# Lifetime Traumatic Experiences and Leisure Physical Inactivity among Adolescent Boys

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Objective: The aim of this study was to examine the associations between lifetime traumatic experiences and leisure physical inactivity among adolescent boys and to determine to what extent those associations are mediated by posttraumatic stress symptoms, unhealthy behaviors (smoking, alcohol use), the daily consumption of fresh fruit, and sense of coherence.

Methods: A self-administered questionnaire combining 3 instruments measured leisure physical activity level (Godin and Shephard), symptoms of posttraumatic stress (IES-revised), lifetime traumatic experiences, sense of coherence (SOC-13, from Antonovsky), and behavioral and dietary patterns in a representative sample of eighth grade boys from a number of Kaunas, Lithuania, secondary schools (N = 885; response rate 88.6%).

Results: Fifty-six point eight percent of boys had experienced at least 1 lifetime traumatic event, with a 20.5% prevalence of PTS symptoms, and 5.4% were inactive during leisure time. In the logistic regression models, leisure physical inactivity was associated with lifetime traumatic experiences (adjusted OR = 2.33; 95% CI: 1.09–4.98). Sense of coherence and posttraumatic stress symptoms did not mediate those associations. Less-than-daily consumption of fresh fruit showed an independent effect, while smoking and weekly consumption of alcohol did not.

Conclusion: Consistent associations between lifetime traumatic experiences and leisure physical inactivity among adolescent boys indicate that the presence of lifetime traumatic events should be taken into account when employing intervention and prevention programs on unhealthy lifestyles (physical inactivity, smoking, and alcohol). [*P R Health Sci J 2018;37:32-38*]

*Key words: Traumatic events, Physical activity, Mental health, Adolescents, Health behaviors* 

ecent intervention projects stress the importance of physical activity (PA) on mental health maintenance among adolescents (1), as physically inactive children tend to have more mental health problems. Many studies confirm the associations between more frequent PA and lower levels of depression, emotional problems, and psychological distress amongst adolescents (2, 3), and sedentary activities constituted independent risk factors for the development of high levels of depressive symptoms in a 1-year study of young adolescents (4). Another study showed that children who met recommended levels of PA (1 hour per day) had fewer emotional problems, 1 year later (5). The problem is that the proportion of physically inactive adolescents is definitely high (6), and PA rates have declined over the years. Factors attributable to PA change among adults are psychosocial, lifetime events (7), etc. The associations between lifetime traumatic experiences and physical inactivity among adolescent boys have not yet been investigated.

A literature review discovered that children and adolescents, after various traumatic experiences, suffer mental health problems. A representative study sample of 12- to 14-year-old adolescents in Norway concluded that depressive symptoms were strongly correlated with school-related stress, daily hassles, and stressful life events, in this study, a possible buffering effect of vigorous exercise on the relationship between stressful life events and depression was demonstrated (4). A literature review has shown that children and adolescents injured in traffic accidents experience psychological consequences such as posttraumatic stress disorder (PTSD) (8), which tends to have an impact on their quality of life. Lifetime trauma experiences (sexual abuse, violence, childhood maltreatment, witnessing a suicide, being

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kidnapped, being involved in a car accident, witnessing a fire, etc.) also contribute to the development of posttraumatic stress (PTS) symptoms in adolescents (9). PTSD may occur following an extreme stressor involving a threat to one's physical integrity, the witnessing of such a threat being made against someone else, or learning of a threat to or actual harm perpetuated on a close associate or associates, such as a family member or members. Reaction to such a stressor often involves intense fear, helplessness, horror, or, in the case of youth, disorganized or agitated behavior. The specific reactions to PTSD include the persistent re-experiencing of the event, persistent avoidance of stimuli associated with the event, and numbing of general responsiveness and persistent symptoms of increased arousal (9).

Recent investigations confirm that youth who have experienced trauma are at markedly increased risk for substance use, binge alcohol drinking and other risky behavior (10) and little is known about lifetime trauma's effects on PA level. On the other hand, it was established that adolescents with a low sense of coherence (SOC) are more prone to depression, anxiety, and psychosomatic problems, and a strong SOC was associated with more frequent practice of physical activities (11). In his salutogenic model, Aaron Antonovsky suggested that SOC is the key determinant in the maintenance of health. He theorized that individuals with a strong SOC have the ability to define life events as less stressful (comprehensibility) and mobilize resources to deal with encountered stressors (manageability) and that they possess the motivation, desire, and commitment to cope (meaningfulness) (12). Though SOC in adolescence is still prone to change, it is an important individual resource for coping and has a protective role in reducing the degree of impact that adverse situations can have on the health of adolescents (11).

Our sample population consisted of eighth grade boys in Kaunas, Lithuania. We used a self-administered questionnaire to determine their prevalence of lifetime traumatic events (witnessing a fire, being in a car accident, being sexually abused, finding a dead person or witnessing a death, being the victim of violence, and being confronted with traumatic news) and the prevalence of traumatic experiences suffered by the respondent in the year prior to filling out the questionnaire (family crises, family stress, severe conflicts or permanent tension in the family, and school bullying). In addition, the questionnaire also elicited the PTS symptoms felt by each respondent and determined his level of physical inactivity. The objectives of the study were to investigate the prevalences and associated PTS symptoms in determining physical activity in our sample population and to test whether those associations were mediated by SOC and unhealthy behaviors (smoking, weekly alcohol consumption, and less than daily consumption of fresh fruit).

## **Methods**

**Participants** 

This cross-sectional study was conducted in a representative sample of boys in eighth grade (aged 14–15 yrs.) selected from

15 secondary schools in Kaunas city during 2012. These schools were randomly selected from 15 city districts to represent the different socioeconomic statuses of the families. From a total of 60 classes, 1000 boys were selected; 885 fully completed the questionnaires (response rate, 88.6%) and were included in the analysis. Girls were not included in the present article as no consistent associations between lifetime traumatic experiences and physical inactivity (p>0.05) were found, but PTS symptoms mediated the associations between health complaints and physical inactivity among girls (13).

#### **Procedures**

Prior to the commencement of the study, ethical clearance was sought from the Regional Ethics Committee of the Lithuanian University of Health Sciences. Permission to conduct the study was also granted by school headmasters and the head of the Kaunas educational center. Data were collected from October to December 2012 using a self-administered questionnaire. The school nurse at each participating school gave the pertinent information to all the pupils in grade 8 in the class about 1 week before the meeting took place. The school nurse also informed the boys about the present study, including an explanation of the questionnaire. All the pupils and their parents received written information about the purpose of the study; boys with written permission from their parents participated. The pupils filled in the questionnaires during the meeting.

#### Measures

## Lifetime traumatic experiences

A traumatic-events checklist reflecting Lithuanian experiences was used to obtain the lifetime trauma history of each subject. The checklist assessed 6 possible traumatic events (witnessing a fire, being in a car accident, finding dead body or witnessing a death, being a victim of violence, being sexually abused, being confronted with traumatic news) (14).

Traumatic events occurring within the year leading up to the survey

Traumatic events during the year prior to filling out the questionnaire were also assessed. School bullying, defined as a student's prolonged and repetitive exposure to negative acts in the school setting, was assessed by a single question explaining the phenomenon as it may have been experienced over the previous study year, with the 5 possible answers then dichotomized into "no" (never during the previous study year, experienced 1 to 2 times in the previous year) and "yes" (2–3 times per month, once a week, several times per week) groups. Questions exploring any family crises (divorce, death or an incurable disease in a close family member, severe financial problems) and family stress events (severe conflicts and permanent tension) that may have occurred during the previous year were used as well.

A general trauma index was calculated by summing up all the lifetime traumatic events and all the school- and familyassociated traumatic experiences that took place during the year prior; the index was dichotomized into a non-trauma experience group and an at least 1 trauma experience group.

#### **Posttraumatic stress symptoms**

The Impact of Event Scale-Revised (IES-R) (15) was used to assess PTS symptoms. The IES-R has 22 items; they assess hyperarousal symptoms such as anger and irritability, heightened startle response, difficulty concentrating, and hypervigilance; the intrusion subscale assesses re-experience ("Any reminders brought back feelings about it"). Eight items are used in assessing avoidance, according to the DSM-IV ("I stayed away from reminders about it"). Respondents were asked to rate each item as it applied over the previous 7 days. The scale was translated into Lithuanian, and cultural adaptation was performed. The reliability and validity of the scale for adolescents was confirmed. Internal consistency for the total IES-R scale was high in the present study (Cronbach's alpha: 0.95) and sufficient correlations with the General Health Questionnaire that measures stress in everyday life were found (0.413; p<0.01).

# Sense of coherence

SOC was measured with a 13-item (with 5 possible answers in a positive direction) version of Antonovsky's SOC scale (12). All the items were summed up, and the total score was included in the analysis as a continuous variable. For this particular scale, the total sum ranges from 13 to 65. The higher the score, the stronger the SOC. A Lithuanian cultural adaptation of the scale was performed previously in an HBSC study (16) and showed good psychometric properties.

## **Dietary patterns**

A self-administered food-frequency scale (previously adopted from an HBSC survey in Lithuania) was used in the study; it included raw vegetables, boiled vegetables, and fresh fruit (16). Adolescents were asked whether they consumed those foods and, if so, how often. The possible responses "never," "once or several times per month," "about once a week," "daily," and "2 to 4 times per day" were dichotomized into "weekly and rarely" and "daily."

# Leisure physical activity

Leisure PA was assessed by using a modified leisure-time exercise questionnaire (17). The scale contains 3 questions that assess the frequency (times per week) of mild (yoga, archery, bowling, golf, snowmobiling, easy walking, etc.), moderate (fast walking, tennis, easy bicycling, volleyball, easy swimming, popular and folk dancing, etc.) and strenuous (running, jogging, hockey, football, basketball, judo, vigorous swimming, vigorous long-distance bicycling) exercise that has been done for at least 15 minutes during a typical week. A total score is calculated in arbitrary units by weighting each frequency by an estimated intensity using the following equation: (9 X strenuous) + (5 X moderate) + (3 X light). The total PA score of our sample group was 91.2 (±38.2). The study participants were assigned into 3 groups based on the total leisure PA scores: boys with the highest tertile of total PA scores (62.1–91.2) were categorized as belonging to the first group, and those with the second highest tertile (34.1–62.0), as belonging to the second group. The others, who had the lowest tertile of total PA scores ( $\leq$  34.0), were categorized as belonging to the third group.

The second question on the Godin and Shephard questionnaire asks how often during a typical 7-day period in leisure time the respondent engages in any regular activity long enough to work up a sweat and have a rapid heartbeat, with the possible answers being "often," "sometimes," and "never/rarely." Respondents with answers "never/rarely" were classified as inactive. Respondents with answers "sometimes" were classified as moderately active. Respondents with answers "often" were classified as highly active.

## Statistical analysis

SPSS for Windows, version 17.0, was used in the statistical analysis. Descriptive statistics were compared using a chi-square test. Lifetime traumatic experiences were assumed as exposure variables, physical inactivity and PTS symptoms as outcome variables, and unhealthy behaviors as covariates (smoking, weekly alcohol, less than daily fresh fruit consumption). Firstly, the distribution of traumatic experiences and behavioral risk factors in PTS symptoms and PA groups was assessed; then the unadjusted odds ratios (OR) and their 95% confidence intervals (CI) between physical inactivity and other variables were calculated. Further the associations between physical inactivity and lifetime traumatic experiences were tested in 4 logistic regression models. In the analyses, firstly, the associations between physical inactivity as a dependent and general trauma index as an independent variable were tested (Model I). Further, in Model II, PTS symptoms, smoking, and weekly alcohol were included. Then, in Model III, dietary pattern (daily fresh fruit consumption) was added. Finally, in Model IV, the adjustment for SOC as a continuous variable was performed. Those associations are expressed as adjusted ORs and their 95% CIs.

## Results

The prevalence of moderately active boys was 12.1%, and that of inactive boys,5.4%. Most of the sampled adolescent boys were physically active, according to their self-reports. Table 1 presents the distribution of the various lifetime traumatic events, family and school traumas, and health behaviors of the boys. Fifty-six point eight percent of boys experienced at least 1 lifetime traumatic event with 20.5% prevalence of PTS symptoms. Of the boys who had been exposed to school bullying, family crises and stress, violence, and sexual abuse; who had been confronted with traumatic news; and who had

Table 1. Distribution of study variables in posttraumatic stress symptoms groups

Variable	Total (N = 885)		Boys with PTSD (n = 181)		Boys without PTSD (n = 704)		p-value*
	n	%	n	%	n	%	
Lifetime traumatic event	202	42.2	20	10.0	252	50.1	
NU Ves	502	43.Z 56.8	29 152	10.0	303	70 Q	<0.001
Witnessed fire	59	67	132	7 2	46	4J.J 65	0.755
In car accident	76	8.6	21	11.6	55	7.8	0.105
Found dead body	30	3.4	9	5.0	21	3.0	0.187
Witnessed violence	50	5.6	18	9.9	32	4.5	0.005
Suffered sexual abuse	21	2.4	10	5.5	11	1.6	0.002
Confronted with traumatic news	158	17.9	61	33.7	97	13.8	< 0.001
Traumatic experiences during the previous year							
Family crises							
No	744	84.1	128	70.7	616	87.5	
Yes	141	15.9	53	29.3	88	12.5	< 0.001
Family stress (no or rare)	818	92.4	149	82.3	669	95.0	
Severe conflicts or permanent							
tension in the family	67	7.6	32	17.7	35	5.0	< 0.001
Victim of school bullying							
No	679	76.7	101	55.8	578	82.1	
Yes (2 times per month or more)	206	23.3	80	44.2	126	17.9	< 0.001
Smoking							
No	769	86.9	142	78.5	627	89.1	
Yes	116	13.1	39	21.5	77	10.9	<0.001
Alcohol							
No	619	69.9	105	58.0	514	73.0	
Occasionally	219	24.8	53	29.3	166	23.6	0.004
Once a week or more	47	5.3	23	12.7	24	3.4	<0.001
Leisure physical activity	720	02.5		70.0	500	02.2	
Active	/30	82.5	144	/9.6	586	83.2	
woderately active	107	12.1	20	11.0	8/	12.4	0.020
Induive Fresh fruit consumed daily	48	5.4	1/	9.4	51	4.4	0.029
No	102	21.6	56	21 1	125	10.2	<0.001
	192	21.0	125	51.1	122	19.2	~0.001
res	693	/8.4	125	68.9	568	80.8	

 $^{*}\chi^{2}$  test was performed.

reported practicing any of the adverse health behaviors of interest (smoking, consuming alcohol, being physical inactive during leisure time, not consuming fresh fruit on a daily basis), significantly more displayed PTS symptoms than did not. Of the boys who were physically inactive during their leisure time, who smoked, who consumed alcohol on a weekly basis, and who consumed fresh fruit on less than a daily basis, significantly more displayed PTS symptoms than did not.

Table 2 presents lifetime traumatic experiences, PTS symptoms, smoking, weekly alcohol intake, and the consumption of fresh vegetables in the three different PA groups. Our results indicate that there were significantly more boys exposed to lifetime traumatic experiences, family crises and stress, and school bullying; consuming fresh vegetables less than daily; and being physically inactive during the year prior to the survey who displayed PTS symptoms than did those who were in the active and the moderately active groups.

Table 3 presents the logistic regression models for the associations between physical inactivity and the

general trauma index, with the purpose of determining to what extent those associations are mediated by posttraumatic stress symptoms, unhealthy behaviors (smoking, alcohol), the daily consumption of fresh fruit, and sense of coherence. In the unadjusted model, significant associations between the general trauma index, PTS symptoms, weekly alcohol use, the less-than-daily consumption of fresh fruit, SOC, and leisure physical inactivity were found. In Model I, the adjustment for PTS symptoms somehow weakened the associations between the general trauma index and leisure physical inactivity, but they remained significant. In Model II, a further adjustment for smoking and weekly alcohol use was performed; in Model III, a further adjustment was done for the daily consumption of fresh fruit; and in Model IV, after further adjustment for SOC, the associations between the general trauma index and leisure physical inactivity remained significant, though the effect of PTS symptoms lost all significance in all the adjusted models. Weekly alcohol use lost all significance in Model II. It is interesting to note that the effect of consuming fresh fruit on a daily basis remained significant after all adjustments. The effect of SOC lost all significance in the final model, though in an unadjusted model it was significant.

 Table 2. Distribution of the study variables in leisure physical activity groups

	Active (n, %)	Moderately active (n, %)	Inactive (n, %)	p-value*	
Lifetime traumatic events Traumatic experiences during the previous	410 (56.2)	55 (51.4)	38 (79.2)	0.004	
Family crises	115 (15.8)	9 (8.4)	17 (35.4)	<0.001	
severe conflicts Victim of school	49 (6.7)	7 (6.5)	11 (22.9)	<0.001	
bullying	157 (21.5)	29 (27.1)	20 (41.7)	0.004	
PTS symptoms	144 (19.7)	20 (18.7)	17 (35.4)	0.029	
Smoking	94 (12.9)	13 (12.1)	9 (18.8)	0.481	
Alcohol (weekly) Less than daily fresh	35 (4.8)	5 (4.7)	7 (14.6)	0.06	
fruit consumption	146 (20.1)	28 (26.2)	17 (35.4)	0.021	

 $^{*}\chi^{2}$  test was performed.

Table 3. Associations between lifetime trau	imatic experiences and	leisure physical inactiv	ity in the logistio	c regression models
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	Unadjusted		Model I		Model II		Model III		Model IV	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
General trauma index	3.04	1.50-6.18	2.65	1.27–5.51	2.51	1.19-5.26	2.54	1.21-5.33	2.33	1.09-4.98
PTS symptoms	2.25	1.22-4.17	1.72	0.91-3.25	1.58	0.82-3.04	1.47	0.76-2.85	1.25	0.61-2.56
Smoking	1.57	0.74-3.34			1.05	0.45-2.44	1.08	0.46-2.52	1.04	0.44-2.47
Alcohol (weekly)	3.31	1.38-8.01			2.24	0.83-6.03	2.07	0.76-5.64	1.88	0.67-5.25
Fresh fruit consumption (daily) (no)	2.08	1.13-3.85					1.89	1.00-3.57	1.93	1.02-3.65
Sense of coherence (continuous)	0.96	0.94–0.99							0.98	0.95-1.12

Footnotes: Model I adjusted for PTS symptoms. Model II adjusted for PTS symptoms, smoking, alcohol (weekly). Model III adjusted for PTS symptoms, smoking, alcohol (weekly), fresh fruit consumption (daily). Model IV adjusted for PTS symptoms, smoking, alcohol (weekly), fresh fruit consumption (daily), sense of coherence

#### Discussion

The aim of the present study was to examine the associations between lifetime traumatic experiences and leisure physical inactivity among adolescent boys, and to determine to what extent those associations were mediated by posttraumatic stress symptoms, unhealthy behaviors (smoking, alcohol), the daily consumption of fresh fruit, and sense of coherence. We found a high prevalence of lifetime traumatic experiences (at least 1 lifetime traumatic event) among the boys in our sample (56.8%); our findings completely coincide with those of a similar study, this one conducted in Europe among ninth grade students attending Swiss public schools in 2009 and 2010, which study found the same prevalence (55.7%) of traumatic events (adolescents reporting having experienced at least 1 traumatic event) in the nationally representative sample that was investigated (18). Other studies (for instance, that described in reference 19) indicated an even higher prevalence in this field, i.e., that 90% of the adolescents had been exposed to at least 1 traumatic event. In the present study, we found that 5.4% of boys in our sample were physically inactive in their leisure time. A similar prevalence of physical inactivity was found in an HBSC survey from 20 European countries (6). Therefore, it is extremely important to identify risk factors that are associated with physical inactivity among adolescents.

Studies among adults confirmed the fact that significant changes in leisure PA are associated with certain life events. Though much attention has been paid to existing studies of PA of PA and to emotional problems and depression during adolescence (4, 5), little is known about the associations between lifetime traumatic experiences and PA level. We found only 1 study in this area, it showed that having at least 1 adverse childhood exposure was significantly associated with having no leisure-time PA (20).

Some of the risk factors that are associated with physical inactivity are the presence of PTS symptoms after traumatic experiences. The development of PTS symptoms after traumatic experiences causes the persistence of painful memories and the reliving of the traumatic event on a daily basis (21), and this psychological state may cause the unwillingness to participate in physical exercise. In our study, the prevalence of PTS symptoms with at least 1 lifetime traumatic experience was 36.0%. Our results confirm the seriousness of the problem in boys who have suffered from traumatic experiences and the necessity to assess trauma influence in future interventions against physical inactivity in children. Therefore, we would suggest including lifetime trauma history and PTS symptom screening and using cognitive behavioral therapy in said future interventions.

Our review of the current literature revealed some significant data: Children who suffer from abuse or neglect, whose families are seriously dysfunctional, or who experience any combination of the previous factors are more likely than their relatively unaffected counterparts to suffer from depression (including displaying physical symptoms of same) and to engage in risky health behaviors (22, 23). One follow-up study (24) matched substantiated cases of child abuse and/or neglect from 1967 to 1971 on the basis of age (children were 11 years old or younger), race (white non-Hispanic and black, Hispanic, or other), sex, and approximate family social class with a group of non-abused and non-neglected children (from a metropolitan county in the Midwestern United States) and followed those children prospectively into young adulthood. No relationship between childhood victimization and subsequent alcohol abuse was found in men; however, a significant bivariate relationship for women was identified (24). The associations between alcohol and PA in the literature are contradictious, indicating the direct and indirect associations (25). The direct associations of the consumption of fresh fruit with PA were found in another study of adolescents (26). Our study showed no mediating effect of behavioral factors in the associations between lifetime traumatic experiences and physical inactivity. Numerous studies were unable to find a clear association between lifetime traumatic experiences and health behaviors as well as physical activity level and health behaviors (10, 23-25). In this context emerged the role of SOC (27).

The role of SOC in child and adolescent health has been under investigation in recent years, with the overall result being that an individual's SOC score is influenced by changes in that person's social situation (27). Adolescents with a high SOC are presumed to regain their health and remain healthy after experiencing stressors, and those with a weak SOC are more prone to depression, anxiety, and psychosomatic problems. Strong SOCs have been associated with more frequent physical exercise and with life satisfaction (28, 29). We found direct associations between SOC and leisure PA among adolescent boys in an unadjusted model. It is interesting to note that the associations between lifetime traumatic experiences and physical inactivity remained significant in the final model, indicating that SOC did not mediate those associations. Our data show that the presence (or lack) of SOC, normally seen as a protective factor regarding the effects of exposure to life stressors, does not explain the association between traumatic experiences and physical inactivity. A high SOC might not appear to be enough to lessen the severity of traumatizing life situations, especially in complex traumatizing life situations. The study investigating the predictors of strong SOC in adolescents found that high leisure-time PA was not significantly related to a strong SOC, but that positive attitudes towards physical education at school were (30). As the highest motivations to pursue physical education were found in adolescents who reported leisure exercise 4 times or more per week, the authors conclude that the actual levels of SOC could influence long-term attitudes toward physical education and be important for lifelong PA. Therefore, it would be meaningful to include psychological methods for how to deal with stressful situations and improve coping strategies in physical inactivity intervention programs.

The study has 2 significant limitations: It relied on self-reports, and it made use of a cross-sectional design. Although previously it was suggested that self-reports can be used reliably for the assessment of problems in adolescents, the impact of factors such as inconsistent answers, recall bias, social desirability, and faking cannot be excluded fully. Secondly, because of the cross-sectional nature of the current analyses, the longitudinal analysis of the relationship between lifetime traumatic events and physical inactivity among adolescents was not possible, and a causal relationship could not be confirmed. The assessment of other behaviors was also based on self-reports, which may be subject to social desirability bias. Nevertheless, the questionnaires used in this study are valid and were confirmed as being so in many studies on PA (15, 17). Advantages of the present study are that it was population-based and that the participation rate was comparatively high.

In conclusion, our study demonstrated consistent associations between lifetime traumatic experiences and physical inactivity and those associations remained significant after adjustment for PTS symptoms, health behaviors, diet, and SOC.

The current study has some implications. First, the results of the current study support the hypothesis that boys exposed to traumatic events report higher rates of being physically inactive. Therefore, we stress that when employing intervention and prevention programs on healthy lifestyles among adolescents, it is important to consider that life experiences, in particular those that are traumatic, may influence the adoption of healthy behaviors.

# Resumen

Objetivos: El objetivo de este estudio fue examinar la asociación entre las experiencias traumáticas vitales y el ocio sin actividad física además de los síntomas de estrés postraumático entre los varones adolescentes, para poder determinar en qué medida esas asociaciones están influidas por conductas no saludables (tabaco, alcohol), consumo diario de frutas y el sentido de la coherencia. Métodos: A nivel cuestionario se mide la actividad física de ocio autoadministrado (Godin y Shephard), los síntomas de estrés postraumático (revisado-IES), las experiencias traumáticas vitales, el sentido de la coherencia (SOC-13), y los patrones de comportamiento y dietéticos en una muestra representativa de muchachos cursando octavo grado en escuelas secundarias de Kaunas, Lituania (N = 885; tasa de respuesta del 88.6%). Resultados: En los modelos de regresión logística, el ocio sin actividad física se asoció con las experiencias traumáticas vitales entre los varones (OR ajustada = 2.33; IC del 95%: 1.09 a 4.98). Síntomas del trastorno por estrés postraumático, el sentido de la coherencia, el tabaquismo, consumo semanal de alcohol, menores que consumos diarios de frutas frescas no determinaron esas asociaciones. Los síntomas de la Síntomas del trastorno por estrés postraumático OR ajustada de el modelo final fue de 1.25; IC del 95% 0.61 a 2.56. Conclusiones: Las asociaciones consistentes entre las experiencias traumáticas vitales y el ocio sin actividad física entre los varones adolescentes indican que la presencia de eventos traumáticos vitales se debe tomar en cuenta al aplicar la intervención y programas preventivos sobre el estilo de vida poco saludable (la inactividad física, el tabaquismo y el alcoholismo).

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