

# Detection of depressive symptoms in children aged 7-13 years: Systematic Review

Leandrou A., Sokratous S., Karanikola M., Middleton N. | Τεχνολογικό Πανεπιστήμιο Κύπρου, Τμήμα Νοσηλευτικής | AA126



## Scope

The purpose of the present study is to estimate the prevalence of depressive symptoms amongst school children population of age between 7-13 years old.

## Project Overview

In recent years children's depression has strongly attracted the interest of the scientific community.

Childhood depression differs from the normal "blues" and everyday emotions that occur as a child develops. In today's society, motions of affliction are now emerging and depression seems to be one of the most common problems of childhood negatively affecting children.

*This study aims to detect the prevalence of depressive symptoms amongst children of age 7 and 13 years old.*

## Specific Goals

A

- to examine the level of prevalence of depressive symptoms among school children of age 7-13 years old.

B

- to exhibit whether and to what extent there are differences in the incidence of childhood depression associated with sex, age, and socio-economic level

C

- to evaluate the usefulness of the questionnaire C.D.I.(Child Depression Inventory) to detect depressive symptoms in children.

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## Methods

Critical review of the research literature carried out through scientific databases e.g. PubMed, Scholar Google and Cinahl.

Keywords used: child depression, depressive symptoms and child.

## Methodology key points

- Articles published during the last decade, 2005-2015

### Selection criteria:

- Publication is in English or Greek language
- Age of the children between 7-13 years old
- The article examined at least one risk factor
- The article used an acceptable depression measurement tool.

## Article Selection Procedure

Initial  
database  
literature  
review  
search

Resulted in  
163 articles  
from which,  
119 were  
rejected after  
reading of  
the scope

Abstracts  
from 44  
articles  
were  
studied

27 articles  
were  
rejected

17  
articles  
studied  
as a full  
text

9 articles  
were  
rejected

8 articles  
selected

Included in  
the  
systematic  
review



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## Presentment of selected articles

<i>Author</i>	<i>Scope</i>	<i>Sample</i>	<i>Methodology</i>	<i>Results</i>
<b>Masip et al., 2010</b>	Usefulness of the CDI as a screening instrument of depressive symptomatology	1705 participants (792 boys and 913 girls) and a clinical sample of 102 participants (42boys and 60 girls) between 10 and 18 years old in Spain	CDI	<ul style="list-style-type: none"> <li>Girls score higher level of prevalence of depressive symptoms than boys.</li> </ul>
<b>Roelofs et al., 2010</b>	Assess relationships between the CDI and DSM-oriented depression and anxiety scales of the Youth Self Report Develop reliable norms for the CDI Determine CDI cutoff scores for selecting youngsters at risk for depression and anxiety	3073 non-clinical and 511 clinically referred children and adolescents, Netherlands and Belgium	CDI & DSM	<ul style="list-style-type: none"> <li>CDI=16 has the most optimal balance between sensitivity and specificity for depression.</li> <li>CDI=21 has the best sensitivity and specificity for anxiety in a subsample of children.</li> </ul>
<b>Giannakopoulos et al., 2009</b>	Determine the level of depressive symptoms of children in Greece	538 children aged 8-12 years	CDI & FAS	<ul style="list-style-type: none"> <li>The prevalence of depressive symptoms was 4%.</li> </ul>
<b>Samm et al., 2008</b>	Assess depressive symptoms according to age and gender	725 children from Estonia 7-13 years old (342 girls and 383 boys)	CDI	<ul style="list-style-type: none"> <li>Girls reported higher level of prevalence of symptoms of anhedonia and low self-esteem.</li> <li>Boys reported more symptoms of inefficiency.</li> <li>Younger children reported more symptoms of anhedonia and inefficiency</li> <li>Older children exhibit negative self-esteem.</li> </ul>
<b>Shin et al., 2008</b>	Assess the relationship between various psychosocial factors, behavioral problems and depressive symptoms reported by parents Exploring the self-assessment of depression than children themselves	1279 children (633 boys and 646 girls) between 9-12 years old in Korea	CDI & Korean version of the Child Behavior Checklist (K-CBCL)	<ul style="list-style-type: none"> <li>14% of the sample exhibit depressive symptoms</li> <li>Younger children (9 years old) have higher scores on the CDI</li> <li>11 years old have the lowest scores.</li> </ul>
<b>Barkmann et al., 2008</b>	To examine the quality of the German version of the Centre for Epidemiological Studies depression scale for Children(CES-DC)	National survey, 2,863 children and adolescents 7-17 years old from Germany	CES-DC & Telephone interviews 30 minutes with the CATI system	<ul style="list-style-type: none"> <li>Girls had higher level of prevalence of depressive symptoms of depression than boys</li> </ul>
<b>Ivarsson et al., 2006</b>	Detection of depressive symptoms in children	School sample of 405 children in Sweden	CDI	<ul style="list-style-type: none"> <li>Girls scored higher level of depressive symptoms than boys.</li> <li>CDI was reliable in terms of internal consistency</li> </ul>
<b>Kleftaras &amp;Didaskalou, 2006</b>	Detection of depressive symptoms in children	323 children from schools in Volos (Greece) aged 10-11 years	CDI	<ul style="list-style-type: none"> <li>30% of children have signs of depressive symptoms</li> </ul>



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## Results

- ✓ Children of age between 7 and 13 seemed to be more prone to physiological issues and present depression symptoms in a percentage that fluctuates around 4 and 15%.
- ✓ In terms of depressive symptoms and sex, the general outcomes vary and are very contradictive.
- ✓ Research showed that younger children have a higher frequency of depression symptoms of anhedonia and ineffectiveness and in older children there is a higher frequency of symptoms of low self-esteem.
- ✓ For the detection of signs of depression, C.D.I was thought to maintain a better balance between specificity and sensitivity in respect to the sample (Ivarsson et al., 2006 and Roelofs et al., 2010)
- ✓ Masip et al. 2010, Ivarsson et al., 2006, Barkmann et al., 2008, Samm et al., 2008, all agree that girls show higher prevalence of depressive symptoms than boys.
- ✓ Giannakopoulos et al., 2009 and Ivarsson et al., 2006 both found that SES were significantly less related to depressive symptoms.

## Conclusions

- Development of depressive symptoms in children has been escalating over the past decades
- Need for further exploration of other operators such as gender, age group, and other factors such as the relation of depression with the socioeconomic level of the child, its school performance, its social functioning and problematic behavior.
- Need for the creation of early prevention programs and treatment of mental disorders in children.

### Limitations of this systematic review:

- a) Present study relies on children who attend school only.
- b) Important to use other gears that take into consideration the evaluation and assessment of the educators and parents opinion for children.