Participation – an outcome of inclusion??

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CHILD

A child/adolescent in need of special support

A child that needs additional support on top of what is provided to all children to function in everyday life

- A child formally identified as in need of special support/having as long term condition after some kind of assessment procedure
- A child identified by professionals (e.g preschool/school staff, social worker) as a child that need additional support to function in the natural context considered

How do children and youth define participation?

- Conceptions of participation in students with disabilities and persons in their close environment *(Eriksson & Granlund, JDPD, 2005,16,* 229-245)
  - *Participants: 674 children and youth with disability, their teachers, parents and consultants (in all appr. 2000 persons)*
  - *Result: Definitions contain three dimensions: perceptions of belonging and motivation, goal directed actions, perceived environmental opportunities. Definitions given not dependent on type and degree of disability but age*

- I can play – young children's perception of health *(Almqvist et al, Pediatric Rehabilitation, 2006)*
  - *Participants: 68 young children with typical development 4-5 years of age*
  - *Result: Children describe feeling well mostly as engagement, not feeling well in terms of physical and psychological illness*

Measuring engagement here and now with a self-report measure

(Maxwell, Augustine & Granlund, 2012)

Table I. Variables grouped by components which make up the subjective experience of involvement index.

Group of variables	Control	Motivation	Concentration	Involvement	Well-being/Quality-of-life
Variables	*Do you have control over the situation?	Why did you do this task?	*Were you concentrating	*Did you feel involved in what you did?	¤Did you feel satisfied with yourself?
		*Was activity important to you?	Were you thinking of other things	¤Did you feel studious?	¤Did you feel happy?
		Did you want to be doing something else?	¤Did you feel alert?	Did you feel bored?	¤Did you feel alone?
			¤Did you feel sleepy?	#How difficult was it [the activity] for you?	Did you feel sad?
				#The activity was fun.	¤Did you feel good?
					¤Did you succeed with what you did?
					Were you satisfied with what you did?

Are children more engaged when they are thinking about the same activity as they are doing ?
(Maxwell, Augustine, & Granlund, 2012)

Table 2: Descriptive statistics for variables used in the index of subjective experience of involvement

Descriptive Statistics

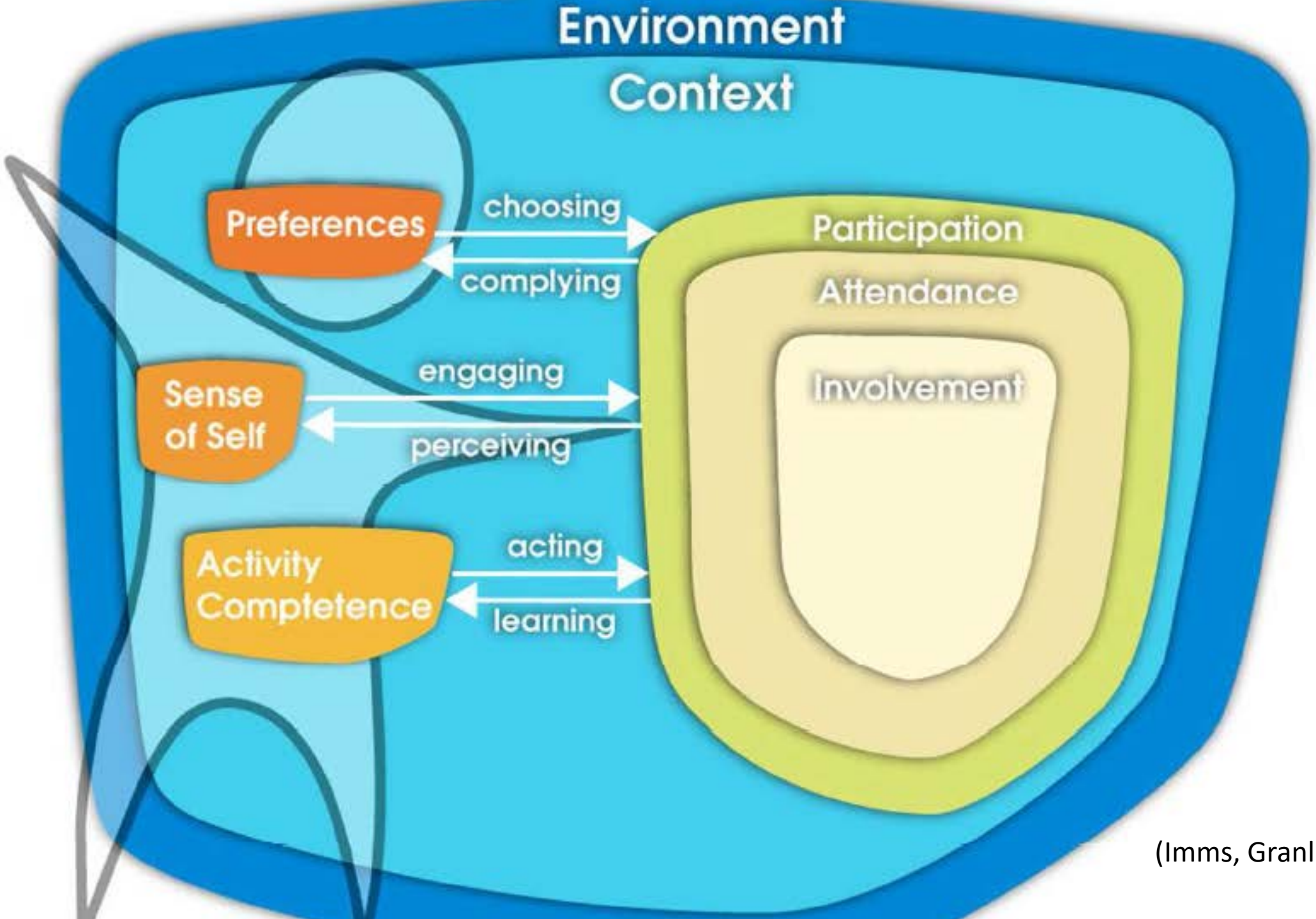
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Were you concentrating?	518	4	1	5	3,10	1,390	1,932
Do you have control over the situation?	518	4	1	5	3,90	1,096	1,202
Did you feel involved in what you did?	518	4	1	5	4,03	1,120	1,254
Was the activity important to you?	517	4	1	5	3,06	1,439	2,070

Differences in level of engagement dependent on whether child thinking and doing have the same focus or not

Table 6. Non-parametric comparison of self-reported degree of subjective experience of involvement: comparing thinking and doing the same at ICF-CY chapter and full-code levels

ICF-CY coding level	Mann-Whitney U	Thinking & doing not same	Thinking and doing same	Significance (2-tailed)
Chapter	25938.000	271	234	0.000**
Full-code	22918.500	365	150	0.004*

** $p < 0.0005$



(Imms, Granlund et al,201

Being there
(Imms, Granlund et al, 2016)

Participation as attendance – sociological concept

- Links to civil rights and the conventions CRC, CRPD and environmental prerequisites

- Availability and accessibility of the environment

Degree of involvement/engagement

(Imms, Granlund et al, 2016)

Involvement - a psychological concept

- Links to - Activity competence, sense of self, preferences
- Accommodation/adaptation and acceptance in the environment

Link between being there and involvement

Time spent in preschool/school

Time spent in different activities (in preschool/school)

Time spent in high engagement (in activities in preschool/school)

Engagement as a linking construct in lifespan development

At the level of the body engagement is the **physiological state of the person** in terms of attention, focus, cognitive load

At the level of the person in context, **'engaging in'** is the internal state, often described as having cognitive (e.g. motivation, attention, focus), behavioural (e.g., effort, persistence) and emotional aspects (e.g., reactions, sense of belonging). Opportunities for engagement at this level probably lead to outcomes related to competence, sense-of-self and preferences. Occur in home, school etc

At the level of the relationships between environment, the focus is on connection to activities, where **'engaging with**´ processes are important, e.g the engagement between a child and therapist within therapy activities, or between parents and professionals in therapy decision-making for children. This might support higher levels of meaningful engagement over time in these contexts, and opportunities for engagement and probably lead more stable perceptions of subjective wellbeing and meaningfulness.

Inclusive Education framework - engagement as an outcome??

- The project also assumed that *quality* early childhood provision needs to be characterised as an inclusive system as described in the Agency position paper:
    - The ultimate vision for inclusive education systems is to ensure that all learners of any age are provided with meaningful, high-quality educational opportunities in their local community, alongside their friends and peers (European Agency, 2015, p. 1).

Low engagement
Not there

High engagement
Always there

Participation in everyday life in a hierarchical systems framework

PARTICIPATION IN EVERYDAY LIFE			
Being there	**Involved while being there**	**Prerequisites**	
Individual/ close contex •Attending, availability, accessibility **Relations between systems** •Attend decision making, system, express opinion **Society** •Attend groups •Know about groups	**Individual/ close context** •Sense of belonging, engaged, focused, interact **Relations between systems** •Plan, decide, perceive trust **Society** •Politically active, active in society	**Person** •activity competence, sense of self, preferences **Relations between systems** •Educated, experiences, knowledge **Society** •Well informed, have knowledge •Democracy important?	**Environment** •Availability, accessibility, adaptability, acceptability **Relations between environments** Knowledge, attitudes, routines **Society** •Organizations designs •Laws – content and form

Why engagement as the outcome?

Being there does not automatically mean being engaged while being there (Imms et al, 2016).

People can focus their attention on different aspects of the same activity, related to having body impairments affecting how mental resources are allocated (Kahneman, 1973; Pickora-Fuller et al, 2016). As a result, they may be engaged in different aspects of the same activity.

Individual variation in task engagement within the same activity creates different participation contexts and may be a key contributor to the disabling process of children with impairments.

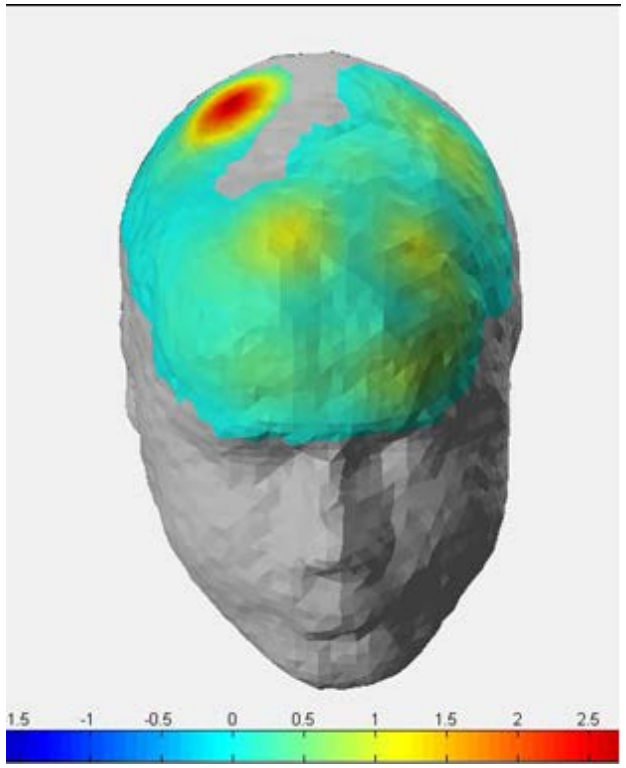
Engagement is a strong predictor of both learning and wellbeing (Aydogan, 2012)

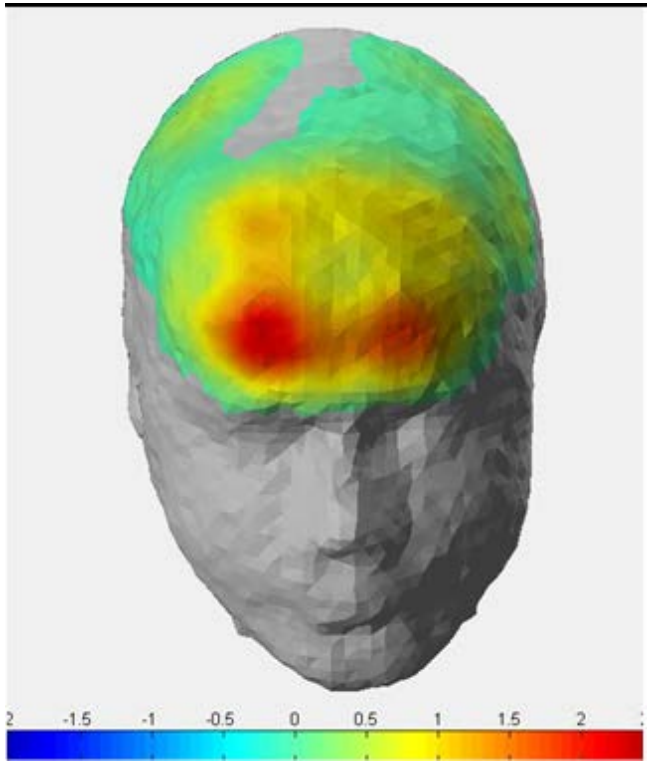
Perceptions of control are strongly related to engagement in school (Skinner et al, 2008)

Attention and effort

Average activity when walking on level ground
(Ramstrand & Möller, in prep.)

Control





This is a case study of two women. The Control is 49 year old with no known conditions affecting walking. The individual on the right is a 50 year old women who was amputated through the thigh approximately 30 years ago and uses a prosthetic limb. Note the increase in frontal cortex activity. This is consistent with numerous other studies investigating walking in individuals who have disabilities affecting walking and suggests that the, normally automated task of walking required more cognitive processing.

Type of measures used

Engagement in:

- Physiological indicators of engagement = attention??
- Measures of behaviors and perceptions

Engagement in an activity:

- Level of engagement in different activties, e.g home, community
- Perceptions of belonging, motivation, importance
- Ratings of type of participation in intervention phases

Type of assessment method

- Physiological indicators
- Self rating
- Self report
- Proxy ratings
- Observations

Aspects to consider in measuring engagement

”Clean” measure or loaded with something else?

Relations between measures in and between ecological levels?

Where on the person-environment continuum ?

Physiol	Behavior Engaged in	Behavior/context Engaged with

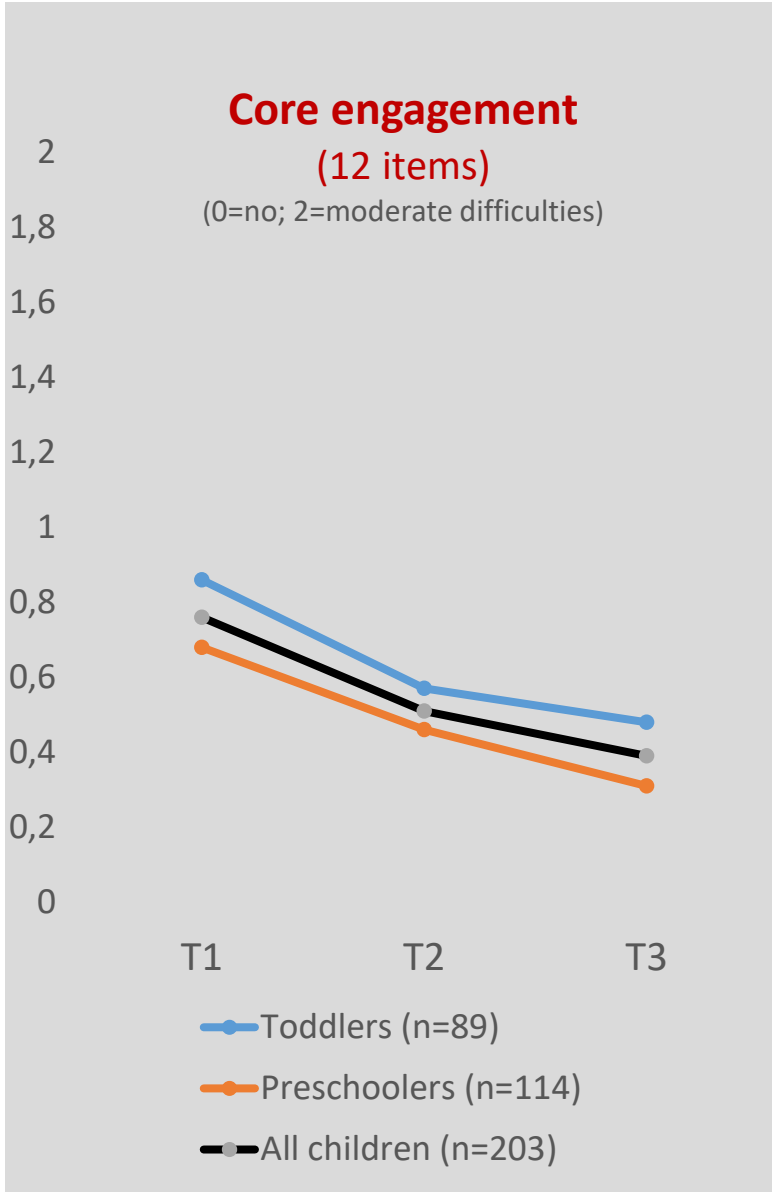
Person — Environment

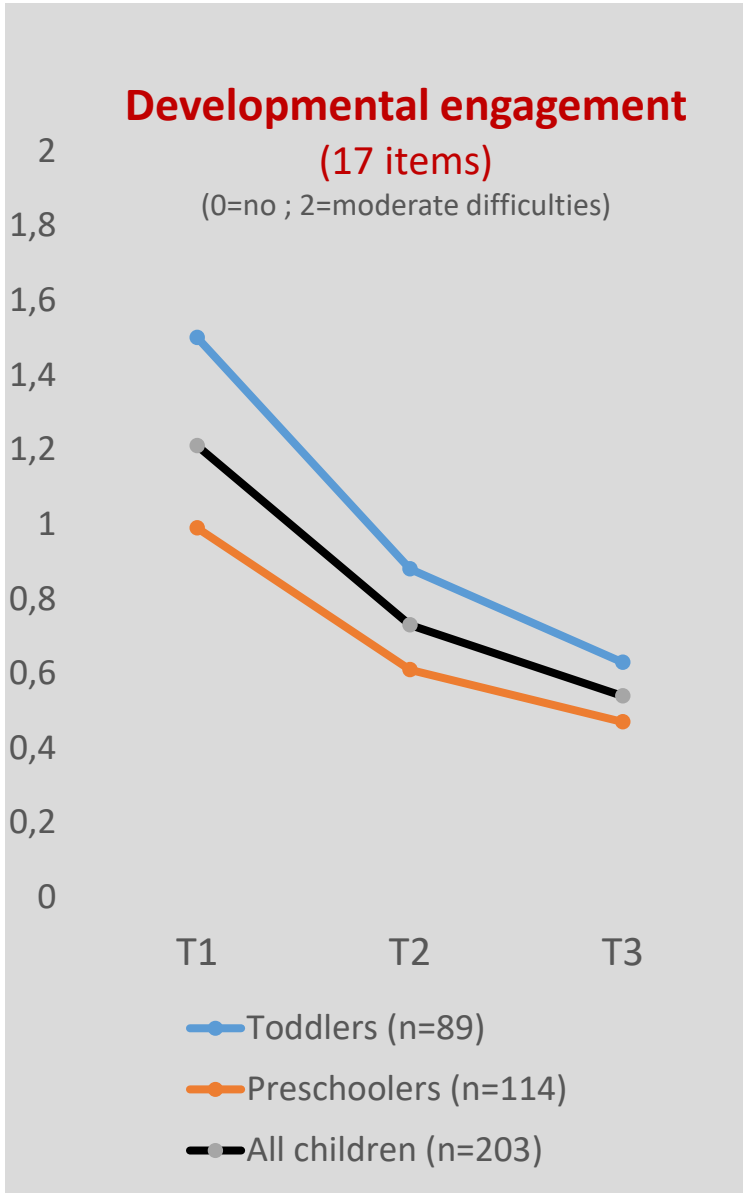
Cross sectional or longitudinal?

Developmental and core engagement

Pattern Matrix[a]

	Component	
	Developmental	Core
CEQ28.Pretend toys are something else	,887	
CEQ21.Pretend to be person, animal or object	,854	
CEQ14.Imitate sound	,810	
CEQ8.Try out new ways to play with objects	,793	
CEQ29.Investiage new places	,785	
CEQ19.Can understand how things work witout asking for help	,745	
CEQ10.Try to get toys to work	,728	
CEQ4.Try to get other children to do things	,707	
CEQ25.Play with peers when they initiate a game	,670	
CEQ15.Try to use langauge in a new way	,666	
CEQ7.Talk about things that has happened or is going to happen	,636	
CEQ12.Play with other children	,613	
CEQ24.Can choose to do difficult activities	,575	
CEQ17.Solve problems quickly	,566	
CEQ13.Keep active	,505	
CEQ27.React on environmental changes (person/physical env.)	,437	
CEQ3.Try to get adults to do things		
CEQ1.Look at or listen to adults		,857
CEQ26.Do what you can expect from the child		,707
CQQ11.Look at or listens to other children		,701
CEQ9.Play in a manner that can be expected in relation to develop.		,692
CEQ2.Play with adult in adult initiated play		,651
CEQ22.Play with toys in afunctional manner		,639
CEQ16.Seems aware of what is happening around him/her		,632
CEQ23.Can concentrate		,580
CEQ18.Motivated to play with adults		,525
CEQ6.Can finish an activity even if it takes a long time	,366	,478
CEQ5.Play with toys		,448
CEQ20.Has a way to communicate that other persons understand	,394	,399





(Adolfsson et al, in prep.)

The outcome of inclusion is not developmetally based

Developmental engagement – expected to become more complex with age -> frequently lead to focusing on learning new skills

Core engagement – expected to be the same independent of age -> engagement in everyday activities

Is core engagement is the key outcome of inclusion? -> focus on functioning in preschool/school

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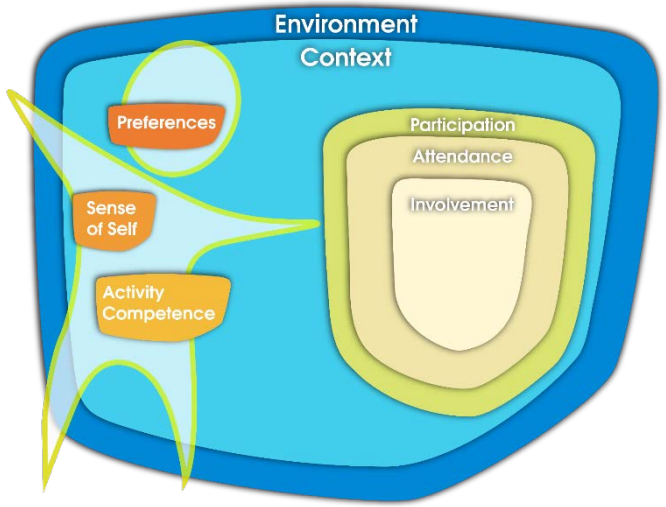
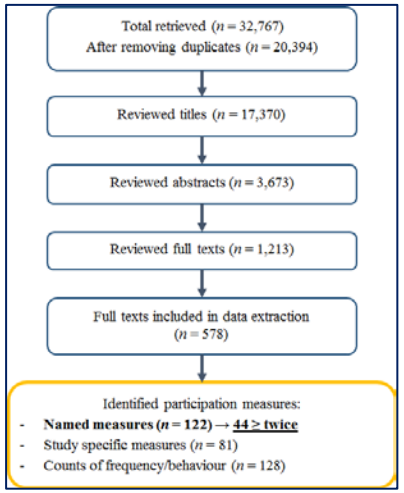
Measures of participation – a systematic review

- Brooke Adair, Christine Imms, Anna Ullenhag, Deb Keen, Mats Granlund (in review)

Mapping ‘participation’ measures so far…





Participation framework mapping of 25 named measures						
Attendance	**Involvement**	**Activity competence**	**Sense of Self**	**Preferences**	**Context/ Environment**	**Other**
16	8	13	1	1	7	6

Often about enjoyment

These are the measures used to assess participation in research

Appendix B: Engagement Versus Disaffection with Learning: Teacher Report

Behavioral Engagement

1. In my class, this student works as hard as he/she can.
2. When working on classwork in my class, this student appears involved.
3. When I explain new material, this student listens carefully.
4. In my class, this student does more than required.
5. When this student doesn't do well, he/she works harder.

Emotional Engagement

1. In my class, this student is enthusiastic.
2. In class, this student appears happy.
3. When we start something new in class, this student is interested.
4. When working on classwork, this student seems to enjoy it.
5. For this student, learning seems to be fun.

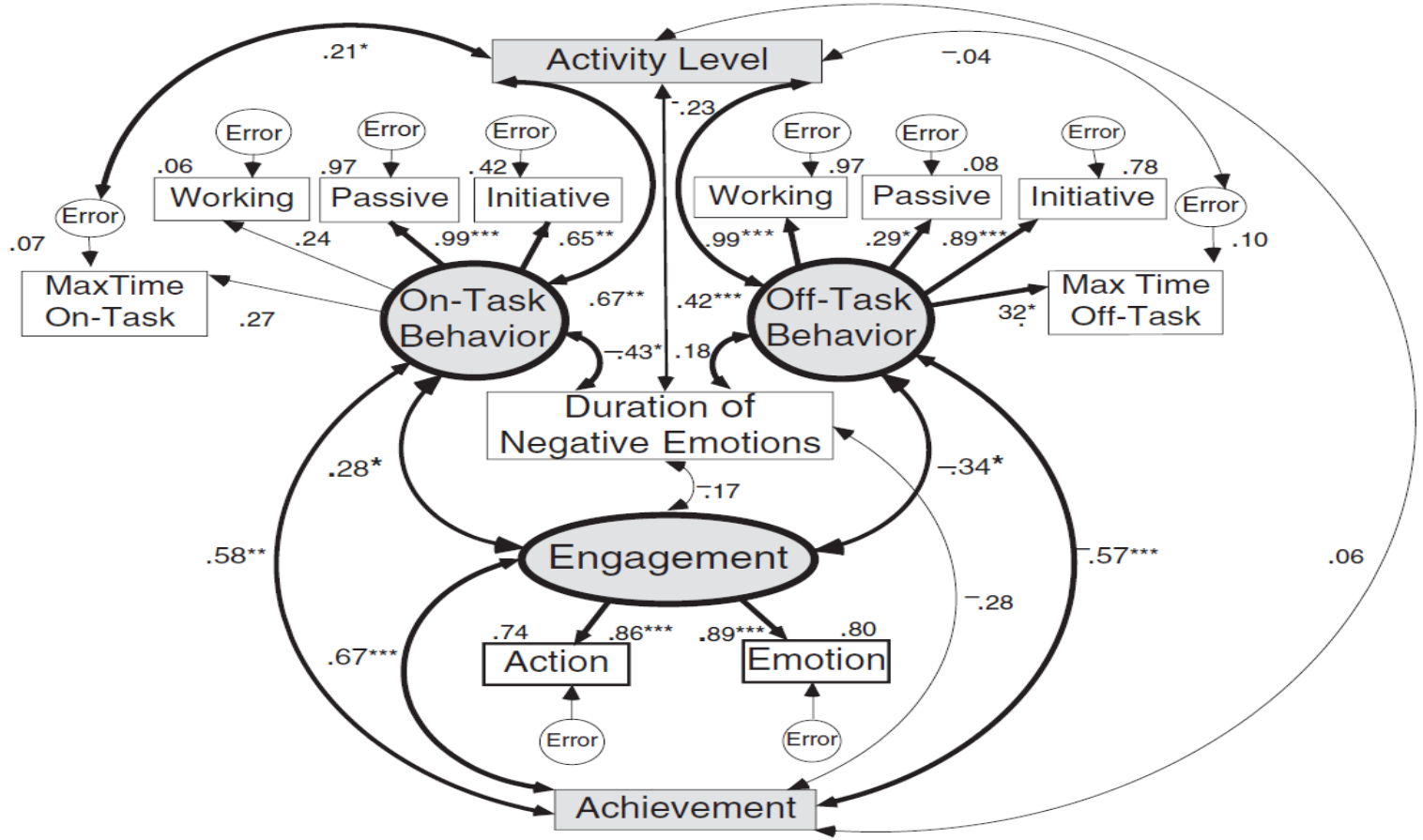
Behavioral Disaffection

1. When we start something new in class, this student thinks about other things. (–)
2. In my class, this student comes unprepared. (–)
3. When faced with a difficult assignment, this student doesn't even try. (–)
4. In my class, this student does just enough to get by. (–)
5. When we start something new in class, this student doesn't pay attention. (–)

Observations of engagement

Coding system. The coding system consisted of seven exhaustive and mutually exclusive categories, adapted from systems developed by Charlesworth and Hartup (1967); Horn, Conners, and Well (1986); and Kerr, Zignmond, Schaeffer, and Brown (1986). Three categories captured children's *on-task behavior: On-Task Active Initiative* (e.g., a child contributed to a lesson on her own initiative, raised his hand, or volunteered to go to the board), *On-Task Working* (e.g., reading, working on a problem, continuing an activity, answering a question), and *On-Task Passive* (e.g., listening to the teacher or a classmate making an on-task contribution). Three categories captured off-task behavior: *Off-Task Initiative* (e.g., disrupting a classmate or interrupting the teacher with a nonacademic issue), *Off-Task Working* (e.g., building paper airplanes, participating in a classmate's active off-task behavior), and *Off-Task Passive Behavior* (e.g., daydreaming or listening to a classmate's off-task contribution). A category of *Other* was used for all other events.

Figure 2
A Model of the Relations Between Teacher Ratings of Student Engagement and *In Vivo* Behavioral Observations of Student On-Task and Off-Task Behavior in the Classroom



* $p < .05$. ** $p < .01$. *** $p < .001$.

Skinner et al (2008) A motivational perspective on engagement and disaffection. *Educational and Psychological Measurement*

A comparison of observed involvement/engagement in PE of students in three groups

(Bertills et al, in prep)

Involvement/engagement in PE of students in three groups of students

		Low	Medium	High
Mean=total		14,99	35,37	49,64
Disability	Mean	16,49	36,80	46,71
D-F	Mean	18,09	35,93	45,98
A-C	Mean	12,24	34,26	53,50

Activity competence

(Imms, Granlund et al, 2016)

Children having good skills can manage more situations -> by training skills we can help children to participate:

Skills – problem solving/cognition, motor skills, communication/language skills, academic skills, social skills. *Key issues are acting and learning*

Maybe, by increasing participation we can enhance skills aquisition

Relations between measures of participation, and intelligence, (Arvidsson, P. & Granlund, M., accepted.)

	TIQ	VIQ	PIQ	Aritm.	Digit span	Corsi Block	KaTid	Pict span	Prosp. memory	Episod memory
Self rated capacity (capability)	0,19	0,13	0,24	-0,08	0,17	0,26	0,05	0,14	0,21	0,33
Self rated performance/freq.	0,08	0,09	0,11	-0,11	0,11	0,22	0,01	-0,05	0,20	0,30
Perceived importance	0,24	0,20	**0,33**	0,13	0,08	**0,33**	0,16	0,12	0,25	**0,42**
Do frequently and important	0,07	0,10	0,10	-0,06	0,15	0,22	0,03	-0,04	0,18	0,27
Do seldom and important	0,12	0,10	0,15	0,26	0,02	0,11	0,22	-0,05	-0,15	-0,04

(**p=0.05** n=41-66)

A portugese preschool example

(Pinto et al, in prep.)

Overall aim: to analyze dimensions of functioning related to learning and development in preschool children with developmental delays in order to characterize their participation in inclusive preschool settings.

Main question: Can children can be grouped based on three dimensions of functioning
- engagement, social interactions and independence - regardless of their diagnostic characteristics.

Cluster analysis was used.

Results:

- Two clusters found low or high profile in cluster variables

- Quality of teacher – child interaction and child activity competence not related to cluster membership

- the quality of peer interactions predicted cluster membership showing that higher quality child-child interactions were associated with membership in the high functioning group

- lower quality child-child interactions were associated with membership to the low functioning group.

Measuring activity performance

performed in the previous week. The ASK*p* measures what the child did do, with a score ranging from 4 (all of the time), 3 (most of the time), 2 (sometimes/ about half of the tim child needed to), 1 (once in a while/ at least once last week), to 0 (none of the time).[26] Fo example, in previous week (7 days), the child dressed himself without help on 4 days, an mom helped him get dressed on 3 days. The child's answer on the item "I fastened my clothes by myself" would be "sometimes". The total score for all applicable items was averaged and was transformed to a zero to 100 score, where 100 indicated best function.[2]

Table 3: Correlation Coefficient (r) in the longitudinal relationships between Motor Capacity and Motor Performance across the Gross Motor Function Classification System Levels

GMFCS	Model 1: Capacity (time 1) ⬇ Performance (time 2)	Model 2: Performance (time 1) ⬇ Capacity (time 2)	Comparisons between Model 1 and Model 2	
			Differences	90% CI
I	.53[a]	.63[a]	-.10	-.31 to .10
II	.34	.26	-	-
III	.64[a]	.54[a]	.10	-.13 to .36
IV–V	.61[a]	.78[a]	-.17	-.47 to -.01

Abbreviations: CI, confidence interval.

[a] $p < .01$

Authors: Pei-Chi Ho, MSc; Chia-Hsieh Chang MD, MS; Mats Granlund, PhD; Ai-Wen Hwang PT, PhD
(Accepted Pedaitric Physiotherapy)

Sense of self
(Imms, Granlund et al, 2016)

Children who belive in their ability and perceive that they can do take more initiatives and act on the environment -> by supporting the development of a positive sense of self we can support participation

Provide perceptions of success and control in natural settings. *Key issues are engaging and perceiving*

Adolescents and young adults with mild intellectual disability -
Statistical correlations between participation and aspects of sense of self
(Arvidsson et al, in prep.)

	Performance	Importance	Particip	Par.restr	Wellb.	Auto-nomy	Loc of control
Self rated capacity	**0.76***	0.32*	**0.75***	-0.52*	0.40*	**0.68***	**0.63***
Perfomance frequency		**0.52***	**0.98***	-0.58*	**0.56***	**0.59***	**0.64***
Importance			**0.54***	0.25	0.08	**0.35***	0.23
Participation				-0.57*	0.56*	**0.61***	**0.66***
Particip. Restriction					-0,54*	**-0.40***	**-0.48***
Well being						0.18	0.52*
Autonomy							0.64*
Locus of control							

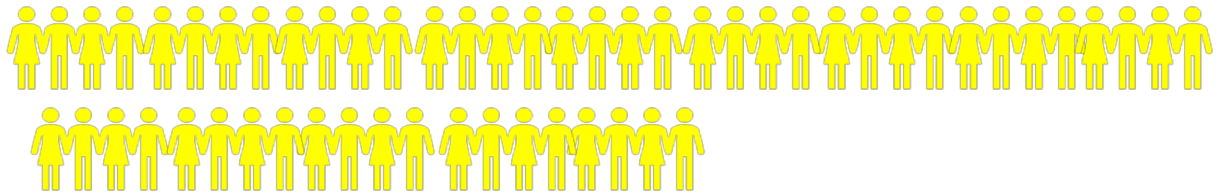
Spearmann Rang-correlations.

Quality teaching and student perceived self-efficacy, functional skills and aptitude to participate in PE (Bertills, Granlund, Dahlström, Augustine, in review)

Disability = 30

Low grades

D-F = 36



High grades

A-C = 55

Results

Total sample: High quality of teaching => High General SE, SE in PE and aptitude to participate

For students with disabilities: High quality of teaching = LOW General SE, SE in PE and aptitude to participate

For all groups: Classroom climate (as rated by teacher)

important for self-efficacy and aptitude to participate (as rated by students)

For all gropus: The better self rated socio-cognitive skills the higher General SE, SE in PE and aptitude to participate in PE

Preferences

(Imms, Granlund et al, accepted)

Children tend to be more active in activities that are in line with their interests, that are self-selected, related to important visions/goals and involve people they like -> frame activities in preferences

Supporting children to make choices based on preferences and important goals. *Key issues are choosing and complying*

Context or nich

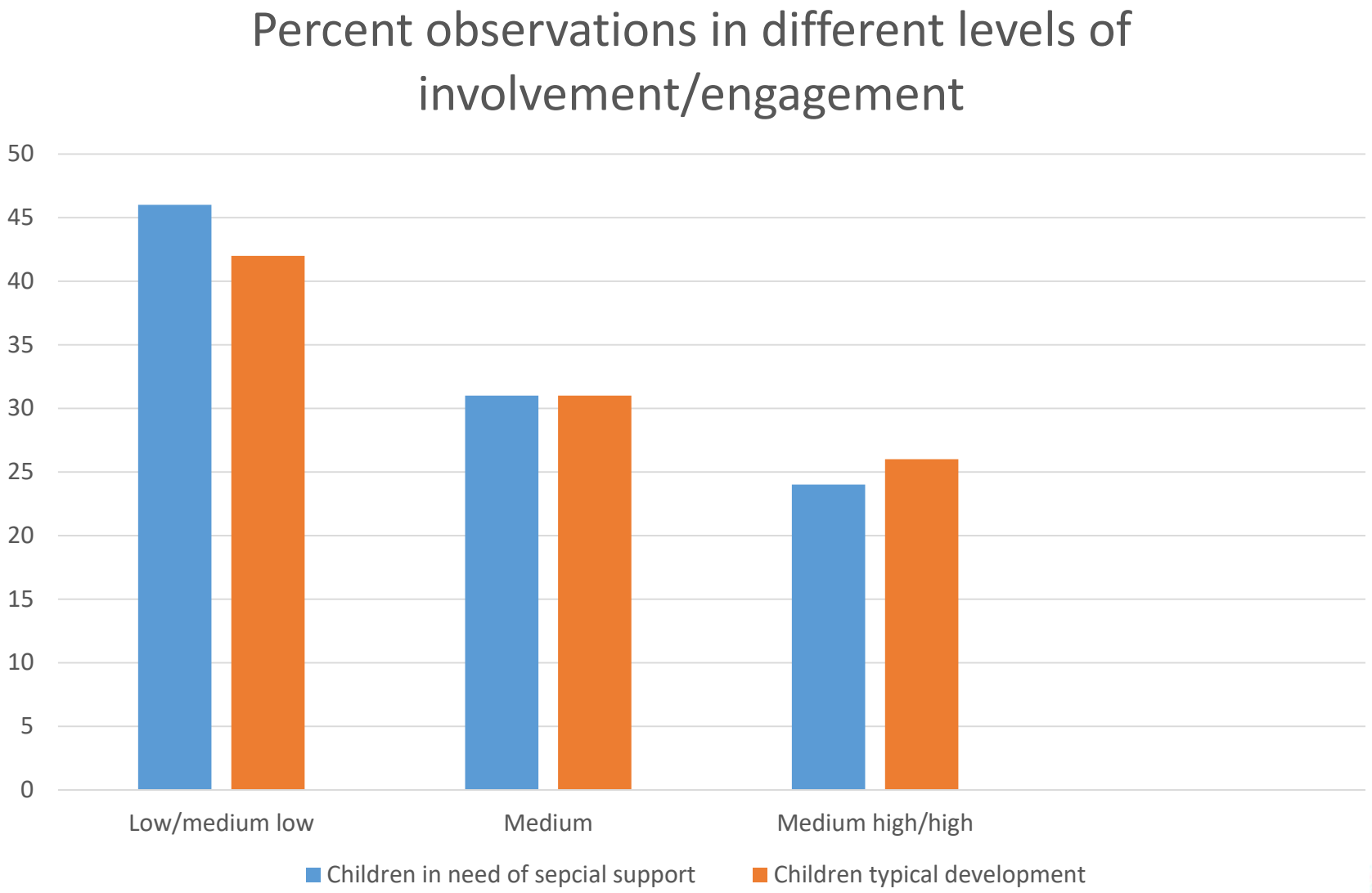
(Imms, Granlund et al, 2017)

Context is personal considered from the perspective of the child participating and relates to people, place, activity, objects and time

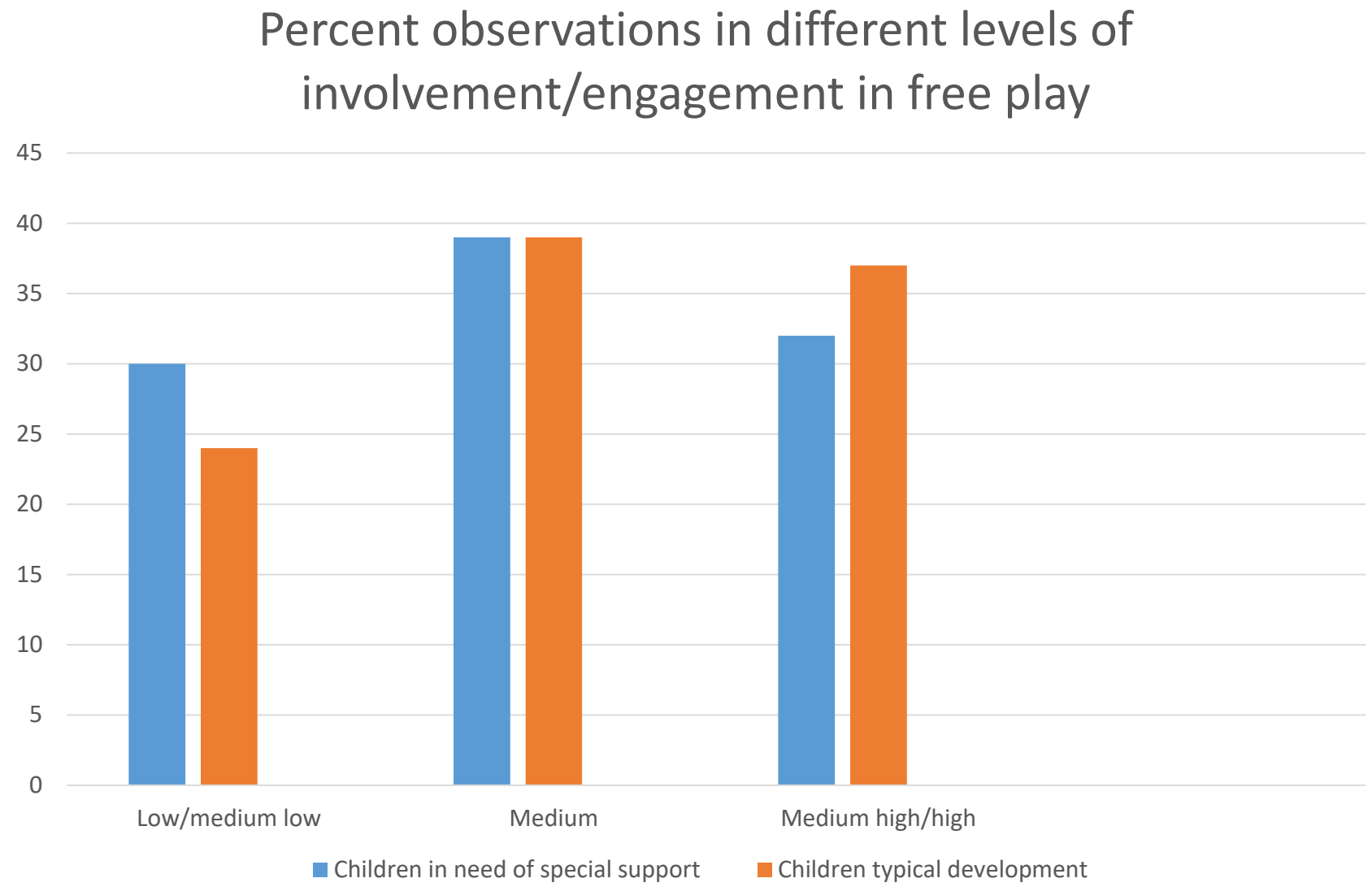
Children attending the same activity can participate in different contexts

Child's understanding of context important but also other's understanding of what child might find important in context

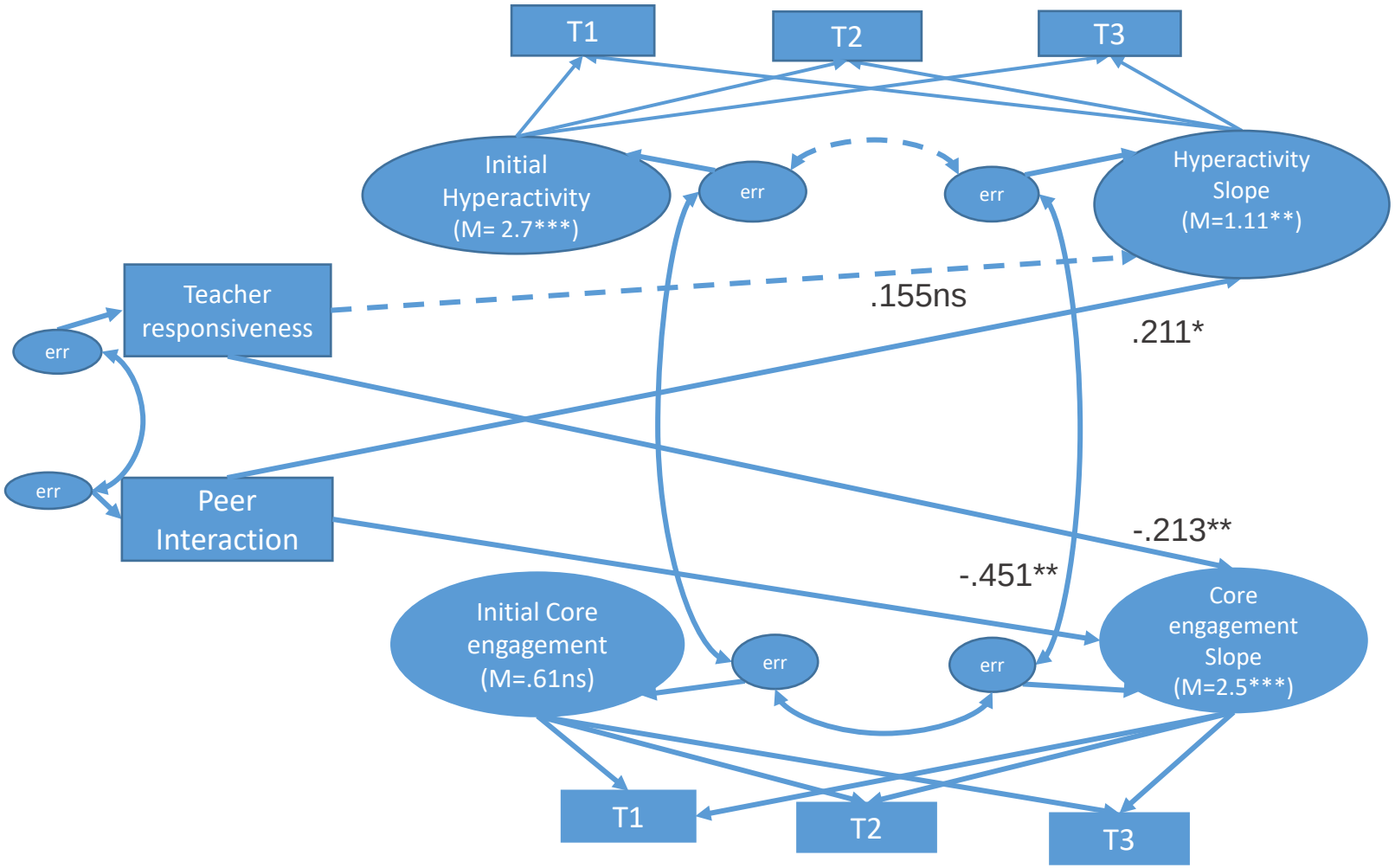
Differences in levels of engagement between children with and without a need for special support (Björck-Åkesson et al, in prep.)



Differences in levels of engagement between children with and without a need for special support in free play (Björck-åkesson et al, in prep.)



Latent Growth curve Modeling (Preliminary results)



(Sjöman et al, in prep.)

Predictive factors

- ✓ Positive peer interaction was a significant predictor for a decreasing trend of hyperactivity
- ✓ Teacher responsiveness was a non-significant predictor for developmental trajectories in hyperactivity.
- ✓ Both teacher responsiveness and positive peer interaction was predictors for an increasing trend of core engagement

Proportion of sweeps talking to someone in PE

(Bertills et al, in prep.)

		Verbal to Whom							
		Teach	Stud	Small group	SG Teach	Whole group	WG Teach	Self	No Talk
Mean=total		16,19	19,88	8,89	0,97	0,70	0,39	1,44	51,54
Disability	Mean	**18,91**	18,48	7,74	**1,86**	0,51	**0,97**	1,53	50,02
D-F	Mean	15,34	**23,91**	8,36	0,40	**1,20**	0,16	**1,72**	48,90
A-C	Mean	15,28	18,10	**9,85**	0,85	0,49	0,22	1,21	**54,01**

Type of context/task engaged in in PE

(Bertills, 2017)

Type of task: What student is engaged in									
		Instructed	Engaged in wrong activity	Active in activ.	Creat. activit	None	Other eg. queuing	Socializing	Disruptive
Mean=total		17,46	3,53	48,51	0,78	10,71	4,57	14,41	0,04
Disabil	Mean	**19,90**	**5,67**	42,59	1,05	11,28	5,22	14,14	**0,16**
D-F	Mean	15,81	3,11	47,02	0,77	**13,85**	**5,47**	13,98	0,00
A-C	Mean	17,18	2,66	**52,62**	0,64	8,43	3,66	**14,81**	0,00

Cluster profiles based on patterns of participation

(Lygnegård, F. Almqvist, L., Granlund, M., & Huus, K. in prep.)

Cluster	Frequency in domestic life (d6) alpha:0.54 sample mean:2.10 SD:0.36	Involvement in domestic life (d6) alpha:0.62 sample mean:2.54 SD:0.43	Frequency in interpersonal interactions and relationships (d7) alpha:0.34 sample mean:2.17 SD:0.41	Involvement in interpersonal interactions and relationships (d7) alpha:0.31 sample mean:2.52 SD:0.36
1 (n=176)	1.80 -	2.82 +	1.9 -	2.50 - (-)
2 (n=220)	2.04 (-)	2.53 (-)	2.61 ++	2.85 +
3 (n=81)	2.64 ++	2.88 +	2.77 ++	2.84 +
4 (n=199)	1,96 - (=)	2.33 -	2.0 -	2.16 -
5 (n=39)	1.64 --	1.41 ---	1.70 --	1.71 ---
6 (n=234)	2.28 +	2.70 +	1,97 -	2.76 +
7 (n=110)	2.44 +	2.80 +	1.90 -	2.20 -
8 (n=132)	1.76 -	1.90 --	2.20 +	2.50 - (=)
9 (n=158)	2.38 +	2.68 +	2.49 +	2.47 - (=)

Clusters 2,3, 6: More/much involved in discussions and more/much support from siblings, less parental control

Cluster 3: Highest level of participation in d6/d7. Only cluster wo experienced differences on body functions in rel to Cluster 1

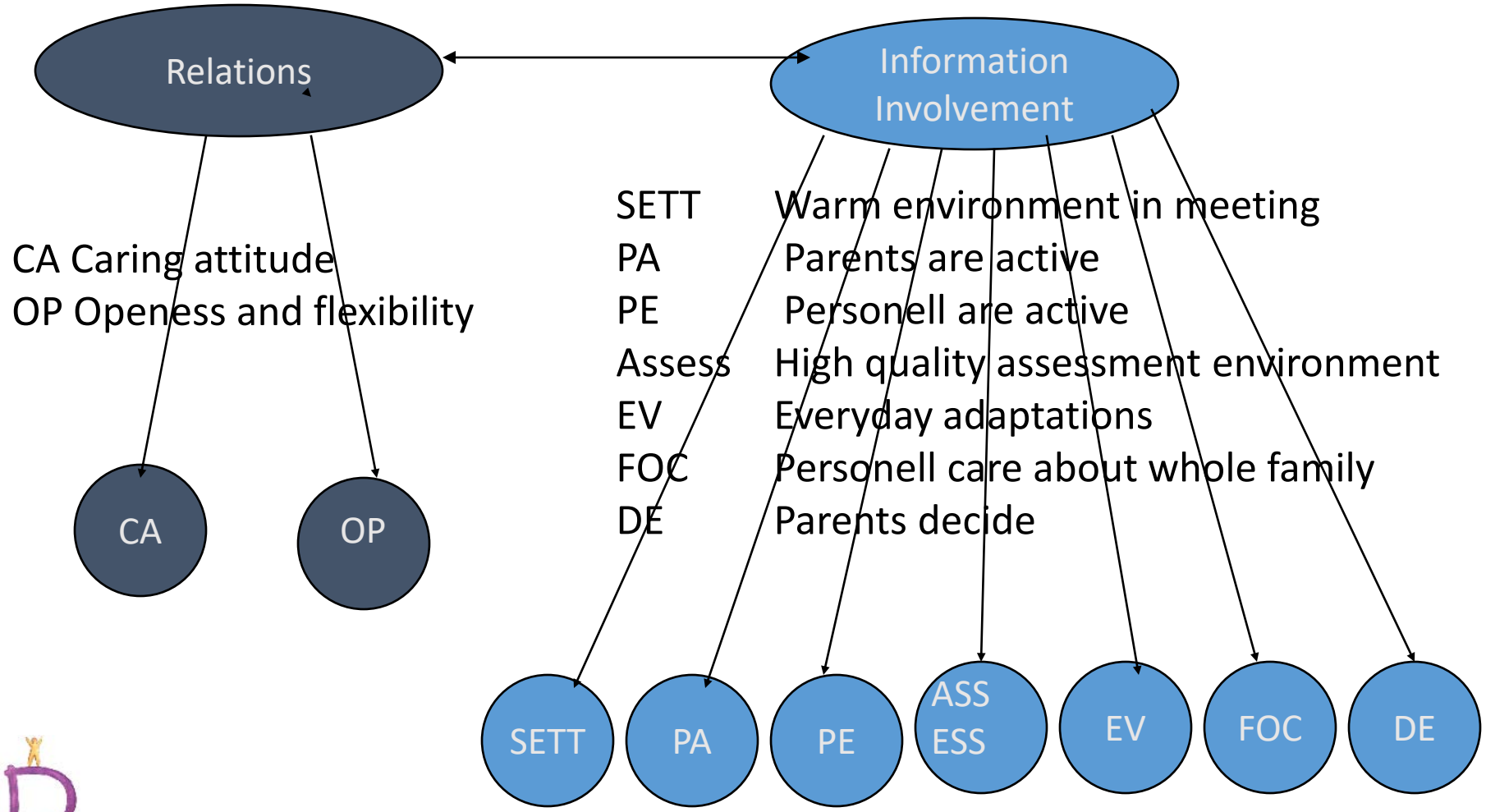
Cluster 5: Lowest level of participation in d6 and d7. Smallest cluster in sample size

Cluster 7: No sign. differences from other clusters regarding body functions, activity or environment

* (-/+) = 1 SD below/above sample mean (--)= 2 SD below/above sample mean (---) 3 SD below sample mean (++)= 2 SD above sample mean

Between system interaction

Dimensions in family-centrered services (Carlhed, 2003)



Family – professional collaboration, a longitudinal study

(Ylven, Granlund et al, 2012, 2015)

Table 1. Number of data sources and meaning units from each family and all families together.

	Fam1		Fam2		Fam3		Fam4		Fam5		Total	
Source of data	*n*	Mean units	*N*	Mean units	*n*	Mean units	*n*	Mean units	*N*	Mean units	*n*	Mean units
Memory notes	344	328	44	49	55	79	49	96	8	21	500	573
Informal inform	132	108	10	13	2	3	80	66	7	6	231	196
Planning meetings	3	17	1	4	4	17	1	6	1	3	10	47
Interviews	2	14	1	3	1	2	1	5	2	6	7	30
Total	481	467	56	69	62	101	131	173	18	36	748	846

Conclusions

(Ylven, Granlund et al, 2012, 2015)

Families like to be involved and like to collaborate with professionals having an opinion

Collaborative problemsolving is the core mechanism in planning meetings

Most problems identified and goal set between planning meetings

Two types of issues:

- **Problems – often here and now, can be solved using problem solving circle**
- **Concern – often focused on transitions and/or ”What will happen when……?”**

- **Problems sometimes lead to intervention**
- **Concerns lead to assessment and providing information**

Engaging with family centered services and child developmental outcome

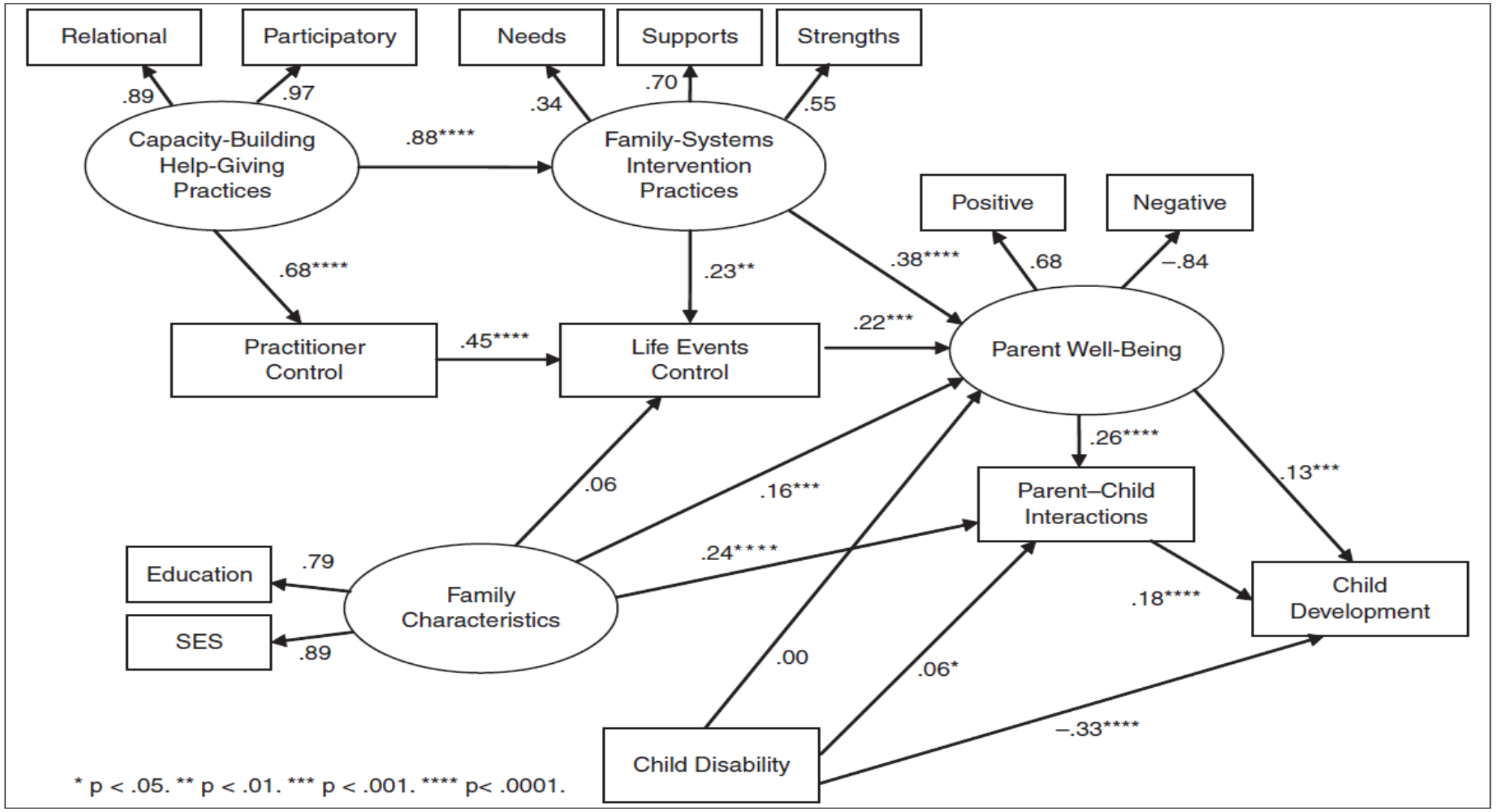


Figure 4. Respecified structural equation model results for the relationships between the study variables with the two self-efficacy belief constructs included in the SEM as measured variables (Model II).

Dunst & Hamby (2010) Influences of family systems intervention practices on parent-child interaction and child development

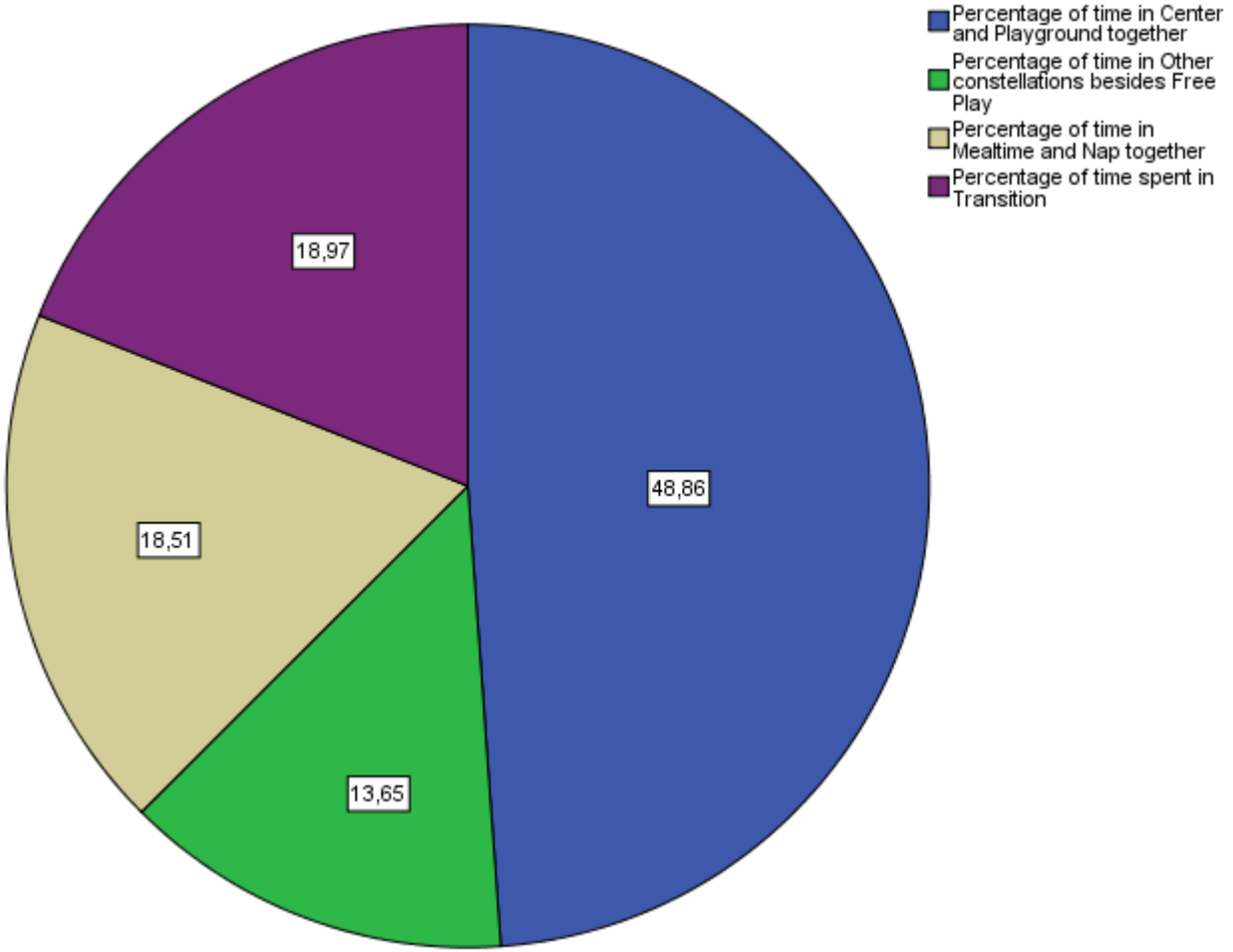
Environment

(Imms, Granlund et al, accepted)

Environment is external to the child and affects the individual child through the context. Environment refers to broader, primarily objective, social and physical structures

Availability and accessibility of activities

Proportion of observations in Free Play activities (Center and Playground) in relation to other activities



Proportion of sweeps with different levels of instruction in free play

T1_ToolsNarrativeInstruct

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	,6	,6	,6
	Low level	69	39,2	39,2	39,8
	Basic skill	69	39,2	39,2	79,0
	Some inferential	34	19,3	19,3	98,3
	High inferential	3	1,7	1,7	100,0
	Total	176	100,0	100,0	

Proportion of observed lesson activity in PE

(Bertills et al, in prep.)

Schedule: Planned lesson activity. How lesson is structured/organized												
			WG including 2 parallell activities	SG group wise activity	Choice: Individual	Choice: Pair-/group wise	Transition		Drink pause >75%	Passive or walk	Gym/ Rehab	Warm-down/ relax >75%
Mean= total			56,77	6,37	7,50	8,75	16,43		1,01	1,63	0,72	0,34
Disab	Mean		**59,06**	4,94	5,53	8,30	16,63		1,21	0,51	**2,93**	**0,73**
Low grade	Mean		57,96	2,87	6,15	**10,71**	15,68		1,50	**4,77**	0,00	0,18
High grade	Mean		54,80	**9,34**	**9,39**	7,77	16,81		0,60	0,25	0,00	0,23

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TABLE 4

CORRELATIONS (R_S): CHILD CHARACTERISTICS AND FREQUENCY OF OCCURRENCE OF FAMILY ACTIVITIES, FAMILIES WITH A CHILD WITH PIMD

Family activity	Health	Cognition	Communication	Behaviour[1]	Motor ability
Positive correlations					
Doing handicraft				0·316*	
Playing outside with you or other adult					0·273*
Going on a swing					0·347*
Playing in the sandpit					0·279*
Going to the playground					0·439**
Going to theatre/cinema/concerts		0·380**			
Going on vacation		0·280*			
Negative correlations					
Watching TV	−0·276*				
Surfing the internet					−0·308*
Playing with you or other adult	−0·320*				−0·342*
Story reading				−0·365**	−0·315*
Playing instruments					−0·384**
Exercising physical therapy at home		−0·280*			−0·592**
Being together in the kitchen	−0·310*				
Laying down for rest	−0·282*	−0·451**			−0·364**
Going for a walk		−0·372***			
Playing ball games			−0·299*		
Going to habilitation center activities					−0·296*
Going to the library				−0·263*	

NOTE: [1]An abnormal behaviour was described, e.g. to hit/bite himself/herself and head rocking.
*$P<0·05$.
**$P<0·01$.

(Axelsson & Wilder, 2013)

CHILD

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TABLE 5

CORRELATIONS (R_S): FAMILY CHARACTERISTICS AND FREQUENCY OF OCCURRENCE OF FAMILY ACTIVITIES, FAMILIES WITH A CHILD WITH PIMD AND FAMILIES WITH CHILDREN WITH TD

Family activity	Families with a child with PIMD			Families with children with TD		
	Family income	Education, father	Education, mother	Family income	Education, father	Education, mother
Positive correlations						
Playing computer games	0·294*			0·221*		
Playing with you or other adult			0·273*			
Story reading					0·304**	0·201*
Playing instruments					0·211*	0·272**
Dancing	0·294*					
Exercising physical therapy at home			0·367**			
Cooking/baking					0·199*	
Picking up after playing	0·258*					
Going by car to and from school						0·245*
Gardening	0·314*					
Going together to child's leisure activities					0·245*	0·292**
Going to the library					0·249*	0·226*
Going to theatre/cinema/concerts					0·262*	0·237*
Visiting relatives	0·324*					
Going to parties	0·363**		0·318*			
Going out in the nature	0·300*					
Going on vacation				0·310**		0·251*
Going to holiday cottage	0·286*			0·238*	0·267**	0·219*
Negative correlations						
Joking and fooling around					−0·234*	−0·197*
Dancing				−0·199*		
Playing instruments		−0·288*				
Laying the table/cleaning away						−0·218*
Doing evening routines					−0·202*	
Shopping for groceries						−0·281**
Gardening						−0·198*
Going on a swing			−0·364**			
Going for a walk						−0·200*
Visiting relatives					−0·257**	−0·270**

NOTE: *$P<0·05$.
**$P<0·01$.

(Axelsson & Wilder, 2013)

CHIDD

Do social support systems make a difference?

(Ullenhag et al, 2012)

- In a cross–sectional analytic design, the Children's Assessment of Participation and Enjoyment, CAPE, was performed with 278 children with disabilities and 602 children without disabilities aged 6-17 years.

- Children with and without disabilities participated from Sweden (55 +337), Norway (177+106) and the Netherlands (74+158).

- Participants were grouped by *age, gender, country of residence, the mothers' level of education* ('non-university level' or 'university level') and *rural* (≥20.000 inhabitants) or *urban* (≤21.000 inhabitants) *living areas. .*

Activity type	Children with disabilities				Children without disabilities			
	Step 1	Step 2		strongest variable	Step 1	Step 2		Strongest variable
	R^2	R^2	Sig.F change	(Correlation part^2)	R^2	R^2	Sig.F change	(Correlation part^2)
Recreation								
Seldom/never	24%	27%	.076	Age (22.6%)	7%	**11%**	.003	Age (5.5%)
Regular	4%	**15%**	.000	**Country NL (8.2%)**	1%[1]	**3%**	.049	**Country NO (1.4%)**
Often	18%	19%	.744	Age (17.0%)	5%	**10%**	.000	**Country NL/Age (4.1%/3.9%)**
Physical								
Seldom/never	6%	**12%**	.000	Gender/living (4.4%/3.3%)	7%	**10%**	.022	Gender (6.7%)
Regular	6%	**14%**	.000	**Country NL (6.2%)**	0.5%[1]	**6%**	.000	**Country NL (4.8%)**
Often	6%	8%	.172	Gender (4.8%)	**8%**	9%	.469	Gender (7.6%)
Social								
Seldom/never	2%	**24%**	.000	**Country NL (17.6%)**	3%	**9%**	.000	**Country NL (4.9%)**
Regular	1%[1]	**12%**	.000	**Country NL (7.8%)**	**3%**	4%	.164	Gender (1.6%)
Often	2%	**24%**	.000	**Country NL (7.7%)**	2%	**15%**	.000	**Country NL (11.3%)**
Skill-based								
Seldom/never	7%	**15%**	.000	Gender (4.8%)	**9%**	11%	.055	Gender (8.6%)
Regular	0.5%	**10%**	.000	**Country SV/NL (2.9%/2.2%)**	**2%**	4%	.245	Gender (2.0%)
Often	6%	10%	.079	Gender (5.3%)	7%	**9.0%**	.013	Gender (6.6%)
Self-improvement								
Seldom/never	1%[1]	**15%**	.000	**Country NL (10.0%)**	**12%**	12%	.913	Gender (9.8%)
Regular	0%[1]	**8%**	.000	**Country SV/NL (2.0%/1.8%)**	**2%**	3%	.597	Gender (2.0%)
Often	2%[1]	**10%**	.000	**Country NL(7.8%)**	**10%**	11%	.505	Gender (7.8%)

Types of support provided in preschool

(Almqvist, Sjöman et al, submitted)

- Support provided by staff under supervision from external experts

  (SUS)

- Support provided within the preschool unit, initiated by teacher and without and supervision by external experts

  (TISS)

Probability for support format

(Almqvist, Sjöman et al, submitted)

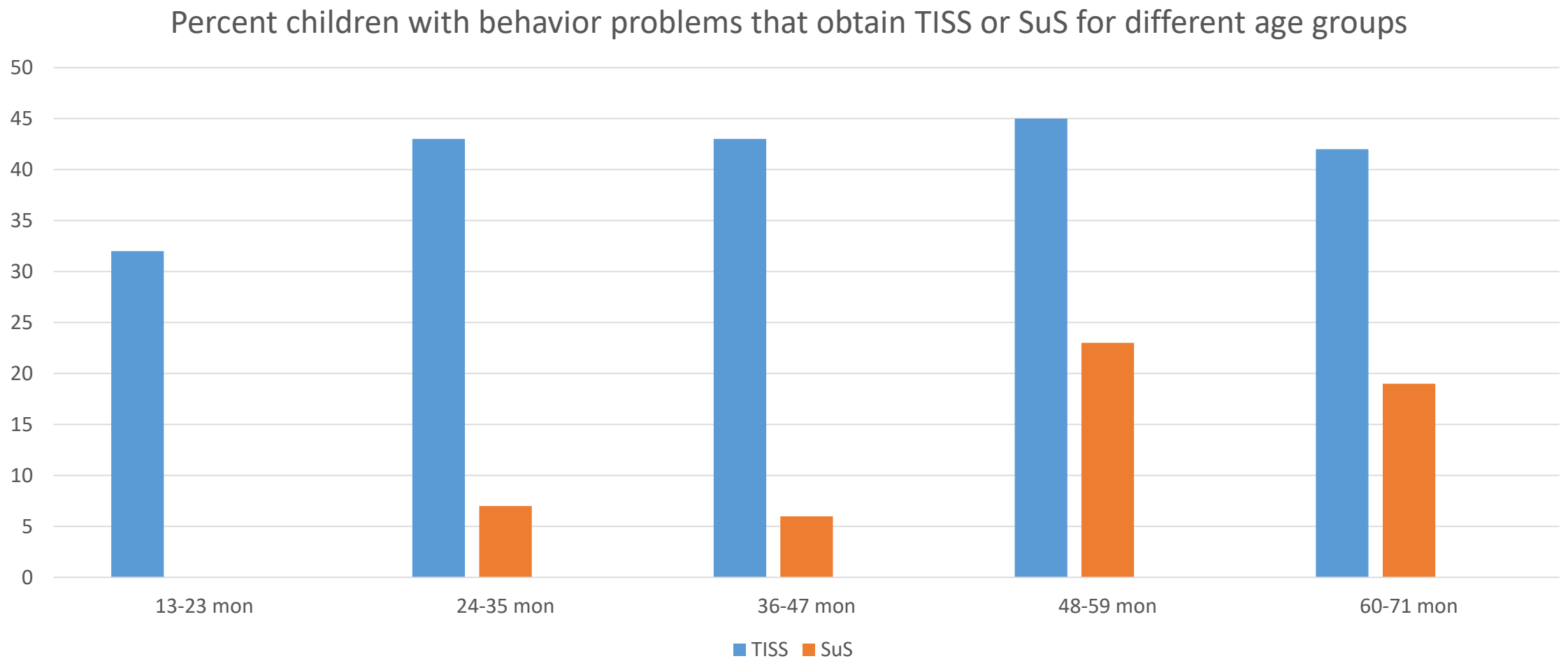
- **Supervised support (SuS) was more likely if the child**
  - was formally identified (all children receivig SUS were formally identified) and if child disturbs group

- **Teacher-initated support (TiSS) was more likely if the child**
  - was not entitled to support in mother tongue (*OR*=2.76)
  - showed a ***high degree of engagement*** (*OR*=2.40)

- **No support were more likely if the child**
  - was'nt perceived to be a burden (*OR*=2.13)
  - had the right to support in mother tongue (*OR*=2.29)
  - Had a **low degree of engagement**

SuS and TISS – based on worries for the future or here and now challenges ?

(Granlund et al, 2015)



Organization of school and service utilization

Table 4. Factors influencing the likelihood of receiving services because of the child's disability.

Independent variables	Services received from social services because of the child's disability		
	p	OR	95% CI
Child's gender	.073	2.60	.92–7.36
Child's school setting	.001	12.96	2.75–61.02
Child's age	.563	1.06	.87–1.28

Table 5. Percentage of families receiving services because of the child's disability and because of social problems, in relation to the child's school setting.

	All families	Families with children in self-contained classes	Families with children integrated into mainstream classes
Families receiving services	55	62	39
Families receiving services because of the child's disability	37	52	7
Families receiving services because of social problems	26	21	36
Families receiving services because of the child's disability *and* because of social problems (not necessarily at the same time during the year)	8	11	4

Olsson, L., Elgmark, E., Granlund, M., & Huus, K. (2014) Social service utilization patterns among children with mild intellectual disablity-….. *European Journal of Special Needs Education*

Learn more about engagement in preschool

A conference on participation and engagement in young children in need of special support, in preschool, health service and court systems. Key note presenters: Rune Simeonsson, Juan Bornman, Dale Farran, Ana Pinto, Samuel Odom, Christine Imms, and Eric Hodges.

Engagement in Young Children

16th

https://www.youtube.com/watch?v=vXZdodhWrEE

17th

https://www.youtube.com/watch?v=4aa9xbz21Os

CHILD

Forskningsmiljö vid Högskolan för lärande och kommunikation och Hälsohögskolan