sheet has initiated this approach (against 20,1% (n=22) who responded in negative) and 35,7% (n=39) said that it strengthened it against 14,6% (n=16) who said "no". It means that to arise friend influence awareness seems to be the cause and seems to strengthen the stop or reduce approach. For participants who limited to a test, this means that the Ageven sheet reinforced the idea to not renew the consumption and to stay in the experimenter statue.

Table 3 "My story, me and other" and its Ageven tool cause the idea to stop and reduction approach

No		Yes, a	little	Yes,	Total	
%	n	%	n	%	n	%
40,7	22	40,7	22	18,5	10	100

Table 4 "My story, me and other" and its Ageven tool reinforces the stop and reduction approach

No		Yes, a	little	Yes,	Total	
%	n	%	n	%	n	%
29	16	45,4	25	25,9	14	100

# Does the Ageven sheet arise awareness?

Promote friends' influence awareness seems to be the first condition for the effectiveness of the method on the consumer. Indeed, when youth take note of this dimension from the reading of their life course, this workshop sends a message that convinced them. If we analyse the level of awareness about friend and parents influence and the level of "My story, me and other" conviction, an important result appears: when the Ageven sheet arises awareness about friends' influence on consumption and parents' influence on non-consumption, the workshop is convincing. Among participants who were very convinced by the workshop (n=29), 37.9% (n=11) said that the Ageven sheet has a lot favoured awareness about friends' influence. When a participant has a "little" awareness, they responded that they were convinced by the workshop. However, when they didn't yet know the friends' influence, they do not feel themselves concerned by the workshop: among participants who do not feel concerned (n=22), 13 responds that they did not learn anything form the Ageven sheet, against 2 participants who said that the Ageven sheet permits a lot the "awareness". The repartition seems similar with the variable of awareness of parents' influence on the non-consumption.

# How this awareness has an impact on current intention?

The awareness of friends' influence on consumption seems to be a convincing argument that reinforced the intention to stop, reduce and also encouraged an idea to stop or reduce the consumption among users. The more the awareness is high, the more the workshop is convincing. In contrary, when the Ageven sheet does not promote awareness friend influence because participants knew yet about it, the Ageven sheet does not have an effect on current intention to stop/reduce the consumption. Thus, it means to promote change in the intentions. The sheet must be a convincing argument and thereby cause awareness.

The results in tables 5 and 6 show that among the whole participants who wanted to reduce consumption or who have begun this process earlier (n=71), 60.5% (n=43) responded that

the Ageven sheet has a "little" and "a lot" contributed to friends influence awareness. However, this effect seems to be significantly (p<0.001) more effectively for reinforcing the intention to stop or reduce the consumption. In table 5, among participants who responded that the Ageven sheet reinforced a "little or "a lot" the process of reduction/stopping (n=39), 30.7% (n=12) said that the sheet has "a lot" allowed awareness of friends' influence, 30.7% (n=12) said "a little". However, among participants who responded that the sheet did not reinforce the stopping/reduction process (=16), 68% (n=11) said that they already knew about friends' influence on their course consumption.

Table n°5 To see the Ageven sheet reinforces the process of stopping/reduction process

	Non concerned		No	)	Yes, a little		Yes, a lot		Total	
	(non-									
	consumers)									
Ageven sheet										
promotes										
awareness of	0/		0/		0/		0/		0/	
friends'	%	n	%	n	%	n	%	n	%	n
influence in										
the										
consumption										
No concerned	23,5	16	0	0	0	0	0	0	13	16
(no										
consumers)										
No	10,3	7	12,5	2	20	5	14,3	2	13	16
Yes, a little	13,2	9	6,3	1	20	5	50	7	17,9	22
Yes, a lot	20,6	14	12,5	2	28	7	35,7	5	22,8	28
I already	32,4	22	68,8	11	32	8	0	0	33,3	41
know that										
Total	100	68	100	16	100	25	100	14	100	123

Khi-deux\* test for the table 2

Value ddl Sign. 37,390 12 0,000

\**p* < 0,001

We can see the same trend for the "intention of reduction/stopping consumption" variable in the table 6. However, theses results are non-significant,

Table n°6: To see the Ageven sheet encourages the idea to stop/reduce consumption.

	Non concerned (non- consumers)		No		Yes, a little		Yes, a lot		Total	
Ageven sheet promotes awareness of friends' influence in the consumption	%	n	%	n	%	n	%	n	%	n
No concerned (no consumers)	23,2	16	0%	0	0	0	0	0	13	16
No	10,1	7	13,6	3	22,7	5	10	1	13	16
Yes, a little	14,5	10	13,6	3	27,3	6	30	3	17,9	22
Yes, a lot	20,3	14	18,2	4	27,3	6	40	4	22,8	28
I already know that	31,9	22	54,5	12	22,7	5	20	2	33,3	41
Total	100	69	100	22	100	22	100	10	100	123

Khi-deux\* test for the table 2

Value ddl Sign. 23,380 12 0,025 \*p < 0,001

Theses non-significant results are due to the low number in cells. However, when we observe the distribution in each cell in the table 6, to promote friends social influence awareness could be arguments to promote change in intentions. Among participants who

responded that the Ageven sheet is the cause of their current stopping/reduction intention (n=32), 31.2% (n=10) said that the sheet raised "a lot" friend influence awareness, 28.1% (n=9) responded "a little", 21.8% (n=7) had already known and 18.7% (n=6) did not awareness. In contrary, when the workshop did not promote awareness, they do not have effect on current intention: among students who responded that the Ageven sheet is not the cause of their current stopping/reduction intention (n=22), 54.5% (n=12) said that they already knew that friend has influenced their consumption course, 13.6% (n=3) said that the sheet did not allow awareness, 18.2% (n=4) responded that the sheet has "a lot" favoured awareness and 13.6% (n=3) said "a little".

Theses results show two interesting ideas. To promote awareness seems to be the first condition for the effectiveness of the method on youth. Moreover, to promote change in intentions, or to reinforce the stop and reduction approach, the Ageven sheet must be a convincing argument and thereby cause awareness. The force of this tool impact in the intentions expressed by the participants seems to be proportional to the awareness degree of the friends' influence in their relations to the products. The more the Ageven tool promotes awareness, the more the argument from the speaker appears to them very persuasive. And this compelling speech will constitute an argument to stop or reduce the consumption. Therefore, these results highlight the interest to engage the reader to a good use of the Ageven tool to enhance and optimize its effectiveness among youth.

#### 5. Discussion

To promote behavioural change, the method offers to arouse favourable intentions for health, so to initiate or reinforce idea to stop consumption among consumers. For this, the challenge lies in its ability to provide a convincing argument among youth. Educate youth about the friends' role in their use can be a method to boost favourable changes to health. This action is similar with a previous method suggested by Moreira, Smith & Foxcroft (2009)<sup>20</sup>. These authors propose "personalized feedback" in which a group of participants mutually compare their consumption course. The objective is to change the often erroneous and exaggerated ideas that they have about the alcohol consumption course of their friends. But this awareness can only be effective when youth realize the role played by their friends in their consumption course. Our approach is similar to the "Social inoculation" approach developed by Evan and Co. Indeed, we try to arm youth against social influence from peer consumers. However, the originality of the proposal method it is to invite the public in a self-reflection process and analysis of its own situation with a singular tool: the Ageven sheet to raise awareness about the friend's influence in consumption among youth.

#### 6. Conclusion

Identify the friends' influence seems to be an argument to prevent addictions. Moreover, to sensitive consumer to friends' influence on their consumption course can be a strong argument for reinforcing their approach of stopping/reducing the substances consummation. This observation highlights the interest for the professional in charge of prevention to use this tool in devices to accompany the steps to stop or reduce the

<sup>&</sup>lt;sup>20</sup> Moreira MT, Smith LA & Foxcroft D (2009). Social norms interventions to reduce alcohol misuse in University or College students. *Cochrane Database of Systematic Reviews, Issue* 3. Art. No.: CD006748. DOI: 10.1002/14651858.CD006748.pub2.

consumption. However, the low numbers in cells require limiting the scope of my comments. Firstly, the number of consumers is low in comparison with the national rate. This low consumer rate makes difficult a statistical evaluation of this proposal method effect on consumers. Secondly, it is a study based on declarative data: there may be some over or under estimate. The condition of this experimentation (in context school) could make difficult psychoactive substances declaration by the students. This can explain the low rate of tobacco and alcohol consumption. The under-estimate could be explained by the fact that students prefer not to declare tobacco consumption because they were afraid that the classmates relate it to their parents or to their surroundings. They do not want that they parents discover they smoke because this practice is prohibited.

This study shows the importance of making prevention among teenagers to prevent stimulate and reinforce idea to stop or reduce cigarette, alcohol consumption and drunkenness. This method could be lead among Korean teenagers in particular to prevent drunkenness experience during adolescence. This study shows that identifying the friends' influence could be an argument to stimulate the intention to stop or reduce the consumption. This approach could develop reflection on their own experience, situation in order to sensitive them to friends' influence in risk taken. To study the conditions of this method application, we need to conduct this experimentation among a large sample and more precisely among Korean high school.

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