

Resilience and vulnerability in adolescents with ADHD : a population-based study



Renato Arruda¹, Pedro Custódio D’Amico², Louise Marques³, Luis da Anunciação³
& Marco Antônio Arruda¹

¹GLIA Institute, Ribeirão Preto, SP, Brazil; ²UNIFEV School of Medicine, Votuporanga, SP, Brazil;
³Department of Psychology, Pontifical Catholic University of Rio de Janeiro, RJ, Brazil



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INTRO

- To the best of our knowledge, no population-based study has investigated resilience resources (RR) and vulnerability risk (VR) in children and adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD), hindering the development of a risk-resilience model for potential interventions.
- Herein, RR and VR were assessed in adolescents with ADHD and controls in a cross-sectional population-based study with adolescents.

METHODS

- The Resiliency Scale for Children and Adolescents was completed by adolescents.
- Sociodemographic, school performance, and mental health data were obtained by validated questionnaires completed by parents and teachers.
- Linear models (t-tests and ANOVA) were applied to compare RR and VR profiles between 1) ADHD vs. non-ADHD controls; and 2) adolescents with other psychosocial adjustment problems without ADHD (OPAD) vs. adolescents without psychosocial adjustment problems (typical).
- Welch’s correction was used when necessary to calculate p-values.

RESULTS

- Consents and analyzable data were obtained from 339 adolescents (80.3% of the target sample), 53% females, aged 10-18 years (M=13.8, SD=2.0).
- DSM-5 criteria for ADHD were met by 2.9%.
- Adolescents with ADHD showed lower RR ($p<0.001$), but no significant difference in VR ($p=0.073$) compared to non-ADHD controls. Adolescents in the OPAD group, demonstrated lower RR ($p=0.01$), and higher VR ($p<0.001$) compared to typical.
- Compared to OPAD, adolescents with ADHD had a lower sense of relatedness.

Table 1. Table 1 – Sociodemographics.

Final sample (n = 339)		
Characteristic	n	% or range
Age (total)	339	10-18
Sex		
Female	181	53%
Male	158	47%
Educational level		
1th grade	60	17.6%
2th grade	26	7.6%
3th grade	37	10.9%
6th grade	50	14.7%
7th grade	58	17.10%
8th grade	55	16.2%
9th grade	53	15.6%
Race		
White	239	70%
Non-white	90	26.5%
Non-respondents	10	2.9%
Income Class		
A and B	93	27.4
C	203	59.9
D and E	43	12.7
Total	339	100.0

Table 2. RSCA results obtained comparing all groups.

Scale	Final Sample (n = 339)		ADHD (n = 10)		No ADHD (n = 329)		ADHD vs. Typical	Other Mental Disorders (n = 23)		OMD vs. Typical	OMD vs. ADHD
	M	SD	M	SD	M	SD	P-value	M	SD	P-value	p-value
Resilience											
Mastery	50.1	11.9	40	16.4	50.4	11.7	0.007	43.7	13.89	0.008	0.256
Optimism	17.9	4.9	15.7	4.9	17.9	4.8	0.156	15.35	5.65	0.01	0.438
Self-efficacy	23.9	6.7	18.3	23.8	24.1	6.6	0.008	20.43	6.93	0.011	0.226
Relatedness											
Trust	63.8	14.9	47.5	20.6	64.3	14.4	< 0.001	58.48	17.82	0.074	0.066
Support	18.5	4.9	14	5.7	18.7	4.9	0.003	16	6.26	0.011	0.197
Comfort	17.5	4.6	12.1	5.5	17.6	4.6	< 0.001	15.78	4.8	0.073	0.031
Tolerance (12-18)	10.4	3.3	7.6	3.8	10.5	3.3	0.007	10.3	4.05	0.88	0.042
	17.3	4.6	13.2	3.8	17.4	4.7	0.014	16.7	5.32	0.579	0.054
Reactivity											
Sensitivity	31	15.3	33	13.4	31.0	15.3	0.681	39.91	16.6	0.004	0.129
Recovery	11.3	4.9	10	4.5	11.3	4.9	0.399	12.91	4.94	0.106	0.061
Impairment	6.3	4.1	5.6	3.09	6.3	4.1	0.6	7.91	5	0.048	0.094
	13.5	8.7	17.4	6.9	13.3	8.7	0.147	19.09	10.1	0.001	0.318
Resource											
Vulnerability	43.3	9.9	32.8	15.4	43.7	9.6	< 0.001	38.22	11.06	0.01	0.131
	12.2	16.9	21.7	12.2	11.9	17.2	0.073	24.22	14.89	< 0.001	0.321

Bolded results are significant at $\alpha \leq .05$ and italicized results are significant at $\alpha \leq .10$.

CONCLUSIONS

- Adolescents with ADHD showed lower RR compared to non-ADHD peers.
- Adolescents with other psychosocial adjustment problems (OPAD) have lower RR and higher VR in relation to typical development colleagues.
- These original findings have immediate clinical implications, since they reveal specific profiles of resilience and vulnerability in adolescents with ADHD and other psychosocial adjustment problems, supporting novel emerging potential targets for intervention in these vulnerable groups.

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Disclosure of interest
The authors report no conflict of interest.

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