Evaluation of effectiveness of the Unplugged program on gambling behaviours among adolescents: study design and population of the experimental controlled study "GAPUnplugged"

Authors

Giulia Giraudi[1], Serena Vadrucci[2], Mariaelisa Renna[1], Maria Ginechesi[3], Claudia Vullo[3], Erica Viola[4], Chiara Sacchi[4], Marco Martorana[5], Alberto Sciutto[4], Emina Mehanović[6], Chiara Andrà[4], Matteo Pezzutto[4], Cristina Scalvini[4], Adalgisa Ceccano[3], Pietro Casella[3], Fabrizio Faggiano[4,5], Federica Vigna-Taglianti[1], and the GAPUnplugged Coordination Group[a]

[a] The GAPUnplugged Coordination Group includes: Federica Vigna-Taglianti, Mariaelisa Renna, Chiara Sacchi, Giulia Giraudi (Department of Translational Medicine, University of Eastern Piedmont, Novara); Adalgisa Ceccano, Maria Ginechesi, Claudia Vullo, Pietro Casella (Department of Mental Health, Addiction Unit, ASL Roma1, Roma); Serena Vadrucci (Department of Prevention, Hygiene and Public Health Unit, ASL Città di Torino, Torino); Fabrizio Faggiano, Chiara Andrà, Alberto Sciutto, Erica Viola, Matteo Pezzutto, Cristina Scalvini (Department of Sustainable Development and Ecological Transition, University of Eastern Piedmont, Vercelli); Marco Martorana, Francesco Brancaccio (Epidemiology Unit, ASL Vercelli, Vercelli); Emina Mehanović (Department of Neurosciences 'Rita Levi Montalcini', University of Torino, Torino); Gian Luca Cuomo, Laura Donati (Piedmont Centre for Drug Addiction Epidemiology, ASL TO3, Grugliasco, Torino).

Affiliations

1. Department of Translational Medicine, University of Eastern Piedmont, Novara, Italy

2. Department of Prevention, Hygiene and Public Health Unit, ASL Città di Torino, Torino, Italy

3. Department of Mental Health, Addiction Unit, ASL Roma1, Roma, Italy

4. Department of Sustainable Development and Ecological Transition, University of Eastern Piedmont, Vercelli, Italy

5. Epidemiology Unit, ASL Vercelli, Vercelli

6. Department of Neurosciences 'Rita Levi Montalcini', University of Torino, Torino, Italy

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Abstract

Background: Gambling risk behaviour is an emerging problem among adolescents. Early onset of gambling behaviour poses a risk for development of problematic gambling and other risk behaviours later in life. Previous studies showed some effects of gambling prevention interventions in reducing gambling behaviours among adolescents, however scarce studies were implemented on early adolescents. The "Unplugged" program is an effective Social Influence curriculum for reducing substance use behaviours among students. In 2022/2023 school year, we conducted an experimental controlled study aimed to evaluate the effectiveness of a new component focused on gambling added to the Unplugged program in preventing gambling behaviours among secondary school students. The present paper aims to describe the study design and the study participants of the experimental controlled study "GAPUnplugged".

Methods: Secondary schools of Piedmont region and Rome city were invited to participate in the study. The schools accepting to participate were allocated to intervention and control arms. The inclusion criteria for intervention arm were at least one class teacher already trained for the implementation of the Unplugged program, availability of the class teacher to implement the new

component on gambling, and participation of the class teacher to a 2-hours training session focused on the new contents on gambling. A self-completed anonymous questionnaire including questions on socio-demographic characteristics, addictive behaviours, beliefs, attitudes and risk perceptions about gambling, normative perceptions, parental practices, school climate, refusal skills; impulsiveness, self-esteem, antisocial behaviours and sensation seeking was prepared for baseline and follow-up surveys. Before the administration of questionnaires, information on the study was provided to the pupils and parental consent to participate was asked. The protocol of the study was submitted and approved by the Novara Ethical Committee and registered in ClinicaTrials database. The baseline questionnaires were administered between November 2022 and January 2023 both in control and intervention group. Afterwards, the intervention group received the 13 units of the "Unplugged" program with the gambling component, for about 3 months (February-April 2023). Finally, after 4 to 8 weeks from the completion of the program, the same evaluation questionnaire was administered in control and intervention classes (May-June 2023).

Results: Twenty-nine schools accepted to participate in the study. Sixty-three classes (1325 students) satisfied the eligibility criteria for intervention arm, and the other 61 (1269 students) were allocated to the control arm, for a total of 124 classes and 2594 students. At baseline, 998 students of 59 classes in the intervention arm and 876 students of 59 classes in the control arm filled the questionnaire (1874 students on overall, of 118 classes). The analyses are ongoing.

Conclusions: This is the first study designed to evaluate the effectiveness of a new gambling unit added to the "Unplugged" school-based universal curriculum. Moreover, this appears to be the first experience of evaluating a new component focused on a different risk behaviour, added to a curriculum previously shown as effective on other risk behaviours. Results of the evaluation will be useful to clarify the effectiveness of school-based prevention programs in reducing gambling behaviours among early adolescents.

Keywords

Study design, experimental controlled trial, students, Unplugged, prevention, gambling

Prevalence of gambling and gambling-related factors among 12-14 years old students in Italy

Authors

Emina Mehanović[1], Erica Viola[2], Marco Martorana[2], Alberto Sciutto[2,3], Giulia Giraudi[4], Maria Ginechesi[5], Claudia Vullo[5], Mariaelisa Renna[4], Chiara Andrà[2], Serena Vadrucci[3], Adalgisa Ceccano[5], Pietro Casella[5], Fabrizio Faggiano[2], Federica Vigna-Taglianti[4], and the GAPUnplugged Coordination Group[a]

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Affiliations

1. Department of Neurosciences 'Rita Levi Montalcini', University of Torino, Torino, Italy

2. Department of Sustainable Development and Ecological Transition, University of Eastern Piedmont, Vercelli, Italy

3. Department of Prevention, Hygiene and Public Health Unit, ASL Città di Torino, Torino, Italy

4. Department of Translational Medicine, University of Eastern Piedmont, Novara, Italy

5. Deparment of Mental Health, Addiction Unit, ASL Roma1, Roma

Ethical standards

The study was conducted following the principles of the Declaration of Helsinki. The protocol of the study including details on the study design, materials, intervention, instruments, and procedures for enrolment was submitted to the Novara Ethical Committee, and approval was obtained on 18/11/2022 (prot. 943/CE; study code CE228/2022). Small amendments to the procedures were requested and applied. Informed letters were sent to parents and written informed consent for the participation of the children in the study was asked and obtained before the baseline survey. Students were informed about the objectives of the study and provided consent to participate before filling the baseline questionnaire. Questionnaires are anonymous. Linkage between baseline and follow-up questionnaires will be performed through an anonymous code self-generated by the student.

Abstract

Background: Gambling risk behavior is an emerging problem among adolescents. According to the ESPAD survey, 22% of 16-year-old students gambled for money in the last 12 months, 7.9% gambled online, 3.8% had excessive gambling activity, and 1.4% experienced problematic gambling. In Italy, the prevalence of problematic gambling is 7% among 15-year-old students. Early onset of gambling behaviour poses a risk for development of problematic gambling later in life, which is associated with other risk behaviours such as substance use. Nevertheless, the data on prevalence of gambling behaviour among early adolescents is scarcely investigated. Moreover, social environment, family and personal characteristics may play an important role in development of gambling behaviours among adolescents. This study aims to describe the prevalence of gambling behaviours and gambling-related factors in a sample of Italian students 12-14 years old.

Methods: In autumn 2022, we conducted the baseline survey of an experimental controlled study aimed to evaluate the effectiveness of gambling unit added to the Unplugged school prevention program. The study took place in Piedmont and Lazio region and involved secondary school students.

The information on gambling behaviors, risk perceptions, attitudes, beliefs, normative perceptions, and socio-demographic indicators were collected through self-completed anonymous questionnaires. The analytical sample of the present study included 1874 students participating in the baseline survey. Descriptive statistics have been performed to describe the study population.

Results: In the current study, 54.9% of students reported gambling at least once in the last 12 months, 35.4% gambled at least once in the last 30 days, 12.4% gambled on regular basis (3+ times in the last 30 days) and 29.9% gambled sporadically (1-2 times in the last 30 days). In terms of gambling-related characteristics, about 27% of students had high positive beliefs and attitudes toward gambling, 26.9% perceived gambling as low-risk behaviour, and 23.6% reported low refusal skills if their friends offer to gamble together. About 20% and 50-60% of students perceived their friends and peers gambled, respectively. About 9% of students reported their parents would allow them to gamble.

Conclusions: The prevalence of adolescent gambling behaviour is high and represents an emerging issue for the health of youth. Appropriate prevention interventions should be aimed at pupils younger than 15 years. A strengthening and enforcement of regulations and interventions preventing underage gambling are of great importance for limiting the spread of this new risk behaviour.

Keywords

Gambling, adolescents, gambling-related factors, prevalence, descriptive analysis