How are the two participation constructs attendance and involvement related?

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Why is this interesting?

In the fPRC framework, participation has two dimensions: attendance and involvement.

- Attendance: Physical or virtual presence.
- Involvement: Experience of participation when present.

These dimensions are used in many tools measuring participation in daily activities, often focusing primarily on attendance.

Understanding the relationship between attendance and involvement is crucial for developing theory and guiding interventions.



What do we know today?

Most studies with data on both dimensions show strong correlations between attendance and involvement.

- **Attendance**: Easier to assess (frequency, diversity, duration).
- Longitudinal studies: Indicate stable attendance levels over time
- **Involvement:** Includes aspects like engagement, sense of belonging and social connectedness,
 - these may not be strongly related to each other
- Interventions: Facilitating attendance doesn't automatically increase involvement

What problems do we have when it comes to assess participation?

Participation is by definition contextualized but do we consider that in assessment?

- **Scores**: Total and subscales scores reliable concerning group data but give little information on participation profiles for individuals
- Change detection: Difficulties in detecting change over time related to what and how we assess?
- Context: Does it relate differently to attendance and involvement?
- 5 A:s in Assessment might help:
 - Availability
 - Accessibility
 - Affordability
 - Adaptability
 - Acceptability



Method

Analysis:

First wave CHILD-PMH longitudinal study of children with disability The relationship between children and parents responses concerning attendance and involvement using different types of factor analysis

Tools:

- 1) FUNDES-CHILD-SE: A Swedish parent web-based survey proxy rating participation.
- 2) Picture my Participation (PMP): Structured interviews with children

Additionally, change scores for attendence and involvement: based on standard deviations between two time points, one year apart.



Instruments used

TABLE 1 Dimensions and rating scales in FUNDES-Child-SE.

Dimension	Frequency of attendance	Engagement	Independence
Question	How often the child/youth participate in different activities compared to children/ young people without disabilities (with or without aids or other equipment)	How engaged/involved you think the child/youth is in activities without comparing with other children/youths	How independent the child/youth is in activities (regardless of whether he/she uses technical aids or not)
Scale			
	$0 = \mbox{the same as or more than what is expected} \\ \mbox{for the age} \\$	0 = very engaged	0 = independent, does not need any guidance or assistance
	1 =a bit less than what is expected for the age	1 = rather engaged	1 = need guidance or a little assistance
	$2 = \hbox{much less than what is expected for the age} \\$	2 = little/somewhat engaged	2 = medium assistance
	3 = never do it	$3 = not \ engaged \ at \ all$	3 = total assistance
	$9 = not \ relevant/not \ applicable$	$9 = not \ relevant/not \ applicable$	9= not relevant/not applicable

Tabel 2 Dimensions and rating scales in Picture My Participation (PMP)

Dimension	Frequency of attendance	Involvement	Three most important	Facilitators/ Barrier
Question	How often do you attend/do	How involved are you when attending	Choose the three most important	What makes it easier/difficult
Scale	0 = never 1 = Not really 2= sometimes 3= always	0= not 1= somewhat 2= very		Pictures for the chapters in ICF

From Gothilander, J., Axelsson, A. K., Danielsson, H., Almqvist, L., & Ullenhag, A. (2024). Factor structure of FUNDES-Child-SE measuring the participation and independence of children with disabilities. *Child: Care, Health and Development, 50*(4), e13306. https://doi.org/10. 1111/cch.13306

Results

Confirmatory Factor Analysis on parental proxy ratings of attendance

Exploratory factor analysis of parental proxy ratings of engagement

Factor structure found with EFA [*]	Factor items	Factor loadings	Standardized parameter estimates	Standard error	Confidence intervals
		0.74	0.733	0.042	0.651-0.816
	✓ 2. Social, play or leisure activities home with friends	0.71	0.686	0.049	0.590-0.782
	 3. Family chores, responsibilities and decisions at home 	0.79	0.610	0.038	0.497-0.727
Engagement	4. Taking care of yourself	0.42	0.663	0.057	0.552-0.775
in informal	5. Moving about in and around the home ²	0.51			
activities ²	6. Communicating with other children, youth and adults at home	0.48	0.835	0.033	0.771-0.899
	7. Social, play, or leisure activities with friends outside the home	0.73	0.770	0.042	0.688-0.852
†	9. Moving around outside the home	0.50	0.787	0.038	0.713-0.861
	10. Communicating with other children, youth and adults outside the home	0.68	0.732	0.045	0.644-0.821
0.661	16. Household activities	0.42	0.714	0.045	0.616-0.812
	11. Instructional activities together with classmates	0.84	0.859	0.028	0.805-0.914
	12. Social, play or leisure activities with other students at school 13. Social, play or leisure activities with other students at school	0.58	0.881	0.024	0.834-0.929
*	13. Moving around at school	0.78	0.850	0.030	0.791-0.910
Engagement in	14. Using pedagogical materials and equipment that are also available for other students or that are adapted for you/your child	0.94	0.816	0.031	0.756-0.876
formal	15. Communicating with other students and adults at the school	0.78	0.928	0.019	0.890-0.966
activities ³	17. Shopping and managing money	0.47	0.764	0.046	0.674-0.854
	18. Managing a daily schedule	0.49	0.846	0.039	0.770-0.922

FIGURE 3 Engagement factors from EFA tested with a CFA. The figure presented the factor correlation, items included in factors and items' factor loadings. Also, the figure presents the items' standardised parameter estimates, standard error and confidence intervals from CFA. *Items 8. Organized activities outside the home; 19. Using transportation in order to move around in society; and 20. Work and responsibilities, not included in factors. ¹Correlation coefficient for factors. ²Item 5 was excluded in CFA. Residual covariances between items 10 and 6, 3 and 16, 1 and 3, 3 and 4, 2 and 7, 6 and 16 and 1 and 2. ³Residual covariance between items 11 and 14, 13 and 14 and 12 and 18.

PCA of child self-ratings of attendance in activities generated 4 factors Explaining 32% of the variance

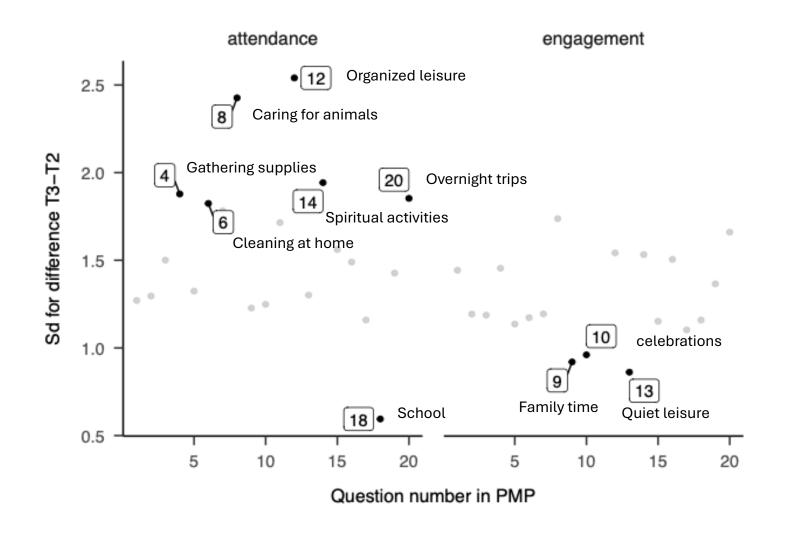
Item	Doing with family	Personal activities	Organized activities	Caring activities
Personal care			<mark>0.637</mark>	
Family meal time		0.541		
My own health				0.633
Gathering suppplies	0.486			
Meal preparation				0.548
Cleaning at home			- <mark>0.574</mark>	
Caring for family	0.702			
Caring for animals/pets		0.756		
Family time	0.429			
Celebrations	0.520			
Playing with others			0.690	
Organized leisure			0.470	
Quiet leisure		0.501		
Spiritual activities	0.532			
Shopping	0.819			
Social activities		0.783		
Health centre	0.598			
School				-0.478
Overnight trips			0.556	

PCA based on children's self ratings of engagement 1 factor explaining 55% of the variance

Item	Engagement
Personal care	0.766
Family meal time	0.759
My own health	0.691
Gathering suppplies	0.731
Meal preparation	0.762
Cleaning at home	0.628
Caring for family	0.788
Caring for animals/pets	0.706
Family time	0.858
Celebrations	0.791
Playing with others	0.773
Organized leisure	0.690
Quiet leisure	0.816
Spiritual activities	0.692
Shopping	0.755
Social activities	0.662
Health centre	0.808
School	0.798
Overnight trips	0.741

Change scores - a comparison between attendance and involvement using childrens' self ratings at two time points The higher the Sd the stronger the probability for change is





Conclusions

- Attendance seems to vary more between activities than what involvement do
 - Can this be explained by a stronger contextual link?
 - Role expectations on children vary with age (e.g organized activities, overnight trips)
- Involvement seems to vary less over time than what attendance do
 - Can this be explained by that involvement is more related to person characteristics

Important to consider when discussing with child and parents about goals for participation intervention

- Role expectations expressed by child and family ask repeatedly
- Child involvement in selecting important goals important is not the same thing as fun
- Involvement is strongly related to personal meaning and motivation ask child