COVID-19, social distance and adolescents' risk behaviours, wellbeing and life satisfaction: a proxy study drawn from HBSC study

COVID-19, distancia social y conductas de riesgo de los adolescentes, bienestar y satisfacción con la vida: un estudio proxy extraído del estudio HBSC

Gina Tomé, PhD
FMH/Universidade de Lisboa, ISAMB/Universidade de Lisboa, Portugal. SFRH/BPD/108637/2015

Cátia Branquinho, PhD
Ana Cerqueira, Msc
Margarida Gaspar de Matos, PhD
FMH/Universidade de Lisboa, ISAMB/Universidade de Lisboa, Portugal

Resumen

Privar a las personas de su libertad tiene efectos devastadores sobre el bienestar y la salud mental, especialmente en los adolescentes. Esta fue la situación con la reciente pandemia de COVID-19 que obligó a los adolescentes a quedarse en casa.

Para simular una situación de ausencia de interacciones sociales fuera del contexto familiar, se utilizaron datos portugueses del estudio HBSC / WHO 2018. Se pretendía explorar y comprender cuál de los factores de riesgo y de protección de la salud de los adolescentes habituales se vería más afectado entre aquellos que no tienen contacto con sus compañeros después de la escuela.

Los resultados muestran que, por un lado, el "distanciamiento social de los compañeros" en general reduce los riesgos para la salud, como el consumo de refrescos, el consumo de alcohol, tabaco y drogas y la participación en la violencia (peleas, victimización por bullying y lesiones). Por otro lado, disminuye la percepción de bienestar y satisfacción con la vida y, en general, aumenta los síntomas psicológicos.

Palabras clave

Distanciamiento social; conductas de riesgo; conductas protectoras; bienestar; adolescencia.

Abstract

Depriving people of their liberty has devastating effects upon wellbeing and mental health, especially in adolescents. This was the situation with the recent COVID-19 pandemic that forced adolescents to stay at home.

In order to simulate a situation of absence of social interactions outside the family context, Portuguese data from the HBSC / WHO 2018 study were used. It was intended to explore and understand which of the usual adolescents' health risk and protective factors would be more affected among those who do not have contact with peers after school.

The results show that, on the one hand, "social distancing from colleagues" in general reduces health risks, such as consumption of soft drinks, alcohol, tobacco and drug use and involvement in violence (fights, victimization by bullying and injuries). On the other hand, it decreases the perception of well-being and life satisfaction and in general increases the psychological symptoms.

Keywords

Social distancing; risk behaviours; protective behaviours; wellbeing; adolescence.

Correspondencia: Gina Tomé, Faculdade de Motricidade Humana, Universidade de Lisboa, Estrada da Costa
ginatome@sapo.pt

Introduction

Well-being is identified as one of the essential elements for the quality of life of young people (Gaspar et al., 2012; Jiménez-Iglesias, Camacho, Rivera, Moreno & Matos, 2017). Depriving people of their liberty has potential devastating effects upon wellbeing and mental health, especially when it comes to adolescents. A very recent study where about 600 adolescents living under lockdown were heard about their experiences (Branquinho, Kelly, Arevalo, Santos, & Matos, 2020, submitted), showed that these adolescents' report mix experiences. surfacing the fact that a few indicators of physical health indeed got better (better nutrition, less substance use and less involvement in violence and accidents) while the general perception of low wellbeing and life satisfaction and a few psychological symptoms, sleep problems and sedentary behaviour (screen time) increased as well.

Providing relevant leisure time occupations and quality schooling is also extremely relevant in childhood and adolescence due to the specific developmental issues of this phase (Brooks et al., 2020), and this issue become extremely difficult during lockdown.

Youth psychosocial development is influenced by individual and environmental/contextual factors associated with the adolescents' well-being, of which school involvement and success are examples (Berger, Alcalay, Torretti, & Milicic, 2011; Lewis, Huebner, Malone, & Valois, 2011).

During the recent COVID-19 pandemic and following the social distancing protective measures, many schools have been closed and classes moved to e-learning home-based models. This raised the question of the potential associations between the social distancing measures and the children's and adolescents' well-being (Golberstein et al., 2020), because there is an established influence of their life (family, peers and school) and well-being (Choi, 2018; Gaspar, Cerqueira, Branquinho, & Matos, 2018).

Developing a good relationship with the peer group is an essential factor in promoting the youths' emotional well-being (Camacho et al., 2017; Tomé et al., 2018). Young people who have more positive school experiences with greater peer support, report better psychosocial adjustment, and tend to perceive a higher life satisfaction (Marques, Lopez, Fontaine, Coimbra, & Mitchell, 2015; Matos et al., 2017).

Social context is an extremely feature in adolescents' positive development and the negative consequences of lockdown for adolescents' wellbeing, while not yet totally estimated can easily be hypothesized and foreseen from available and tested theoretical models and empirical (Matos et al., 2020, in press; Tomé, et al., 2020; Jensen et al. 2020, submitted).

It is expected that Negative consequences of lockdown for adolescents' physical and mental health and well-being are expected may include involvement in risk behaviours such as increased drug and alcohol use, violence, and poor school performance (Simões, Rivera, Moreno & Matos, 2018, Branquinho et al., 2020, submitted; IREFREA, 2020). This same feature was found in a paper comparing data from HBSC in 2010 and in 2014 (Matos et al., 2012; Matos, Simões, Camacho, Reis & Aventura So-

cial Team, 2015), before and after the impact of the economic recession experienced between 2008 and 2014 (Matos et al., 2015). This paper established that wellbeing and mental health were the first to deteriorate even when there were no signs of physical health problems.

In the context of social distancing due to the recent COVID-19 pandemic, we revisited the 2018 wave of HBSC (Matos & Equipa Aventura Social, 2018) in Portugal, in order to explore the effect of the lack of socialization with friends after school upon several risk and protective factors. We also intend to explore the impact of these risk and protective factors upon wellbeing and life satisfaction, controlling for social contact with peers after school.

Method

This survey is part of the Health Behaviour in School-aged Children (HBSC) study (Currie et al., 2004; Matos et al., 2006; Matos & Aventura Social Team, 2018). The HBSC is a collaborative WHO study, undertaken in 44 countries and that aims to study the school-aged children behaviour regarding health and risk behaviours. Portugal has been part of this group of countries since 1996. The HBSC is a school-based survey of adolescents' health behaviours, carried out every 4 years. Collected data is used at a national and international level, using an internationally standardized methodological protocol (Roberts et al., 2007) that intends to: (1) gain a new vision into young people's health and well-being, (2) understand the social and psychological determinants of health and (3) incorporate policies to improve young people's lives.

Participants

The 2018 study provided national representative data of 8215 Portuguese adolescents, randomly chosen from those attending 6th grade, 8th grade (middle school), 10th grade and 12th grade (high school) during the 2017/2018 academic year. The sample included 52.7% of girls and 47.3% of boys, whose mean age was 14.36 years old (standard deviation 2.28). This study used a subset of 8th (n=2766), 10th (n=1711) and 12th graders (n=1218) to represent middle school and high school educational stages. They were randomly selected from 42 national vertical clusters of schools, in a total of 476 classes, in a national sample geographically stratified by Education Regional Divisions in Portugal. The overall procedure has been described elsewhere (Currie et al., 2004; Matos et al., 2012); in brief, this study has the approval of a scientific committee, an ethical national committee and the national commission for data protection and followed strictly all the guidelines for protection of human rights; adolescents' participation in the survey and completion of the questionnaires was voluntary and anonymous. The sample was nationally representative of the respective grade levels.

Variables and Measures

For this study, variables that evaluate the mental health and the well-being of Portuguese adolescents were used: Well-being was measured by the Kidscreen scale, the global Well-being with 10 items scale with answer options: 1-Never; 2-Rarely; 3-Quite often; 4-Very often; 5-Always; Higher score higher wellbeing

(Gaspar et al., 2012). Life satisfaction was evaluated with the Cantril scale (1965), graphically represented as a ladder, where step '10' corresponds to "best possible life" and step '0' represents "the worst possible". Psychological symptoms were assessed with the questions used in the HBSC study protocol for health symptoms, were higher score higher symptoms (sadness, irritation or bad temper, nervousness, tiredness and exhaustion, difficulties in getting to sleep and self-harm) (Currie et al., 2004; Matos et al., 2012). Variables associated with health risks were: drinking coke or other soft drinks that contains sugar; alcohol, tobacco and drugs consumption, injuries, fights involvement, being bullied and being cyberbullied, were assessed with the questions used in the HBSC study protocol (Currie et al., 2004; Matos et al., 2012) described in table 1. The detailed description of the variables used is shown in table 1.

Data analysis

The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 24 for Windows. Descriptive correlational and comparative analyzes were performed (ANOVAS and Chi-Square) and finally multiple linear and logistic regression models.

Results

To analyze the differences between adolescents who are more or less often with friends, three groups were formed for the variables "peer contact frequency-after school: None or 1 day; A few days; Every day.

For the differences between frequency of after school contact with the peers , it was found by Chi-Square that adolescents who spend less days with friends after school (none or 1 day), consume less: coke or other soft drinks that contain sugar (never or less than once a week) (x^2=91.688(4), p≤.001, 49.4%), alcohol – in the last 30 days (never/1-2 days) (x^2=102.975(4), p≤.001, 90.8%), tobacco – in the last 30 days (never/1-2 days) (x^2=98.828(4), p≤.001, 95.7%), marijuana – in the last 30 days (never/1-2 days) (x^2=35.638(4), p≤.001, 98%), had less injuries (never/1 time) (x^2=42.111(4), p≤.001, 84.7%), involved less in fights (never/1 time) (x^2=26.441(4), p≤.001, 91.4%), had more feelings: sadness (about every day) (x^2=44.495(4), p≤.001, 15.1%), irritability or bad temper (about every day) (x^2=24.831(4), p≤.001, 17.4%), nervousness (about every day) (x^2=31.824(4), p≤.001, 20.4%), difficulties in getting to sleep (about every day) (x^2=9.522 (4), p≤.05, 14.4%), finally, are less satisfied with life (nothing satisfied) (x^2=44.216 (4), p≤.001, 32.8%) and mention less quality of life – Kidscreen (poor quality) (x^2=95.860 (4), p≤.001, 41%). Finally, adolescents who spend more days with friends after school (every day), are more involved in bullying and cyberbullying behaviour: being bullied (several times a week) (x^2=22.617 (4), p≤.001, 4.4%) and being cyberbullied (several times a week) (x^2=9.632 (4), p≤.05, 1.3%) and feel more often tiredness and exhaustion (about every day) (x^2=9.632 (4), p≤.01, 23.3%).

Table 3 shows the differences between the peer contact frequency – after school, for life satisfaction and Kidscreen. Regarding life

Table 1
Variables used in the analysis

	Item	Original Response Options	Recoded Response Options
Kidscreen (Global well-being)	Global Well-being	1-Never; 2-Rarely; 3-Quite often; 4-Very often; 5-Always;	Higher score higher wellbeing
	10 items scale		
Life Satisfaction	Cantril scale, graphically represented as a ladder	Step '10' corresponds to "best possible life and step '0' represents "the worst possible life".	Higher score higher life satisfaction
Peer contact frequency (after school)	How many days a week do you usually spend time with friends right after school?	1- 0 days; 2- 1; 3- 2; 4- 3; 5- 4; 6 – 5; 7- 6 days.	1 – none or 1 day; 2 - a few days; 3- every day; /or dichotomized variable for regression analysis: 0- 0 days; 1- a few days; Higher score higher contact
Coke or other soft drinks that contain sugar (transformed into Zscore for regression)	How many times a week do you usually eat or drink ....?	1-Never; 2- Less than once a week; 3- Once a week; 4-2-4 days a week; 5-5-6 days a week; 6- Once a day, every day; 7- Every day, more than once.	Higher score higher consumption
Alcohol – in the last 30 days (transformed into Zscore for regression)	How many days there was (if any) that you have drunk alcohol:	1- Never; 2- 1-2 days; 3- 3-5 days; 6-9 days; 10-19 days; 20-29 days; 30 days (or more)	Higher score higher alcohol abuse
Tobacco - in the last 30 days (transformed into Zscore for regression)	How many days there was (if any) that you have smoke:	1- Never; 2- 1-2 days; 3- 3-5 days; 6-9 days; 10-19 days; 20-29 days; 30 days (or more)	Higher score higher consumption

(Continue)

Table 1
Variables used in the analysis (Continuation)

Variable	Question	Response categories	Coding note
Drugs – in the last 30 days (transformed into Zscore for regression)	How many days there was (if any) that you have consumed "marijuana":	1- Never; 2- 1-2 days; 3- 3-5 days; 6-9 days; 10-19 days; 20-29 days; 30 days (or more)	Higher score higher consumption
Injuries (transformed into Zscore for regression)	During the past 12 months, how many times were you injured and had to be treated by a doctor or nurse?	1-I was not injured in the past 12 months; 2-1 time; 3- 2 times; 4-3 times; 5- 4 times or more	Higher score higher injuries frequency
Fights (transformed into Zscore for regression)	During the past 12 months, how many times were you in a physical fight?	1-I have not been in a physical fight in the past 12 months; 2-1 time; 3-2 times; 4-3 times; 5-4 times or more.	Higher score higher fights frequency
Being bullied (transformed into Zscore for regression)	How often have you been bullied at school in the past couple of months?	1-I have not been bullied at school in the past couple of months; 2-It has only happened once or twice; 3-2 or 3 times a month; 4-About once a week; 5-Several times a week;	Higher score higher bullying-victimization frequency
Cyberbullying victim (transformed into Zscore for regression)	How often have you been cyberbullied at school in the past couple of months?	1-I have not been cyberbullied at school in the past couple of months; 2-It has only happened once or twice; 3-2 or 3 times a month; 4-About once a week; 5-Several times a week;	Higher score higher cyberbullying-victimization frequency
Sadness (transformed into Zscore for regression)	In the last 6 months: how often have you had the following….?	1-About every day; 2-More than once a week; 3-About every week; 4-About every month; 5-Rarely or never.	1- Rarely or never; 2- About every month; 3- About every week; 4- More than once a week; 5- About every day. Higher score higher sadness
Irritability or bad temper (transformed into Zscore for regression)	In the last 6 months: how often have you had the following….?	1-About every day; 2-More than once a week; 3-About every week; 4-About every month; 5-Rarely or never.	1- Rarely or never; 2- About every month; 3- About every week; 4- More than once a week; 5- About every day. Higher score higher bad temper

(Continue)

Table 1
Variables used in the analysis (Continuation)

Variable	In the last 6 months: how often have you had the following....?		
Nervousness (transformed into Zscore for regression)		1-About every day; 2-More than once a week; 3-About every week; 4-About every month; 5-Rarely or never.	1- Rarely or never; 2- About every month; 3- About every week; 4- More than once a week; 5- About every day. Higher score higher nervousness
Tiredness and exhaustion (transformed into Zscore for regression)		1-About every day; 2-More than once a week; 3-About every week; 4-About every month; 5-Rarely or never.	1- Rarely or never; 2- About every month; 3- About every week; 4- More than once a week; 5- About every day. Higher score higher tiredness
Difficulties in getting to sleep (transformed into Zscore for regression)		1-About every day; 2-More than once a week; 3-About every week; 4-About every month; 5-Rarely or never.	1- Rarely or never; 2- About every month; 3- About every week; 4- More than once a week; 5- About every day. Higher score higher difficulties getting to sleep

satisfaction, it can be seen that adolescents who were most satisfied with life spend more time with friends after school (every day) (M=7.5, SD=1.9), F(2,4502) = 19.793, p <.001. As for Kidscreen, the same pattern can be seen, meaning that adolescents with a better perception of quality of life spend more time with friends after school (every day) (M=37.6, SD=7.3), F(2,4502) = 48.298, p<.001.

To understand the predictive effect of the variables used in this study regarding life satisfaction and quality of life (Kidscreen), multiple linear regression analysis was conducted, including variables that were significant at a bivariate level (Chi-Square and ANOVA).

The regression equation for the model of the life satisfaction explained 21% of the variance (R^2=.215). In this model, the explanation of the life satisfaction was obtained through the peer contact frequency – after school (stay with friends after school) (β=.038, p=.005), drinking coke or other soft drinks that contain sugar (higher consumption) (β=.034, p=.012), tobacco – in the last 30 days (lower consumption) (β= - .055, p=.001), alcohol – in the last 30 days (lower consumption) (β= - .037, p=.015), being bullied (less involvement) (β= - .079, p<.001), have feelings of: sadness (less feelings) (β= - .314, p<.001), irritability or bad temper (less feelings) (β= - .093, p<.001), tiredness and exhaustion (less feelings) (β= - .050, p=.002) and difficulties in getting to sleep (less feelings) (β= - .077, p<.001).

The regression equation for the model of the quality of life (Kidscreen) explained 27% of the variance (R^2=.270). In this model, the explanation of the quality of life (Kidscreen) was

Table 2
Distributions between groups of After School - Peer contact frequency Qui-squares

Peer contact frequency (after school)		None or 1 day		A few days		Every day		Total	X2	df.
		N	%	N	%	N	%			
Coke or other soft drinks that contain sugar	Never or less than once a week	690	**49.4**	980	**39.6**	193	**30.3**	1663	91.688***	4
	Few days	518	**37.1**	1117	**45.2**	288	**45.3**	1923		
	Every day	188	**13.5**	376	**15.2**	155	**24.4**	719		
Alcohol –	Never/1-2 days	1268	**90.8**	2069	**83.7**	496	**78**	3833	102.975***	4
in the last 30 days	Few days	97	**6.9**	350	**14.2**	93	**14.6**	540		
	Many days	31	2.2	54	2.2	47	7.4	132		
Tobacco –	Never/1-2 days	1336	**95.7**	2288	92.5	541	**85.1**	4165	98.828***	4
in the last 30 days	Few days	29	2.1	95	**3.8**	25	3.9	149		
	Many days	31	2.2	90	**3.6**	70	**11**	191		
Drugs –	Never/1-2 days	1368	**98**	2404	97.2	595	**93.6**	4367	35.638***	4
in the last 30 days	Few days	13	0.9	49	2	23	3.6	85		
	Many days	15	1.1	20	0.8	18	2.8	53		
Injuries	Never/1 time	1182	**84.7**	1938	**78.4**	484	**76.1**	3604	42.111***	4
	Sometimes	151	**10.8**	421	**17**	101	15.9	673		
	4 times or more	63	4.5	114	4.6	51	8	228		
Fights	Never/1 time	1276	**91.4**	2223	89.9	538	**84.6**	4037	26.441***	4
	Sometimes	79	**5.7**	173	7	58	**9.1**	310		
	4 times or more	41	2.9	77	3.1	40	**6.3**	158		
Bullying Victim	I have not been bullied/once or twice	1293	92.6	2358	**95.3**	591	92.9	4242	22.617***	4
	Sometimes	60	**4.3**	70	2.8	17	2.7	147		
	Several times a week	43	3.1	45	**1.8**	28	**4.4**	116		
Cyberbullying victim	I have not been cyberbullied/once or twice	1356	97.1	2429	**98.2**	618	97.2	4403	9.632*	4
	Sometimes	30	2.1	34	1.4	10	1.6	74		
	Several times a week	10	0.7	10	**0.4**	8	**1.3**	28		

(Continue)

Table 2
Distributions between groups of After School - Peer contact frequency Qui-squares (Continuation)

		None or 1 day		A few days		Every day				
		N	%	N	%	N	%	Total	χ²	df
Sadness	Rarely/few times	868	**62.2**	1687	**68.2**	428	67.3	2983	44.495***	4
	Sometimes	317	22.7	577	23.3	128	20.1	1022		
	About every day	211	**15.1**	209	**8.5**	80	12.6	500		
Irritability or bad temper	Rarely/few times	740	**53**	1379	55.8	366	57.5	2485	24.831***	4
	Sometimes	413	29.6	780	**31.5**	161	25.3	1354		
	About every day	243	**17.4**	314	**12.7**	109	17.1	666		
Nervousness	Rarely/few times	676	48.4	1249	50.5	346	**54.4**	2271	31.824***	4
	Sometimes	435	**31.2**	873	**35.3**	188	29.6	1496		
	About every day	285	**20.4**	351	**14.2**	102	16	738		
Tiredness and exhaustion	Rarely/few times	604	43.3	1131	45.7	299	47	2034	19.732**	4
	Sometimes	481	34.5	896	**36.2**	189	29.7	1566		
	About every day	311	**22.3**	446	**18**	148	23.3	905		
Difficulties in getting to sleep	Rarely/few times	909	65.1	1664	67.3	443	69.7	3016	9.522*	4
	Sometimes	286	20.5	503	20.3	103	**16.2**	892		
	About every day	201	**14.4**	306	**12.4**	90	14.2	597		

Table 3
Differences for life satisfaction and kidscreen for After School - Peer contact frequency- ANOVAS

After School - Peer contact frequency	None or 1 day			A few days			Every day				
	N	M	SD	N	M	SD	N	M	SD	F	p
Life satisfaction	1396	7.1	1.9	2473	7.4	1.6	636	**7.5**	1.9	19.793	.000
Kidscreen	1396	34.9	7.7	2473	37	6.7	636	**37.6**	7.3	48.298	.000

Table 4
Multiple Linear Regression - Enter Method - Life satisfaction predictors (r2 = 21%)

	Variable included	β	t	p	R^2_a	F(model fit)*
Life satisfaction	Peer contact frequency - After school (dichotomic: 0- 0 days; 1- a few days)	.038	2.811	**.005**		
	Coke or other soft drinks that contain sugar (Zscore)	.034	2.504	**.012**		
	Tobacco – in the last 30 days (Zscore)	-.055	-3.333	**.001**		
	Alcohol – in the last 30 days (Zscore)	-.037	-2.445	**.015**		
	Marijuana – in the last 30 days (Zscore)	.017	1.050	.290		
	Being Bullied (Zscore)	-.079	-5.538	**.000**		
	Cyberbullying victim (Zscore)	-.007	-.527	.598	.215	88.944***
	Fights (Zscore)	-.024	-1.695	.090		
	Injuries (Zscore)	.018	1.296	.195		
	Sadness (Zscore)	-.314	-18.167	**.000**		
	Irritability or bad temper (Zscore)	-.093	-5.231	**.000**		
	Nervousness (Zscore)	.029	1.687	.092		
	Tiredness and exhaustion (Zscore)	-.050	-3.169	**.002**		
	Difficulties in getting to sleep (Zscore)	-.077	-5.145	**.000**		

Table 5
Multiple Linear Regression - Enter Method - Kidscreen predictors (r2= 27%)

	Variable included	β	t	p	R^2_a	F(model fit)*
Kidscreen	Peer contact frequency - After school (dichotomic: 0- 0 days; 1- a few days)	.095	7.343	**.000**		
	Coke or other soft drinks that contain sugar (Zscore)	-.002	-.184	.854		
	Tobacco – in the last 30 days (Zscore)	-.021	-1.336	.182		
	Alcohol – in the last 30 days (Zscore)	-.024	-1.637	.102		
	Marijuana – in the last 30 days (Zscore)	-.041	-2.716	**.007**		
	Being Bullied (Zscore)	-.055	-4.031	**.000**		
	Cyberbullying victim (Zscore)	-.085	-6.193	**.000**	.270	119.617***
	Fights (Zscore)	-.006	-.421	.674		
	Injuries (Zscore)	.018	1.376	.168		
	Sadness (Zscore)	-.284	-17.051	**.000**		
	Irritability or bad temper (Zscore)	-.083	-4.831	**.000**		
	Nervousness (Zscore)	-.048	-2.924	**.003**		
	Tiredness and exhaustion (Zscore)	-.059	-3.860	**.000**		
	Difficulties in getting to sleep (Zscore)	-.109	-7.523	**.000**		

Table 6
Logistic Regression – After School (YES- stay with friends, at least 1 day after school) - Peer contact frequency Predictors

	β	E.P	Sig	OR	95%IC than	95% IC to
Kidscreen	.044	.006	**.000**	1.045	1.032	1.059
Life satisfaction	.022	.026	.393	1.022	.972	1.075
Coke or other soft drinks that contain sugar (Zscore)	.141	.042	**.001**	1.152	1.060	1.250
Tobacco – in the last 30 days (Zscore)	.130	.062	**.035**	1.139	1.009	1.286
Alcohol – in the last 30 days (Zscore)	.289	.058	**.000**	1.335	1.191	1.496
Marijuana – in the last 30 days (Zscore)	-.067	.055	.222	.935	.840	1.041
Being Bullied (Zscore)	-.108	.040	**.000**	.898	.830	.972
Cyberbullying victim (Zscore)	-.030	.043	.489	.971	.892	1.056
Peer contact frequency - After school (dichotomic) Fights (Zscore)	-.021	.045	.639	.979	.896	1.070
Injuries (Zscore)	.143	.045	**.002**	1.154	1.056	1.261
Sadness (Zscore)	-.058	.054	.281	.944	.849	1.049
Irritability or bad temper (Zscore)	.003	.054	.956	1.003	.901	1.116
Nervousness (Zscore)	-.050	.052	.340	.952	.859	1.054
Tiredness and exhaustion (Zscore)	.004	.049	.932	1.004	.913	1.105
Difficulties in getting to sleep (Zscore)	.089	.046	.052	1.093	.999	1.195
Constant	-.114	.260	.662	.893		

$R_N^2 = .06$

χ_{HL}^2 $p = 20.795; .008$

obtained through the peer contact frequency – after school (stay with friends after school) (β=.095, p<.001), consumption of marijuana – in the last 30 days (lower consumption) (β= -.041, p=.007), being bullied (less involvement) (β= -.055, p<.001), cyberbullying victim (less involvement) (β= -.085, p=.000), have feelings of: sadness (less feelings) (β= -.284, p<.001), irritability or bad temper (less feelings) (β= -.083, p<.001), nervousness (less feelings) (β= -.048, p=.003), tiredness and exhaustion (less feelings) (β= -.059, p<.001) and difficulties in getting to sleep (less feelings) (β= -.109, p<.001).

Finally, a logistic regression model was performed in order to explain peer contact frequency – after school (stay with friends after school), an adjusted model was obtained (Hosmer & Lemeshow $\chi2$=20.795(8), p=.008) and the regression equation explained 6% of the variance (Nagelkerke R^2=.06). In this model the explanation of the "stay with friends after school" was made by the variables: quality of life (Kidscreen) (better quality) (β=.044, p<.001), drinking coke or other soft drinks that contain sugar (higher consumption) (β=.141, p=.001), tobacco – in the last 30 days (higher consumption) (β=.130, p=.035), alcohol – in the last 30 days (higher consumption) (β= .289, p<.001), being bullied (less involvement) (β= -.108, p<.001) and injuries (more injuries) (β=.143, p=.002).

Discussion

In the context of social distancing due to the recent COVID-19 pandemic, we studied the effect of the lack of socialization with friends after school upon several risk and protective factors. We also explore the impact of these risk and protective factors upon wellbeing and life satisfaction.

As Branquinho and colleagues (2020, submitted) refer, in a context of lockdown [or confinement] due to the COVID-19 pandemic, adolescents who do not see their peers have lower levels of wellbeing, mental health and life satisfaction This happens even if they report less risk behavior (drinking sweet drinks and alcohol, smoking tobacco or marijuana) and less involvement in situations of violence and accidents.

Depriving adolescents from the contact with peers and peer social support harms their mental health, and as schools move back to normal and lockdown ends, it is important to provide relevant leisure time occupations with peers, together with quality schooling changed to fit the situation (Brooks et al., 2020).

There is an established influence of the various contexts in which adolescents are involved (family, peers and school) and wellbeing (Choi, 2018; Gaspar, Cerqueira, Branquinho, & Matos, 2018). With the COVID-19 pandemic different patterns were shaped meaning for the great majority of adolescents a better family monitoring but a lower peer contact, which, was checked in the present study, low health risks but also decrease wellbeing, being established that developing a good relationship with the peer group is an essential factor in promoting the youths' emotional well-being (Camacho et al., 2017; Tomé et al., 2018).

With the lockdown any positive school experience was remote, peer support decrease

and as reported previously (Marques, Lopez, Fontaine, Coimbra & Mitchell, 2015; Matos et al., 2017), adolescents report lower psychosocial adjustment, and tend to perceive poorer life satisfaction.

Results show that, on the one hand, "social distancing from peers" in general reduce health risks such as soda consumption, alcohol, tobacco and drug use and violence involvement (fights, bullying victimization and injuries). On the other hand, decreases the perception of wellbeing and life satisfaction and in general, increases the psychological symptoms. This fact has important messages for health and educational professionals, as well as for public policies.

If we can expect an improvement in a general pattern of less health risks with the lockdown, it is also the case that we can expect mental health to deteriorate. Thus, there must be a focus of public policies and interventions in the education and the health sector, when classes return to "normal" in the next academic year. It is advisable to have a period for recovering from the delays related to the academic setbacks. And it is also extremely advisable to keep the psychological wellbeing in mind and to consider a period in which adolescents can be heard with regard to their lockdown experiences, before coming back to their "usual" academic routines.

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