

Psychosocial adjustment in hard of hearing preschool children

Nina Jakhelln Laugen
Clinical psychologist



The Norwegian context

- **Screening since 2008**
- **Home visits within 2 weeks**
- **Parent courses, individual follow-up**
- **No program evaluation**

Photo: Flickr/Markus Trienke

From clinical practice to research



Photo: Flickr/Samuel King Jr



Photo: Flickr/Catherine Cronin

Should we worry about hard of hearing children?

- ▶ Better auditory access
- ▶ Less risk of language delay

- ▶ Later diagnosis
- ▶ «social deafness»
- ▶ Identity?

- ▶ Psychosocial difficulties not related to degree of hearing loss

We asked:

- ▶ Are HH preschool children at risk for psychosocial problems, compared to the general population?
- ▶ What is the role of:
 - ▶ Gender
 - ▶ Age at detection
 - ▶ Degree of hearing loss
 - ▶ Language



Participants

- ▶ 16 boys, 19 girls
 - ▶ 4-5 years old
 - ▶ Hearing aids
 - ▶ Spoken Norwegian
-
- ▶ Control group: 180 children, matched on age, gender and SES

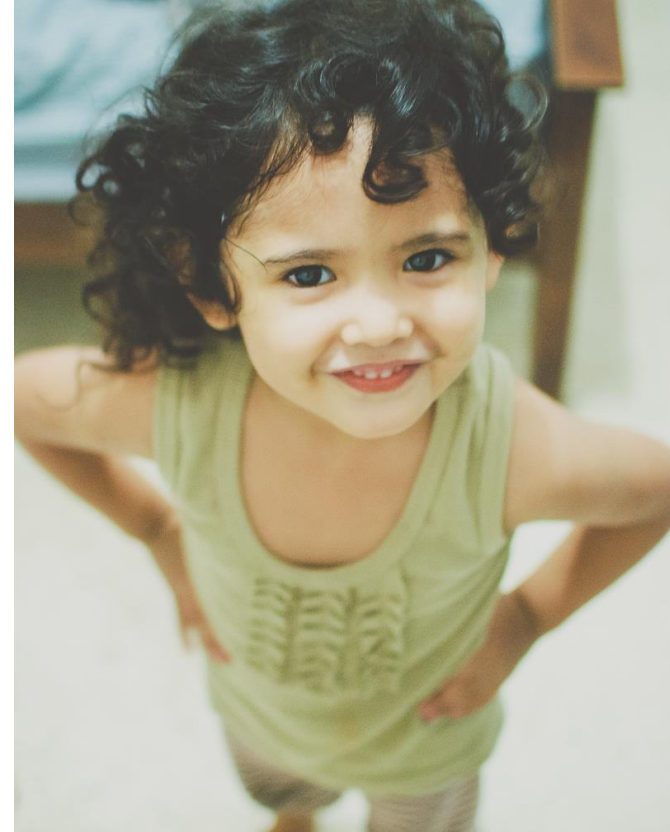


Foto: Flickr/dukmaniquis

Data collection

► Strengths and Difficulties Questionnaire (SDQ) (Goodman et al, 2000)

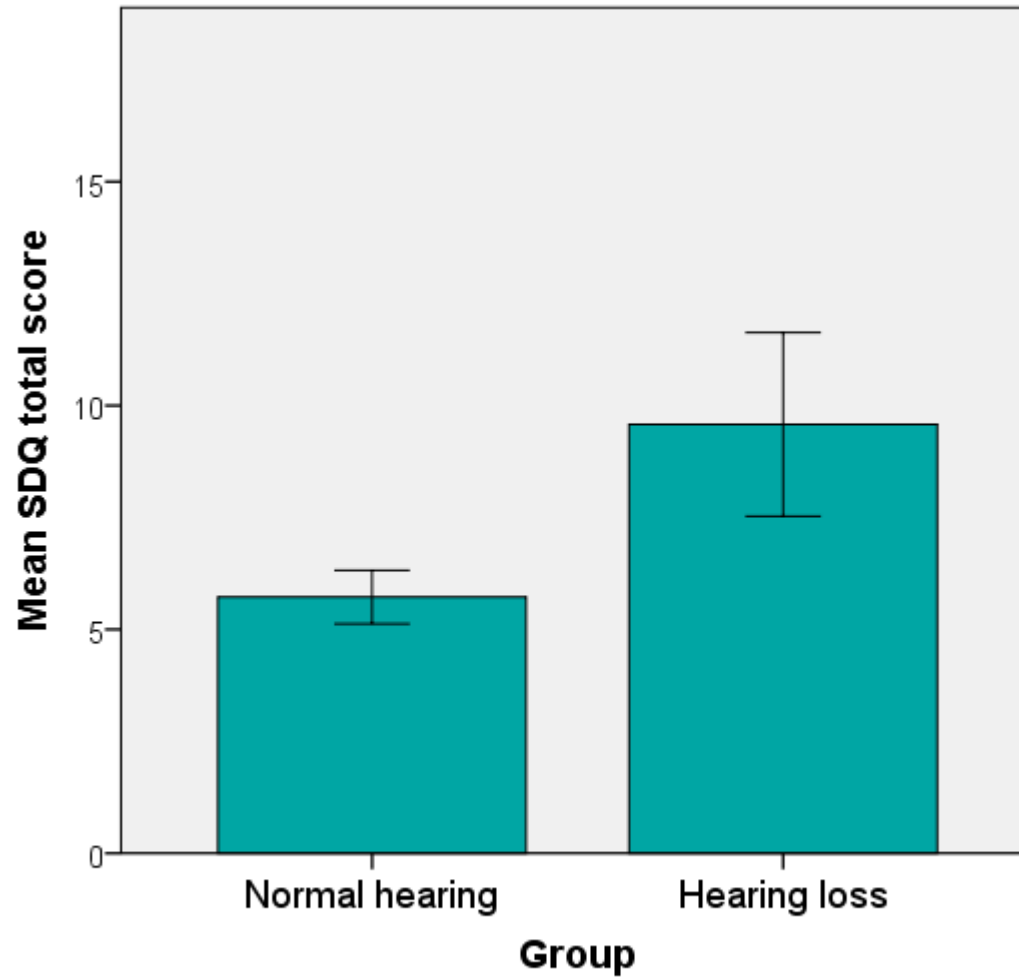
► Peabody Picture Vocabulary Test (PPVT-III) (Dunn & Dunn, 1997)

Sterke og svake sider (SDQ-Nor)

Vennligst kryss av for hvert utsagn: Stemmer ikke, Stemmer delvis eller Stemmer helt. Prøv å svare på alt selv om du ikke er helt sikker eller synes utsagnet virker rart. Svar på grunnlag av barnets oppførsel de siste 6 månedene eller dette skoleåret.

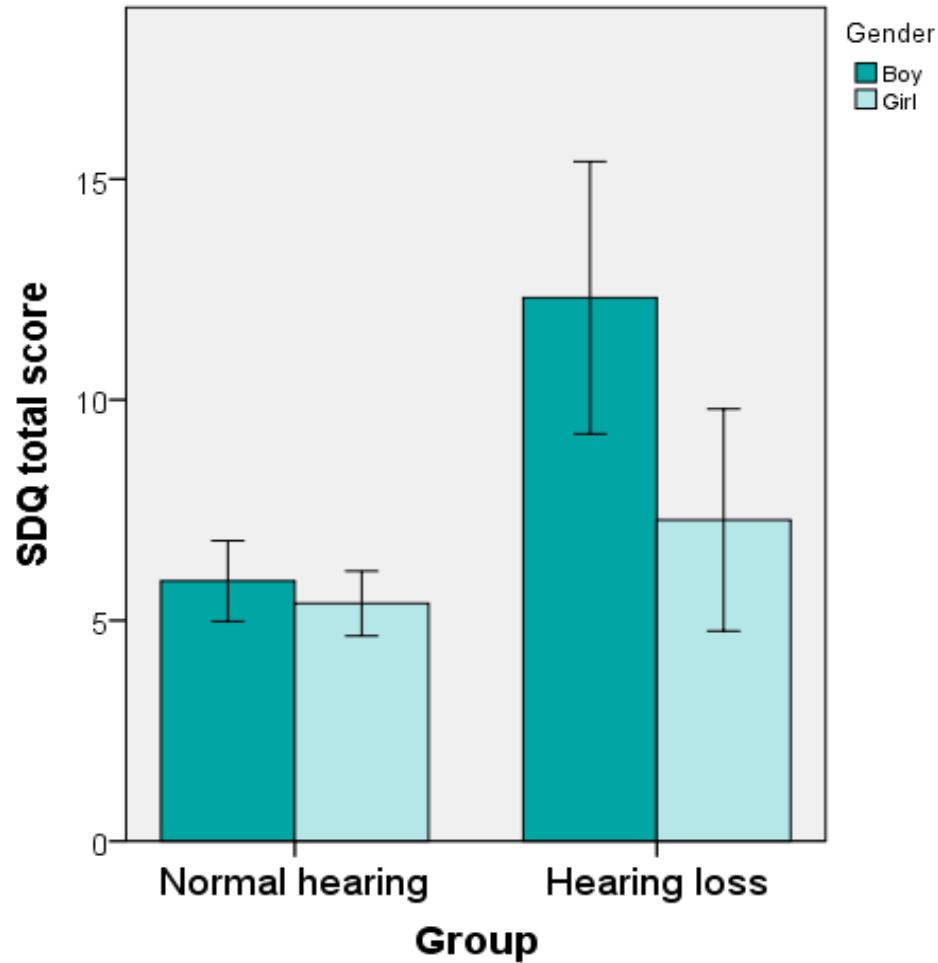
	Stemmer ikke	Stemmer delvis	Stemmer helt
Omtenkssom, tar hensyn til andre menneskers følelser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rastløs, overaktiv, kan ikke være lenge i ro	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Klager ofte over hodepine, vondt i magen eller kvalme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deler gjerne med andre barn (godter, leker, andre ting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Har ofte raserianfall eller dårlig humør	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ganske ensom, leker ofte alene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Som regel lydlig, gjør vanligvis det voksne ber om	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mange bekymringer, virker ofte bekymret	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjelpsom hvis noen er såret, lei seg eller føler seg dårlig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stadig urolig eller i bevegelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Har minst en god venn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slåss ofte med andre barn eller mobber dem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ofte lei seg, nedfor eller på gråten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vanligvis likt av andre barn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lett avledet, mister lett konsentrasjonen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervøs eller klengete i nye situasjoner, lett utrygg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Snill mot yngre barn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lyver eller jukser ofte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plaget eller mobbet av andre barn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tilbyr seg ofte å hjelpe andre (foreldre, lærere, andre barn)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tenker seg om før hun / han handler (gjør noe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stieler hjemme nå skolen eller andre steder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hard of hearing children have more difficulties



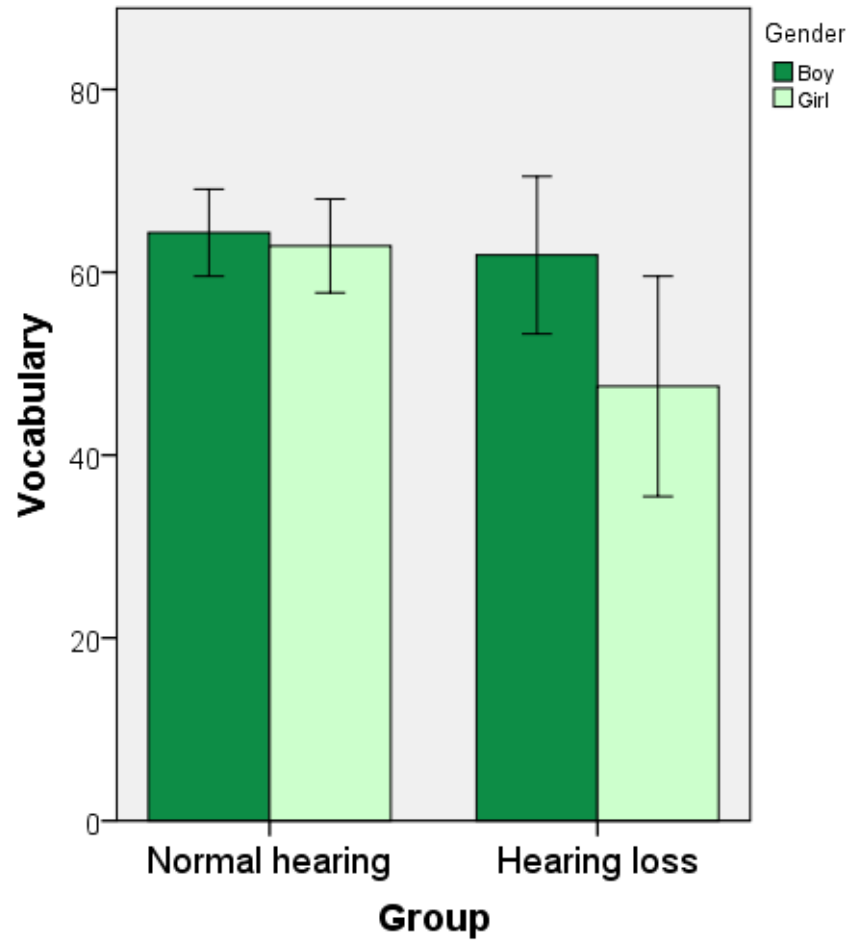
Error Bars: 95% CI

Girls are doing ok



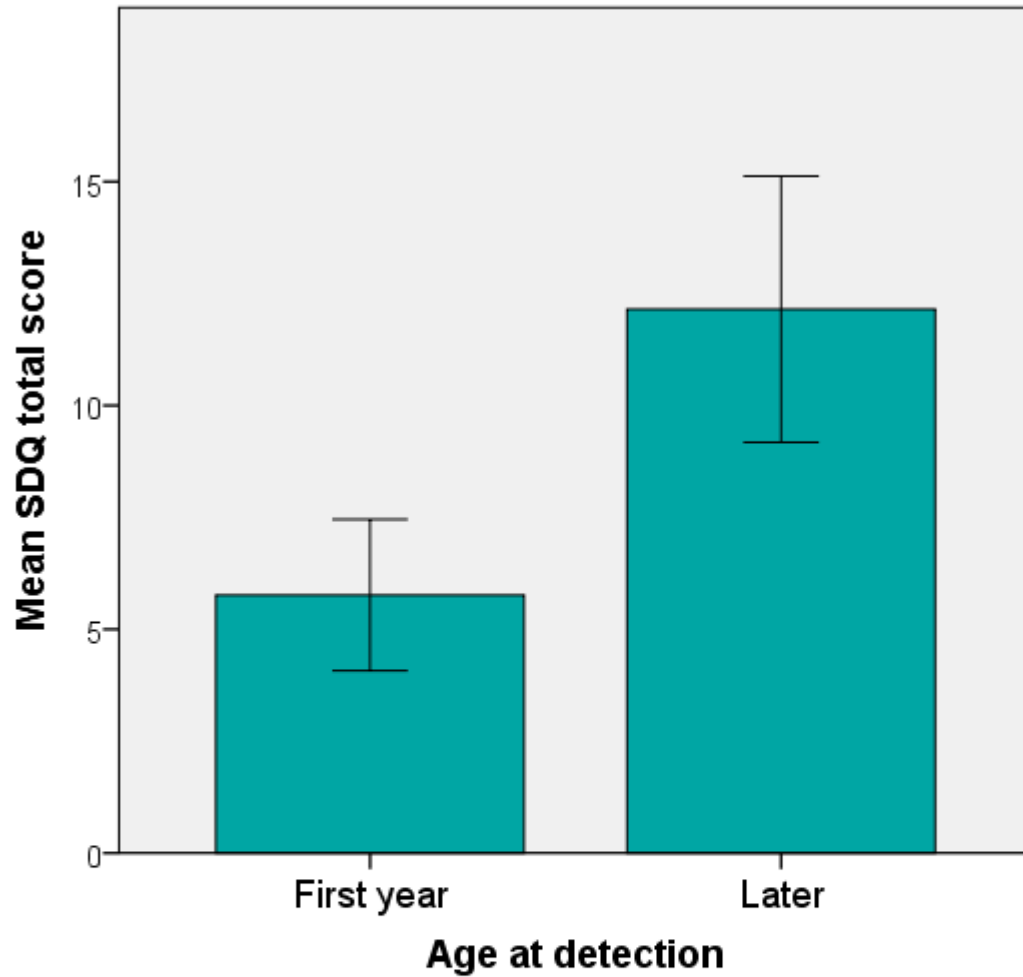
Error Bars: 95% CI

Vocabulary



Error Bars: 95% CI

Age at detection



Degree of hearing loss

- ▶ No significant relationship between degree of hearing loss and degree of psychosocial problems
- ▶ Children with mild hearing loss have the same risk of psychosocial difficulties as children with severe loss, even when age at detection is taken into account

Implications

- ▶ Hard of hearing children are at risk: all degrees
- ▶ Early detection protects against psychosocial difficulties, even for children with mild hearing loss
- ▶ Good language is not a guarantee for good mental health, even in preschool age
- ▶ Gender differences need more investigation



EMPIRICAL MANUSCRIPT

Predictors of Psychosocial Outcomes in Hard of Hearing Preschool Children

Nina J. Laugen^{*,1,2}, Karl H. Jacobsen¹, Carolien Rieffe^{3,4}, and Lars Wichstrøm¹

¹Norwegian University of Science and Technology, ²Statped, ³Leiden University, and ⁴Dutch Foundation for the Deaf and Hard of Hearing Child

*Correspondence should be sent to Nina J. Laugen, Department of Psychology, Norwegian University of Science and Technology, 7491 Trondheim, Norway (e-mail: nina.jakhelln.laugen@ntnu.no).