



# Conceptions of ADHD

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## Objectives

Aim of this explorative study was to construct a questionnaire to obtain and to describe children's conceptualization of ADHD and to compare groups of children with and without ADHD. The results should give orientation for psychological education of children with ADHD and to ensure their agreement and compliance for treatment.

## Introduction

Subjective theories about illness and treatment are suggested to influence coping mechanisms and treatment motivation decisively. In children, there's a rare body of literature concerning concepts of physical illness (Bibace & Walsh, 1981). Studies about children's conceptions of mental disorders nearly don't exist. In the main, studies investigated children's beliefs of mental disorders in relation to physical disorders or examined children's style of control and causal attributions, but often open-ended questions were used and the evaluation was done qualitatively (Lohaus, 1990). In our survey we wanted to compare groups of ADHD-affected and ADHD-non affected children and to assess causal and control attributions in a quantitative manner.

## Methods

The explorative study examines the conceptualization of ADHD in 17 boys with ADHD (8 boys actually under medication) and 24 age-matched boys without ADHD (age range 7 to 12 years, MEAN = 9;2 years). In a multiple-choice questionnaire children were first asked five questions concerning the leading symptoms of ADHD to assess their knowledge about the disorder. The second part of the questionnaire was introduced by a short description of the behavior of a boy showing leading symptoms of ADHD (hyperactivity, impulsivity, deficits in attention). The children were then asked about their beliefs concerning given causes of the behavior and the appropriateness of given interventions to change the behavior for each of the leading symptoms.

The children should rate the appropriateness of given causes and interventions in a five-step Likert scale. The categories of conceptualization were: medical, environment-related (parents/ teacher), personal-motivational, therapeutically and gender typical (and not changeable). Data were calculated on a MANOVA. Table 1 and 2 show examples from the questionnaire.

Table 1:  
Example for the attribution of causes

Why does Marco often forget what his mother told him?	1	2	3	4	5
Because his memory functions in a bad manner.	↖	↖	↖	↖	↖
Because his mother tells him too much things.	↖	↖	↖	↖	↖
Because he prefers to remember other things.	↖	↖	↖	↖	↖
Because he didn't learn how to be aware yet.	↖	↖	↖	↖	↖
Because all boys forget what they are told.	↖	↖	↖	↖	↖

1=totally true, 2=true, 3=partly true/partly untrue, 4= untrue, 5=totally untrue)

Table 2:  
Example for the attribution of interventions

What should happen that Marco remembers what his mother told him?	1	2	3	4	5
The doctor has to give him a medicine for the better functioning of his memory.	↖	↖	↖	↖	↖
His mother has to tell him less things.	↖	↖	↖	↖	↖
He has to try harder then he can remember more things.	↖	↖	↖	↖	↖
He has to exercise with a therapist for better remember things.	↖	↖	↖	↖	↖
What ever happens, boys forget the things their mothers tell them.	↖	↖	↖	↖	↖

1=totally true, 2=true, 3=partly true/partly untrue, 4= untrue, 5=totally untrue)

## Results

The internal consistencies of both categories of attributions (causes and interventions) are presented in Table 3. The internal consistencies range from .49 to .83.

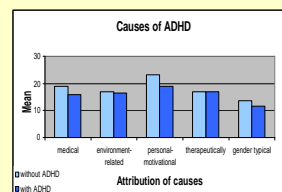
Table 3:  
Internal consistencies (both groups)

Scale		?
Attribution		
Causes (n = 14)	Medical	.63
	environment-related	.69
	personal-motivational therapeutically	.49
	therapeutically	.74
	gender typical	.73
Interventions (n = 42)	medical	.76
	environment-related	.53
	personal-motivational therapeutically	.72
	therapeutically	.78
	gender typical - not changeable	.83

We found no differences in the knowledge about the leading symptoms of ADHD, but differences in the attribution of causes and interventions.

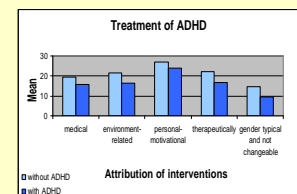
Figure 1 shows the attribution of causes in both groups. The MANOVA revealed differences between both groups ( $F_{(5,35)} = 3.1, p < .05, \text{Eta}^2 = .31$ ) in a way that children without ADHD obtained higher scores in the rating of medical causes ( $p < .10, \text{Eta}^2 = .08$ ) and personal-motivational causes ( $p < .01, \text{Eta}^2 = .22$ ) of the ADHD-related behavior as being true.

Figure 1:  
Attribution of causes



The children without ADHD obtained also general higher scores in the rating of appropriateness of the different interventions ( $F_{(5,36)} = 3.3, p < .05, \text{Eta}^2 = .32$ ) as shown in Figure 2 (medical:  $p < .10, \text{Eta}^2 = .09$ , environment-related:  $p < .01, \text{Eta}^2 = .24$ , personal-motivational:  $p < .01, \text{Eta}^2 = .16$ , therapeutically:  $p < .01, \text{Eta}^2 = .19$ ) and also in the category gender typical and not changeable:  $p < .05, \text{Eta}^2 = .12$ ).

Figure 2:  
Attribution of interventions



## Conclusions

First of all it is to notice that the sample size of the study is small and the study has explorative character. The internal consistencies of the attributions indicate the tendency of the children to attribute the causes of ADHD and the appropriateness of interventions in a consistent way throughout the leading symptoms. Furthermore the lower scores in the attribution of medical (small effect) and personal-motivational (medium effect) causes of ADHD in the ADHD-children reflects their more reserved estimation in attribution medical and personal-motivational causes as being relevant for the leading symptoms of ADHD. This is interesting especially together with the general lower scores of the ADHD-children in rating the appropriateness of different interventions (medium effect) including medical treatment even though half of the children are under medication. These estimations are maybe linked to disappointing experiences in efforts of social adjustment and should be discussed at the beginning of psychiatric treatment.

## Literature

Bibace, R. & Walsh, M.E. (1981). *Children's conceptions of health, illness and bodily functions*. San Francisco: Jossey-Bass Inc.  
 Lohaus, A. (1990). *Gesundheit und Krankheit aus der Sicht von Kindern [Health and illness from children's view]*. Göttingen: Hogrefe.