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Perfectionism and Attention Deficit and Hiperactivity

Disorder: what is their relationship?

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Glossary

ANX- anxiety

C- children

P- parents

SPP- Socially Prescribed Perfectionism

SOP- Self-Oriented Perfectionism

OOP- Others Oriented Perfectionism

MPS- parent's view of themselves

EPP- parent's view of their children

ADHD- attention deficit hyperactivity disorder

DO- challenge and opposition

DA- attention deficit

MO- Hyperactivity

Abstract

Introduction: Perfectionism is now seen as a multidimensional construct, encompassing Intra and Interpersonal components, broadly associated with clinical problems and co morbidities. ADHD is one of the most common neurodevelopmental disorders, affecting more frequently boys than girls, with a beginning in childhood. Despite empirical experiences conducted by some clinicians relating both topics, research has not been done relating both. This study aims to understand the connection between both; to know the relation between parent's perfectionism and children ADHD and to study the consequences of ADHD in the psychologic health in children.

Materials and methods: A sample of 190 children, from the 1st cycle of basic education grades from 2 private schools located in Coimbra and their parents/guardians have participated in the study. A few scales were used: Portuguese versions of the Children and Adolescents Perfectionism Scale - Short Form (Bento et al., 2019), the Conner Parental Scale - abbreviated version (Nascimento Rodrigues, 2005), questions of psycho-somatic symptoms of the Conner Parent Scale (Boavida-Fernandes, 1998) and the Multidimensional Perfectionism Scale (Soares et al., 2003). Data treatment was done in SPSS version 26.

Results: Children' Socially Prescribed Perfectionism was correlated with TOTAL Attention Deficit and Hyperactivity Disorder ($r=0.225^*$) and Attention Deficit ($r=0.220^*$). Parents' view of their children' socially prescribed perfectionism correlated with Opposition and Challenge (DO) ($r=0.221^{**}$) and Attention Deficit ($r=0.188^*$). Parents' Others-Oriented Perfectionism correlated with TOTAL Attention Deficit and Hyperactivity Disorder ($r=-0.209^{**}$) and Attention Deficit ($r=-.222^{**}$). Anxiety correlated positively with all dimensions of Attention Deficit and Hyperactivity

Disorder: TOTAL Attention Deficit and Hyperactivity Disorder ($r=0.469^{**}$), Motor ($r=0.443^{**}$), Attention Deficit ($r=0.479^{**}$) and Opposition and Challenge ($r=0.571^{**}$).

Discussion: All dimensions of ADHD are related with anxiety, which can be damaging to those kids. Children with ADHD do not tend to seek to be perfect (SOP) but some feel outside pressure to be perfect, especially those with attention deficit, which probably is the easiest dimension of ADHD to detect. Parents of children with ADHD do not tend to self-oriented perfectionism, and they do not expect perfection from others. Those that feel outside pressure tend to cause conflict (DO) and distraction (DA) in their kids.

Key Words: perfectionism, attention deficit hyperactivity disorder; neurodevelopmental disorders, psychologic health, children.

Resumo

Introdução: O perfeccionismo atualmente é visto como um conceito multidimensional, que inclui componentes intra e interpessoais, amplamente associado a problemas clínicos e comorbidades. A PHDA é uma das perturbações do neurodesenvolvimento mais prevalente, que afeta mais frequentemente rapazes, com início na infância. Apesar de empiricamente alguns clínicos associarem ambos os temas, ainda não foi feita pesquisa que os relacione. Este estudo tenta compreender a relação entre perfeccionismo e PHDA, compreender a relação entre o perfeccionismo parental e a PHDA e estudar as consequências da PHDA na saúde psicológica da criança.

Materiais e Métodos: Participaram no estudo 190 crianças, do 1º ciclo de 2 escolas privadas em Coimbra, bem como os seus pais/encarregados de educação, compondo uma amostra de conveniência. Algumas escalas foram usadas tais como: Escala do Perfeccionismo da Criança e do Adolescente – Forma Curta (Bento et al., 2019), a Escala Parental de Conner- Versão Abreviada (Nascimento Rodrigues, 2005), questões de sintomas psicossomáticos da Escala Parental de Conner (Boavida-Fernandes, 1998) e a Escala de Perfeccionismo Multidimensional (Soares et al, 2003). A análise de dados foi feita com SPSS 26 versão.

Resultados: O Perfeccionismo Socialmente Prescrito das crianças correlacionou-se com Perturbação de Hiperatividade e Défice de Atenção Total ($r=0.225^*$) e com Défice de atenção ($r=0.220^*$). O Perfeccionismo Socialmente Prescrito das crianças visto pelos pais correlacionou-se com Desafio e Oposição ($r=0.221^{**}$) e Défice de Atenção ($r=0.188^*$). O Perfeccionismo Orientado para os Outros dos pais correlacionou-se com Perturbação de Hiperatividade e Défice de Atenção Combinada ($r=-0.209^{**}$) e Défice de Atenção ($r=-.222^{**}$). A Ansiedade correlacionou-se positivamente com todas as dimensões da Perturbação de Hiperatividade e

Défice de Atenção: Perturbação de Hiperatividade e Déficit de Atenção Combinada ($r=0.469^{**}$), Hiperatividade ($r=0.443^{**}$), Déficit de Atenção ($r=0.479^{**}$) e Desafio e Oposição ($r=0.571^{**}$).

Palavras chave: perfeccionismo, perturbação de hiperatividade e déficit de atenção, distúrbio do neurodesenvolvimento, saúde psicológica, criança

1 Introduction

Perfectionism is a multidimensional construct consisting of both intra and interpersonal components (Frost et al., 1990; Hewitt and Flett, 1991). As a personality trait, perfectionism is characterized by the demand of perfection and high standards, often associated with fear of not achieving the expected results. According to Hewitt and Flett (1991), it is a multidimensional construct varying in the object to which it is directed to (Self-oriented Perfectionism [SOP] and Others-oriented Perfectionism [OOP]) or to whom it is attributed (Socially prescribed Perfectionism [SOP]).

In the last few years research has been developed with the aim of studying the importance of Perfectionism in childhood and better understanding its origins, developmental pathways and health consequences, which resulted in the association of perfectionism with the development and maintenance of a wide range of psychological problems, such as depression, anxiety, eating disorders, chronic health problems, and suicidal ideations (Affrunti and Woodruff-Borden, 2014; Egan et al., 2011; Hewitt et al., 2017; Sirois and Molnar, 2016; Stoeber, 2017).

Attention deficit/ hyperactivity disorder is one of the most common neurodevelopmental disorders, affecting more frequently boys than girls, in a ratio varying with the literature between 2:1 and 3:1. It is defined by a degree of inattention, hyperactivity and impulsiveness, peculiar for the age and development stage it appears in, (Green and Chee, 2009) showing its first signs during childhood, but can persist even as the person reaches adulthood, with the symptoms varying with aging. These can appear in any combination at school, home or in other social situations, being in at least 2 different social contexts, and must be present before the child turns 12 so that diagnosis can be made. Attention-Deficit / Hyperactivity Disorder has a significant impact on children's social, emotional and academic performance (Blotnicky-Gallant, et al., 2015).

2 Background

Perfectionism is now seen as a multidimensional construct, encompassing Intra and Interpersonal components, broadly associated with clinical problems and comorbidities. It is a personality style that at the extreme high end is characterized by tendencies to hold harsh self-evaluations and unrealistically high standards of achievement (Farrell and Vaillancourt, 2019). For the perfectionist, excellency is not a goal, it is a necessity, gaining an irrational importance, causing much distress if not reached.

Perfectionism as a trait is composed by 3 dimensions: Self-Oriented Perfectionism, which describes the tendency to demand perfection from oneself; Others-Oriented Perfectionism, which describes the tendency to demand perfection from others, and Socially Prescribed Perfectionism, which is a sense of need of self-perfection imposed by others or by social pressure. For many youngsters, social judgment from important individuals such as peers, parents, and teachers can influence psychosocial development and adjustment (Farrell and Vaillancourt, 2019). To gain positive appraisal, these individuals may strive for perfection, and if praise is not given, it may cause them distress.

According to Stricker et al. (2019), this tendency has linearly increased over the last decades and is hypothesized to play a role in various everyday activities. However, so far, there is little research into the role of other-oriented perfectionism in daily life situations.

Although these trait components are thought to be relatively independent, it is supposed that they do affect each other and can be related, being differently associated with negative or maladaptive outcomes (Hewitt and Flett, 2017).

Vicent et al. (2017) stresses that in recent years, various authors have insisted on the importance of studying perfectionism in childhood in order to better understand its origins and developmental pathways. Farrell and Vaillancourt (2019) stressed that as with many normally distributed personality traits, moderate levels of perfectionism can be beneficial such as to have goals, aspirations, and standards and to feel satisfied with accomplishments and high levels of

perfectionism are typically seen as maladaptive. Some authors do not see this, regarding perfectionism only as negative.

Vicent et al. (2017) suggested that students who are characterized by high levels of Self-Oriented Perfectionism and Socially Prescribed Perfectionism simultaneously tend to be more aggressive and hostile and to experience higher levels of anger than other students.

Gnilka and Broda (2019) stated that perfectionistic concerns are negatively associated with social support which, in turn, leads to increased levels of depression and potentially other negative emotional outcomes such as anxiety. There is consistent evidence for the perfectionism social disconnection model for perfectionistic concerns in which the lack of social support leads to vulnerability to negative psychological outcomes.

For Petersen (2018), people with ADHD have perfectionistic tendencies, either for Impaired self-regulation, people with ADHD aren't able to monitor their own behavior so they just do their things till they are perfect; or as a coping mechanism resulting as a compensation for the lack of attention to detail imposed by ADHD and by other people's comments. This relation between ADHD and perfectionism is also backed up by some clinical practitioners and people with the disease.

The attention deficit/ hyperactivity syndrome (ADHD) has become a more frequent problem: according to Silke et al. (2006), it is increasingly common to see children with diagnosis of attention deficit and hyperactivity disorder (ADHD). It affects both pre-school and school children (Danciu, 2011), being a behavioral disorder, manifested by attention deficit (incapacity to focus or to pay attention, regardless of the duration), impulsive behavior, excessive hyperactivity and difficulties in performing a task.

Although this disorder is specific to children, its symptoms and functional deficits may persist into adulthood in 60% of patients, as follow-up studies show prevalence in adults ranges from 2.5% to 4.7%. Which risky factors distinguish children with ADHD whose condition may persist from those who don't are yet to be determined (Vélez et al., 2017).

Danciu (2011) reports that the hyperactivity/impulsiveness manifests through excessive movement and talking, impulsive decisions and emotional impulsiveness, the incapacity to anticipate future emotional reactions and failure to motivationally self-regulate one's arousal, dependency on external motivation sources and disregard for the future. The restlessness/agitation decreases with age and becomes interiorized and subjective during adulthood. The relevant issues when it comes to inattention are:

- lack of perseverance when performing tasks/trying to achieve goals (incapacity to remain attentive and concentrated during uninteresting or boring activities);
- increased distractibility (reacting to irrelevant stimuli or to unimportant or irrelevant thoughts);
- difficulty in acting, resuming a task, and remembering one's goal,
- low emotional self-control.

Data about prevalence of ADHD in Children has shown that this disease is associated with an increased risk of a broad range of negative outcomes, including depression, school failure and dropout, learning disabilities, conduct disorders in children and adults, failed relationships, workplace underachievement, substance abuse and low self-esteem in adults (Feiz and Emamipour, 2013).

Also, according to Vélez-van-Meerbeke (2017), genetic factors have often been implicated in ADHD etiology. The disorder is multifactorial, and its estimated heritability is approximately 76%. This being the case, the children of a parent affected by ADHD have a 50% chance of exhibiting the same symptoms. Assessment of children whose parents were diagnosed with ADHD revealed that 57% of the children met ADHD criteria, and 75% of that latter group were treated.

Despite extensive study and research about both of these topics, perfectionism and ADHD, and massive development in knowledge, there is yet lack of information about the relation between both, with not much more than what was presented in Bento, C (2018), where was presented part of this work. There is still much to learn and research to carry out about this relation in order to fulfill this void. So, this study aims to understand the relation between perfectionism and

ADHD; to know the relation between parent's perfectionism and children with ADHD and to study the consequences of ADHD in the psychologic health in children.

3 Materials and Methods

This study falls in the scope of project "Psychological Characteristics of Childhood", approved by FMUC's Ethic Commission (CE-006-2017).

An inquiry was applied to a convenience sample of 190 children (Female=86, Male=104), from the 1st cycle of basic education grades (33 in the 1st grade; 37 in the 2nd; 32 in the 3rd, 83 in the 4th), from 2 private schools located in Coimbra, and also to their parents/ guardians. The children from the 1st and 2nd years did not answer the questionnaire; in this case only did their parents, because at this age it is too soon for children to have an idea of perfectionism and to be able to evaluate it.

For data analysis within this study we used the SPSS version 26.

In addition to socio-demographic characterization, the children evaluation protocol included the Portuguese versions of the Children and Adolescents Perfectionism Scale - Short Form (Bento et al., 2019). Parents answered the experimental version of the Children and Adolescents Perfectionism Scale Parent Report, the Conner Parental Scale - abbreviated version (Nascimento Rodrigues, 2005), questions of psycho-somatic symptoms of the Conner Parent Scale (Boavida-Fernandes, 1998) about the child; and the Multidimensional Perfectionism Scale about them (Soares et al., 2003).

With data treatment, initially generic descriptive statistics were obtained, in order to achieve the general characterization of the inquired samples, for children and their parents. A study was conducted to evaluate whether there were statistically significant differences in data between genders to evaluate the need to work data as a whole or if a gender-based study should instead be carried out. Then, SPP and SOP were distributed amongst 3 groups dependent on their degree of that type of perfectionism. Kruskal-Wallis tests were then performed. In the following

step a Pearson correlation matrix was analyzed in order to find how the different variables would influence each other. Correlation coefficients were used to measure how strong a relationship between two variables was (Snedecor and Cochran 1995). It ranges between the absolute values from 0 (no correlation) till 1 (the highest correlation), being stronger as closer it is from 1. It can be positive (+1) if every positive increase in one variable, there is a positive increase of a fixed proportion in the other. It can also be negative (-1), if they range in opposite directions. Pearson's correlation is a correlation coefficient commonly used in linear regression.

Thus, in this study the direction of the significant correlations were evaluated (if positive or negative) and, finally, the magnitude of the correlation figures according to the Cohen criteria (cit. in Pallant, 2011), where between .10 and .29 is considered as low; an r between .30 and .49 is considered as moderate; and, finally, an r between .50 and 1.0 is considered as high.

To conclude the work, mediation analysis was performed with the intent to see how specific variables would influence each other through indirect effect of mediator variables. To study the simple mediation models, the model 4 of the macro PROCESS for SPSS, version 3.1, developed by Hayes et al, was used. To assess the direct, indirect and total effects of variables, this macro uses the bootstrapping method by calculating confidence intervals. The indirect effect represents the impact of the independent variable on the dependent variable, and the direct effect represents the impact of the mediating variable on the relationship between the independent and the dependent variable. If the value 0 is not in the confidence interval (CI) of the indirect effect, it is assumed that the difference between the total and direct effects was different from 0 and, therefore, that the indirect effect is significant. For all analyzes, a value of $p < 0.05$ was recommended as the significance level.

4 Results

4.1 Sample Characterization

The sample used in this research was composed of 190 individuals: 86 females, representing 45.3% of the sample, and 104 males, representing 54.7% of the total sample.

In terms of age (Figure 1), there is a gap of observed values between 6 and 10 years old, with the median and mode being both at 8 years old. A simple visualization of the age distribution chart is showing a normal distribution, regardless of the sex.

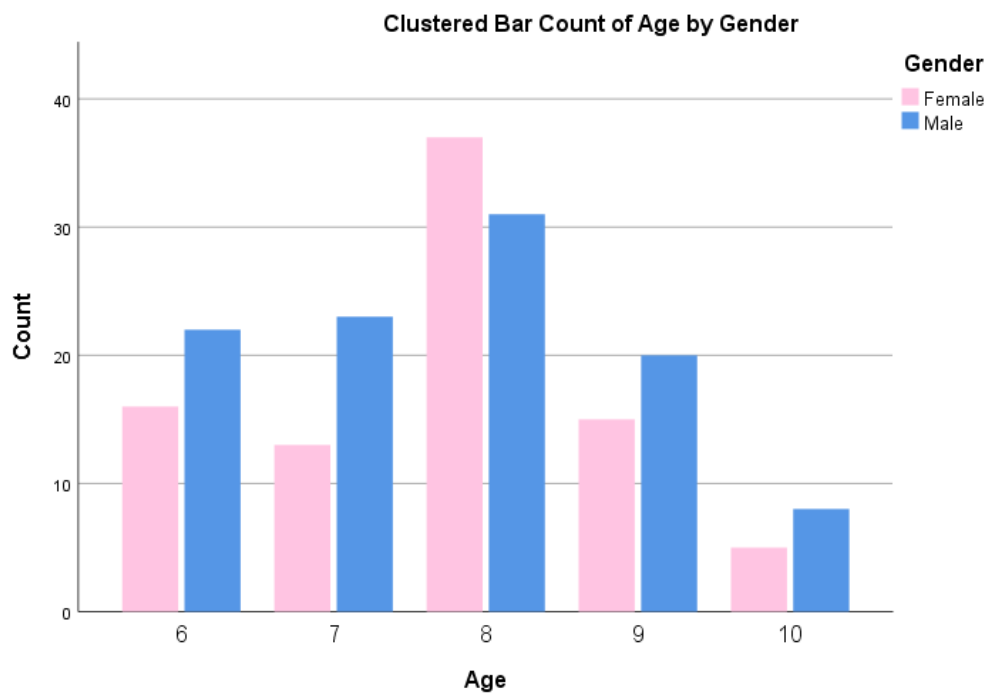


Figure 1 Distribution of children by age

Analyzing now the academic year of each children (Figure 2; Table 1), it can be observed that, the most represented class (mode) was the 4th grade, with a gap of analysis ranging from the 1st till the 4th academic year. For this variable, the median of our sample is in the 3rd academic year.

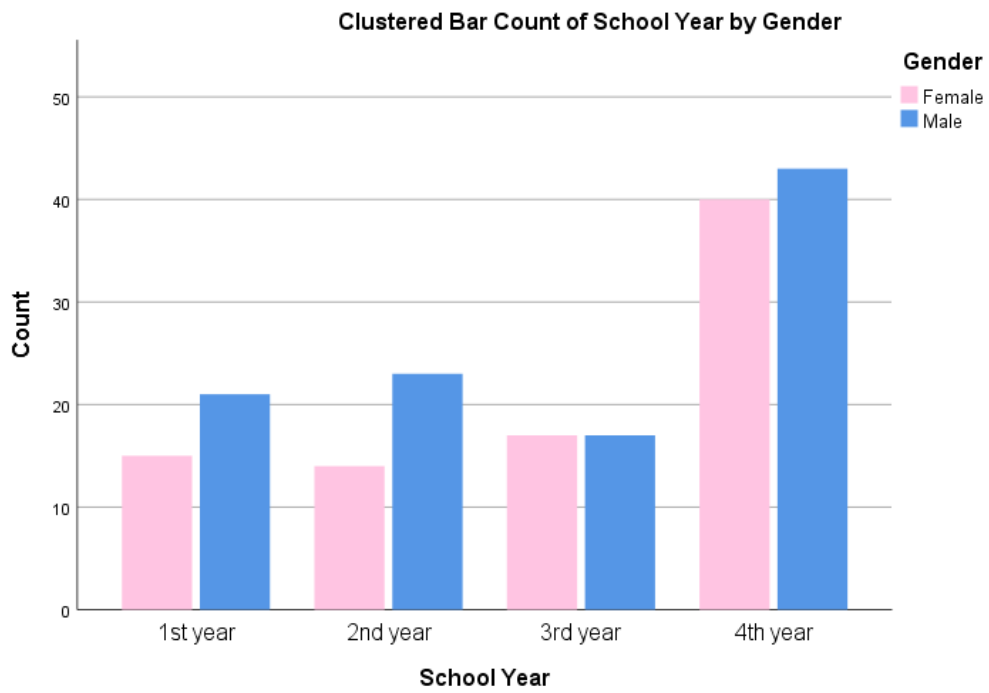


Figure 2 Distribution of children by school years

Table 1 Distribution of children by school years

	Frequency	Percentage
1 st year	36	18.9
2 nd year	37	19.5
3 rd year	34	17.9
4 th year	83	43.7

Table 2 Descriptive Analysis of multiple variables related with Anxiety, Perfectionism and ADHD components;

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Anxiety	0.00	24.00	8.9441	5.19525	0.460	-0.396
SOP MPS	7.00	49.00	31.4313	9.36246	-0.226	-0.526
SPP MPS	4.00	20.00	11.4063	4.06751	0.139	-0.580
OOP MPS	3.00	14.00	10.6038	2.29755	-0.712	0.568
SOP	4.00	20.00	13.7232	3.62476	-0.386	-0.423
SPP	5.00	24.00	15.5536	4.90603	-0.424	-0.761
Total ADHD	0.00	15.00	5.0062	3.10744	0.526	0.042
DO	0.00	15.00	4.0932	2.98706	0.879	1.228
MO	0.00	17.00	5.3354	3.85672	0.565	-0.258
DA	1.00	34.00	13.5839	6.94222	0.322	-0.197

Legend: MPS – Parent’s; SOP – Self-Oriented Perfectionism; SPP - Socially Prescribed Perfectionism; OOP – Others Oriented Perfectionism; ADHD – Attention Deficit/Hyperactivity Disorder; DO –challenge and opposition; MO – Hyperactivity; DA – Attention Deficit

Table 2 summarizes a descriptive analysis of the most important variables in this research, mainly related with anxiety, perfectionism and ADHD, in terms of average figures, the observed extreme values, and its Skewness and Kurtosis. Skewness is a measure of the lack of symmetry, of a distribution while Kurtosis measures the tail-heaviness of the distribution.

A perfect symmetric distribution such as a normal distribution has a skewness of 0. Thus, the closest variable to a perfect symmetric distribution are “SOP MPS” and “DA”. As Kurtosis is positive if the tails are "heavier" than for a normal distribution and negative if the tails are "lighter" than for a normal distribution, that is only the case of “OOP MPS” and “Total ADHD”.

Table 3 General statistics of the main variables analyzed and the t test

	Child Gender	Mean	SD	t(df)	P
Anxiety	Feminine	9.3421	4.88959	0.924(158.999)	0.329
	Masculine	8.5882	5.45827		
SOP MPS	Feminine	32.4400	9.70266	1.277(151.986)	0.610
	Masculine	30.5412	9.01527		
SPP MPS	Feminine	11.5200	4.26285	0.330(151.225)	0.289
	Masculine	11.3059	3.90977		
OOP MPS	Feminine	10.5789	2.24061	-0.130(156.797)	0.758
	Masculine	10.6265	2.36185		
SOP	Feminine	14.0536	3.45580	0.964(109.084)	0.160
	Masculine	13.3929	3.78840		
SPP	Feminine	15.9821	5.01449	0.924(109.794)	0.992
	Masculine	15.1250	4.80175		
DO	Feminine	3.6184	2.64306	-1.944(157.880)	0.318
	Masculine	4.5176	3.22051		
Total ADHD	Feminine	5.0395	3.24732	0.127(153.313)	0.465
	Masculine	4.9765	2.99594		
MO	Feminine	4.9737	3.86428	-1.126(156.817)	0.842
	Masculine	5.6588	3.84384		
DA	Feminine	12.8816	6.65125	-1.221(158.782)	0.539
	Masculine	14.2118	7.17319		
SOP EPP	Feminine	13.8933	3.72201	0.456(156)	0.045*
	Masculine	13.6506	2.95261		
SPP EPP	Feminine	13.2667	4.79395	0.766(151.476)	0.915
	Masculine	12.7059	4.41540		

Legend: MPS – Parent's; SOP – Self-Oriented Perfectionism; SPP - Socially Prescribed Perfectionism; OOP – Others Oriented Perfectionism; ADHD – Attention Deficit/Hyperactivity Disorder; OD –challenge and opposition; MO – Hyperactivity; DA – Attention Deficit; EPP – parent view of children' perfectionism; t Test; SD: Standard Deviation

As seen in table 3, the different variables do not show major differences according to gender, allowing data treatment to be done with both genders at once without compromising the results.

4.2 Comparison of mean scores per groups of Perfectionism

We assumed that it could be relevant to evaluate the mean scores' differences between Self-Oriented Perfectionism (SOP) or Socially Prescribed Perfectionism (SPP) and ADHD

dimensions and anxiety. To do so, the participants were distributed amongst 3 groups, depending on their score: Group 1 with a low perfectionism [M – SD]; group 2 with a moderate perfectionism [M-DP; M+DP]); and group 3 with a high perfectionism [M+DP]).

Tables 4 and 5 summarize the Kruskal-Wallis test, with the grouping variables being SPP 3Gr and SOP 3Gr, respectively.

4.2.1 Groups of Socially Prescribed Perfectionism

Table 4 shows that there was a statistically significant mean difference in DA, in MO and Total ADHD by SOP groups [DA ($\chi^2(2) = 10.778, p = 0.005$, with a mean rank score of 24.85 for Low; 42.94 for Moderate and 56.04 for High); MO ($\chi^2(2) = 8.951, p = 0.011$, with a mean rank score of 25.27 for Low, 43.54 for Moderate and 52.67 for High); TOTAL ADHD ($\chi^2(2) = 810.593, p = 0.005$, with a mean rank score of 24.19 for Low, 43.42 for Moderate and 54.42 for High)]

Table 4 Kruskal-Wallis test; Grouping Variable: SPP 3Gr;

	Socially Prescribed Perfectionism Groups				
	Low N=17	Moderate N=78	High N=17	Kruskal-Wallis	
	Mean Rank	Mean Rank	Mean Rank	X ²	p
ANX	28.27	44,14	46,54	5,124	0,077 ^{NS}
DO	28.04	44.16	46.54	5.374	0.068 ^{NS}
DA	24.85	42.94	56.04	10.778	0.005 ^{**}
MO	25.27	43.54	52.67	8.951	0.011 [*]
Total ADHD	24.19	43.42	54.42	10.593	0.005 ^{**}

Legend: ADHD – Attention Deficit/Hyperactivity Disorder; DO –challenge and opposition; MO – motor; DA – Attention Deficit; ANX – Anxiety

4.2.2 Groups of Self Oriented Perfectionism

Table 5 shows that there was no mean difference in the ADHD dimensions and anxiety by SOP groups.

Table 5 Kruskal-Wallis test; Grouping Variable: SOP 3Gr;

	Self Oriented Perfectionism Groups				
	Low N= 24	Moderate N=26	High N=62	Kruskal-Wallis	
	Mean Rank	Mean Rank	Mean Rank	X ²	P
ANX	37,45	46,19	42,34	1,273	0,529 ^{NS}
DO	41.50	38.86	43.48	0.491	0.782 ^{NS}
DA	41.35	42.44	42.11	0.022	0.989 ^{NS}
MO	42.10	42.81	41.63	0.031	0.985 ^{NS}
Total ADHD	40.98	42.53	42.24	0.050	0.975 ^{NS}

Legend: ADHD – Attention Deficit/Hyperactivity Disorder; DO – challenge and opposition; MO – motor; DA – Attention Deficit; ANX – Anxiety

After the basic descriptive analysis, the next step was to try to find how the different variables would influence each other through correlation studies. The Correlation coefficients were interpreted using Cohen's standards.

Table 6 Bivariable Correlation Analysis;

	Anxiety												
SOP MPS	.171*	SOP MPS											
SPP MPS	.221**	.330**	SPP MPS										
OOP MPS	-.085	.072	-.096	OOP MPS									
SOP	.050	.161	.212	-.153	SOP								
SPP	.160	.083	.257*	-.228*	.539**	SPP							
DO	.571**	.064	.221**	-.150	.071	.084	DO						
Total ADHD	.469**	-.002	.149	-.209**	-.066	.225*	.420**	Total_ADHD					
MO	.443**	-.081	.155	-.154	-.013	.149	.620**	.791**	MO				
DA	.479**	.026	.188*	-.222**	-.052	.220*	.541**	.858**	.832**	DA			
SOP EPP	-.042	.480**	.140	.173*	.246*	-.149	-.118	-.441**	-.293**	-.356**	SOP EPP		
SPP EPP	.169*	.470**	.305**	-.064	.204	.141	.238**	.066	.028	.063	.334**	SPP EPP	

Legend: MPS – Parent’s; EPP- Parent’s view of their children; SOP – Self-Oriented Perfectionism; SPP - Socially Prescribed Perfectionism; OOP – -Others Oriented Perfectionism; ADHD – Attention Deficit/Hyperactivity Disorder; DO –challenge and opposition; MO – Hyperactivity; DA – Attention Deficit; Blue – positive correlation, Red – negative correlation, the more intense is the color the stronger is the correlation; Person Correlation ; p=0.05; * - p<0.05; ** p<0.01.

We can conclude that Children's SOP had statistically significant correlations, positive with low degree with SOP EPP ($r=.246^*$).

Children's SPP showed statistically significant correlations, positive and with low degree with PHDA Total ($r=.225^*$) and with ADHD DA ($r=.220^*$).

SOP EPP had statistically significant correlations, positive and with low degree with children's SOP ($r=.246^*$), Parent's OOP ($r=.173^*$); negative and low degree with MO ($r=-.293^{**}$); and negative with a moderate degree with DA ($r=-.356^{**}$) and Total ADHD ($r=-.441^{**}$).

SPP EPP showed statistically significant correlations, positive and with low degree with anxiety ($r=.169^*$) and DO ($r=.238^{**}$); positive with moderate degree with Parent's SOP ($r=.470^{**}$); and Parent's SPP ($r=.305^{**}$).

Anxiety had statistically significant correlations, positive and with low degree with Parent's SPP ($r=.221^{**}$), Parent's SOP ($r=.171$), and SPP EPP ($r=.169^*$); positive and with moderate degree with all ADHD dimensions (DA. $R=.479^{**}$, MO $r=.443^{**}$, Total $r=.469^{**}$), with the exception of DO with which it has a statistically significant correlation, positive with high degree ($r=.571^{**}$)

Parent's SOP showed statistically significant correlations, positive and with low degree with Parent's SPP ($r=.330^{**}$); positive and with moderate degree with SOP EPP ($r=.480^{**}$) and SPP EPP ($r=.470^{**}$).

Parent's SPP had statistically significant correlations, positive and with low degree with children's SPP ($r=.257^*$), DO ($r=.221^{**}$) and DA ($r=.188^*$); positive with moderate degree with SPP EPP ($r=.305^{**}$)

Parent's OOP showed statistically significant correlations, negative and with low degree with children's SPP ($r=-.228^*$), Total ADHD ($r=-.209^{**}$) and DA ($r=-.222^{**}$); and positive with a low degree with SOP EPP ($r=.173^*$).

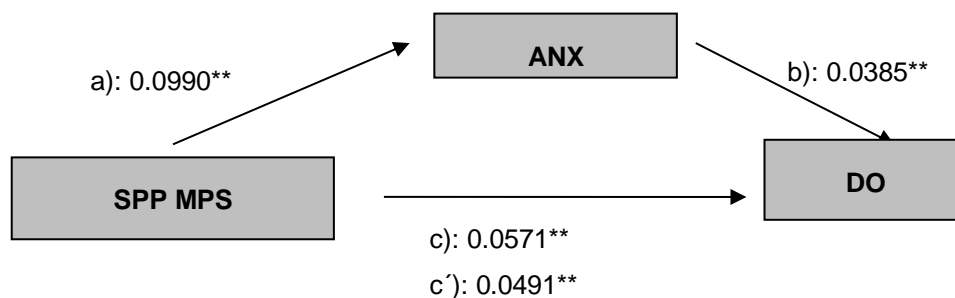
The different components of ADHD all showed statistically significant correlations, positive and with high degree with themselves, with the exception of DO and Total PHDA, with a positive correlation with moderate degree ($R=.420^{**}$)

4.3 Mediation analysis

Considering the results obtained in Table 6, a simple mediation model was tested.

Continuing, a mediation with the predictor being Parent's Socially Prescribed Perfectionism (SPP MPS), the outcome being opposition and challenge (DO) and the mediator being Anxiety (ANX).

Figure 3 **Model I:** ANX mediating role in the relation between SPP MPS and PHDA DO



Legend: X^{ns} – not significant; * – $p<0.05$; ** - $p<0.01$; SPP MPS – Parents' Self-Prescribed Perfectionism, ANX – Anxiety; DO – challenge and opposition

The total effect of the model (c) has been proved significant, as well as the direct effect (c'). The model presented an indirect effect significant (*coefficient* = 0.0891, *SE* = 0.0330, IC 95% = 0.0302 till 0.1615).

5 Discussion

The aims of this study were to investigate the relationship between perfectionism and ADHD.

Starting by analyzing opposite poles of types of people, an individual with high degree of self-oriented perfectionism is always looking for perfection in the simplest things that they do, giving their best, but taking their time to do those things with fear of failure. If the failure happens, they tend to become enraged. In the other part of the spectrum, an individual with ADHD usually forgets to do some tasks or does them so quickly and with so little attention that they frequently commit mistakes, without a minimum seek of perfection. This statement is supported by the data, where none of the components of ADHD are correlated with SOP. Parents of ADHD individuals report a negative correlation between ADHD and children's SOP (meaning that in this case we are talking about SOP EPP).

Children's SOP and SPP are correlated, meaning that children that feel external pressure to be perfect tend to hold themselves accountable and so they try to correspond to the expectations, resulting in the development of self-oriented perfectionism. The same can be concluded about their parents. This is easily observed with the positive correlation detected in all of the obtained results regarding perfectionism scales, with a positive correlation between children's SPP and SOP, in parents' SPP and SOP, and with SPP MPS and SOP MPS. This is easily understood since they are different dimensions of the same trait. Not surprisingly, parents' and children's perfectionism could be correlated, which is true, as results from this research show, when referring to SPP. This could be explained by genetic or environmental factors, but possibly by interaction of both. Differing a little bit from the age gap study, according

to Costa (2016), the biggest correlation with college students' SPP is the view they have of their parent's SPP, bigger than the true SPP of their parents. This could suggest that perfectionism could depend not only on parent's perfectionist traits, but maybe even more in their descendants view of it. Costa (2016) also correlates parent's perfectionist traits with children's psychological disturbs.

Parents' SPP is related with anxiety symptoms in the children, which can be expressed in several ways, through aggressiveness and impulsivity, leading to conflicts (Agostini and dos Santos, 2015). or through an exacerbation of ADHD symptoms.

Regarding parents' capacity to recognize their children perfectionist tendencies, they tend to identify children's SOP but are not as good at recognising children's SPP: This could be justified by the larger impact that SOP has in children, making it easier to recognize. But they show some capacity to recognize children's SPP indirectly, through anxiety. Herson and Thomas (2007), have reported that several researchers have hypothesized that parents' agreement would be lower and more difficult for children (approximately 6 to 9 years old) than for adolescents (approximately 10 to 16 years old) because young children lack the cognitive sophistication to fully understand and describe their emotions.

All ADHD dimensions were correlated with anxiety, meaning that ADHD possibly is a source of anxiety by itself with a few components of the disorder correlated with outside pressure. Or, in another perspective, children that are anxious tend towards the chaos that characterizes ADHD, resulting in marked symptoms across all dimensions of ADHD, mainly the challenge and opposition, which is particularly exacerbated by anxiety (high degree of correlation).

Parents with children with ADHD learn to live with their child's behavior. They tend to feel less outside pressure or, at least, to be less affected by it. Because of their children's characteristics, they do not expect others to be perfect, nor do they demand it, being instead comprehensive with the rest of the world. Even those parents with higher degrees of perfectionism do not tend to expect the same from others. This is in agreement with the results obtained by Shenaar-

Golan et al. (2017), which reports that parents of children with ADHD tend to use more regulation strategies of all kinds and not only more response-focused strategies.

In the future, further similar studies should be developed, although it is recommended that they should be careful on the sample design, in order to obtain a wider and more representative population sample. As the conclusions of this research are extremely relevant and gave guidelines for future research, the way this database collection was designed can condition some results. The sample was obtained in only 2 schools in Coimbra, which were selected by the investigators. Additionally, the database cannot confirm ADHD was already diagnosed and if/or treatment was already in progress when necessary, which can condition results. Plus, the analysis was based only on parents Conner's Test, while it would be preferable that it had been conducted with both parent's and teacher's Conner's Test, because as we know, the diagnosis of ADHD must be done with multiple contexts being affected and the 2 most important ones are school and home. So, the information obtained through teachers can be as important as the information obtained through parents, if not even more, since nowadays kids spend more time at school than at home.

Additionally, undoubtedly, a study based on a sample design that is based on general population *versus* a sample representing population with ADHD will allow to better infer differences caused by ADHD.

Other scales could be beneficial as well in a major study, such as Griffiths scale.

The main topic of this research is not yet intensively explored, with barely if any previous investigation, meaning it is not possible to support some of the obtained results with previous knowledge. Thus, this is an innovative work, with the constraints that this fact carries by itself. This stresses that this research is a meaningful initial step forward in the common fields of Perfectionism and ADHD, but further studies should be implemented if we want to truly understand the relationship between the analysed topics.

6 Acknowledgments

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I would also like to thank the schools that allowed information to be collected, and to those who participated and contributed with their information, both kids and parents.

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8 Appendices

Appendices I – CAPS Protocol Children

Nº de emparelhamento:

1º

Por favor, **responde a todas as questões e sê sincero(a)**

pois não há respostas certas nem erradas.

Lê cada frase e coloca uma cruz na palavra/frase da resposta que mais se adapta a ti. Por exemplo, na frase “ Eu gosto de ler banda desenhada”, coloca a cruz no “Verdadeiro” se achas que é verdadeiro. Na frase “ Eu gosto de manter o meu quarto limpo e arrumado”, coloca a cruz no “Falso” se achas que é falso. Agora, estás pronto para começar.

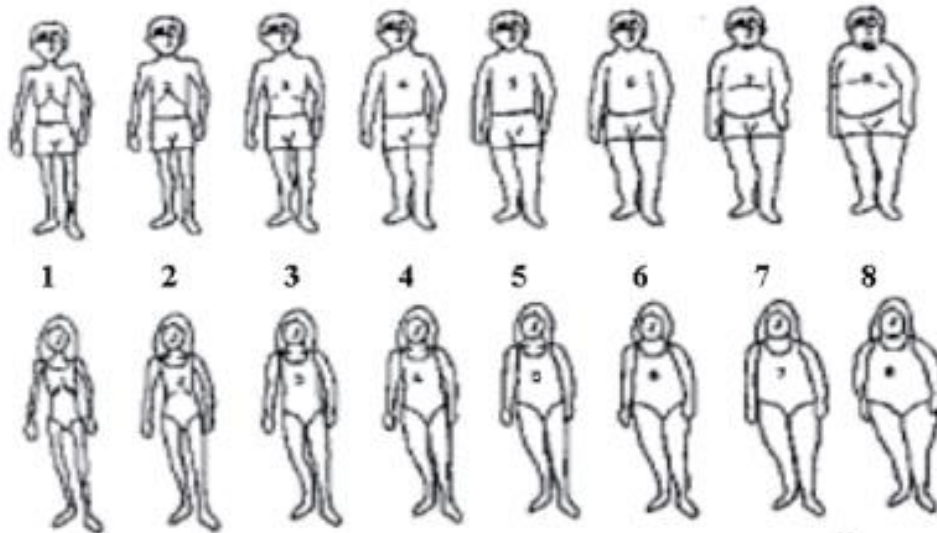
Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro	
1.Tento ser perfeito(a) em tudo o que faço.	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
2.Quero ser o(a) melhor em tudo o que faço.	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
5.Há pessoas na minha vida que esperam que eu seja perfeito(a).	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
7.Fico muito aborrecido(a) se não dou sempre o meu melhor.	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
8.A minha família espera que eu seja perfeito(a).	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
13.Os outros esperam que eu seja sempre perfeito(a).	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
15.As pessoas à minha volta esperam que eu seja o(a) melhor em tudo.	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
16.Quando faço alguma coisa tem que ficar perfeita.	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro
21.Sinto que as pessoas exigem demais de mim.	Completamente Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completamente Verdadeiro

Idade _____

Sexo F M

Sabes o teu peso? _____ Kg.

Sabes a tua Altura _____ Cm.



No desenho de cima:

- 1) Faz um círculo **verde** à volta da imagem que tem a forma do teu corpo
- 2) Faz um círculo **vermelho** à volta da imagem do corpo que gostarias de ter

Sabes qual é o trabalho do teu papá? _____

Sabes qual é o trabalho da tua mamã? _____

Tens quarto só para ti? Sim Não

Tens computador em casa? Sim Não

Tens Internet em casa? Sim Não

Podes ver a televisão sempre que queres? Sim Não

Podes usar o computador sempre que queres? Sim Não

Podes usar a internet sempre que queres? Sim Não

És o máximo! Obrigada pela tua ajuda!

Appendices II – CAPS Protocol

<u>Ano Escolar</u>		<u>Nº de emparelhamento:</u>				1º
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Protocolo de investigação 1ª Parte

Exmo. Encarregado de Educação,

O estudo do comportamento da criança pode ajudar a reconhecer algumas características que podem mais tarde, na adolescência e vida adulta, vir a causar dificuldades na sua adaptação. Pediatras e psicólogos infantis têm vindo a verificar que essas características estão presentes desde cedo, logo nos primeiros anos da escola; no entanto a avaliação direta na criança é difícil antes dos oito anos. Assim, o nosso objetivo é conhecer a sua opinião acerca das características psicológicas do seu educando. Para melhor caracterizar todas as respostas, a segunda parte do inquérito possui outro tipo de questões. Por favor, responda a cada pergunta. Todos os dados serão rigorosamente confidenciais.

Quem preencheu o questionário Mãe _____ Pai _____

Outro (quem) _____

Profissão do pai _____ Idade _____ Peso _____ Kg. Altura _____ Cm.

Profissão da mãe _____ Idade _____ Peso _____ Kg. Altura _____ Cm.

Este menino (a) é filho único (a)? Sim Não

Ano Escolar do seu educando _____ Sexo F M

1) Utiliza o computador no dia a dia da sua profissão? Sim Não

2) Possui computador em casa? _____ Quantos? _____

3) Possui acesso à Internet em casa? _____

4) O seu educando tem acesso livre ao computador? Sim Não

5) Qual é, na sua opinião, a idade ideal para permitir acesso livre ao computador e internet?

6) Qual é na sua opinião a idade ideal para oferecer um telemóvel ao seu educando? _____

Por favor leia cada frase e coloque uma cruz na palavra/frase da resposta que mais se adapta às atitudes e sentimentos do seu educando (a).

1-Tenta ser perfeito(a) em tudo o que faz.	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
2-Quer ser o(a) melhor em tudo o que faz.	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
5-Sente que há pessoas na vida dele (a) que esperam que seja perfeito(a).	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
7-Fica muito aborrecido(a) se não dá sempre o seu melhor.	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
8-Sente que a família espera que ele(a) seja perfeito(a).	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
13-Pensa que os outros esperam que seja sempre perfeito(a).	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
15-Pensa que as pessoas à sua volta esperam que el(a) seja o(a) melhor em tudo.	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
16-Quando faz alguma coisa tem que ficar perfeita.	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro
21-Sente que as pessoas exigem demais dele (a).	Completa/ Falso	Mais falso do que verdadeiro	Nem verdadeiro nem falso	Mais verdadeiro que falso	Completa/ Verdadeiro

Leia cada item cuidadosamente e escolha a opção que acha reflectir em que medida o seu filho é afetado por estes problemas. Ponha uma cruz no quadrado que pensa corresponder ao comportamento do seu filho no presente momento.

	0 Nunca	1 Raramente	2 Frequentemente	3 Muito Frequentemente			
1	Desatento, distrai-se facilmente (38)			0	1	2	3
2	Furioso (zanga-se com facilidade) e ressentido (1)			0	1	2	3
3	Dificuldade em fazer ou acabar os trabalhos de casa (2)			0	1	2	3

4	Está sempre a movimentar-se ou age como “tendo as pilhas carregadas” ou como se “estivesse ligado a um motor” (3)	0	1	2	3
5	Atento por curtos períodos de tempo (56)	0	1	2	3
6	Discute/argumenta com os adultos (11)	0	1	2	3
7	Mexe muito os pés e as mãos e mexe-se ainda que sentado no lugar (55)	0	1	2	3
8	Não consegue completar o que começa (12)	0	1	2	3
9	Difícil de controlar em centros comerciais ou sítios públicos (13)	0	1	2	3
10	Desarrumado ou desorganizado em casa ou na escola (63)	0	1	2	3
11	Perde o controlo (21)	0	1	2	3
12	Precisa de acompanhamento para executar as suas tarefas (22)	0	1	2	3
13	Só presta atenção quando é uma coisa que lhe interessa (69)	0	1	2	3
14	Corre e trepa em situações inapropriadas (23)	0	1	2	3
15	Distraído e com tempo de atenção curto (45)	0	1	2	3
16	Irritável (31)	0	1	2	3
17	Evita, tem relutância ou tem dificuldade em empreender tarefas que exigem um esforço continuado (tal como os trabalhos na escola ou de casa) (9)	0	1	2	3
18	Irrequieto, “tem bicho carpinteiro” (32)	0	1	2	3
19	Distrai-se quando lhe estão a dar instruções para fazer uma coisa (48)	0	1	2	3
20	Provocador ou recusa em satisfazer os pedidos de um adulto (40)	0	1	2	3
21	Tem problemas em concentrar-se nas aulas (19)	0	1	2	3
22	Tem dificuldade em manter-se numa fila ou esperar a sua vez num jogo ou trabalho de grupo (42)	0	1	2	3
23	Levanta-se na sala ou em lugares onde deveria ficar sentado (76)	0	1	2	3
24	Deliberadamente faz coisas para irritar os outros (67)	0	1	2	3
25	Não segue instruções e não acaba os trabalhos no lugar (Não é dificuldade em entender as instruções ou recusa) (29)	0	1	2	3
26	Tem dificuldade em brincar ou trabalhar calmamente (59)	0	1	2	3
27	Fica frustrado quando não consegue fazer qualquer coisa (78)	0	1	2	3
28	Chupa ou rói (dedos, unhas, roupa)	0	1	2	3
29	Chora com facilidade e frequentemente	0	1	2	3
30	Tímido	0	1	2	3
31	Preocupa mais do que os outros (quando está só ou doente)	0	1	2	3
32	Dores de cabeça	0	1	2	3
33	Criança infeliz	0	1	2	3
34	Dificuldades com alimentação (pouco apetite, levanta-se entre colheradas)	0	1	2	3
35	Dores de estômago	0	1	2	3
	0 Nunca	1 Raramente	2 Frequentemente	3 Muito Frequentemente	
36	Dificuldades com o sono (custa a adormecer, acorda muito cedo, levanta-se de noite)	0	1	2	3

37	Outras dores	0	1	2	3
38	Vómitos ou enjoos	0	1	2	3
39	Sente-se posto de parte, na família	0	1	2	3
40	Problemas intestinais (obstipação, diarreia frequente, hábitos irregulares)	0	1	2	3

A seguir, leia cada frase e coloque uma cruz na palavra/frase da resposta que mais se adapta a si.

1 Discordo completamente	2 Discordo bastante	3 Provavelmente discordo	4 Indeciso	5 Provavelmente concordo	6 Concordo bastante	7 Concordo completamente				
6. Um dos meus objetivos é ser perfeito em tudo o que faço				1	2	3	4	5	6	7
10. Pouco me importa que os que me rodeiam, não deem o seu melhor				1	2	3	4	5	6	7
12. Raramente sinto o desejo de ser perfeito				1	2	3	4	5	6	7
13. Tudo o que eu faça que não seja excelente, será julgado de má qualidade, pelas pessoas que me rodeiam				1	2	3	4	5	6	7
14. Faço tudo o que posso para ser tão perfeito quanto possível				1	2	3	4	5	6	7
15. Preocupo-me em ter um resultado perfeito em tudo				1	2	3	4	5	6	7
17. Esforço-me para ser o melhor em tudo				1	2	3	4	5	6	7
20. De mim, não exijo menos do que a perfeição				1	2	3	4	5	6	7
28. Quando estabeleço os meus objetivos, tendo para a perfeição				1	2	3	4	5	6	7
30. Os outros aceitam-me como sou, mesmo sem ser bem sucedido				1	2	3	4	5	6	7
31. Sinto que as outras pessoas exigem demais de mim				1	2	3	4	5	6	7
41. As pessoas esperam mais de mim, do que eu posso dar				1	2	3	4	5	6	7
43. É-me indiferente que um bom amigo não tente fazer o seu melhor				1	2	3	4	5	6	7

Por favor, verifique se respondeu todas as questões. Muito obrigada

Appendices III – Informed Consent



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FMUC FACULDADE DE MEDICINA
UNIVERSIDADE DE COIMBRA
PSICOLOGIA MÉDICA

CARACTERÍSTICAS PSICOLÓGICAS NA INFÂNCIA

É convidado(a) a participar voluntariamente neste estudo porque é pai/mãe e encarregado de educação de uma criança do ensino básico. Este procedimento é chamado consentimento informado e descreve a finalidade do estudo, os procedimentos, os possíveis benefícios e riscos. A sua participação poderá contribuir para melhorar o conhecimento sobre as características psicológicas em crianças da cidade de Coimbra através da perceção parental.

Este estudo irá decorrer na Clínica Universitária de Pediatria e no Serviço de Psicologia Médica da Faculdade de Medicina da Universidade de Coimbra. Trata-se de um estudo observacional, que não terá nenhuma implicação na sua vida. Será garantida a proteção dos direitos, segurança e bem-estar de todos os participantes incluídos. Serão incluídos cerca de 250 crianças e os seus pais e professores.

A participação consiste no preenchimento de um conjunto de questionários sobre pensamentos, comportamentos e maneiras de ser. Não há respostas certas ou erradas. O que interessa é que cada um responda como de facto se aplica ao seu educando e a si. Os pais dos meninos do primeiro ciclo farão o preenchimento em casa. Os professores e as crianças do 3º e 4º anos farão o preenchimento na escola. Se aceitar participar, fará o preenchimento de um questionário. **Para fins de emparelhamento dos questionários, os dígitos que aparecem no início do questionário do educando serão os mesmos no questionário dos pais; e do professor.**

A participação é voluntária. É inteiramente livre de aceitar ou recusar participar neste estudo. Pode retirar o seu consentimento em qualquer altura sem qualquer penalização para si, sem precisar de explicar as razões, sem qualquer penalização ou perda de benefícios; e sem comprometer a sua relação com o Investigador que lhe propõe a participação neste estudo.

Os seus registos manter-se-ão confidenciais e anonimizados de acordo com os regulamentos e leis aplicáveis. Necessitamos de grandes amostras e as respostas não serão analisadas individualmente. Os dados serão informatizados para podermos proceder ao seu tratamento estatístico. A sua participação não acarreta qualquer risco.

CONSENTIMENTO INFORMADO

De acordo com a Declaração de Helsínquia da Associação Médica Mundial e suas atualizações:

1. Declaro ter lido este formulário e aceito de forma voluntária participar neste estudo.
2. Fui devidamente informado(a) da natureza, objetivos, riscos, duração provável do estudo, bem como do que é esperado da minha parte.
3. Tive a oportunidade de fazer perguntas sobre o estudo e percebi as respostas e as informações que me foram dadas.
4. Os meus dados serão mantidos estritamente confidenciais. Autorizo a consulta dos meus dados apenas por pessoas designadas pelo promotor e por representantes das autoridades reguladoras.
5. Aceito seguir todas as instruções que me forem dadas durante o estudo.
6. Autorizo o uso dos resultados do estudo para fins exclusivamente científicos.
7. Aceito que os dados gerados durante o estudo sejam informatizados pelo promotor ou outrem por si designado. Eu posso exercer o meu direito de retificação e/ ou oposição.
8. Tenho conhecimento que sou livre de desistir do estudo a qualquer momento, sem ter de justificar a minha decisão e sem comprometer a qualidade dos meus cuidados médicos.

Nome do educando _____

Assinatura do encarregado de educação _____

Data: ____/____/____

Rasgar por Aqui

CARACTERÍSTICAS PSICOLÓGICAS NA INFÂNCIA

Assinatura do Investigador: _____

Se tiver questões sobre este estudo deve contactar: Investigadora: Maria Del Carmen Bento Teixeira, Clínica Universitária de Pediatria, Faculdade de Medicina, Avenida Afonso Romão, Alto da Baleia, 3000-602 Coimbra Telefone: 239 480 400; e-mail: mteixeira@fmed.uc.pt

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Fax.: 239 823 170
E-Mail: psicomed@fmed.uc.pt

Appendices IV – Ethics comission statement



COMISSÃO DE ÉTICA DA FMUC

Of. Refª **007-CE-2017**

Data 20/2/2017

C/C aos Exmos. Senhores

Investigadores e co-investigadores

Exmo Senhor

Prof. Doutor Duarte Nuno Vieira

Director da Faculdade de Medicina de

Universidade de Coimbra

Assunto: Pedido de parecer à Comissão de Ética - Projecto de Investigação autónomo (refª CE-006/2017).

Investigador(a) Principal: Maria Del Carmen Bento Teixeira

Co-Investigador(es): Ana Telma Fernandes Pereira, Jorge Manuel Tavares Lopes de Andrade Saraiva e António Ferreira de Macedo

Título do Projecto: "*Características psicológicas na infância*".

A Comissão de Ética da Faculdade de Medicina, após análise do projecto de investigação supra identificado, decidiu emitir o parecer que a seguir se transcreve:

"Parecer favorável não se excluindo, no entanto, a necessidade de submissão à Comissão de Ética, caso exista, da(s) Instituição(ões) onde será realizado o Projecto".

Queira aceitar os meus melhores cumprimentos,

O Presidente,

Prof. Doutor João Manuel Pedroso de Lima

HC

SERVIÇOS TÉCNICOS DE APOIO À GESTÃO - STAG • COMISSÃO DE ÉTICA

Pólo das Ciências da Saúde • Unidade Central

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