

# Participation mediates the relationship between family functioning and mental health in children with and without disabilities

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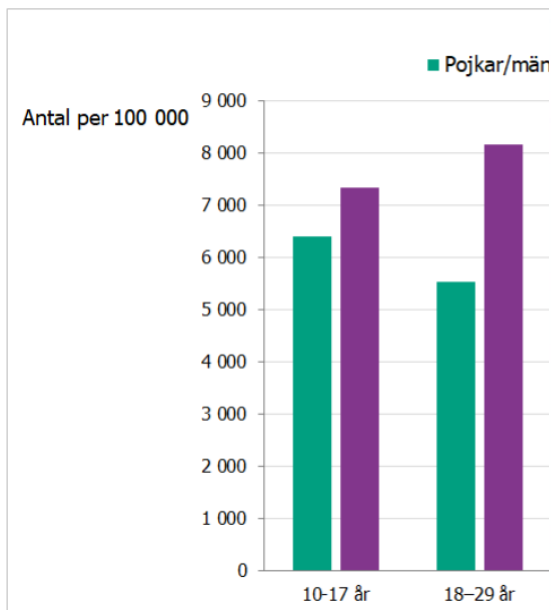
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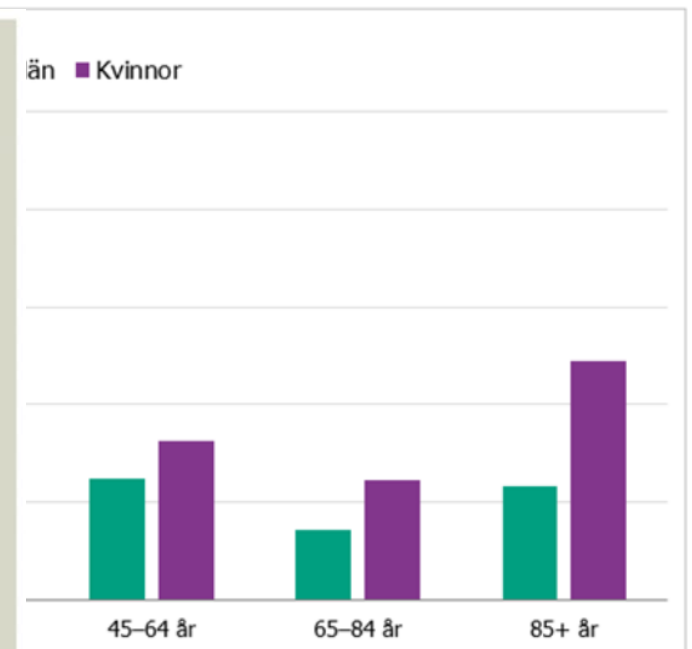
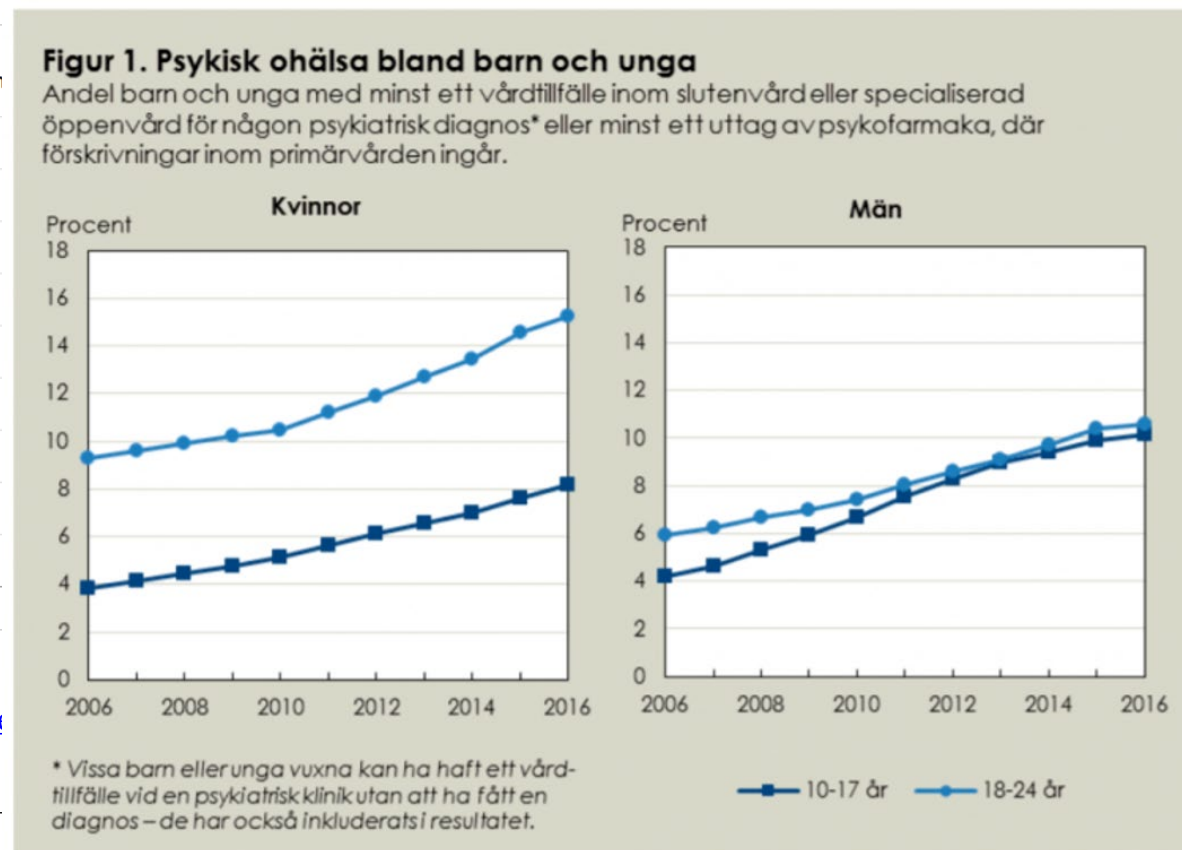
# Mental health problems are on the increase

Figure 1. Number of individuals per 100 000 in different age groups and by gender who have visited psychiatric care unit, 2022. Source: Patient registry



<https://www.folkhalsomyndigheten.se/>

Figure 2. Percentage of men and women in different age groups who report a serious mental health problem, 2022. Source: National public health survey, Sweden



<https://www.folkhalsomyndigheten.se/>

# What impacts mental health?

- Non-modifiable & modifiable factors impact mental health in children with and without disability
- One modifiable factor is higher quality family functioning which predicts better mental health in children (Vacaru et al., 2022)
- Another modifiable factor is participation (Arakelyan et al., 2019) which promotes mental health wellbeing & prevents mental health problems (Jewett et al., 2014)

## Children with disabilities are (as compared to children without):

- At increased risk of poor mental health (eg Emerson & Hatton, 2007; van Steensel et al., 2011)
- Indicate fewer protective factors and more risk factors of poor mental health (King et al., 2010)

# BUT

- Children with disabilities face larger obstacles for participation and more restriction (King et al., 2010)
- One factor important for participation in children is their environment and in particular their home situation and family functioning (Di Marino et al., 2018)
- But, disabilities also impact family functioning and may mean an increase in stress (Täljedal et al., 2024).
- Through promoting modifiable family functioning factors we may increase participation in the child and thereby improve their mental health

# Aim

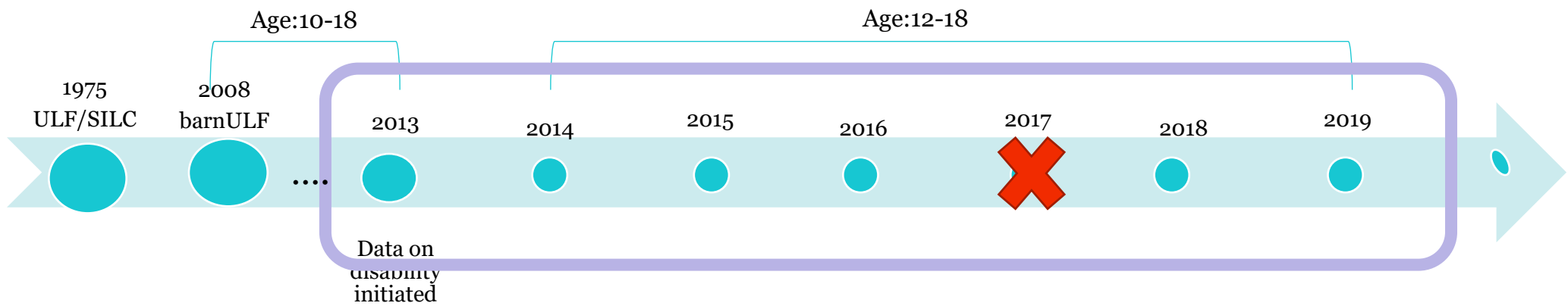
The present study aimed to investigate whether participation mediates the relationship between family functioning and mental health and whether it differs in children with and without disabilities.

# BarnULF & ULF/SILC

- Data from **Sweden Statistics (SCB)**- interview-based sample surveys undertaken yearly:
  - register on the conditions of life for children (barnULF)
  - and their caregivers (ULF/SILC)
- *ULF/SILC & barnULF* is a Swedish government initiative and one of the only data bases on the subjective experience of children and their caregivers on a large scale in Sweden
  - Used to guide governmental decision making, for research and for the public
- Includes information on (amongst other):
  - ULF/SILC: health, family, economy, work, leisure, household, disabilities
  - barnULF: school, friends, family, leisure, disabilities, health

# Participants

- Data was extracted from 2013-2019
- A total of 3676 children aged 10-18 were included in the study, and their caregivers (N=2804)
- 1945 girls & 1731 boys





# Disabilities

510 children reported a disability which impacted their daily life

**Table 1. Demographic information of children, by year**

	2013 (n=724)	2014 (n=677)	2015 (n=553)	2016 (n=546)	2018 (n=607)	2019 (n=569)	Total (n=3676)	Total*
Age (Mean (SD))	13.75 (2.56)	13.81 (2.59)	14.87 (2.01)	14.92 (2.00)	14.64 (1.97)	14.88 (2.00)	14.41 (2.29)	-
Girls (%)	54.14	52.29	54.07	53.75	49.42	53.95	52.92	-
Disability (N)								
Hearing impairment	9	6	10	4	6	10	45	35
Visual impairment	13	15	3	2	5	9	47	34
Mobility impairment	7	5	14	8	4	5	43	26
ADHD/Autism	23	19	18	20	35	24	139	89
Dyslexia etc	37	25	44	35	44	33	218	166
Other	31	13	23	19	13	20	119	78
Comorbid	23	6	15	9	16	13	-	82

\*Total: only including individuals with comorbid conditions in the comorbid group

**Table 2. Variables of interest**

Family functioning		Mental health	
	Part of the decision-making process	Wellbeing	Feeling happy
	Get along with mum and dad		Satisfied with self
	Feels mum and dad has time for me		General wellbeing
	Confide in mum or dad when troubled	Problems	Feeling sad
	Parental monitoring		Trouble concentrating
Participation			Nervous
	Social (Meeting friends at home, at their place, someplace else or the internet)		Sleep problems
	Physical (Team or solitary physical exercise)		Stressed
	Cultural (Cinema, theatre, museum, concerts, library)		Tired
	Solitary (Reading books, listening to the news, other solitary activities)		Headache
	Household (Cleaning, cooking, washing, gardening, other)		Stomach-ache

# Methods – Analysis



1

CFA was conducted as to assess the validity of the latent constructs (Participation, Family functioning, Mental health)



2

Mediation analyses were conducted where participation mediated the relationship between family functioning and mental health.



3

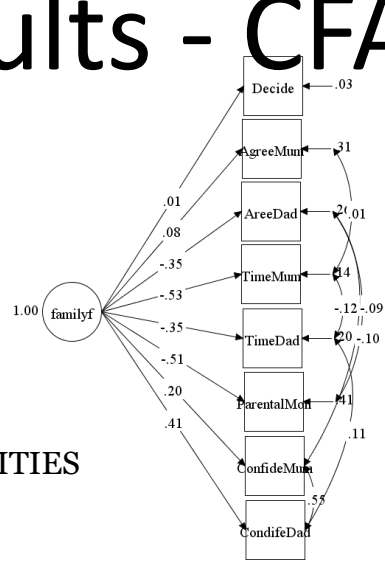
Multigroup analysis was performed as to assess whether the relationships differed between children with and without disabilities.

# Results - CFA

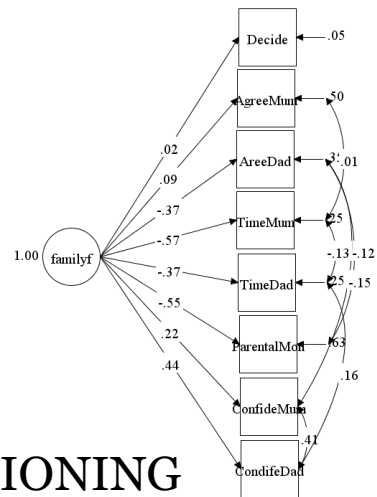
Table 3. CFA results of latent construct of family functioning, participation and mental health

	RMSEA	CFI	TLI	SRMR
Family functioning	.043	.971	.962	.039
Participation	.018	.993	.991	.021
Mental Health	.006	.997	.999	.015

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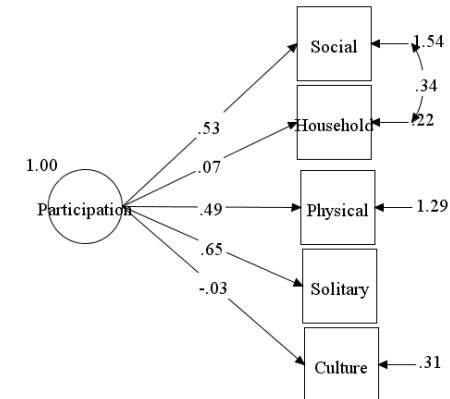
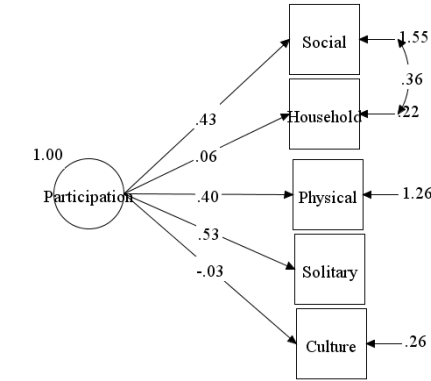
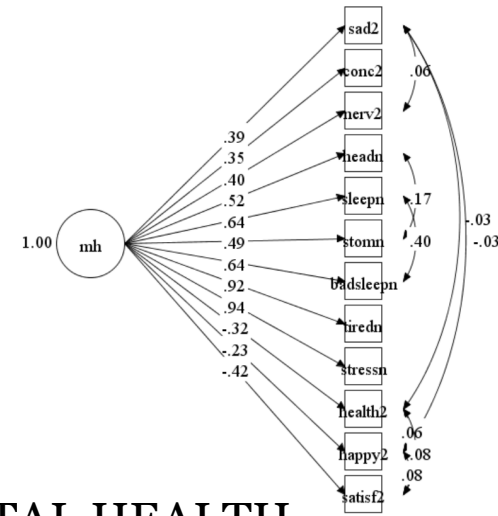
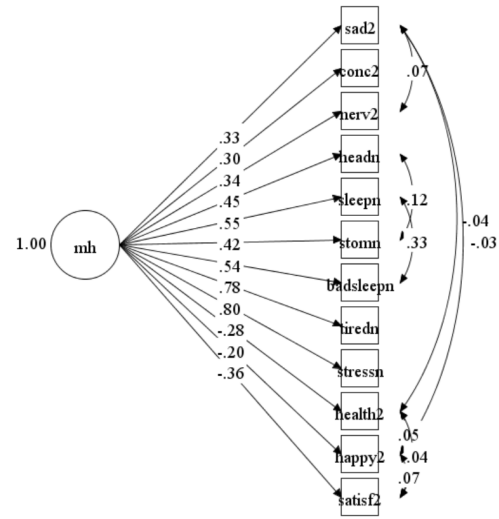


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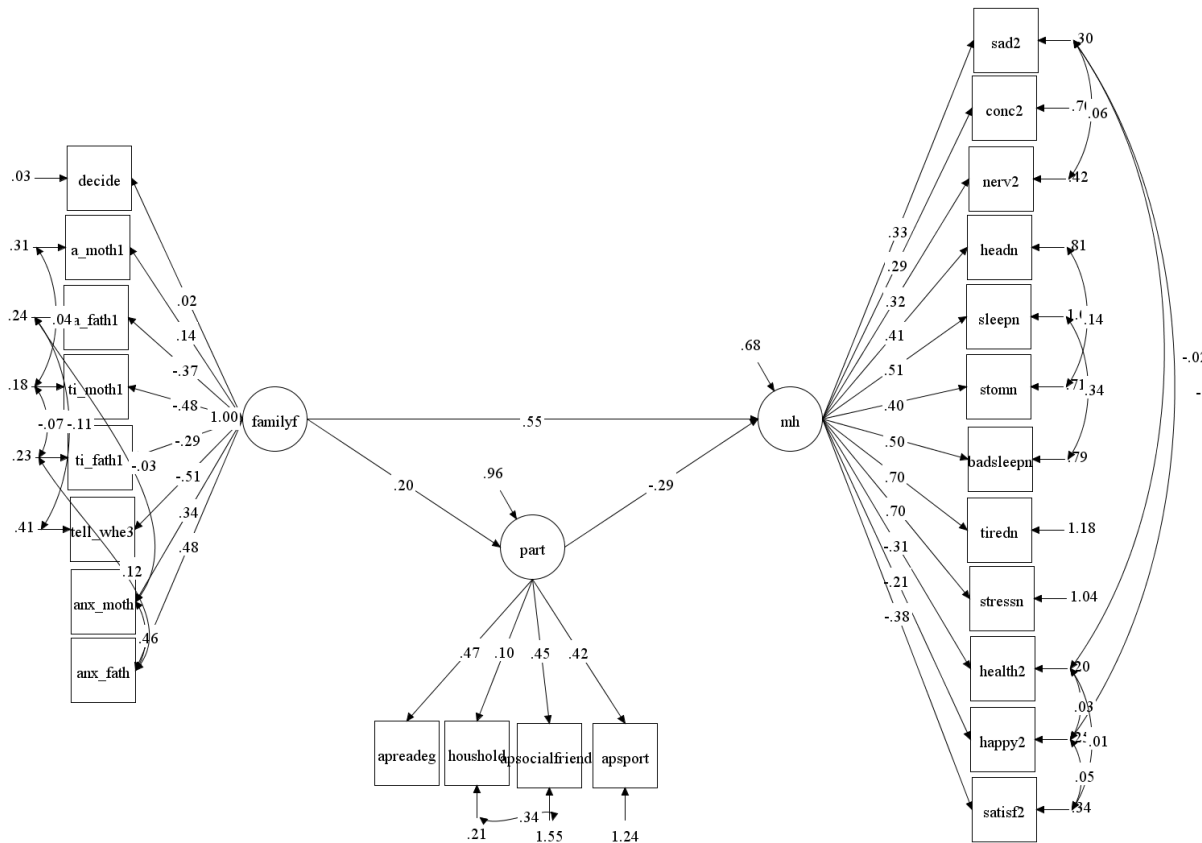
FAMILY FUNCTIONING

MENTAL HEALTH

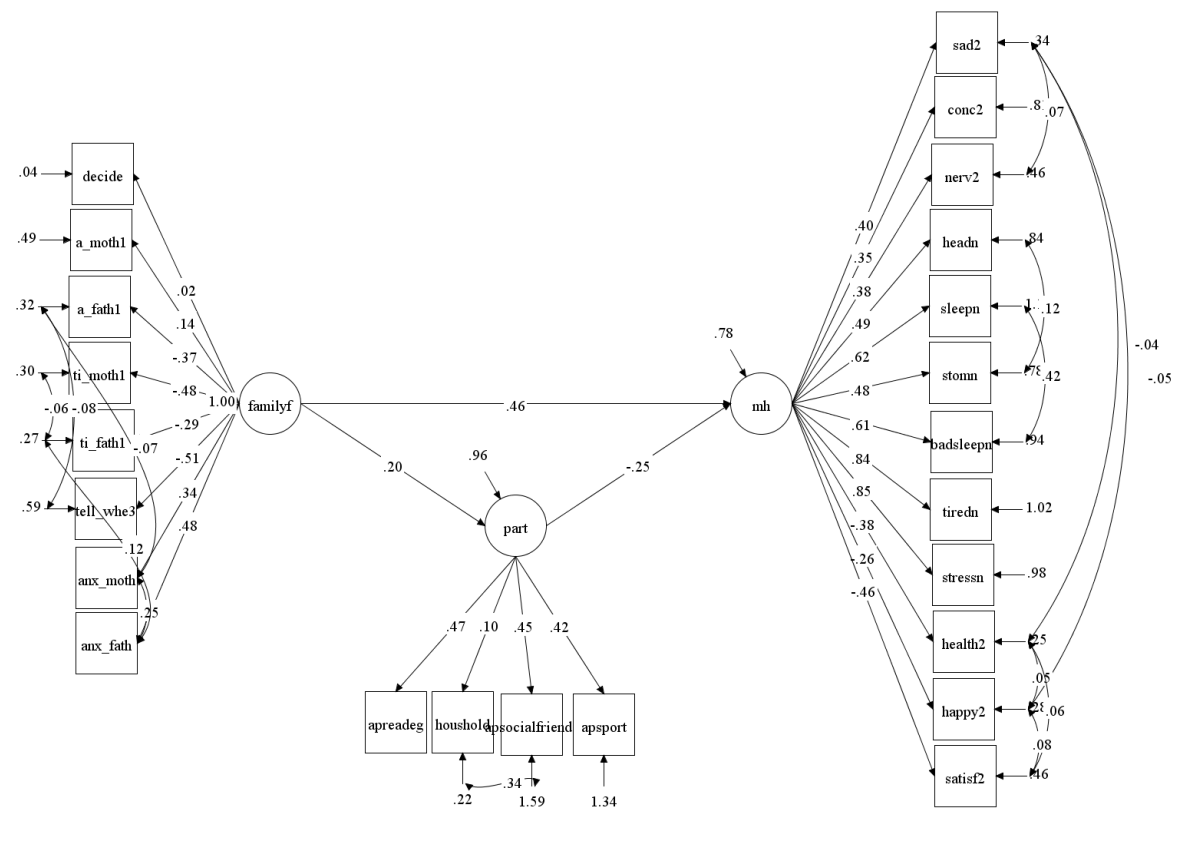


PARTICIPATION

# Participation mediate the relationship between family functioning and mental health



WITHOUT DISABILITIES



WITH DISABILITIES

# Conclusions

- Participation mediates the relationship between family functioning and mental health indicating that family functioning impacts other areas of a child's life than just family, such as participation, which in turn and in addition to family functioning, impacts mental health
- Factors for all latent variables are more important amongst children with a disability
- But the relationships in a mediation model is stronger amongst children without a disability, suggesting that interventions may not have the same impact and may have to be adapted to children with disabilities
- Solitary participation seems to be a strong predictor of mental health, in particular amongst children with disabilities

# Some factors to consider

- Data is self reported and not necessarily based on a diagnosis. While this means less control it does mean children with symptoms are included
- If the current sample children with a variation of disabilities are included, the relationships investigated may differ depending on type of disability, however we lack power to investigate each disability separately

# References

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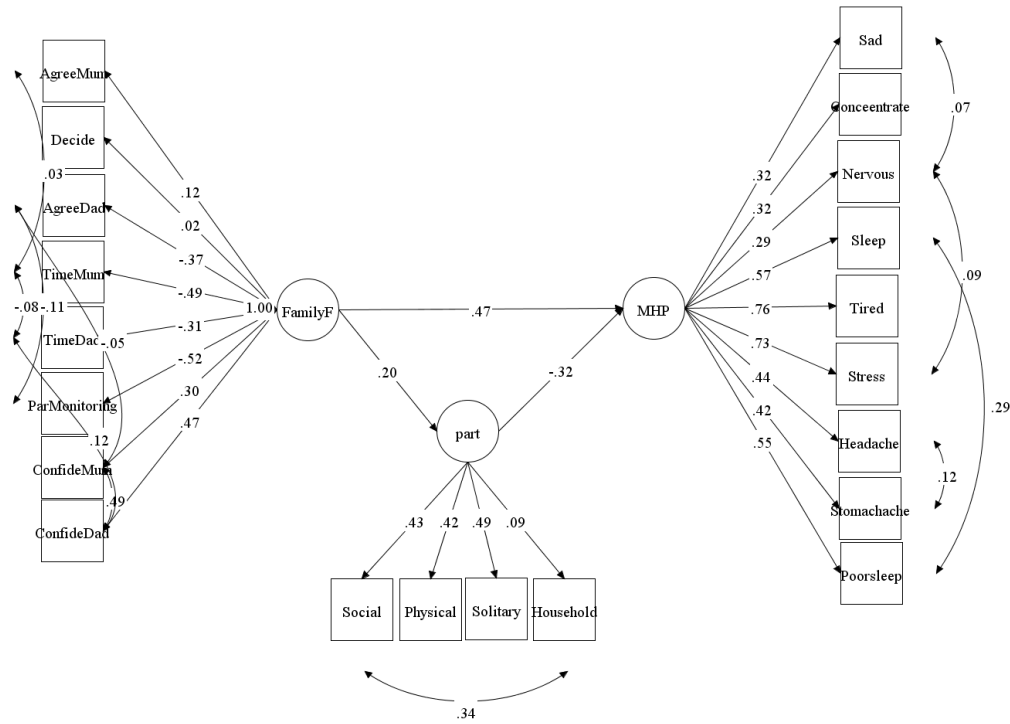


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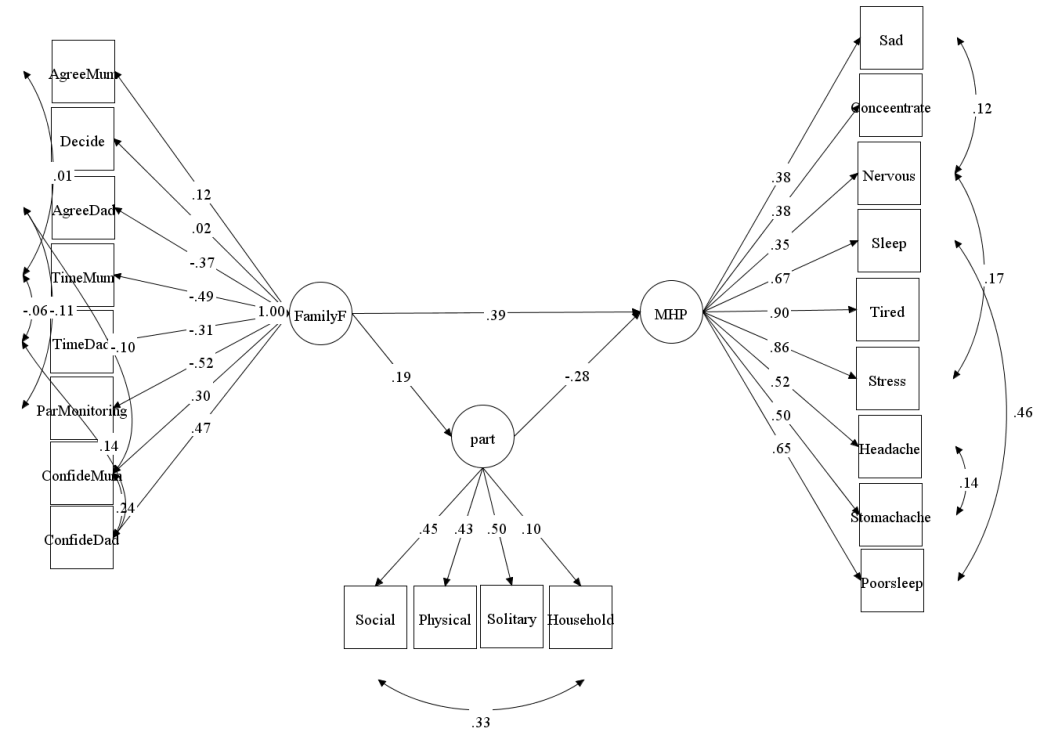
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# Participation mediate the relationship between family functioning and mental health problems

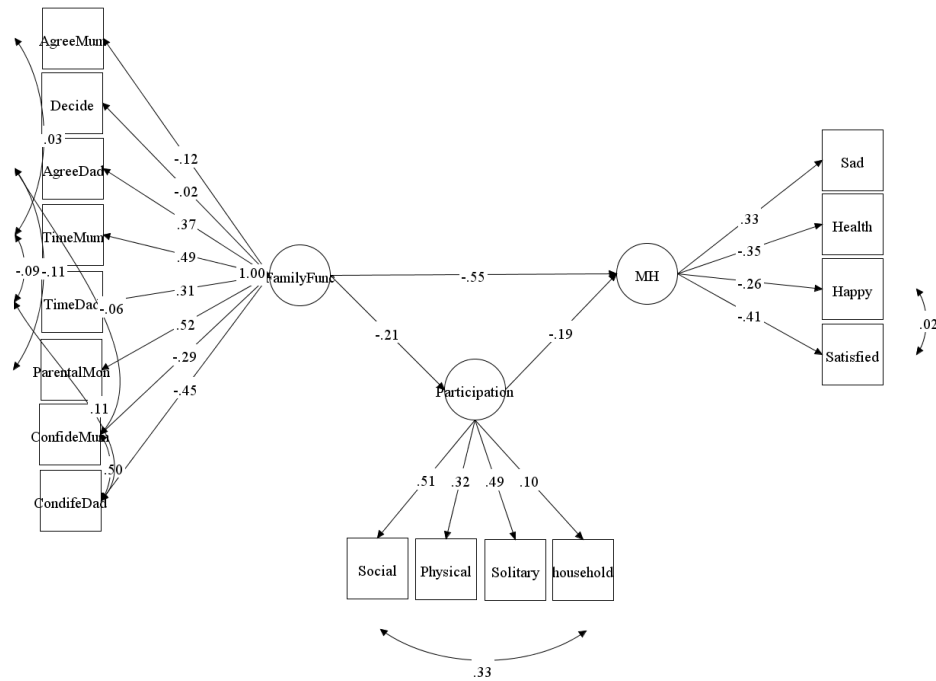


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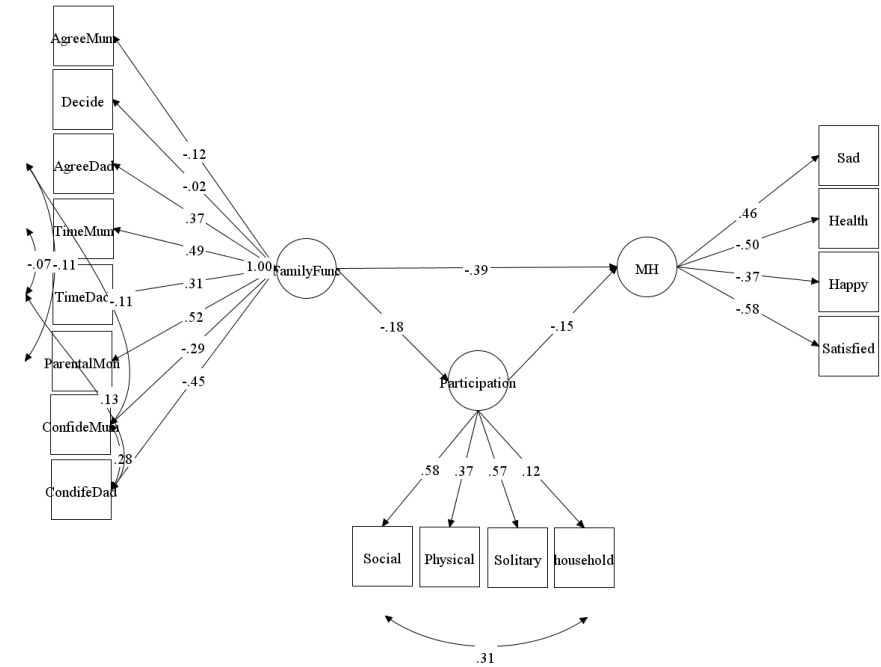


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# Participation mediate the relationship between family functioning and mental health wellbeing

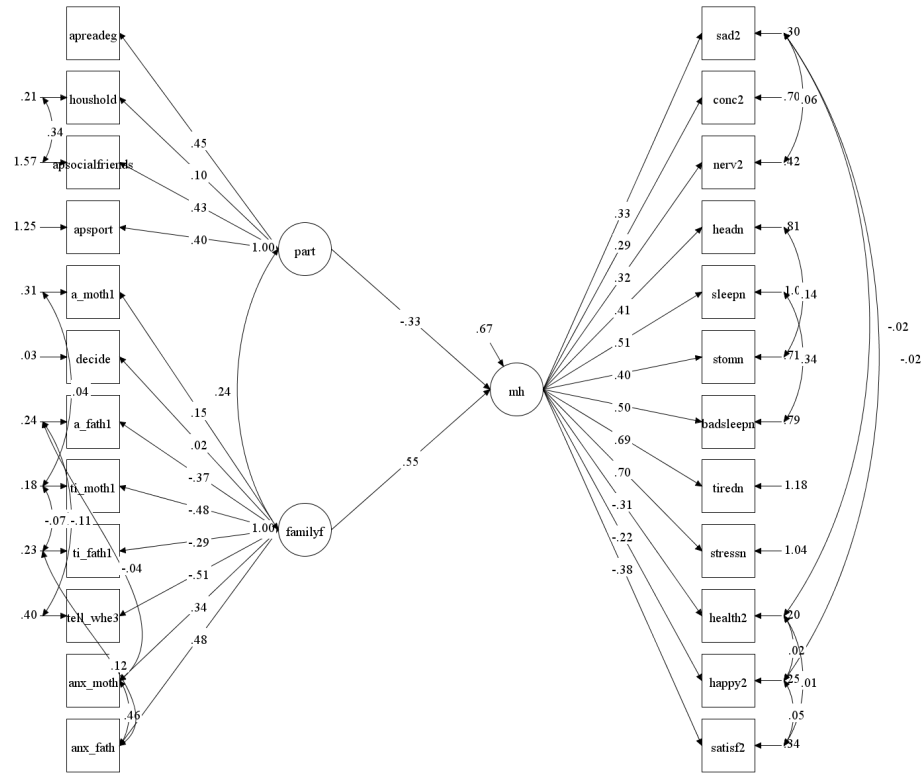


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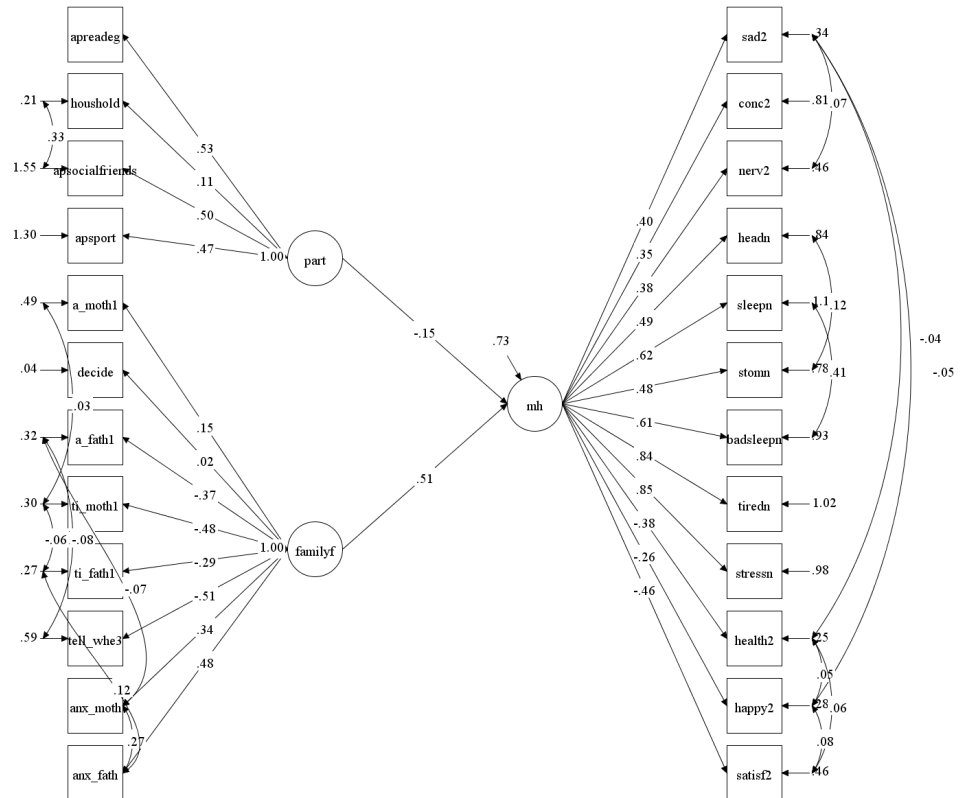


WITH DISABILITIES

# Participation & Family functioning both predict mental health

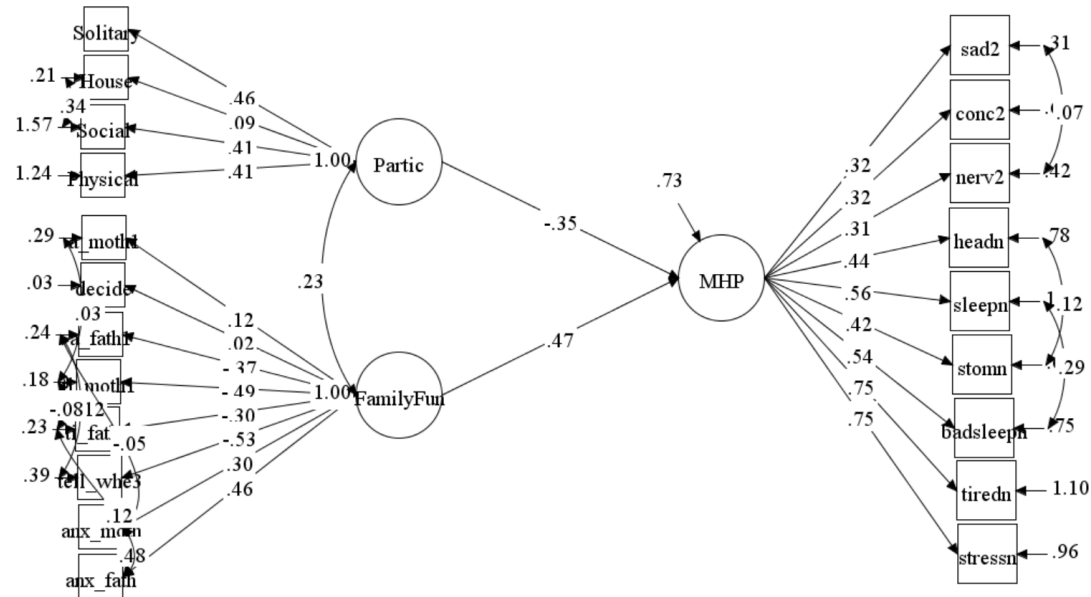


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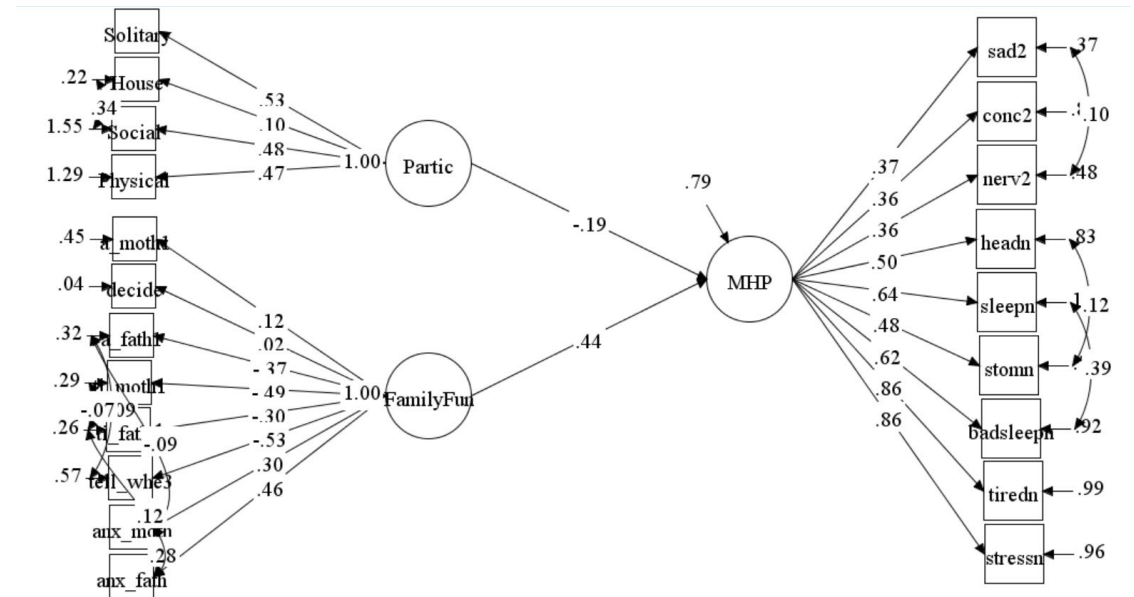


WITH DISABILITIES

# Participation & Family functioning both predict mental health problems



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