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Motor activation in people with profound intellectual and multiple disabilities

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Take home message

- › Motor activation seems to be a minor part of the support to PIMD
- › Related to personal and contextual factors



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Motor activation/ physical activity

- › Positive effects, physical and mental health



Profound intellectual & multiple disabilities

- › General effects
- › Activation and participation
 - *E.g. Using switches, communication*
- › Reducing problem behaviour (*Jones et al., 2007*)
- › QoL (*Petry, Maes & Vlaskamp, 2005*)



Problem

- › PIMD at risk to be physically inactive (*Emerson, 2005*)
- › Relation with contextual factors (*Robertson et al., 2000*)
- › PIMD: no data available
 - Although benefits (*e.g. van der Putten et al., 2005*)



Aim and research questions

- › Analysis of the amount of physically focussed activities in daily practice in PIMD.
- › Amount of physically focussed activities in daily practice in PIMD?
- › Relation with contextual and personal factors?



Method, participants

- › N=41
- › PIMD
- › 28 males, 13 females (age range: 12-63 year, mean 34.7, SD 13.9)
- › Three facilities
 - no significant differences in age ($F=.79$, $df=2$, $p=.46$)



Method, data

- › nr of mobility/transfers
- › nr of offered motor oriented activities
 - *examples*
- › duration of motor activation

- › Diary, four weeks
 - *Inter rater reliability .75*
- › Living group and activity centre



Analysis

- › 14 days included
- › Frequencies and mean duration (minutes)

- › Relation with age
- › Contextual variables:
 - Working days - weekend days
 - Living unit - activity centre
 - Facility (n=3)



Results

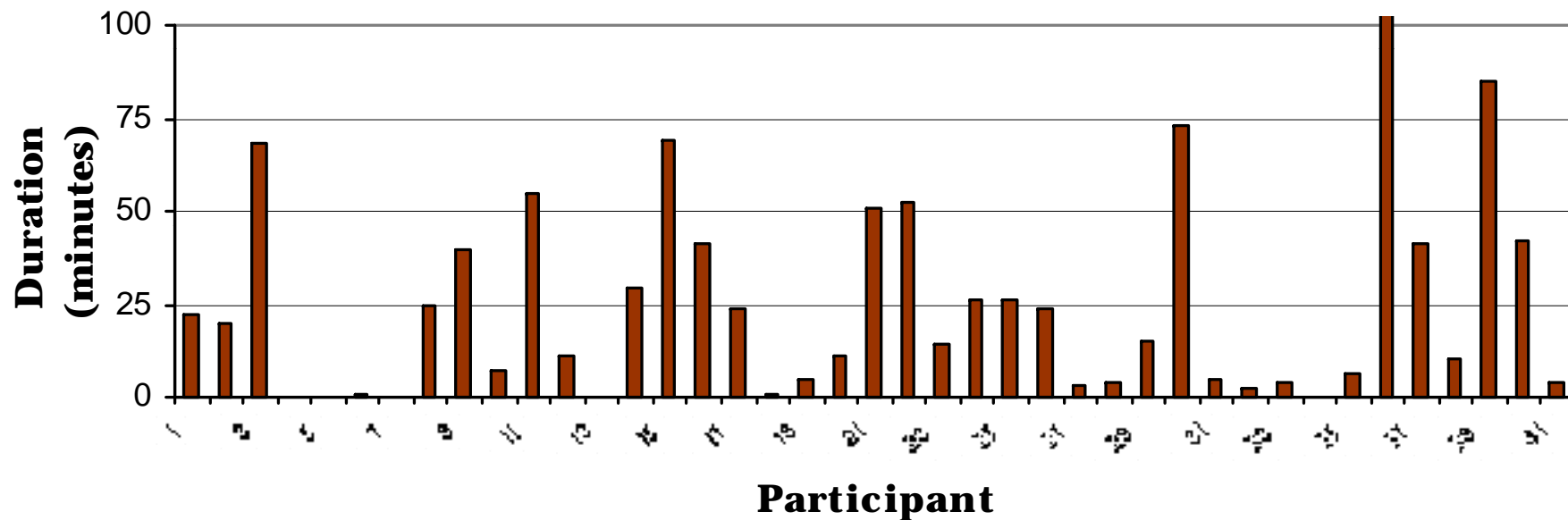
	Mean	Range	SD
Transfers/mobility	6.2	3.4-8.4	1.0
Nr of activities*	0.8	0-3.3	1.1
Duration (minutes)	26	0-163	35

* 68% (n=24) \leq 1 activity a day, n=5 no activities



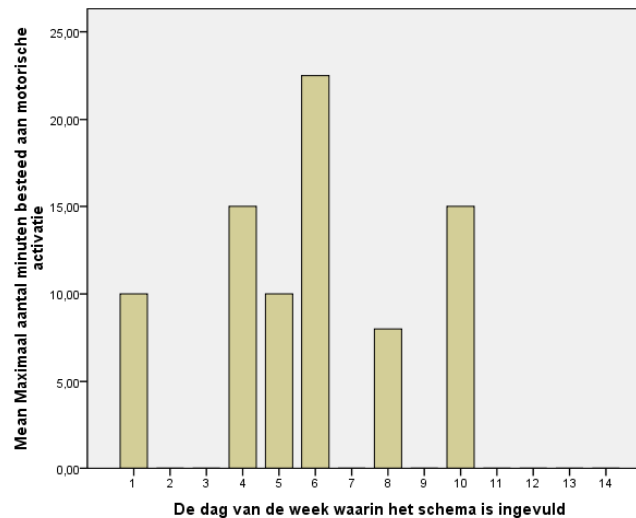
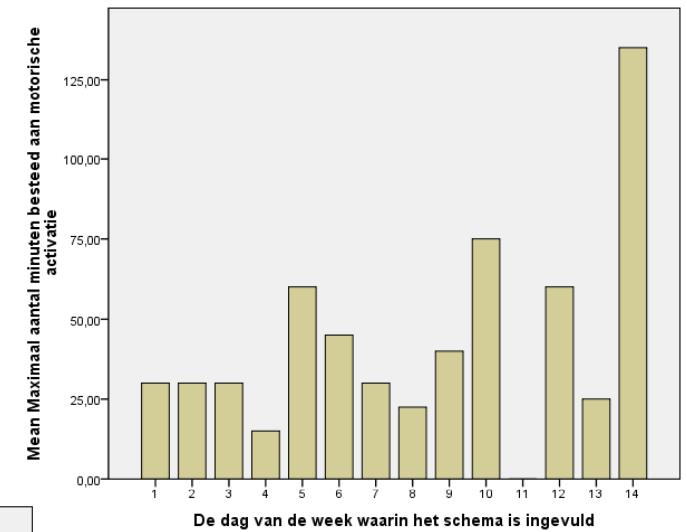
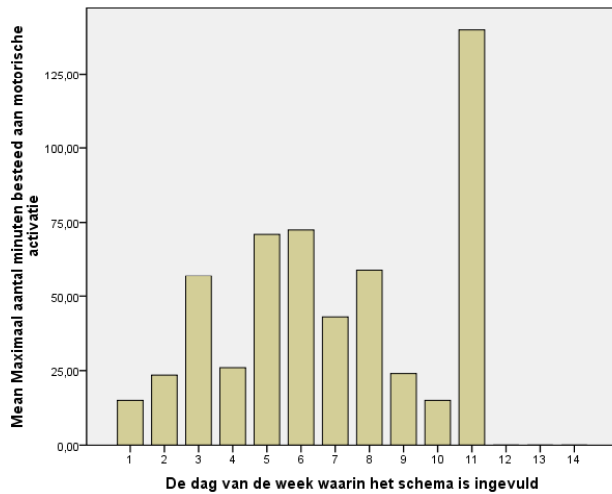
Results, duration (per participant)

**Mean minutes of motor activation
 per participant per day**





Variation during the days





Contextual factors: week - weekend

Nr of motor activities: week > weekend

	Week- weekend		Living- activity group		Fac A	Fac B	Fac C
Transfers/ mobility	6.0	6.4	5.9	6.4*	6.2*	5.6	6.0
Nr of activities	0.8	0.5*	0.4	1.3*	0.7*	0.4*	1.4*
Duration	26	34	20	37*	24*	15*	48*

* p<.05



Contextual factors: living- activity group

All three variables: activity group > living group

	Week- weekend		Living- activity group		Fac A	Fac B	Fac C
Transfers/ mobility	6.0	6.4	5.9	6.4*	6.2*	5.6	6.0
Nr of activities	0.8	0.5*	0.4	1.3*	0.7*	0.4*	1.4*
Duration	26	34	20	37*	24*	15*	48*

* $p < .05$



Contextual factors: facility

Differences between facilities; facility C >

	Week- weekend		Living- activity group		Fac A	Fac B	Fac C
Transfers/ mobility	6.0	6.4	5.9	6.4*	6.2*	5.6	6.0
Nr of activities	0.8	0.5*	0.4	1.3*	0.7*	0.4*	1.4*
Duration	26	34	20	37*	24*	15*	48*

* $p < .05$



Correlation with age

- › Weak negative correlations

	Pearson 's correlation
Transfers/mobility	-.18*
Nr of activities	-.14*
Duration (<i>minutes</i>)	-.16*

* $p < .05$



Conclusion & Discussion

- › Motor activation a minor part of the support to PIMD
- › Variation
- › Related to personal and contextual factors
- › Implementation and research



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Thank you for your attention!