



## When Foster Care is Called “Home”: Risk and Protective Issues

Inês Camacho<sup>1,2\*</sup>, Margarida Gaspar de Matos<sup>1,2,3</sup>, Catarina Mota<sup>1,3</sup>,  
Gina Tomé<sup>1,2</sup>, Marta Reis<sup>1,2</sup> and Antonia Jiménez-Iglesias<sup>4</sup>

<sup>1</sup>*Equipa Aventura Social, Faculdade de Motricidade Humana, Universidade de Lisboa, Estrada da Costa, Cruz Quebrada, Portugal.*

<sup>2</sup>*ISAMB / Universidade de Lisboa, Portugal.*

<sup>3</sup>*WJCR / ISPA – Instituto Superior de Psicologia Aplicada, Portugal.*

<sup>4</sup>*Departamento de Psicología Evolutiva y de la Educación, Universidad de Sevilla, Spain.*

### **Authors' contributions**

*This work was carried out in collaboration between all authors. Authors IC and MGM designed the study, wrote the protocol and supervised the work. Authors IC and MGM carried performed the statistical analysis. Authors GT and MR managed the analyses of the study. Author IC wrote the first draft of the manuscript. Authors IC, CM and AJI managed the literature searches and edited the manuscript. All authors read and approved the final manuscript.*

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### **ABSTRACT**

**Aim:** The aim of this study was to understand in depth the differences that exist between adolescents in foster care and adolescents living with their families (living with mother and father; living with mother or father; living with mother and stepfather; living with father and stepmother).

**Methodology:** The Portuguese HBSC survey included 6026 students (47.7% were boys).

**Results:** Adolescents in foster care when compared with their peers, show more risk behaviours such as: smoking, being drunk and being more violent. These adolescents often report that they are sad, nervous and angry, are more frequently worried, and practice less physical activity.

\*Corresponding author: E-mail: [inmcamacho@gmail.com](mailto:inmcamacho@gmail.com);

**Conclusion:** Health promotion interventions with adolescents in foster care, similarly to those living in different types of family structures are important because they may prevent risk behaviours and promote health and well-being.

*Keywords: Foster care; different types of families; risk and protective behaviours; adolescence.*

## 1. INTRODUCTION

Several reasons may be in the origin of foster care placement, including an abandonment experience (directly or indirectly), the loss of a parent (mother, father) or family member (grandparent) or, in the worst cases, the whole family [1].

The placement of young people in a residential group care home after being removed from unhealthy home environments, by child protective services, is commonly accepted [2]. Additionally, foster homes provide shelter to homeless, runaway and rejected adolescents [2].

It is well known that children and adolescents in foster care homes or families, who have previously experienced maltreatment or negligence, are more likely to engage in risk or unprotected behaviours [3]. Findings from an earlier study [4] show that adolescents within the foster care system report substance use at equal or higher level than others adolescents in the population living in nuclear family environment. [5] point that although adolescents in foster care may behave similarly to their peers who are not in foster care, risk behaviours occur at an earlier age and with a greater frequency and intensity.

Several aspects and behaviour domains have been investigated in relation to adolescents in foster care context: sexuality, delinquency, substance use, or even self-destructive behaviours [3,6]. Risk behaviours, such as using inadequate contraception, engaging in criminal or violent behaviour, alcohol and drugs experiences at an early age, are all typical examples of identified problems that require special attention and intervention. Moreover, it is important to investigate, from a cross-sectional perspective, the differences between adolescents growing up in their families and adolescents growing up in foster care homes or families.

According to Steinberg and his colleagues [7], adolescence is a time of pronounced development and change; young people are particularly concerned and making decisions about their future being a time of several

individual transitions, irrespectively of foster care situations. Before examining the differences between adolescents in foster care and other adolescents, concerning engagement in risk behaviours, it is important to address the reasons underlying foster care placement. Children in foster care are, frequently, victims of neglect, physical, emotional or sexual abuse, all circumstances of maltreatment [4]. An examination of 2013 data from the "Characterization Report of Annual Situation of Foster Care Children and Young People" [8], negligence appeared as the principal motive leading to the child's placement in foster care homes, in Portugal. The data indicate that 86% of foster care situations were due to situations of severe negligence, either in terms of education, health, child risk behaviour, or in the form of exposure to deviant parental patterns or lack of parental supervision and pmonitoring. The same source specifies that, in respect to the year 2013, most children and young people in foster care were male (more than 50%). The age distribution shows that 55% of the children/adolescents in foster care were aged between 12 and 17 years [8].

The past negative perspective was frequently associated with depression, anxiety, low self-esteem, aggression, and unsatisfactory interpersonal relationships, with a severe level of conflict [9]. In the same line of ideas [3], in their study about past, present and future using adolescents and children growing up in care homes, found that they scored higher on the past negative perspective, suggesting that they are isolated or have a restrict social support. However, and because of this negative past experiences, adolescents in foster care can show more sympathy and concern with others, which may lead, in some cases, to building positive relationships with others.

In relation to risk and protective behaviours, it's well established that protective behaviours are associated, for example, with a positive self-conception and self-esteem, which is somehow linked to resilience [10]. Several behaviour problems may be prevented through the development of competencies like self –

regulation, decision-making skills or personal values.

Some authors support the idea that in foster care there are increased risks of poor health [11,12,13]. Moreover, some studies show that health profiles are influenced by developmental age and gender [10]. Other studies suggest that adolescents in foster care use substances, report mental health problems and engage in risk sexual behaviours [4]. In fact, several studies show a strong association between childhood maltreatment and substance use (alcohol and marijuana are the most frequent substances) among adolescents [4], and that's one reason why it is important to understand the context and environment and of foster care. Also noticed that the use of marijuana or other delinquent behaviours are quite predictive of adolescents' engagement in HIV risk behaviours like unprotected sex which is considered a maladaptive method of coping [4].

Furthermore, the feeling of loss and separation in adolescents who have been removed from their homes, parents or relatives, can have devastating consequences on their emotional, physical and psychological state, which, in turn, increases the risk to engage in substance abuse and of mental health problems [4]. Further problems include post-traumatic stress or difficulty to cope with unresolved psychological distress, which may lead to depression, anxiety and other disorders. Delinquent and aggressive behaviours may be seen as externalizing responses to internal discomfort.

Kools and his colleagues found that adolescents exhibit worst health profiles and that girls report more often worst health status when compared to boys. This means that girls in foster care are more vulnerable to health issues and, accordingly, they also reported lower self-esteem and higher physical and emotional discomfort, considering health dimensions [10].

As already mentioned, in Portugal, in the year 2013, some data (8445 children and young people in a host situation) was collected and compiled in an annual report of the foster care children and young people situations [8]. This characterization says respect to 8,445 children and young people who were actually in a host situation. It is important to note that 6192 started the foster placement in previous years and 2253 during the year under review. According to geographic distribution, Lisbon (19.3%), Porto (18.3%) and Braga (7.5%) are the Portuguese

cities with more children and adolescents in foster situation. Regarding behavioural problems (ranging between mild to severe) more problems were identified in the age group between 15 and 17 years old. On the other hand, children between 6 and 9 years old were the age group with less recognized problems.

Considering gender, 62,6% of the children and young people in foster care are male [8].

Another aspect, analysed by the report were the life projects of children and youngsters in foster care homes. Be autonomous (41%), followed by the probability of permanent host (approximately 18%) and the possibility of (re)integration in the nuclear family of origin (16%) were the three main issues in life projects reported.

In respect to the different types of families, research has found that children from stepfamilies showed more externalising and internalising problems than children from traditional families or children from single-parent families, among others not analysed in this study [14]. Similarly, stepfamilies showed lower quality of family context than traditional or single-parent families [15]. Nevertheless, these differences were not due to the type of families, since differences between families disappeared when sociodemographic or contextual variables were controlled [14,15].

The aim of this study was to understand the differences between foster care adolescents and their peers living with their families (living with mother and father; living with mother or father; living with mother and stepfather; or living with father and stepmother).

## 2. METHODS

### 2.1 Procedures

This survey is part of the Health Behaviour in School-aged Children (HBSC) study [16,17, 18,19].

A questionnaire with open-ended and closed-ended questions was administered in the classroom with the assistance of the informatics teacher, using an online procedure, and took an average of 50 minutes (a regular class length) to fill in. Researchers were available to answer the students questions. This study followed all ethic recommendations regarding research on humans and got the approval of the ethical committee.

**Table 1. Items of the study**

	<b>Items</b>	<b>Responses</b>
Drunkenness	Have you ever been drunk?	1. No, never 2. Yes, 1-3 times 3. Yes, more than 4 times
Frequency of tobacco use	How often do you smoke tobacco at the present?	1. Don't smoke 2. Less than once per week 3. At least once a week 4. Every day
Subjective health complaints	In the last 6 months: how often have you had the following... a) Feeling low (sad, depressed) b) Irritability or bad temper c) Feeling nervous	1. Rarely or never 2. More than once a week 3. Almost every day
Health	How do you feel?	1. Excellent 2. Good 3. Reasonable 4. Bad
Worries	How often gets worries?	1. Rarely or never 2. Almost every month 3. Almost every week 4. More than once a week 5. Almost every day
Was bullied in school	How many times have you been bullied in school over the past two months?	1. I wasn't bullied in school in the past two months 2. Unless once a week 3. Several times a week
Bullier in school	How many times did you bully someone in the last two months?	1. I haven't bullied anyone in school in the past two months 2. Unless once a week 3. Several times a week
School	Do you like school?	1. Yes, I Like School 2. No, I Don't like school
Physical Activity	How many often do you practice physical Activity?	1. Every Day 2. More than twice a week 3. Once a week 4. At least once a week 5. Never
Life Satisfaction	"10" is the best possible life for you and "0" is the worst possible for you. In general, where on the ladder do you feel standing at the moment?	10 – best possible life ... 0 – worst possible life
Family Relationship	"10" is the best relationship with you family and "0" is the worst possible for you. In general, where on the ladder do you feel standing at the moment?	10 – best relationship ... 0 – worst relationship
Friends Relationship	"10" is the best relationship with your friends and "0" is the worst possible for you. In general, where on the ladder do you feel standing at the moment?	10 – best relationship ... 0 – worst relationship

## 2.2 Participants

The Portuguese HBSC survey included 6026 students (47.7% were boys), from the 6<sup>th</sup> (49.1% boys), 8<sup>th</sup> (48.9% boys) and 10<sup>th</sup> (43.7%) grade

level, with a mean age of 13.8 years ( $SD = 1.68$ ).

They were randomly selected from 36 national vertical clusters of schools, in a total of 473 classes, in a national sample geographically stratified by Education Regional Divisions in

Portugal. The overall procedure, has been described elsewhere [16,19]; 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 is nationally representative of the respective grade levels. The response rate was 79%.

### 2.3 Measures

Adolescents were confronted with a questionnaire with a large number of questions on demographics (gender, grade level and socio-economic status), and also school ethos, tobacco and alcohol use, aspects of behaviour and psychosocial health, general health symptoms, social relations, bullying behaviours, social and family support (See Table 1).

### 2.4 Data Analysis

In order to analyse the differences between foster care adolescents and the adolescents who living with their families (living with mother and father; living with mother or father; living with mother and stepfather; living with father and stepmother), the Chi-Square analysis ( $\chi^2$ ) and a One Way ANOVA (life satisfaction; satisfaction with friends relationship; satisfaction with family relationship), were used, followed by regression analysis.

## 3. RESULTS

As previously mentioned, the main objective of this study was to understand the differences between foster care adolescents and their peers living with their birth family in alcohol consumption, use of tobacco, participation in bullying situations, being sad, nervous or angry, frequency of worries, feelings towards school, life satisfaction, relationships satisfaction (friends and family), physical activity and general health.

Groups were created according to the types of family for this study. About 0.9% (59.6% boys) adolescents reported living in foster care; 17.2% (47.5 boys) reported living with their mother or father; 73.7% (47.5% boys) living with both their mother and father; 8.1% (42.3% boys) living with mother and stepfather or with father and stepmother.

Regarding the use of tobacco and alcohol, (See Appendix), young people placed in a foster home refer less frequently that they do not smoke, when compared with young people living with their birth family. (Every day - 14.9%) ( $\chi^2_{(9)} = 71.49$ ;  $p < 0.001$ ) and have been drunk more frequently (4 or more times in life- 10.6%) ( $\chi^2_{(6)} = 68.58$ ;  $p < 0.001$ ), when compared with their peers. The adolescents living with both mother and father reported more frequently that they don't smoke and have never been drunk.

The adolescents living in foster care refer more frequently to be sad almost every day, when compared with their peers ( $\chi^2_{(6)} = 83.66$ ;  $p < 0.001$ ). The same results were found in being nervous ( $\chi^2_{(6)} = 41.20$ ,  $p < 0.001$ ) and angry ( $\chi^2_{(6)} = 69.37$ ;  $p < 0.001$ ) (See Appendix).

Adolescents placed in foster care also refer more frequently that their health is bad (See Appendix). Regarding getting worried and the impact of worries, it seems to be a real issue in adolescence, particularly for those living in foster care, who report more frequently being worried several times a day (See Appendix).

When analysing violence, adolescents living in foster care provoke others more often ( $\chi^2_{(6)} = 37.95$   $p < 0.001$ ) and have also been bullied several time a week ( $\chi^2_{(6)} = 65.80$ ;  $p < 0.001$ ) (See Appendix).

Regarding feelings towards school and doing physical activity (See Appendix), when compared with the adolescents living with their birth families, adolescents placed in foster care practice less physical activity ( $\chi^2_{(12)} = 29.40$   $p < 0.01$ ); the results in feelings towards school showed that there were only significant differences between adolescents living with mother and father and adolescents living with mother or father. The adolescents living with both parents refer more often that they like school.

In order to examine the mean differences between the variable life satisfaction (min-0; higher level- 10) ANOVA was performed. Differences were found among groups (foster care; living with mother and father; living with mother or father; living with mother and stepfather; living with father and stepmother) ( $F(3, 5178)=15.88$ ,  $p < 0.001$ ). Post hoc comparisons using the Tukey HSD test indicated that adolescents that live with their mother or father had lower levels of life satisfaction ( $M = 7.05$ ;  $SD = 2.11$ ). Adolescents that live with both

parents had a higher mean of life satisfaction ( $M = 7.52$ ;  $SD = 1.85$ ).

Regarding satisfaction with the relationship with friends (min-0; higher level- 10) ANOVA was used. Differences were found among groups (foster care; living with mother and father; living with mother or father; living with mother and stepfather; living with father and stepmother) ( $F(3, 4764) = 10.15$ ,  $p < 0.001$ ). Post hoc comparisons with the Tukey HSD test indicated that adolescents living in foster care had lower levels of satisfaction concerning relationships with their friends ( $M = 7.32$ ;  $SD = 3.09$ ). Adolescents that live with both parents had a higher mean ( $M = 8.59$ ;  $SD = 1.67$ ).

In order to examine the mean differences between the variable satisfaction in respect to relationships with family (min-0; higher level- 10) ANOVA was used and differences were found among groups [ $F(3, 4748) = 32.09$ ,  $p < 0.001$ ]. Post hoc comparisons using the Tukey HSD test indicated that adolescents that live in foster care had lowers levels of satisfaction in respect to relationship with family ( $M = 7.16$ ;  $SD = 3.63$ ). Adolescents living with both parents had a higher mean ( $M = 8.95$ ;  $SD = 1.64$ ).

A linear regression analysis, Method Enter, was used to examine the predictors of life satisfaction. The statistical treatment for the three types of family, was made, considering the variables studied.

The first model (see Table 2) included adolescents living in foster care and all the variables of the model explained 33.6% ( $R^2_{aju} = .336$ ; Error = 1.578;  $F(154.70) = 385.268$ ,  $p \leq .001$ ). The adolescents with higher levels of life satisfaction also practiced more physical activity, had better relationships with their family and friends, liked school and showed better health. The adolescents feeling more often sad, angry and nervous were also bullied and had lower levels of life satisfaction.

The second model (see Table 3) included adolescents living with mother and stepfather or with father and stepmother, and all the variables of the model explained 33.6% ( $R^2_{aju} = .336$ ; Error = 1.579;  $F(154.31) = 384.625$ ,  $p \leq .001$ ). Adolescents who practiced more physical activity also had better relationships with family and friends, liked school, had better health and higher levels of life satisfaction. On the contrary, those feeling more often sad and nervous, were frequently worried, were bullied and presented lower levels of life satisfaction.

In the third model (see Table 4), with the adolescents living with mother and father, all the variables of the model explained 33.6% ( $R^2_{aju} = .336$ ; Error = 1.579;  $F(154.43) = 384.827$ ,  $p \leq .001$ ). Adolescents who practiced more physical activity, had better relationships with family and friends, liked school, and had better health also reported higher levels of life satisfaction, contrary to those feeling sad and nervous, often worried and that had been bullied, who reported lower levels of life satisfaction.

**Table 2. Foster care**

	Variable included	$\beta$	$t$	$p$	$R^2_a$
Life satisfaction	Tobacco	-.019	-1.399	.162	.336
	Drunkennes	-.005	-.363	.717	
	Sad	-.131	-8.695	.000	
	Angry	-.028	-1.839	.066	
	Nervous	-.040	-2.651	.008	
	Worries	-.037	-2.896	.004	
	Bullier	.007	.519	.606	
	Bullied	-.049	-3.600	.000	
	Like school	.074	6.125	.000	
	Health	.172	13.308	.000	
	Physical activity	.045	3.594	.000	
	Relationship friends	.160	11.763	.000	
	Relationship family	.228	16.247	.000	
	Age	-.052	-3.997	.000	
	Gender	.017	1.325	.185	
Foster Care	.025	2.152	.031		

**Table 3. Living with mother and stepfather; living with father and stepmother**

	Variable included	$\beta$	$t$	$p$	$R^2_a$
Life satisfaction	Tobacco	-.018	-1.321	.187	.336
	Drunkenness	-.005	-.335	.738	
	Sad	-.130	-8.619	.000	
	Angry	-.029	-1.842	.066	
	Nervous	-.040	-2.647	.008	
	Worries	-.037	-2.897	.004	
	Bullier	.008	.590	.555	
	Bullied	-.050	-3.655	.000	
	Like School	.075	6.165	.000	
	Health	.172	13.323	.000	
	Physical Activity	.045	3.612	.000	
	Relationship Friends	.159	11.708	.000	
	Relationship Family	.227	16.179	.000	
	Age	-.053	-4.069	.000	
	Gender	.016	1.262	.207	
	Living with mother and stepfather; Living with father and stepmother	.008	.708	.479	

Finally, the fourth model (see Table 5) comprised adolescents living with mother or father, and similarly, all the variables of the model explained 33.7% ( $R^2_{aju} = .337$ ; Error = 1.578;  $F(154.93) = 385.637$ ,  $p \leq .001$ ). Young people who practiced more physical activity, had better relationships with family and friends, liked school, had better health presented higher levels of life satisfaction. On the other hand, those feeling more sad and nervous, often worried, and that had been bullied reported lower levels of life satisfaction. The variable living with mother or father showed significant amounts, thus adolescents included in this type of family had lower levels of satisfaction with life.

#### 4. DISCUSSION

The aim of this study was to understand the differences between foster care adolescents and adolescents who living with their families, considering three types of configuration.

When analysing the differences between foster care adolescents and their peers who live with their families, it was found that adolescents placed in foster care show more risk behaviours. The results indicate that these adolescents smoke and drink alcohol more often. Previous studies have shown that children and adolescents in foster care placements or in foster families, and that have been through experiences of maltreatment or negligence, are more likely to engage in risk or unprotected behaviours [3]. other studies show that adolescents within the foster care system report substance use levels

equal to or higher, than others adolescents living in their birth family environment [4]. The results obtained in the present study also confirm these findings.

Our study has some limitations; first, the small number of adolescents in foster care, included in our sample; then, the fact that it wasn't possible to make a distinction between those placed in foster care families and those living in foster care centers. This would be import to consider, as the literature indicates that may exist differences between children living in foster families and those living in foster centres, concerning their development [20].

Our results meet Thompson and Auslander's findings, in 2011, [4]. Namely that adolescents in foster care report more frequently mental health problems. The present study found that adolescents living in foster care refer more often to be sad, angry and nervous. Some other studies support the idea that in foster care there are increased risks for poor health [11,12,13], result also found in our study; adolescents in foster care more frequently refer that their health is bad, when compared with their peers living with their families. The differences in life and relationships (friends and family) satisfaction were also analysed with adolescents living with their mother or father showing a lower level of life satisfaction, while adolescents living in foster care or with their mother and stepfather or with father and stepmother had similar levels of life satisfaction.

**Table 4. Living with mother and father**

	Variable included	$\beta$	$t$	$p$	$R^2_a$
Life satisfaction	Tobacco	-.017	-1.234	.217	.336
	Drunkenness	-.004	-.289	.772	
	Sad	-.129	-8.582	.000	
	Angry	-.028	-1.811	.070	
	Nervous	-.040	-2.665	.008	
	Worries	-.037	-2.881	.004	
	Bullier	.008	.602	.547	
	Bullied	-.048	-3.534	.000	
	Like School	.074	6.153	.000	
	Health	.173	13.346	.000	
	Physical Activity	.045	3.594	.000	
	Relationship Friends	.159	11.713	.000	
	Relationship Family	.226	16.040	.000	
	Age	-.052	-3.997	.000	
	Gender	.016	1.270	.204	
Living with mother and father	.016	1.342	.180		

**Table 5. Living with mother or father**

	Variable included	$\beta$	$t$	$p$	$R^2_a$
Life satisfaction	Tobacco	-.017	-1.256	.209	.337
	Drunkenness	-.004	-.308	.758	
	Sad	-.128	-8.529	.000	
	Angry	-.028	-1.811	.074	
	Nervous	-.040	-2.686	.007	
	Worries	-.037	-2.858	.004	
	Bullier	.008	.608	.543	
	Bullied	-.049	-3.566	.000	
	Like School	.074	6.152	.000	
	Health	.173	13.373	.000	
	Physical Activity	.045	3.559	.000	
	Relationship Friends	.160	11.790	.000	
	Relationship Family	.225	16.034	.000	
	Age	-.052	-3.974	.000	
	Gender	.016	1.235	.217	
Living with mother or father	-.031	-2.647	.008		

## 5. CONCLUSION

The results show that young people in foster care placement, compared with their peers living with other family type, have more risk behaviours. This raises the question of what can be done in terms of intervention and policies to prevent, not only foster care placement measures due to very dysfunctional families, but also the emergence of risk behaviours. Parental programs, risk families-oriented, may come as a response to these concerns.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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## APPENDIX

## Comparison of drunkenness and use of tobacco according to type of family

		Foster care		Living with mother or father		Living with mother and father		Living with mother and stepfather; living with father and stepmother		Total	$\chi^2$	df
		N	%	N	%	N	%	N	%			
Drunkenness	Never	31	<b>66.0</b>	755	<b>84.6</b>	3421	<b>89.7</b>	335	<b>79.6</b>	4542	68.58***	6
	1-3 times	11	<b>23.4</b>	99	<b>11.1</b>	277	<b>7.3</b>	62	<b>14.7</b>	449		
	More than 4 times	5	<b>10.6</b>	38	4.3	117	<b>3.1</b>	24	<b>5.7</b>	184		
Tobacco	Don't smoke	36	<b>76.6</b>	795	<b>89.5</b>	3575	<b>93.9</b>	374	<b>88.8</b>	4780	71.49***	9
	Less than once per week	1	2.1	32	<b>3.6</b>	86	2.3	9	2.1	128		
	At least once a week	3	6.4	27	3.0	76	<b>2.0</b>	16	<b>3.8</b>	122		
	Every day	7	<b>14.9</b>	34	<b>3.8</b>	71	<b>1.9</b>	22	<b>5.2</b>	134		

\*\*\*p $\leq$ .001; Values in bold refer to adjusted residuals higher than 1.9

## Prevalence of being sad, nervous and angry according to type of family

		Foster Care		Living with mother or father		Living with mother and father		Living with mother and stepfather; living with father and stepmother		Total	$\chi^2$	df
		N	%	N	%	N	%	N	%			
Sad	Rarely or never	20	<b>42.6</b>	559	<b>62.6</b>	2766	<b>72.4</b>	267	<b>63.4</b>	3612	83.66***	6
	More than once a week	18	<b>38.3</b>	260	<b>29.1</b>	901	<b>23.6</b>	132	<b>31.4</b>	1311		
	Almost every day	9	<b>19.1</b>	74	<b>8.3</b>	151	<b>4.0</b>	22	5.2	256		
Nervous	Rarely or never	16	34.0	396	44.3	1839	<b>48.2</b>	160	<b>38.0</b>	2411	41.20***	6
	More than once a week	22	46.8	397	44.5	1708	44.7	214	<b>50.8</b>	2341		
	Almost every day	9	<b>19.1</b>	100	<b>11.2</b>	271	<b>7.1</b>	47	<b>11.2</b>	427		
Angry	Rarely or never	20	42.6	434	<b>48.6</b>	2173	<b>56.9</b>	187	<b>44.4</b>	2814	69.37***	6
	More than once a week	17	36.2	380	<b>42.6</b>	1455	<b>38.1</b>	202	48.0	2054		
	Almost every day	10	<b>21.3</b>	79	<b>8.8</b>	190	<b>5.0</b>	32	7.6	311		

\*\*\*p $\leq$ .001; Values in bold refer to adjusted residuals higher than 1.9

**Prevalence of Health and worries according to type of family**

		Foster care		Living with mother or father		Living with mother and father		Living with mother and stepfather; living with father and stepmother		Total	$\chi^2$	df
		N	%	N	%	N	%	N	%			
Health	Excellent	19	40.4	326	36.5	1453	38.1	142	33.7	1940	37.93***	9
	Good	18	38.3	416	<b>46.6</b>	1915	50.2	214	50.8	2563		
	Reasonable	7	14.9	137	<b>15.3</b>	421	<b>11.0</b>	60	14.3	625		
	Bad	3	<b>6.4</b>	14	<b>1.6</b>	29	<b>0.8</b>	5	1.2	51		
Worries	Rarely or never	17	37.0	243	<b>27.6</b>	1226	<b>32.5</b>	109	<b>26.3</b>	1595	51.38***	12
	Almost every month	2	<b>4.3</b>	160	18.2	766	20.3	84	20.2	1012		
	Almost every week	0	<b>0</b>	115	13.1	443	11.8	55	13.3	613		
	More than once a week	4	8.7	114	12.9	480	12.7	47	11.3	645		
	Almost every day	23	<b>50.5</b>	249	<b>28.3</b>	852	<b>22.6</b>	120	<b>28.9</b>	1244		

\*\*\*p≤.001; Values in bold refer to adjusted residuals higher than 1.9

**Prevalence of violence according to type of family**

		Foster care		Living with mother or father		Living with mother and father		Living with mother and stepfather; living with father and stepmother		Total	$\chi^2$	df
		N	%	N	%	N	%	N	%			
Bullied	Haven't	25	53.2	510	<b>57.2</b>	2450	<b>64.2</b>	221	<b>52.5</b>	3206	65.80***	6
	Less than once a week	12	25.5	335	<b>37.6</b>	1276	<b>31.9</b>	170	<b>40.4</b>	1733		
	Several times a week	10	<b>21.3</b>	46	5.2	151	<b>4.0</b>	30	<b>7.1</b>	237		
Bullier	Haven't	24	<b>51.1</b>	591	<b>66.3</b>	2713	<b>71.1</b>	277	65.8	3605	37.95***	6
	Less than once a week	17	36.2	276	<b>31.0</b>	1021	<b>26.7</b>	127	30.2	1441		
	Several times a week	6	<b>12.8</b>	24	2.7	83	<b>2.2</b>	17	<b>4.0</b>	130		

\*\*\*p≤.001; Values in bold refer to adjusted residuals higher than 1.9

**Prevalence of like school and practice of physical activity according to type of family**

		Foster care		Living with mother or father		Living with mother and father		Living with mother and stepfather; living with father and stepmother		Total	$\chi^2$	df
		N	%	N	%	N	%	N	%			
School	Like	31	66.0	617	<b>69.2</b>	2822	<b>74.0</b>	293	69.6	1940	11.83**	3
	Don't like	16	34.0	275	<b>30.8</b>	993	<b>26.0</b>	128	30.4	2563		
Physical Activity	Every day	11	<b>23.4</b>	119	13.3	509	13.3	58	13.8	697	29.40**	12
	More than twice a week	23	48.9	417	<b>46.7</b>	1946	<b>51.0</b>	186	<b>44.2</b>	2572		
	Once a week	4	8.5	120	13.4	554	14.5	66	15.7	744		
	At least once a week	2	4.3	126	14.1	443	<b>11.6</b>	68	<b>16.2</b>	639		
	Never	7	14.9	111	<b>12.4</b>	366	<b>9.6</b>	43	10.2	527		

\*\*\*p<.001; \*\*p<.01 Values in bold refer to adjusted residuals higher than 1.9

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