A NEW INSTRUMENT TO ASSESS EXECUTIVE FUNCTION IN ADHD DURING SCHOOL AGE

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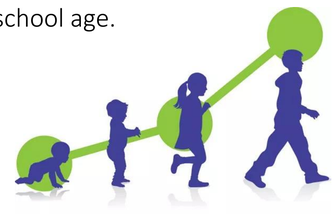
OBJECTIVES

To develop an psychometric instrument to assess ADHD from a **neuropsychological and dimensional perspective** to better **describe the deficits** and their **real impact** in the person's daily life, complementary to traditional performance test.

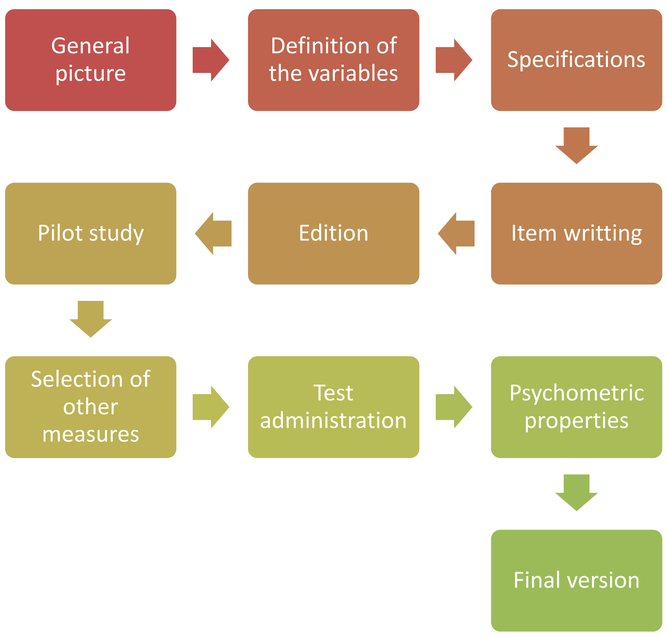
This instrument approach might be:

Dimensional	Understand the disorder from a more global perspective, focusing on affected processes instead of just the compliant of diagnostic criteria.
Ecological	Assess executive functioning in daily life through behavioral observation from parents and teachers, as well as the own child or teenager.
Based on development	Adapted to the level of development of the executive processes during each school period, allowing a continuous follow-up during all school age.
Comprehensive	Provide a broad profile of executive functions and other information relevant to help the clinician in the diagnostic process.
Intervention-oriented	Identify weaknesses and strengths for a more adapted and personalized intervention planning.



METHODS

Test development



*Based on the *Standards for Educational and Psychological Testing* (AERA, APA and NCME, 2014).

Inicial pool of items n = 855

Panel of experts

Academicians
Psychometrists
Clinicians
n = 30

- Relevance & Representativity
- Psichometrical and formal issues
- Writting, clarity & legibility

Pilot study

General sample n = 338

Clinical sample n = 101

Standardization study

General sample	Clinical sample
n = 2.578	n = 768
48,9% ♀	31,3%
51,1% ♂	68,7%

From 3 to 18 years old

RESULTS

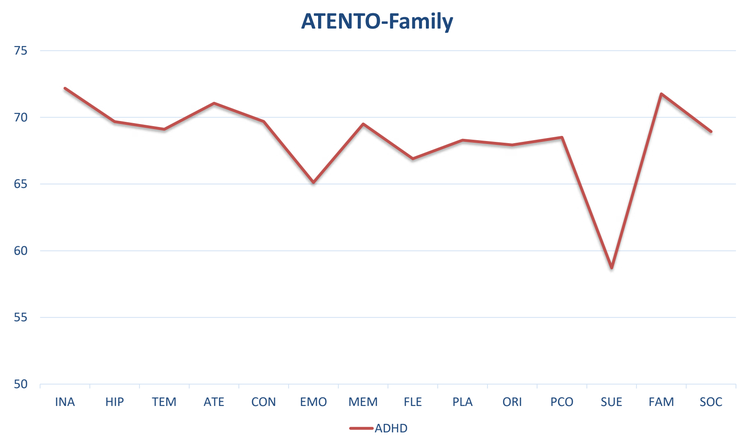
RELIABILITY

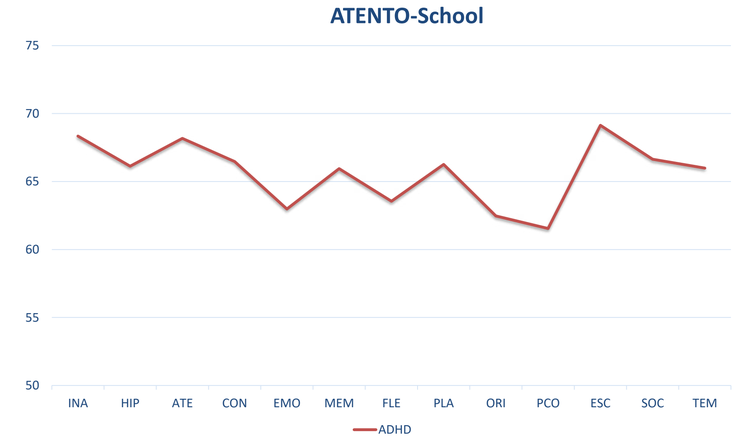
Alfa de Cronbach

Scale		Family		School		Self-report
		L1	L2	L1	L2	-
INA	Inatenttion	,87	,91	,91	,93	,88
HIP	Hiperactivity and impulsivity	,90	,87	,91	,91	,85
TEM	Tempo Cognitivo Lento	,82	,90	,90	,93	,89
ATE	Attentional control	,93	,95	,96	,96	,93
CON	Behavioural regulation	,91	,89	,93	,92	,86
EMO	Emotional regulation	,91	,91	,90	,93	,90
MEM	Working memory	,89	,94	,95	,96	,91
FLE	Flexibility	,85	,88	,86	,92	,84
PLA	Planification and organization	,86	,94	,94	,96	,89
ORI	Temporal orientation	,81	,87	,88	,89	,77
PCO	Behavioural problems	,83	,86	,85	,90	,85
SUE	Sleeping problems	,83	,82	-	-	,81
FAM	Impact in familiar context	,88	,89	-	-	,85
ESC	Impact in schoolar context	-	-	,91	,90	,83
SOC	Impact in social context	,76	,82	,84	,90	,82

VALIDITY

Discriminant capacity in clinical samples

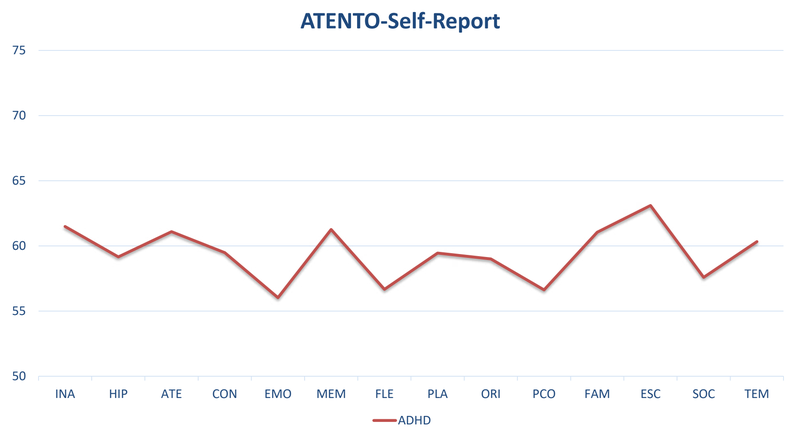




VALIDITY

Correlations with ADHD-5

	ADHD-5 Family			
ATENTO Family	INA	HIP	IMP	IMP-HIP
Ina	**,60**	,40	,36	,36
Hip	,29	**,73**	,31	,51
Ate	**,58**	,46	,36	,39
Con	,32	**,74**	,34	,52
Emo	,36	,47	,45	**,52**
Mem	**,43**	,28	,24	,28
Pla	**,57**	,33	,38	,31



Note: T scale; M = 50; Sd = 10

CONCLUSIONS

To develop a psychometric test is necessary to carry out a planned and rigorous procedure in order to establish its reliability and validity with guarantees.

In our case, the instrument has shown **satisfactory psychometric properties** in Spanish population: high alfa coefficients, high correlations with ADHD-5 related scales and good capacity to discriminate between general scholar population and ADHD diagnosticated cases.

According to recent scientific evidences, ADHD seems to be characterized by an executive profile of **lower attentional, working memory, planning and organization and temporal orientation** scores in comparison with the profile of general population. This pattern of dysfunctions may be related with the presence of adaptation problems in familiar, scholar and social contexts.

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