Educational styles, parenting stressors and psychopathological symptoms in parents of adolescents with high-risk behaviours

Running title: Parents of adolescents with high-risk behaviours

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Summary

Aims: The main goal of this study was to determine the characteristics of parents who sought help from two prevention programmes due to having an adolescent child who presents risk behaviours. Method: The sample was composed of 374 parents (169 male and 205 female). Information on socio-demographic characteristics, psychopathological symptoms, emotional states, educational styles and maladjustment to everyday life was collected. Findings: The results show statistically differences by gender. Mothers obtained a higher degree of psychopathology symptoms, maladjustment and parental stress relative to fathers. Mothers also used more frequently authoritative and permissive parenting styles. In general, authoritarian and permissive parenting styles and stressful perceptions of the parental role are associated with more psychopathological symptoms and with maladjustment. Finally, the following variables predicted the severity of psychopathological symptoms: secondary education, maladjustment, stressful perceptions of the parental role, and authoritarian and permissive parenting styles. Conclusions: This study highlights the need to assess the psychological problems of parents of adolescents with risk behaviours and to develop specific intervention programmes.

Keywords: adolescence; risk behaviours; parents; educational styles; parenting stressors

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Introduction

The most common risk behaviours in adolescents are those related to drug consumption and to the development of antisocial behaviour (Luengo, Romero, Gómez-Fragüela, Guerra, & Lence, 2008). Various studies show that the presence of these types of risk behaviours at an early age increases one's likelihood of maintaining such behaviours over the long term (Espiritu, Huizinga, Crawford, & Loeber, 2001; Farrington, Lambert, & West, 1998; Kempf-Leonard, Chesney-Lind, & Hawkins, 2001; Krohn, Thornberry, Rivera, & Blanc, 2001; Loeber & Farrington, 1998). Some risk factors that have been identified in adolescents with these problem behaviours are school failure, involvement in youth gangs, violent attitudes or a lack of social skills (López & Rodríguez-Arias, 2012). Additionally, various studies have shown that the presence of family conflicts significantly increases one's risk of developing problem behaviours related to substance abuse and aggressive behaviour (Ary et al., 1998; Estévez, Jiménez, & Musitu, 2007).

Additionally, fathers and mothers of adolescents with risk behaviours present a high incidence of psychological problems, mainly symptoms of anxiety, depression and irritability that result from complex family situations generated in these households (Lloret, Espada, Cabrera, & Burkhart, 2013). Inadequate educational and communication styles are typical of these families and usually range between permissiveness and authoritarianism and lack appropriate strategies for coping with relationships with adolescents (Ary, et al., 1998; Parker & Benson, 2004). This is a highly relevant factor, as existing data show that both a suitable family atmosphere

(Jiménez, 2011) and appropriate communication between family members (Cava, Murgui, & Musitu, 2008) serve as important protective factors.

In this sense, certain programmes developed over recent years that are directed at teenagers with problem behaviours have included specific interventions with parents. The main European database that lists programmes that include some type of evaluation only lists two specific programmes in Spain (European Monitoring Centre for Drugs and Drug Addiction, 2015a, 2015b): the Suspertu programme, developed by the Proyecto Hombre Navarra Foundation, and the Hirusta programme, developed by the Gizakia de Bizkaia Foundation. These two prevention programmes are directed at teenagers who present risk behaviours (mainly of substance use and aggressive behaviour) and offer specific intervention programs for the parents of these adolescents.

However, though these two interventions have a 16-year-old history, no studies have yet been conducted on the characteristics of these parents, on the family consequences of the conflictive experiences that they share, or on the psychological effects of the adolescents' behaviour. No data exist on the effectiveness of these specific intervention programmes directed at families, with the exception of one isolated qualitative study (Comas, 2004). From an international perspective, there is also an important gap in research about how these parents are affected and what type of help they need (Burkhart, 2011).

Therefore, the main objective of this study was to determine the socio-demographic characteristics, educational styles, emotional states, psychopathological symptoms and degrees of maladjustment to everyday life of the parents of adolescents engaged in risk behaviours who have sought help from the two Spanish prevention programmes included in the EDDRA database (European Monitoring Centre for Drugs and Drug Addiction, 2015a, 2015b). Moreover, this study tried to establish the main

variables associated with a worse personal condition of the parents (psychopathological symptoms and maladjustment). The specific contribution of this study will be to have accurate information on the characteristics of these parents and on the problems they face as a way to improve the intervention programmes implemented for them.

Method

This study's protocol was approved by the ethics committee of the Public University of Navarra (Code: PI-003/14).

Participants

The sample for this study included 374 parents (169 fathers and 205 mothers) of adolescents ranging from 12 to 18 years old who present risk behaviours and who have sought assistance from the indicated prevention programmes developed by Suspertu of the Proyecto Hombre Navarra Foundation and by Hirusta of the Gizakia de Bizkaia Foundation from 2013 to 2014. The two prevention programmes are directed at at-risk teenagers (mainly for substance use and aggressive behaviour) and also offer interventions with their parents. Intervention approaches used in these programmes are the same, as both are based on the foundational principles of Proyecto Hombre. More specifically, these interventions involve both individual interviews with parents, which function as follow-up meetings for emotional support and for developing daily conflict management skills, and family gatherings with the adolescent and his or her parents, which are aimed at mediating and confronting specific situations depending on each case.

The following study participation inclusion criteria were used: 1) enrolment in either of the two indicated prevention programmes; 2) completion of the evaluation tests; and 3) signed informed consent to participate in the study.

The sample was composed of 54.8% of mothers and 45.2% fathers. The main socio-demographic characteristics are shown in table 1. The mean age of the individuals included in the study was 48.8 years (SD = 5.7), being fathers significantly older than mothers. Most of them had secondary studies, followed by university education. Although most of the sample was employed, the rate of unemployment and the proportion of homemakers was higher in mothers than in fathers. On the other hand in the 70.3% the whole family lived together, and in the rest of cases (27.7%) the family of origin had changed in different ways. Anyway, 95.1% of the parents in the sample lived with the adolescent child with high-risk behaviours.

INSERT TABLE 1 HERE

Assessment instruments

The *Parenting Practices Questionnaire (PPQ)* (Robinson, Mandleco, Olsen, & Hart, 1995, 2001) identifies three parenting educational styles: authoritative, authoritarian and permissive. The questionnaire presents parents with a series of statements on possible behaviours exhibited during interactions with their children. Parents must choose one of four response options on a Likert scale ranging from one (*never*) to four (*always*) depending on their agreement or disagreement with each of them. A shortened Spanish version with 34 items (Arranz, Oliva, Olabarrieta, & Antolín, 2010) corresponding to one of the three parenting educational styles examined was used in this study. The Authoritative scale includes 13 items (range: 13-52), the Authoritarian scale includes 11 items (range: 11-44) and the Permissive scale includes 10 items (range: 10-40). Higher scores denote a higher prevalence of the educational style evaluated. The internal consistency is 0.86 for Authoritative scale, 0.62 for Permissive scale, and 0.77 for the Authoritarian scale.

The *Parental Stress Scale (PSS)* (Berry & Jones, 1995) is a self-administered questionnaire with 12 statements that are answered in a Likert scale with five response options ranging from one (*strongly disagree*) to five (*totally agree*) depending on the degree of agreement with each of the statements. This test assesses the degree of stress and gratification perceived by parents regarding their roles as fathers or mothers. Higher scores indicate a higher degree of parental stress (range 12-60). In addition to the total score, this test includes two subscales that offer information on two dimensions of perceived stress: a) Rewards from the child (five items), which assess the degree of gratification perceived in his/her role as a father/mother; and (b) Stressors (seven items), which assess the degree of perceived stress in his/her role as a father/mother. The Spanish adaptation by Oronoz, Balluerka and Alonso-Arbiol was used in this study (2007). The internal consistency is 0.77 for the Rewards subscale, and 0.76 for the Stressors subscale.

The *Symptom Checklist (SCL-90-R)* (Derogatis, 1975) is a self-administered questionnaire that was developed for the assessment of general psychopathology. It includes 90 items with five response options on a Likert scale that range from zero (*no*) and four (*a lot*). The questionnaire is designed to reflect a subject's symptoms of psychological distress. The SCL-90-R is composed of nine dimensions of primary symptoms (somatisation, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism). In addition, it offers three global indexes that reflect a subject's overall level of severity: Global Severity Index (GSI), Positive Symptom Distress Index (PSDI) and Positive Symptom Total (PST). The internal consistency ranges from 0.70 to 0.90. In this study, the percentiles of each dimension were considered

The *Maladjustment Scale* (Echeburúa, Corral, & Fernandez-Montalvo, 2000) reflects the extent to which each patient's problematic situation affects various areas of

everyday life: work or studies, social life, free time, partner relationships and family life. This instrument includes six items that range from zero (*nothing*) to five (*a lot*) on a Likert scale. The total scale range is 0–30. The cut-off point revealing a significant maladjustment is two points for each area and 12 points for the full scale. The internal consistency is 0.94.

Procedure

After the participants were selected in accordance with the above criteria, sample data collection was conducted over two sessions based on the initial assessment established in the protocol of the two programmes. In the first meeting, data on socio-demographics, aspects related to educational styles and the degree of perceived stress among parents were collected. During the second session, psychopathological exploration was completed using the SCL-90-R and based the degree of maladjustment to everyday life derived from existing family problems involving the teenagers. All participants were interviewed by psychologists who had five or more years of experience in assessing and dealing with parents of at-risk adolescents. Self-report measures were administered with the presence and support of the interviewers.

After the evaluation sessions were completed, the parents engaged in usual treatments according to the corresponding prevention programme.

Data analysis

Descriptive analyses were conducted for all of the variables. Bivariate analyses were employed using $\chi 2$ or t-test statistics (depending on the nature of the variables studied) as well as Pearson's correlations. Moreover, two logistic regression analyses (forward method) were conducted to determine the main variables associated with a worse personal condition of the parents, using psychopathological symptoms ($GSI \geq 70$) and maladjustment levels (total score ≥ 12) as dependent variables. Although these variables were quantitative in nature, they have been dichotomized using the cut-off

points in order to identify from a clinical perspective parents who showed clinically relevant symptomatology and maladjustment (scores above the cut-off point). The variable entry criterion was set to 0.05 and the variable retention criterion to 0.10. The Hosmer–Lemeshow test was used to assess the goodness of fit of these models. A difference of $p < .05$ was considered significant. Statistical analyses were carried out using SPSS (version 15.0 for Windows).

Results

Comparison between the fathers and mothers in the sample

Table 2 presents the scores obtained by the parents in the sample for all of the variables studied as well as a comparison based on gender. Statistically significant differences were observed between the fathers and mothers for nearly all of the variables. More specifically, the mothers generated significantly higher scores than the fathers in the subscales related to authoritative and permissive educational styles. In addition, they viewed their roles as mothers as more stressful than those of fathers.

INSERT TABLE 2 HERE

Furthermore, mothers participating in the programme presented higher levels of psychopathological symptomatology in all dimensions of the SCL-90-R than the fathers. In this sense, scores obtained by the mothers in two global indexes of severity (GSI and PST) and for scales related to obsessive-compulsive or depressive symptomatology are of particular note. For all of these, scores exceeded the 70th percentile. Conversely, scores obtained by fathers were significantly lower, falling below the 60th percentile for nearly all of the subscales.

The same tendency was observed for levels of maladjustment to everyday life, with the women generating significantly higher scores in all of the areas analysed, though with the exception of partner relationships. In any case, the mean scores for the

women exceeded the cut-off point in all areas of maladjustment. For the men, the cut-off point was exceeded in four of the six areas assessed by the instrument.

Relationships between the variables studied

Table 3 presents the results of the correlation analysis between educational styles and perceived stress and the severity of psychopathological symptoms and maladjustment to everyday life.

INSERT TABLE 3 HERE

Overall, parents (both fathers and mothers) who generated high scores for authoritative educational styles and who felt more rewarded in their role as fathers/mothers presented fewer psychopathological symptoms and less maladjustment. However, more permissive and authoritarian parents with more stressful perceptions of their roles as fathers/mothers showed more significant psychopathological symptoms and maladjustment to everyday life.

Multivariate analyses

The results of the logistic regression analysis show that the main variables that predicted the severity of psychopathological symptoms presented by the parents (GSI > 70) included the following: secondary educational background, high global maladjustment subscale scores, views of the parental role as stressful and a preference for authoritarian and permissive educational styles (table 4). Specifically, the odds ratios in secondary education and global maladjustment were above 2. The odds ratio in the rest of variables were above 1. In summary, these five variables correctly classified 73.5% of the cases.

INSERT TABLE 4 HERE

Additionally, the main variables that predicted the degree of maladjustment to everyday life were the following: viewing the parental role to be unrewarding and

highly stressful and a preference for an authoritarian educational style (table 4). Specifically, the odds ratio in Reward scale was below 1; and the odds ratios in Stressors scale and in Authoritarian educational style were above 1. These three variables correctly classified 74.9% of the cases.

Discussion

The main objective of this study was to examine the emotional state, the psychopathological symptoms and educational styles of parents of adolescents who engage in risk behaviours, mainly substance abuse and aggressive behaviour. The results reveal the presence of several psychopathological symptoms among the parents studied, with greater impacts in the case of mothers, who exceeded the 70^{th} percentile for nearly all of the SCL-90-R subscales. Therefore, they present a more severe psychopathological condition than general population. Moreover, high maladjustment to everyday life was also observed.

These findings are consistent with the few studies conducted to date that show an overrepresentation of anxiety and depression symptoms in the fathers/mothers of adolescents who engage in risky behaviours (Lloret, et al., 2013). This result is of great consequence, as family problems related to adolescent risk behaviours, either as cause or consequence, contribute to the maintenance of problem behaviours in adolescents including those of drug consumption or acts of violence (Ary, et al., 1998; Estévez, et al., 2007). Therefore, intervention programmes that involve parents of at-risk adolescents should consider the psychopathological characteristics that they present to improve the family atmosphere and to limit risks of problem behaviours in adolescent children. This type of intervention is especially necessary in the case of mothers who, as is typical in the field of psychopathology (Frank, 2000) and as shown in this study, present higher degrees of affective symptomology that is primarily related to anxiety

and depression. Interventions with these mothers in prevention programmes with adolescents are likely more accurate than the general treatments that many of them may be receiving in primary health care or mental health centres in response to the symptoms they present.

Regarding the educational styles observed in these parents, the results show that those parents who use more authoritative educational styles present fewer psychopathological symptoms, both in the case of fathers and mothers. Nonetheless, authoritarian and permissive educational styles relate to more severe psychopathological symptoms and to higher levels of maladjustment to everyday life. Several of these parents develop inappropriate strategies for coping with these family conditions, as demonstrated by other authors (Ary, et al., 1998; Parker & Benson, 2004). Given the importance of creating an adequate family atmosphere and efficient communication strategies between family members for the development of protective factors (Cava, et al., 2008; Jiménez, 2011), the development of proper educational styles and effective communication strategies in the context of the family must also be emphasised in intervention programmes that involve such parents.

Another relevant finding derived from this study is the relationship between parents' perceptions of their parental role (stressful or rewarding) and the psychopathological state and levels of maladjustment to everyday life. Therefore, intervention programmes should develop strategies for minimizing perceptions of parental roles as stressful and for maximizing feelings of parental reward. In this sense, it should not be forgotten that in this study, perceptions of the parental role as stressful, lacking feelings of reward and the use of permissive and authoritarian educational styles are identified as some of the main variables that predict the severity of psychopathological and maladjustment symptoms.

Additionally, the prediction analysis developed shows that the acquisition of secondary education is associated with symptom severity. While limited data are available on this issue, a possible explanatory hypothesis derived from clinical experience with these parents may be related to greater expectations regarding childcare in these cases relative to those characterised by primary education. In any case, this is merely a hypothesis to be tested in future studies.

This research study presents some limitations. First, this is a descriptive study that covers a specific sample of parents who are seeking assistance in two specific prevention programmes. It would be beneficial for researchers to study broader samples that are representative of other types of intervention programmes. Second, due to their descriptive nature, our results do not allow one to analyse causal relationships between the studied variables. It is necessary to develop longitudinal studies that reveal the causal relationships between psychopathological symptoms observed in the family, perceived levels of parental stress, educational styles developed and risk behaviours among adolescents in the sample. This would make it possible to establish preventive guidelines that are directed at developing protective factors and at limiting risk factors.

In any case, the contribution of this study is to provide information on phenomena that have been studied little to date: psychopathological symptoms observed in many parents of adolescents who engage in risky behaviours and their relationships with perceptions of parental roles and educational styles used. The results highlight the need to establish intervention programmes for the parents of such adolescents for the combined purpose of attenuating psychopathological symptoms and of teaching educational styles and more appropriate coping strategies in response to conflict situations with one's children so that parents can view their role as parents as more

rewarding. These intervention programmes should include components that address the specific parents' problems detected in this study.

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Table 1

Comparison between socio-demographic variables

	Total (N = 374)		**Fathers (n = 169)**		**Mothers (n = 205)**		***t (d.f.)***	***p***
	M	***(s.d.)***	***M***	***(s.d.)***	***M***	***(s.d.)***		
Age	48.8	5.7	50.5	5.3	47.3	5.5	5.5 (353)	< .001
	N	***(%)***	***N***	***(%)***	***n***	***(%)***	***X^2 (d.f.)***	***p***
Education	365		164		201			
Primary	86	23.6%	43	26.2%	43	21.4%		
Secondary	161	44.1%	63	38.4%	98	48.8%	3.9 (2)	.140
University	118	32.3%	58	35.4%	60	29.9%		
Employment situation	358		160		198			
Homemaker	30	8.4%	3	1.9%	27	13.6%		
Employed	291	81.3%	139	86.9%	152	76.8%	27.3 (3)	< .001
Unemployed	26	7.3%	8	5.0%	18	9.1%		
Retired	11	3.1%	10	6.3%	1	0.5%		
Type of family	370		166		204			
Family of origin	260	70.3%	125	75.3%	135	66.2%		
Reconstituted family father	5	1.4%	3	1.8%	2	1.0%		
Reconstituted family mother	16	4.3%	4	2.4%	12	5.9%	29.1 (5)	< .001
Single father	18	4.9%	13	7.8%	5	2.5%		
Single mother	55	14.9%	10	6.0%	45	22.1%		
Other	16	4.3%	11	6.6%	5	2.5%		
Living with the child	371		167		204			
Yes	353	95.1%	154	92.2%	199	97.5%	5.7 (1)	.017

Table 2
Comparison between mothers and fathers according to the studied variables

	Total (N = 374)		**Fathers (n = 169)**		**Mothers (n = 205)**			
	M	***(s.d.)***	***M***	***(s.d.)***	***M***	***(s.d.)***	***t (d.f.)***	***p***
Educational styles								
Authoritative	40.14	6.67	38.78	6.59	41.27	6.53	3.66 (372)	< .001
Authoritarian	16.70	3.50	16.56	3.28	16.82	3.68	0.74 (372)	.462
Permissive	21.44	3.76	20.66	3.41	22.08	3.92	3.68 (369)	< .001
Parental stress	34.65	6.80	33.88	6.71	35.29	6.82	2.01 (372)	.045
Rewards	16.72	4.69	16.78	4.83	16.66	4.58	0.24 (372)	.810
Stressors	19.65	5.32	19.04	5.03	20.15	5.51	2.03 (372)	.043
Psychopathological symptoms[1]								
Somatisation	61.92	31.21	58.25	33.86	64.93	28.59	2.03 (325.6)	.043
Obsession-Compulsion	63.53	30.87	55.20	33.36	70.35	26.88	4.74 (316.3)	< .001
Interpersonal sensitivity	61.33	31.39	56.32	33.46	65.44	29.03	2.77 (330.9)	.006
Depression	66.79	30.93	59.77	33.06	72.54	27.86	3.97 (325.3)	< .001
Anxiety	63.68	29.04	58.27	30.33	68.10	27.21	3.25 (337.1)	.001
Hostility	63.06	29.89	59.20	30.67	66.22	28.93	2.26 (369)	.024
Phobic anxiety	34.74	34.63	30.66	33.59	38.08	35.20	2.06 (369)	.040
Paranoid ideation	53.42	31.63	47.49	32.30	58.28	30.30	3.31 (369)	.001
Psychoticism	56.15	34.37	50.64	37.02	60.66	31.43	2.77 (326.7)	.006
Global severity index	65.52	31.58	58.75	34.15	71.06	28.20	3.73 (321.3)	< .001
Positive symptom distress index	47.75	29.19	40.72	27.56	53.51	29.29	4.30 (369)	< .001
Positive symptom total	70.27	30.31	64.52	32.94	74.97	27.17	3.29 (320.9)	.001
Maladjustment scale								
Work/studies	2.07	1.35	1.90	1.30	2.22	1.37	2.3 (370)	.024
Social life	1.93	1.29	1.72	1.26	2.09	1.29	2.8 (360.8)	.005
Free time	2.37	1.38	2.19	1.31	2.53	1.42	2.4 (372)	.018
Partner relationship	2.49	1.33	2.47	1.31	2.50	1.35	0.21 (370)	.830
Family life	2.72	1.29	2.56	1.21	2.85	1.34	2.2 (370)	.031
Global item	2.74	1.15	2.54	1.10	2.90	1.17	3.0 (370)	.003
Total	14.19	6.12	13.33	5.81	14.90	6.30	2.49 (372)	.013

[1]Percentiles according to general population

Table 3

Correlation between educational styles and parental stress and the severity of psychopathological symptoms and degree of maladjustment to everyday life

	Educational styles						Parental stress					
	Authoritative		Permissive		Authoritarian		Rewards		Stressors		Parental stress	
Fathers	***r***	***p***	***r***	***p***	***r***	***p***	***r***	***p***	***r***	***p***	***r***	***p***
Somatisation	-.112	.148	.324	< .001	.366	< .001	-.111	.154	.335	< .001	.177	.022
Obsession-Compulsion	-.184	.017	.452	< .001	.350	< .001	-.304	< .001	.459	< .001	.277	< .001
Interpersonal sensitivity	-.137	.077	.343	< .001	.297	< .001	-.205	.008	.328	< .001	.197	.011
Depression	-.133	.085	.384	< .001	.322	< .001	-.359	< .001	.514	< .001	.307	< .001
Anxiety	-.149	.054	.393	< .001	.320	< .001	-.358	< .001	.504	< .001	.290	< .001
Hostility	-.221	.004	.325	< .001	.427	< .001	-.257	.001	.371	< .001	.313	< .001
Phobic anxiety	-.108	.165	.288	< .001	.126	.104	-.118	.130	.226	.003	.081	.296
Paranoid ideation	-.265	.001	.240	.002	.250	.001	-.156	.043	.314	< .001	.174	.025
Psychoticism	-.210	.006	.354	< .001	.285	< .001	-.187	.016	.435	< .001	.236	.002
GSI	-.162	.036	.443	< .001	.397	< .001	-.305	< .001	.471	< .001	.283	< .001
PSDI	-.031	.688	.360	< .001	.261	< .001	-.304	< .001	.364	< .001	.193	.012
PST	-.185	.017	.386	< .001	.382	< .001	-.255	.001	.444	< .001	.274	< .001
Maladjustment scale	-.121	.118	.311	< .001	.248	.001	-.383	.000	.451	.000	.233	.002
Mothers	***r***	***p***	***r***	***p***	***r***	***p***	***r***	***p***	***r***	***p***	***r***	***p***
Somatisation	-.054	.446	.231	.001	.220	.002	-.145	.038	.292	< .001	.177	.011
Obsession-Compulsion	-.101	.149	.357	< .001	.242	< .001	-.219	.002	.356	< .001	.256	< .001
Interpersonal sensitivity	-.125	.075	.286	< .001	.300	< .001	-.226	.001	248	< .001	.098	.165
Depression	-.069	.330	.332	< .001	.233	.001	-.319	< .001	.331	< .001	.162	.021
Anxiety	-.079	.264	.271	< .001	.279	< .001	-.229	.001	.370	< .001	.209	.003
Hostility	-.143	.041	.304	< .001	.410	< .001	-.270	< .001	.375	< .001	.202	.004
Phobic anxiety	-.072	.308	.282	< .001	.311	< .001	-.039	.582	.187	.007	.144	.040
Paranoid ideation	-.095	.178	.229	.001	.270	< .001	-.097	.169	.301	< .001	.161	.022
Psychoticism	-.141	.044	.321	< .001	.333	< .001	-.209	.003	.299	< .001	.152	.030
GSI	-.069	.324	.314	< .001	.273	< .001	-.263	< .001	.390	< .001	215	.002
PSDI	.075	.283	.299	< .001	.137	.051	-.159	.023	.201	.004	.033	.640
PST	-.144	.039	.305	< .001	.303	< .001	-.264	< .001	.393	< .001	.238	.001
Maladjustment scale	-.124	.077	.267	< .001	.173	.013	-.246	.000	.325	.000	.253	.000

Table 4
Logistic regression (final models)

(Dependent variable = GSI Score; 0 = GSI ≤ 69; 1 = GSI ≥70)			
	Variables	**Odds Ratio (significance)**	**95% CI**
	Education (secondary)	2.34 (.004)	(1.31. 4.19)
	Global maladjustment	2.03 (< .001)	(1.57. 2.62)
	Stressors	1.08 (.002)	(1.03. 1.14)
	Permissive educational style	1.15 (.001)	(1.06. 1.24)
	Authoritarian educational style	1.09 (.048)	(1.01. 1.18)
	Constant	0 (< .001)	
Adj. R^2	.370		
Correctly classified	73.5% (Total)	63.2% (GSI ≤ 69)	81.4% (GSI ≥70)
(Dependent variable = maladjustment; 0 = maladjustment ≤ 11; 1 = maladjustment ≥12)			
	Variables	**Odds Ratio (significance)**	**95% CI**
	Reward	0.89 (< .001)	(0.84. 0.95)
	Stressors	1.13 (< .001)	(1.07. 1.19)
	Authoritarian educational style	1.10 (.024)	(1.01. 1.19)
	Constant	0.364 (.364)	
Adj. R^2	.260		
Correctly classified	74.9% (Total)	44.2% (Maladjustment ≤ 11)	88.8% (Maladjustment ≥12)