

Relation between participation in sport activities and drug-taking among 14 year-old primary school pupils in Slovenia

Povezava med športnim udejstvovanjem in uživanjem drog pri 14-letnih učencih in učenkah osnovnih šol v Sloveniji

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Izvilleček

Izhodišča: Cilja raziskave sta bila ugotoviti, ali obstaja povezava med udeležbo v športnih dejavnostih in uživanjem dovoljenih in nedovoljenih drog ter ali obstaja povezava med uživanjem nedovoljenih drog in vrsto športa pri 680 14-letnih učencih in učenkah slovenskih osnovnih šol.

Metode: Uporabili smo vprašalnik, ki je vseboval 38 spremenljivk, verjetnost povezave med spremenljivkami pa smo testirali s testom hi-kvadrat.

Rezultati: Analiza je pokazala, da je v prostem času športno dejavnih 74,6 % učencev in 79,3 % učenk, ki se v povprečju s športom ukvarjajo 2- do 3-krat tedensko. Največ učencev se ukvarja s tekmovalnimi športi, pri učenkah pa prevladuje neorganizirana rekreacija. Kadi 7,3 % učencev in 16,6 % učenk. Večina učencev je prvo cigareto poskusila pri starosti 13 let, učenke pa pri starosti 12 let. Alkoholne pijače je poskusilo 87,4 % učencev in 85,5 % učenk, večina med 10. in 13. letom starosti. Droge je poskusilo 21,6 % učencev in 29,3 % učenk. Ugotovili smo, da obstajajo nekatere statistično značilne povezave med pogostostjo ukvarjanja s športom ter uživanjem dovoljenih in nedovoljenih drog, in sicer pri pitju alkoholnih pijač pri učencih ter pri kajenju pri učenkah. Uživanje omenjenih poživil je povezano z manj pogostim ukvarjanjem s športom.

Zaključek: Športna nedejavnost v obdobju adolescence povečuje tveganje za uživanje alkohola pri učencih ter za kajenje pri učenkah. Sodelovanje učenk in učencev v organiziranih športnih dejavnostih pa lahko zmanjša tveganje za zlorabo prepovedanih drog.

Abstract

Purpose/Objective: The aim of this research was to establish whether there is a correlation between sport activity and drug-taking among 680 14-year-old pupils, and to establish whether the drug-sports link depends on the type of sports.

Methods: We used a questionnaire with 38 variables on sports activities and drugs. The probability relations among the variables were tested by chi-square.

Results: The analysis has shown that 74.6 % male and 79.3 % female pupils practise sports in their leisure time. On average, they practise sports 2 to 3 times a week. The majority of male pupils practise sports competitively, while female pupils primarily practise unorganized recreational sports. 7.3 % male and 16.6 % female pupils smoke; the majority of male pupils had the first cigarette at the age of 13, female pupils at the age of 12. 87.4 % male and 85.5 % female pupils had tried an alcohol beverage. 21.6 % male and 29.3 % female pupils had tried drugs. We have ascertained that there is some statistically significant correlation between sports activities and taking licit and illicit drugs. A statistically characteristic correlation has been established for alcohol drinking with male pupils and for smoking with female pupils. We also observed a significant correlation between organized sports as the type of sports and drug use.

Conclusion: We can conclude that persistent sports inactivity in adolescence may increase the risk of alcohol use among male, and smoking among female pupils. Participation in organized sports, as opposed to unorganized and competitive sports, may reduce illicit drug use.

Introduction

Drug addicts are rarely found among groups of people who reject drugs for their special interests and goals.¹ Undoubtedly, sports activities represent an important factor in preventing drug-taking. Most people start taking drugs in their youth and become addicted easily. Therefore, it is important to offer young people a number of various healthy activities, among which sports activities undoubtedly belong to as well.² Appropriate sports activities can most efficiently restrain drug-taking attempts, whereas, on the other hand, wandering and strolling around with friends can only accelerate the progress of this bad habit. A healthy life style represents a very important aspect in education, which begins at home and continues at kindergarten and school and finally extends in a form of self-education.³ The problem of drug-taking among young people should not be solved as an isolated problem, but rather in the context of caring for young people in general.

Wichstrøm study provides a valuable contribution to the understanding of the drug-sports link. They focused their longitudinal analysis on organised sports, taking into account the parameters listed above, and adding two further parameters. First, the timing of the drug-sports link: for example, alcohol intoxication and sports participation were negatively correlated at baseline, but sports participation at baseline was positively correlated with alcohol intoxication measured seven years later. Secondly, the drug-sports link can mediate gateway effects: for example, initial sports participation reduced later tobacco use via lower levels of cannabis initiation.⁴ Of course, further research is needed to better understand the timing of the drug-sports relationship and the gateway effects favoured or impeded by sports participation. Socialisation into sports may teach adolescents to use various kinds of substances to cope with everyday life. For example, in a sample of university sports students 36 % had used cannabis to enhance academic performance.⁵ Sporting activity and drug use may be impelled by similar motives or values. Both activities may reveal

similar impulses for sensation-seeking, the search for a thrill, vertigo or 'flow'.^{6,7} This hypothesis is especially relevant to the relationship between sliding sports practice and alcohol and cannabis use.^{8,9} Outings and other peer-oriented activities were strongly correlated with cannabis use. Occasional use was more common among respondents who participated in many different outdoor activities. Regular use was associated with a more selective lifestyle, focusing on music-oriented outings and time spent at a friend's home in the evening.¹⁰

Methods

Sample of subjects

The sample of subjects studied here includes 14-year-old pupils—326 male and 354 female. The study includes pupils from 9 different primary schools in Slovenia.

Sample of variables

This research is based on a questionnaire comprising 38 questions on sports and drugs, adapted for 14-year-old pupils.

The questionnaire includes questions about socio-demographic information, sports activities, type of sports activity, frequency of participation in sports activities, legal drug use, illicit drug use, relationship with parents, etc.

Procedures

Data has been processed by the SPSS software (Statistical Package for the Social Sciences). Frequency, Correlation and Contingency tables have been generated by the help of FREQUENCY, CORRELATIONS and CROSSTABS sub-programs. The probability relations among the variables have been tested by the chi-square. All the hypotheses were tested at a significance level of 5 % ($P \leq 0.05$).

Results

The results have shown that 74.6 % of male and 79.3 % of female pupils practise sports in their spare time. The majority

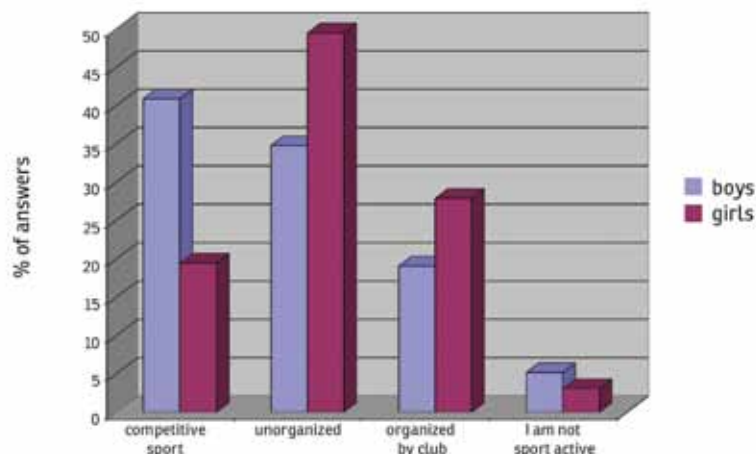


Figure 1: Pupils sports activity in their spare time.

practise sports 2 to 3 times a week (33.5 % male and 55.6 % female pupils). The majority of male pupils practise sports competitively (40.9 %); the next sports activity is unorganized recreational sports. Almost one half of female pupils practise unorganized recreational sports (Fig. 1). Male pupils primarily do basketball and football, while female pupils do dance, roller skating and taking walks.

This research indicates that most male pupils (37.4 %) spend their spare time practising sports or meeting friends. A little over one half of female pupils in the first place spend their spare time meeting friends and in the second place practising sports. Adolescence is the time when children push their parents away while their friends are becoming more and more important. Despite that, it is encouraging that so many young people devote their spare time to sports.

7.3 % male and 16.6 % female students smoke. A little over one half of the pupils questioned never tried smoking. The majority of male pupils had their first cigarette at the age of 13 and female at the age of 12. The majority of those who smoke, smoke on special occasions only and the duration of their smoking ranges from 1 to 6 months to two and more years. The primary reason why children start smoking is curiosity. Children want to know how a person feels when smoking. At the same time, they want to be liked, or do not want to be an exception among others. The coeval pressure is high in this period and it can influence the »smoking« habits of adolescents. With over

one half of male and female pupils, none of their friends they spend time with smoke. With a little less than one half, some of their friends smoke.

There are a little over one half of the questioned children's parents who do not smoke, and 12.3 % where both parents smoke. Whether parents smoke or not, does not however influence the frequency of male and female pupils' sports activity. The majority is of the opinion that sports and smoking do not go together.

The results of this research show that 87.4 % of male and 85.5 % of female 14-year-old pupils tried alcohol. They mostly drink alcohol once a month or less frequently (more often in rural than urban environment) and they first tried it at an age between 10 and 13 years. The main reason they have first tried alcohol is curiosity and it is the children's parents who offered alcohol to a majority of pupils questioned. The majority of questioned pupils state they can have fun without alcohol. 21.6 % of male and 29.3 % of female pupils tried drugs (more often in urban than in rural environment). The prevailing types of drug-taking are vapor inhaling, pills (e.g. sedatives) and cannabis (marijuana, hashish). The majority of pupils tried drugs at the age of 13. Those who have tried drugs, say they first tried it for the same reason as cigarettes and alcohol – curiosity. The majority of pupils say they are aware of the harmful effects of drugs.

The answer to the question »What is in your opinion the most important reason young people start taking drugs?«, almost one half answered it was the curiosity. The second most frequent answer was a desire to be accepted or approved by the coevals. The other answers were curiosity and attempt to overcome emotional distress, depression, and anxiety.

Half of the pupils questioned are of the opinion that sports activities are those that would turn young people away from taking drugs, next would be the promotion of parties with no drugs and alcohol (Fig. 2).

We have ascertained that there is no statistically significant correlation between sports activities and taking licit and illicit drugs. However, a statistically significant

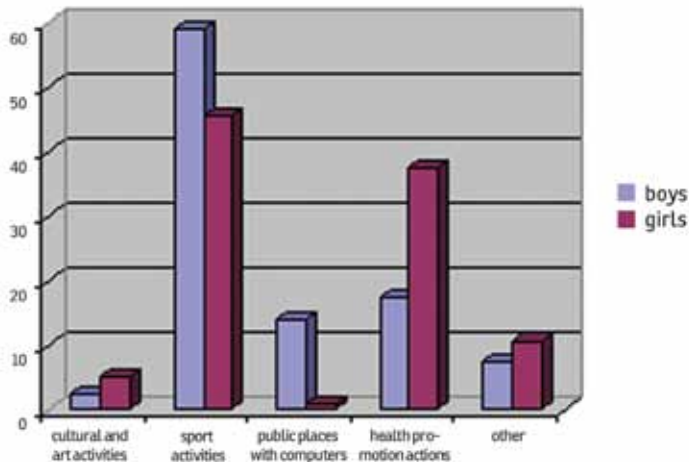


Figure 2: Activities pupils think would dissuade young people from taking drug.

correlation has been ascertained between sports activities and drinking alcohol with male pupils, and smoking with female pupils. All the questions were related to attempts and *not* regular usage of licit and illicit drugs.

The findings of correlation analyses showed that there is a statistically significant correlation between participation in organized sports and illicit drug use (Table 1).

Discussion

One of the most important factors influencing a decrease in drug-taking habits is providing appropriate and adequate activities for young people in their spare time. It is the spare time that should be properly conducted and planned. Spare time should be fulfilled with activities that would fully engage each young individual. And sports activities certainly belong there.

In our study we find sports involvement to be associated with less alcohol use among male pupils and less inhaling vapors among female pupils. These findings are inconsistent with a research made by Sallis and colleagues, where no consistent association between physical activity and alcohol consumption exists.¹¹ The results of our study were also inconsistent with a study that reported physical activity and alcohol abuse to be unrelated,¹² with work by Kueffer and colleagues¹³ indicating that athletes had significantly higher rates of alcohol use than non athletes, and with work by Miller and colleagues,¹⁴ which reported increased lev-

els of alcohol use and binge drinking among male athletes when compared with nonathletes.

In our study, though, the correlations between type of sports and drug use are significant. Our results indicated differences in alcohol use between participants who practise organized sports. This finding is consistent with some studies that found substantially less alcohol use among youth who participated in organized sports.^{15,16}

We used the questionnaire focused on 14-year-old pupils who still visit the primary school. According to their age, quite a large number of primary school pupils smoke, drink alcohol or take drugs. The number will probably increase when these children get to a secondary school. In order to move into a positive direction, we need to be more active within the families, schools and local communities. Parents are those who raise their children from the start and pass their behavior patterns on to them.

If parents are sport active and have their children involved in sports as well, children will accept sports as part of their everyday life and spare time. Parents are also responsible to openly talk to and inform children about the drug-taking risks. Permissive attitude towards smoking and alcohol in a family, where in addition some of the parents smoke and drink too much alcohol, causes that children are more likely to start smoking or taking any other drugs. Experts recommend parents to start talking to their children about smoking, drinking alcohol and taking drugs when they are 5 or 6 years old, since many children have their first cigarette and an alcohol drink very early. By then, they should be appropriately informed about drugs being unacceptable and harmful. Parents should tell their children how to turn down a cigarette and alcohol if offered one and yet remain a "hero".¹⁷ They should talk about commercials, publicity, the "true" messages, and wrong beliefs about drugs among young people (relaxation, body weight control, less harmful light cigarettes, mature appearance, better digestion...). Their educational attempts will certainly be more successful if their behavior will support what they are saying.^{18,19}

Table 1: Correlation analyses between participation in organized sports and illicit drug use.

Type of sports	r	p
Organized	0.350	0.0001*
Unorganized	0.022	0.6540
Competitive sports	0.042	0.4439

r = correlation, *p* = significance of correlation

Fight against drugs continues and is seeking new methods that would enable a more healthy way of life among young people. Schools are nowadays participating in various projects by which young people are being motivated to promote sports and not drugs. Joining in this fight are also medical and other institutions engaged in preventive and curative treatments. PE teachers should get more involved as well. In cooperation with parents, they could well use sports to restrain drug taking and build upon a relationship towards sports activities. We are of the opinion that young people will resist smoking by means of planning a quality way of life. People who are adequately occupied most likely fulfill their needs by taking part in appropriate activities and therefore do not feel the need for any kind of substitutes.

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