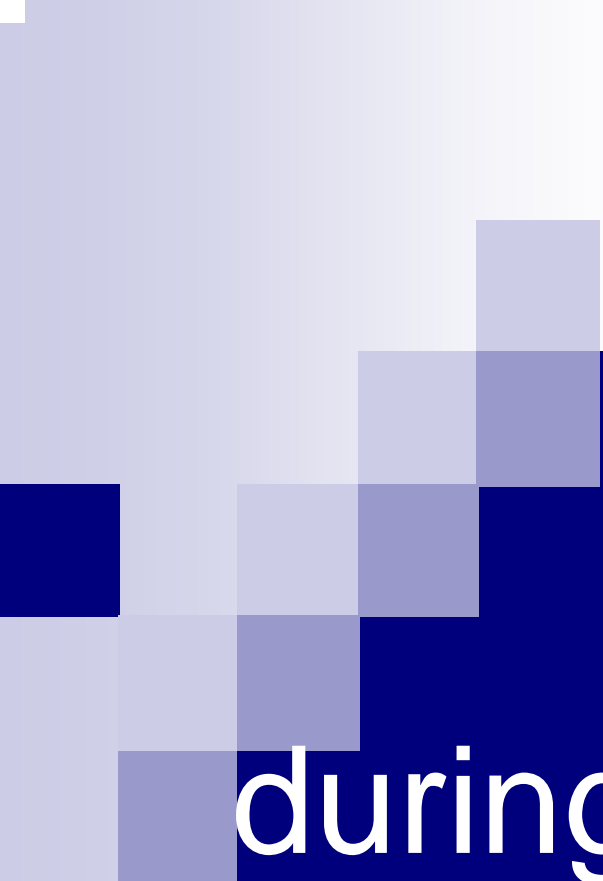


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School bonding and substance use during early adolescence

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Introduction

- One of the most important setting for adolescents is school.



Introduction

- The relationship between substance use and school-related variables is well documented.

Introduction

- Students who smoke, and use alcohol and other substances dislike school, skip school more often, have lower grade, attend lower-track schools, and are more likely to drop out of school than non-users (Bachman, O'Malley, and Johnston, 1978; Bryant, Schulenberg, O'Malley, Bachman, and Johnston, 2003; Ciairano, 2004; Ciairano, Settanni, Van Shur, Miceli, 2006; Mensch and Kandel, 1988; Paulson, Coombs, and Richardson, 1990; Galambos and Silbereisen, 1987; Smith and Fogg, 1978).



Introduction

- Authors suggested that using substance will influence school achievement and bonding (e.g. Newcomb and Bentler, 1986; Brook and Newcomb, 1995; Wills, Vaccaro, McNamara, and Hirky's works 1996). Those who use substance have decreased interest, motivation, and commitment in school.



Introduction

- Another theory, the disengagement model by Hawkins and Weis (1985), postulates that school failure would decrease educational motivation, which leads to association with deviant peers and substance use. Some supporting evidence of the disengagement model is provided in the studies by Zimmerman and Schmeelk-Cone (2003), and by Shulenberg, et al (1994).



Introduction

- Finally, others said that there is no causal relationship between substance use and school (Dewey, 1999). The nature of the relation between substance and school would be correlational and it would be not possible to establish what comes first.



Introduction

- Then, it is not clear what drives what



Introduction

- Moreover, the majority of these studies are conducted with high school students.



Introduction

- There is a lack of studies regarding early adolescents. The study of early adolescence dynamics could be of relevance to understand what comes first. Indeed, early adolescence is the period when adolescents start using substance (alcohol and cigarette)



Aims

- The goal of the study 1 is to investigate the reciprocal influence of alcohol and school bonding during middle school
- The goal of the study 2 is to show the effects of a school-based life skills intervention program over one year. In line with study 1, it will be investigated the mediation role of school involvement in the effect of intervention.



Sample of study 1

- 162 students of sixth grade;
- belonging to 2 middle schools in Turin, and
- 48% girls, 52% boys;
- aged 11-12 at the beginning of the study;
- Three waves of data (one every year)

School bonding

- Scale of 9 items (Fend and Shure, 1991)
(alpha .80, .81, .80).

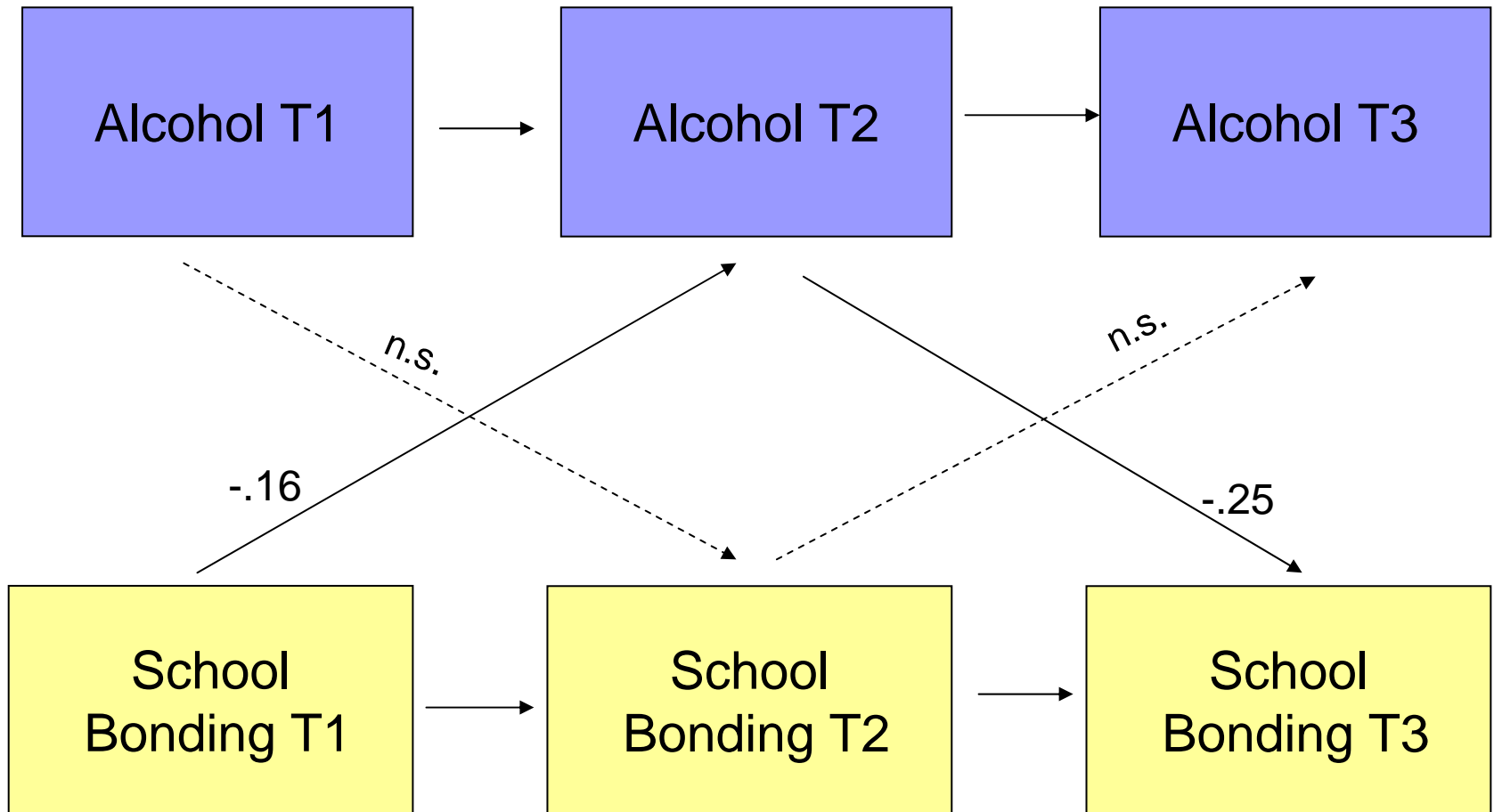
Eg. I like going to school; I enjoy class time;
I always study a lot before exams.




Alcohol use

- Frequency during the last 30 days of wine and beer
- Amount of wine and beer at the last drinking occasion

- 
- What is the relation between school bonding and alcohol use?



Chi square=257.37, df=107, $p=.00$, RMSEA=.07, CFI=.95

- 
- With regard to alcohol use, there is an initial influence of school bonding on alcohol use from t1 to t2. However, the influence is reversed from t2 to t3.



Conclusion

- School bonding had an effect on alcohol.



Conclusion

- However, school bonding seems to be important for Italian pupils to predict alcohol use at a precise moment (6th grade). After that moment, alcohol use start influencing school experience.



What can we do in practice?



Aim of the second study (made in collaboration with Dr Weichold and Prof Silberesein)

The goal of study is to test a German life-skills program in the Italian context (Weichold, 2002).



Ipsy program

IPSY is a prevention program against substance misuse in adolescence (Weichold, 2002; Weichold et al., 2006). It is implemented by the teachers in the 6th grade (in Italy). The basic manual consists of 15 lessons, 10 of 90 min and 5 of 45 min.



Ipsy program


The contents are about:

- 1) learning and enhancement of social and resistance skills;
- 2) enhancement of generic life skills, intra and interpersonal;
- 3) development of knowledge about alcohol, smoking, media strategies and organization of leisure time;
- 4) promotion of involvement in school and in studying.

Implementation of IPSY in Italy

The sample

- 159 students of 6th grade;
- belonging to 2 middle schools in Turin,
- 48% girls, 52% boys;
- aged 11-12;
- 97 (50%) are in experimental group, 98 (50%) in the control group;
- Pre-test, post-test (two months after the implementation), follow-up 1 year later.



The teachers involved in the programme were 9. They were chosen either on the basis of their availability or casual choice.

The teachers were trained in one day about the contents of the program.

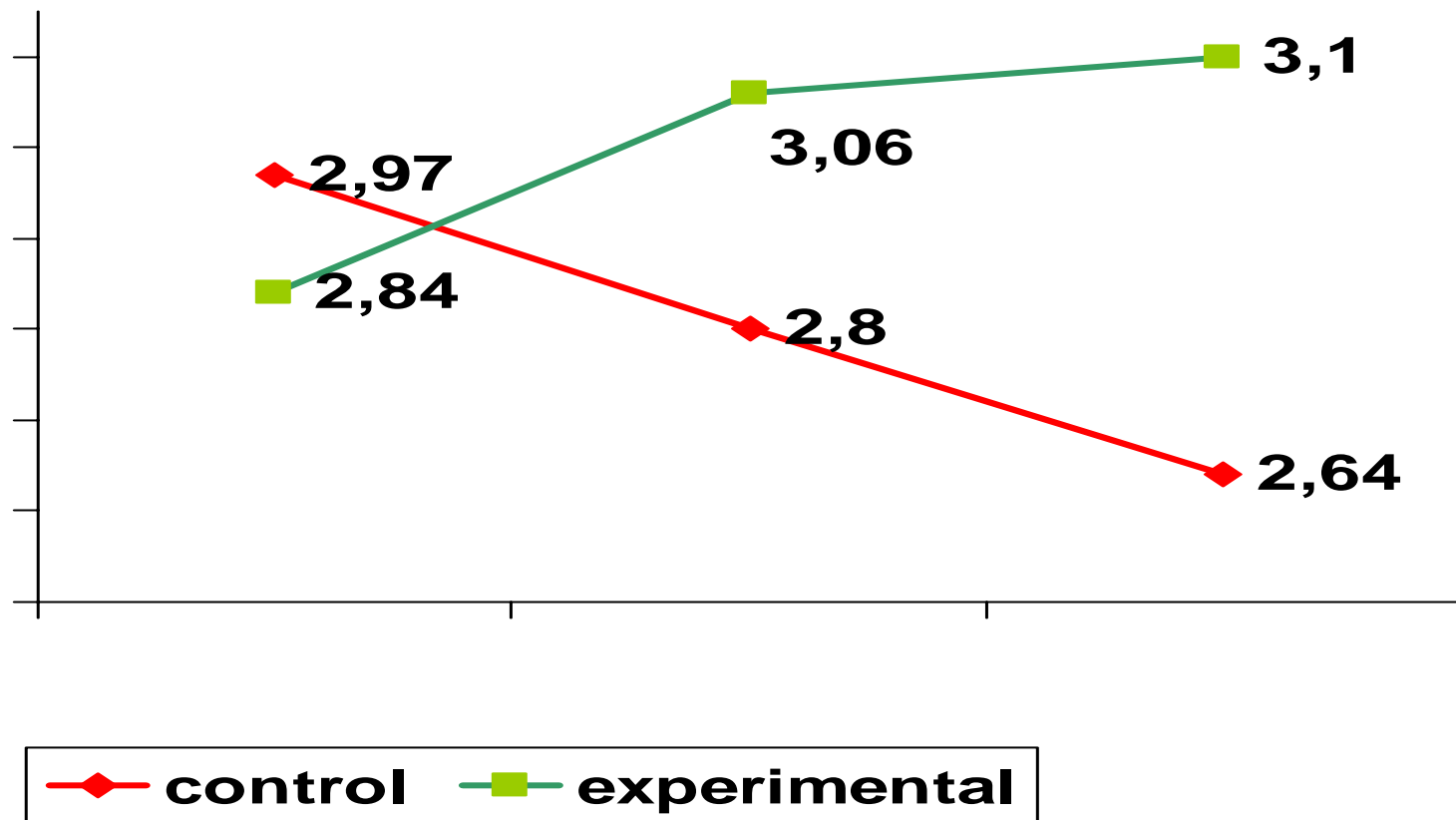
Moreover, they were provided with the IPSY manual and with all the material they needed for the implementation.



Short term effects

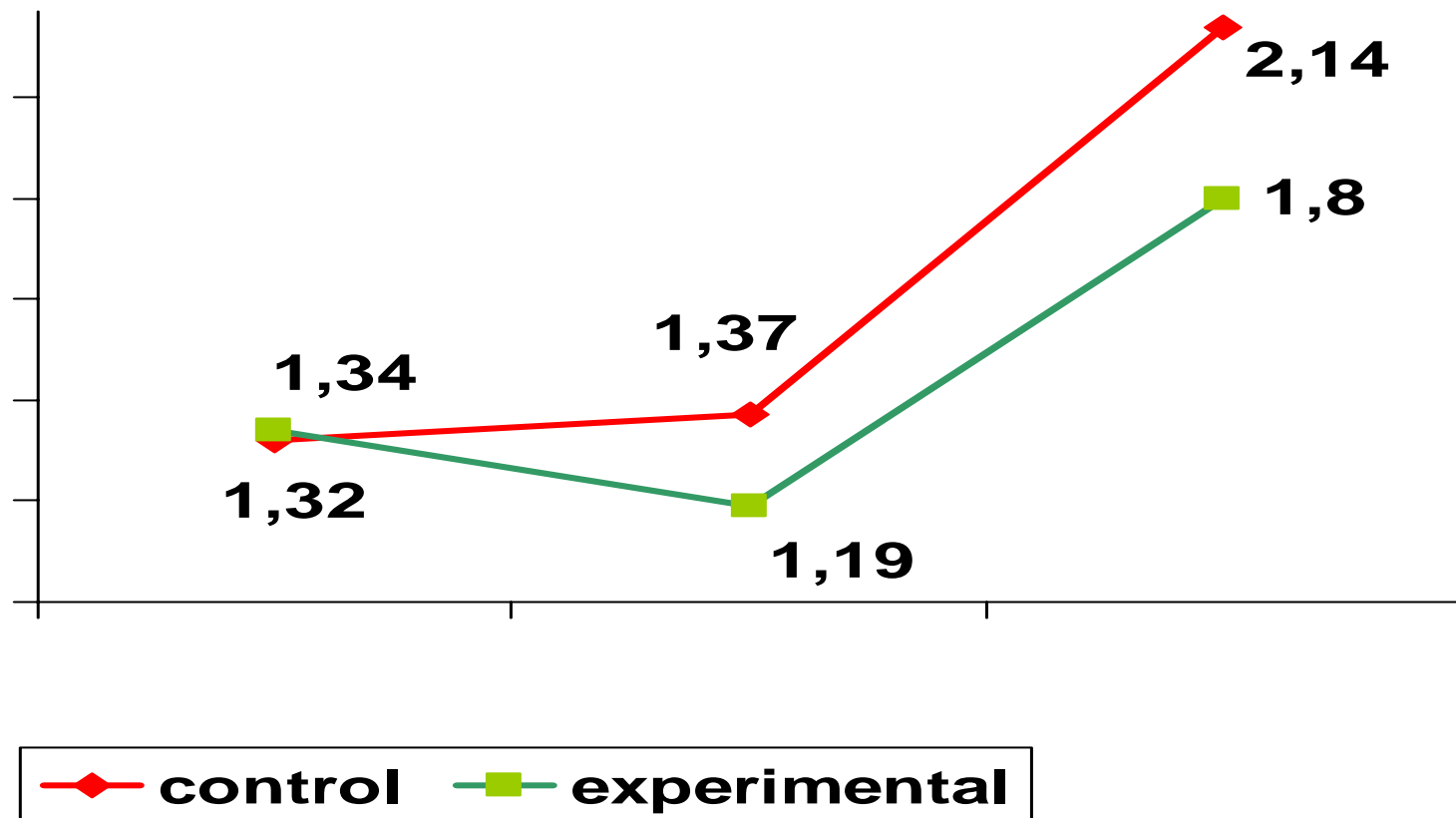
The **IPSY program** seems to have an effect from the very beginning on some indicators of alcohol use (amount of wine and beer at the last drinking occasion), on some life skills (appreciation from other, resistance to peer pressure) and on school related variables (school bonding).

Liking one's class



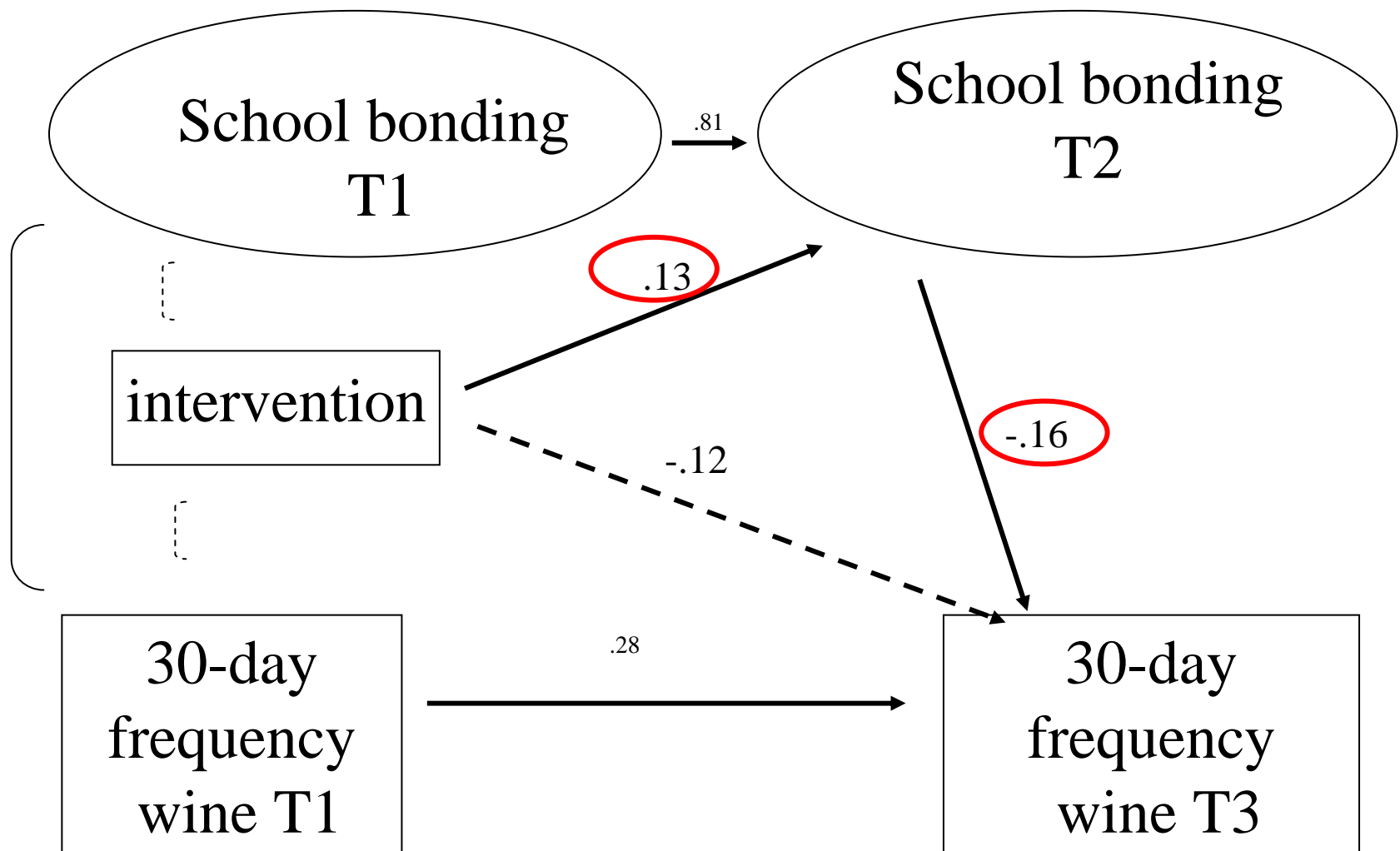
3) Liking one's class: pupils from the treatment group increased their enjoyment of their class, while for the control group the enjoyment kept on decreasing [IE: $F=3.48$ (2, 155), $p>.05$, $ES=.44$].

Frequency of wine during the last 30 days



3) 30-day frequency wine: pupils from the treatment group increased over time their frequency of wine consumption during the last 30 days, much less than pupils from the control group. [IE: $F= 2.37 (2, 151)$, $p>.10$, $ES= .471$]

Mediation effect of school bonding on 30-day frequency of wine





To conclude

- This study suggests that reinforcing school bonding might be a good strategy for prevention.
- However, it is also important the role of timing in prevention.
- Our study seems to be a further confirmation that an intervention must take into account the timing of developmental changes to be effective (Ferrer-Wreder et al. 2004).



Thank for your attention!