

# MOOD STATE OF ADOLESCENTS AND ITS RELATION WITH RISK BEHAVIOURS AND OTHER VARIABLES

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## INTRODUCTION

Adolescence is a stage of life in which new mental abilities are developed. They build their own ideas and adopt different lifestyles. Poor mental health is common problem in adolescence.

But in most cases the mental health problem are not recognized and sometimes are attributed to the physical and hormonal changes that young people experience.

The aims of this study has been to describe the mood state and related factors in a sample of adolescents in the city of Valladolid (Spain).

## METHODS

We surveyed a sample of 2,412 schoolchildren aged from 13 to 18 years old .

Six aspects of mood state were considered to be classified as positive or negative (Table 1).

Answers were collected on a five option scale from never to always and included almost never, sometimes and almost always. The students who answer always or almost always in three or more items were considered have negative mood state.

The association between negative mood states and sociodemographic , economic factors and risk behaviors were analyzed using a logistic regression model.

## RESULTS

The frequency of negative mood states was 14.9%, being higher in females 16.9% vs 13% in males and those high school students 20.7% (OR:1.95, IC25% :1.29-2.97, p=0.002).

In bivariate analysis (table 2) we found association between negative mental states and some factors such as: the type of school: higher in private; habitat: higher in urban; model of family life: lower if the student live with both parents and brothers and higher in unemployed parents I didn't found association with the nationality of the student or their parents, neither with parenteral educational level (no education, medium education or university education)

If odd ratio was greater than 1, statistical association existed.

Also we found association with the most risk behaviours (table 3): have worse grades than the average, problematic connection Internet, stealing, feeling physically or psychologically mistreated, having suffered of sexual harassment or be overweight.

However protective factors would be brothers or sisters, being statistically significant having two or more.

## CONCLUSIONS

The prevalence of mental health problems in adolescents is in general similar to other research studies, being higher in females. Several sociodemographic and economic variables and risk behaviors are associated with negative mood states. The assessment of these aspects by a doctor can be useful for detecting adolescents on risk.

	Tired to do things	Trouble falling asleep or waking up before the time	Moved, sad, depressed	Hopeless to the future	Nervous or tense	Bored of things
Never	89 (3.7%)	404 (16.8%)	476 (19.8%)	748(31.1%)	206 (8.6%)	237 (9.9%)
Almost never	436 (18.1%)	673 (28%)	997 (41.4%)	800(33.3%)	533 (22.2%)	632 (26.3%)
Sometimes	1290 (53.6%)	792 (33%)	719 (29.9%)	603(25.1%)	1123 (46.7%)	1058 (44%)
Almost always	475 (19.7%)	418 (17.4%)	192 (8%)	215(8.9%)	467 (19.4%)	401 (16.7%)
Always	117 (4.9%)	116 (4.8%)	22 (0.9%)	37 (1.5%)	76 (3.2%)	76 (3.3%)

	Total n (%)	Negative mood state n (%)	OR (IC 95%)	p-value
Gender				0.007
Male	1.270 (52.7)	165 (13)		
Female	1.142 (47.3)	193 (16.9)	1.36 (1.09 - 1.71)	
Course				0.013
2º ESO	566 (23.5)	72 (12.8)		
3º ESO	622 (25.8)	100 (16.1)	1.31 (0.94 - 1.81)	
4º ESO	487 (20.2)	72 (14.8)	1.18 (0.83 - 1.68)	
1º Bach	457 (18.9)	56 (12.3)	0.95 (0.65 - 1.38)	
2º Bach	280 (11.6)	58 (20.7)	1.78 (1.21 - 2.60)	
School type				0.042
Públic	818 (33.9)	101 (12.4)		
Subsidized	1.532 (63.5)	245 (16)	1.34 (1.05 - 1.72)	
Private	62 (2.6)	12 (19.4)	1.69 (0.87 - 3.29)	
School habitat				0.048
Urban	2.105(87.3%)	324 (15.4)	1.46 (1.00 - 2.12)	
Rural	307 (12.7%)	34 (11.1)		
Nationality of the student				0.888
Spanish	2.267 (94)	336 (14.8)		
Other country	145 (6)	22 (15.3)	1.03 (0.65 - 1.65)	
Nationality of the parents				0.368
Both spanish	2.184 (90.5)	318 (14.6)		
Both foreign	114 (4.7)	17 (15)	1.04 (0.61 - 1.76)	
Foreign father or mother	103 (4.3)	20 (19.4)	1.41 (0.85 - 2.33)	
Not answered	11 (0.5)			
Number of siblings				0.062
Only child	438 (18.2)	77 (17.6)		
A brother	1.491(61.8)	223 (15)	0.83 (0.62 - 1.10)	
Two or more siblings	483 (20)	58 (12.1)	0.64 (0.45 - 0.93)	
Not answered	1			
Model of family life				<0.001
Father and mother and/or brother	1.816 (75.4)	243 (13.4)		
Other situations*	593 (24.6)	115 (19.5)	1.57 (1.23 - 2.00)	
Not answered	3			
Educational level of parents:				0.817
Not education	406 (16.8)	61 (15.1)		
Medium education	571 (23.7)	87 (15.3)	1.01 (0.71 - 1.45)	
Higher education	1.098 (45.5)	166 (15.1)	1.00 (0.73 ; 1.38)	
Not answered	337(14)			
Socioeconomic status of parents:				0.018
Working father and mother	1.446 (60)	189 (13.1)		
Working father or mother	791 (32.8)	135 (17.1)	1.37 (1.08 ; 1.74)	
Other situations**	116 (4.8)	24 (20.7)	1.73 (1.08 ; 2.78)	
Not answered	59 (2.4)			

	Total n (%)	Negative mood state n (%)	OR (IC 95%)	p-value
Have worse note tan the average	406 (16.8)	104 (25.8)	2.4(1.85-3.1)	<0.001
Watching TV more three hours per day	371 (15.4)	74 (19.9)	1.54(1.16-2.04)	0.003
Internet dependence	559 (23.2)	149 (26.7)	2.85(2.25-3.61)	<0.001
Access to sexual contents (videos or photos)	272 (11.3)	57 (21)	1.62 (1.18-2.23)	0.003
Experiment with tobacco	881 (36.5)	178 (20.3)	1.89(1.51-2.37)	<0.001
Experiment with alcohol	1.857 (77)	302 (16.3)	1.74(1.29-2.37)	<0.001
Experiment with drugs	428 (17.7)	86 (20.1)	1.58(1.21-2.07)	0.001
Skipping school	271 (11.3)	64 (23.6)	1.93 (1.42-2.63)	<0.001
Stealing things	94 (3.9)	30 (31.9)	2.85 (1.82-4.47)	<0.001
Feeling psychologically mistreated	562 (23.3)	150 (26.7)	2.93(2.31-3.71)	<0.001
Feeling physical mistreated	344 (14)	94 (27.3)	2.54(1.94-3.33)	<0.001
Have suffered of sexual harassment	158 (6.6)	48 (30.4)	2.73(1.90-3.91)	<0.001
Violent behaviors (laughed, insulted, hit, attacked or marginalized)	631 (26.2)	119 (18.9)	1.48(1.17-1.89)	0.001
Overweight	538 (22.4)	119 (22.1)	1.92(1.51-2.46)	<0.001
No physical activities	101 (4.2)	28 (28)	2.33(1.48-3.66)	<0.001
Coital sex	726 (30.4)	140 (19.3)	1.61(1.27-2.03)	<0.001
Use emergency contraception pill	151 (20.1)	28 (18.3)	0.93(0.59-1.48)	0.622