

# Information as a component of prevention: Is it worth it?

## Evaluation of a school-based project on the prevention of psychoactive substances and addictive behaviours

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### BACKGROUND

The informative component of prevention requires the provision of scientifically grounded information on psychoactive substances and addictive behaviours.

To improve informative component a school-based intervention project, focused on tobacco and alcohol use prevention, was developed in the municipalities of Amadora and Sintra, district of Lisbon, Portugal. This project is promoted by a partnership between the Division For the Intervention on Addictive Behaviours (DICAD) –West Lisbon CRI - Prevention Team, ACES School-Health Teams and a number of Public Schools. It is being applied as continuous intervention associated with other levels and components of prevention.

### OBJECTIVES

- Increase knowledge and risk perception about addictive behaviours;
- Increase negative and decrease positive expectations about psychoactive substance use.
- Strengthen the partnership between health structures that have responsibility for addiction prevention in schools and school community.

### IMPLEMENTATION: GAME-DEVELOPMENT

The strategy uses a quiz game named "Who Wants To Be in Charge" (WWTBC), adapted from the game "Who wants to be a millionaire". This game was built in a multicomponent intervention in the school context of Sintra, which aimed to explore the informative component with the participation and co-construction of the students. With students and class delegates, a brainstorming was done to arrive at the model and name of the game "Who wants to be in charge". The structure of the game allows to explore different types of psychoactive substances and can focus on specific ones.

### METHOD

- In selected schools, a group of students for each cycle is asked to place doubts concerning addictive behaviours and psychoactive substances. The most frequent questions are selected and the game items are created accordingly. The result is a different quiz for each school. Different questions, but the same process.
- Training sessions are carried out with teachers and school staff to test the game, inform about the issues addressed and about the dynamics of the debate that it is intended to promote.
- During school classes, a quiz session is moderated by the class teacher, for 50' to 90'. The discussion derives from the contributions of the group. A winning group emerges by class and an inter-tournament between class winners is done, to conclude the competition..
- The outcome evaluation protocol consists in a pre and post-intervention questionnaire, adapted to each school, analysing the knowledge (questions derived from the game's questions) and risk perception variation in both municipalities and in Sintra expectations about the use of psychoactive substance were also analysed .
- The sample targeted by this intervention involved a total of 2.319 students, of 2<sup>nd</sup> and 3<sup>rd</sup> cycle of both municipalities Amadora (7 schools – 2017/2018) and Sintra (6 schools 2016/2017). For these analysis 1.571 questionnaires were validated, with a retention rate of 68%.

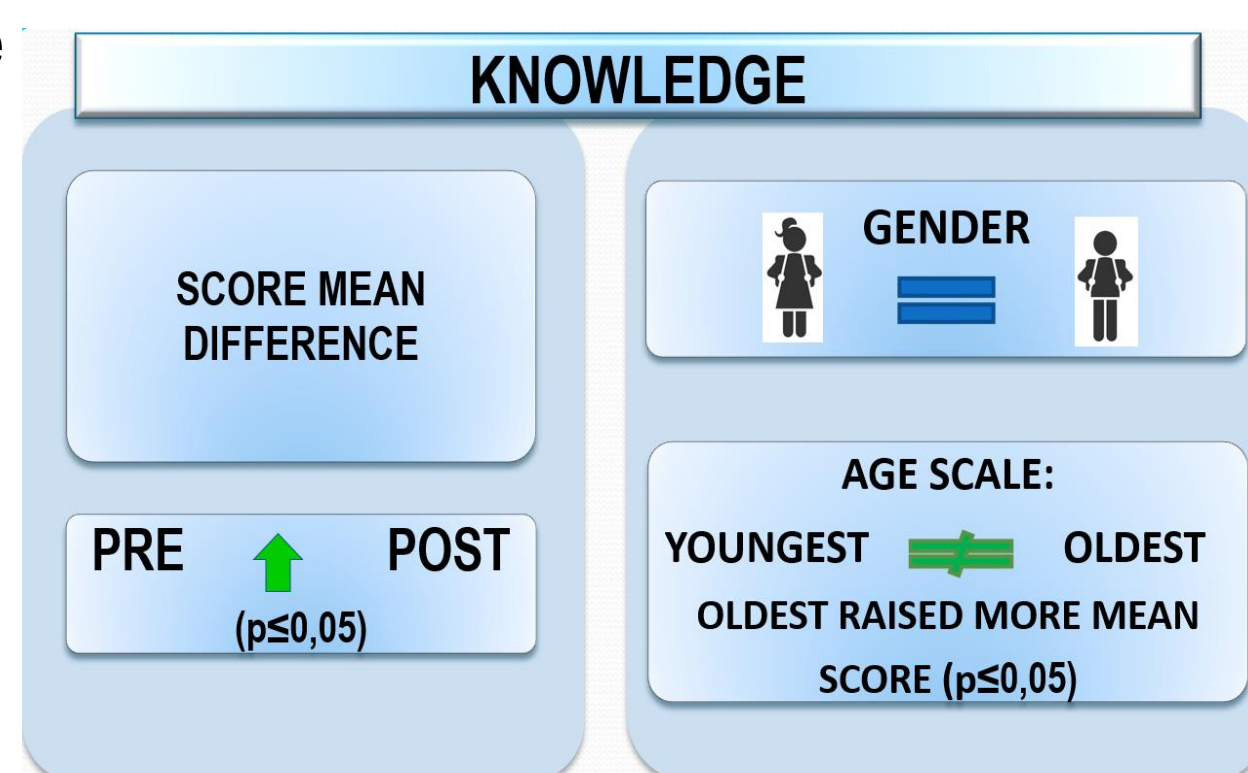
OUTCOME ANALYSIS - SAMPLE		N.º
STUDENTS TOTAL		1.571
GENDER	Female	798
	Male	770
MEAN AGE	Sintra	12,7
	Amadora	12,7
MUNICIPALITY	Amadora	337
	Sintra	1.234
SCHOOL CYCLE	Second Cycle	467
	Third Cycle	1.104

### RESULTS

#### KNOWLEDGE – BY GENDER AND AGE SCALE

The knowledge test was based in a binary scale - true or false – with 6 items in Sintra and 10 items in Amadora. The students showed a high medium knowledge about psychoactive substances right in the pre intervention, but even so the average of correct answers in post intervention increased, with statistical significance.

In terms of gender, both male and female increased mean score of correct answers, with statistical significance and there are no statistically significant differences between genders. Regarding age scale, both youngest and oldest in each school cycle increased mean score of correct answers, with statistical significance and there are statistically significant differences between ages. The oldest increased more the mean score of correct answers in post evaluation.

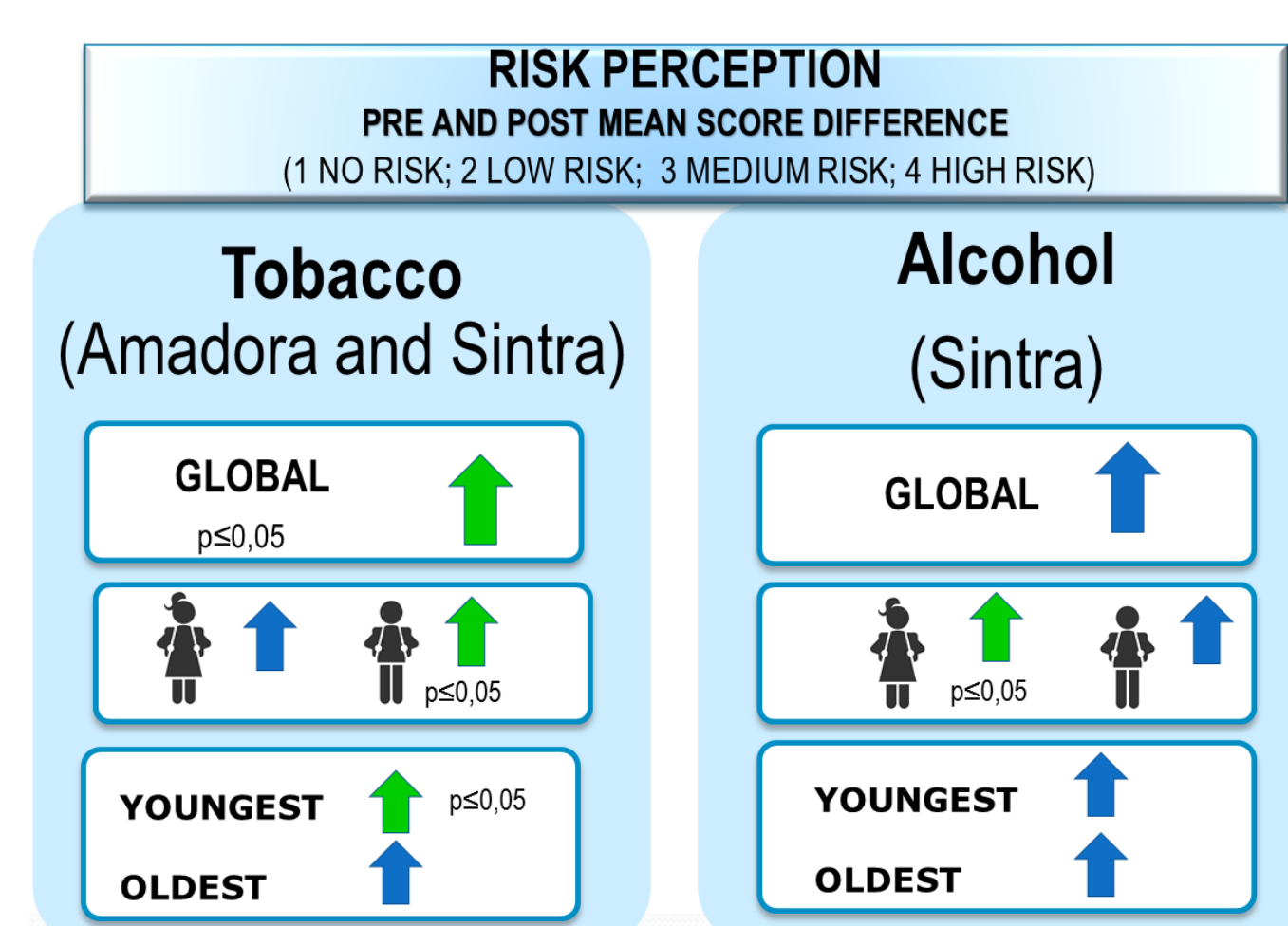


#### RISK PERCEPTION – BY GENDER AND AGE SCALE

Risk perception scale analysed – Tobacco (Amadora and Sintra), Alcohol (Sintra) and Cannabis (Sintra)- and is rated in a scale of 4 points. After the intervention, it was expected an increase of risk perception.

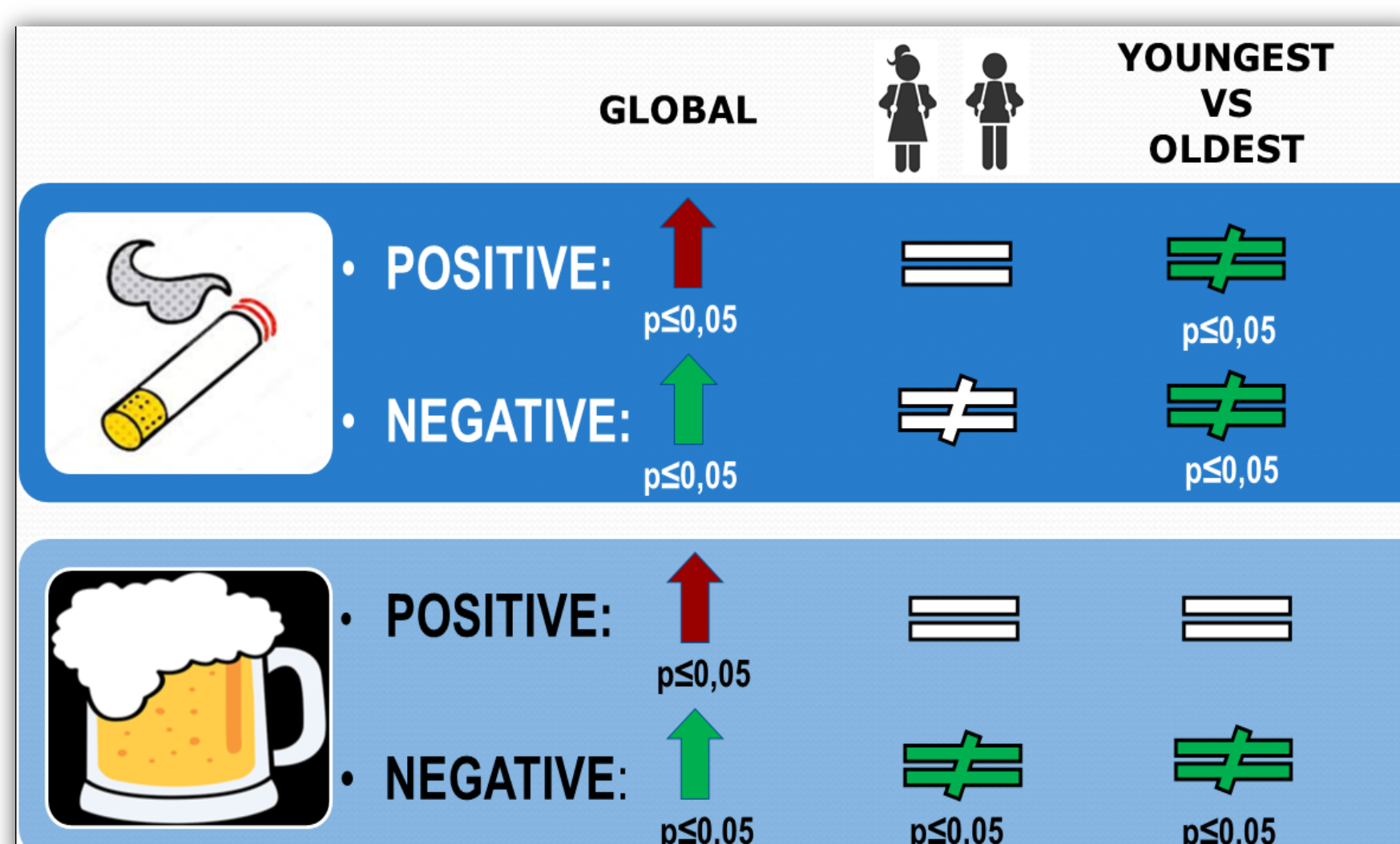
**Tobacco:** globally risk perception raised with statistical significance. In terms of gender, both male and female increased mean score, but male have higher score, with statistical significance. Regarding age scale, both youngest and oldest in each school cycle increased mean score, but youngest have higher score with statistical significance

**Alcohol:** globally risk perception raised but with no statistical significance. In terms of gender, both male and female increased mean score, but female have higher score with statistical significance. Regarding age scale, both youngest and oldest in each school cycle increased mean score, but with no statistical significance;



#### NEGATIVE AND POSITIVE EXPECTATIONS – BY GENDER AND AGE SCALE

The analysis was based in 13 items – 2 factors – positive expectations (7 items) and negative expectations (6 items), rating in a scale of 4 points (1 impossible and 4 very possible). Lower positive expectations and higher negative expectations are expected after intervention.



**Tobacco:** The intervention increased mean score positive expectations, what was not expected, but on the other hand raised negative expectations has expected, both with statistically significant differences. There are no differences at gender level, both raised mean score at two levels of expectations, although mean score is higher in female negative expectations. There are statistically significant differences between youngest and oldest within positive (youngest have higher mean score than oldest) and negative expectations (youngest and oldest raise mean score, but higher raise in the oldest ones)

**Alcohol:** The intervention increased mean score positive expectations, what was not expected, but on the other hand raised negative expectations has expected, both with statistically significant differences. There are no differences at gender level within positive expectations, but within negative expectations statistically significant differences exist, both raised mean score at two levels of expectations, although mean score is higher in female negative expectations. There are no differences between youngest and oldest within positive expectations, but within negative expectations there is a statistically significant difference - youngest and oldest raise mean score, but higher raise was in the youngest ones).

### CONCLUSIONS AND FUTURE RECOMENDATIONS

Students have a high degree of knowledge about the subjects included in the game, as shown by the results of the pre-intervention questionnaire. The same happens with risk perception. Nevertheless, after the participation in the project, knowledge and risk perception increased, as expected. Results related with positive and negative expectations about substance use were less conclusive. Both positive and negative expectations increased, when the desirable was that they varied in opposite directions. Further exploration of this dimension is needed, to understand these results. Nevertheless we can conclude that the game WWBC is a valuable strategy to contribute for an interactive and reflexive discussion about addictive behaviours and can function as a useful complement to more extensive life skills training programs. In future interventions it will be necessary to standardize assessment tools and have a greater control over the delivering conditions.

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