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OBSERVED CLASSROOM QUALITY PROFILES OF KINDERGARTEN CLASSROOMS IN FINLAND

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Context and background

- Importance of teacher-child interactions for children's academic and social development (Early et al., 2006; Howes et al., 2008; Mashburn et al., 2008) as well as contribution to classroom process quality (Pianta, LaParo, & Hamre, 2008).
- Teaching Through Interactions –framework (Hamre et al 2103)
- Finnish kindergarten education
 - For 6-year-olds
 - Free of charge (700h/year)
 - National Core Curriculum for Preschool Education (2014) as binding guideline



Structure of the CLASS, Pre-K

(Pianta, LaParo & Hamre, 2008)

3 DOMAINS	EMOTIONAL SUPPORT	CLASSROOM ORGANIZATION	INSTRUCTIONAL SUPPORT
10 DIMENSIONS	Positive Climate Negative Climate Teacher Sensitivity Regard for Student Perspectives	Behavior Management Productivity Instructional Learning Formats	Concept Development Quality of Feedback Language Modeling

Multiple **indicators** define each dimension.

Multiple **behavioral markers** define each indicator.



Research questions

- How many latent profiles of classroom process quality can be identified in this sample?
- What kind of patterns of dimensions will emerge within the three domains of Emotional Support, Classroom Organization, and Instructional Support?
- Do the profiles differ with regard to teacher characteristics and classroom characteristics?
- Do the profiles differ with respect to classroom quality as assessed by another observational measure, the ECCOM?

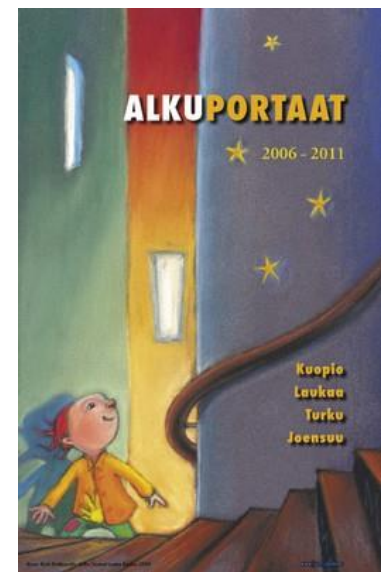


Why profiling study?

- The CLASS provides three domain classification of factors which are known to contribute to children's development and learning
- LoCasale-Crouch et al. (2007): Profiles show combinations based on these factors (i.e., what is done well, where are the places of further development)
- In this study the interest was to see how profiles can be identified in a context where relatively homogenous quality throughout classrooms can be expected, but where teachers are also given relatively much freedom to choose *how* they teach



Data



- Data were gathered as part of the First Steps study (2006-2011), in the spring of the kindergarten year 2007.
- Observations in 49 kindergarten classrooms
 - Two independent observers
 - Two different days (3 hours at a time)
 - Rating of the CLASS in 30 min cycles
- Teachers' and parents' questionnaires



- Mixture modeling procedure of the Mplus 5.0
- Latent profile analysis
- Five variables of characteristics were analyzed separately with one-way analyses of variance
- The external validity of the profiles was examined by evaluating differences between profiles against the ECCOM observational ratings

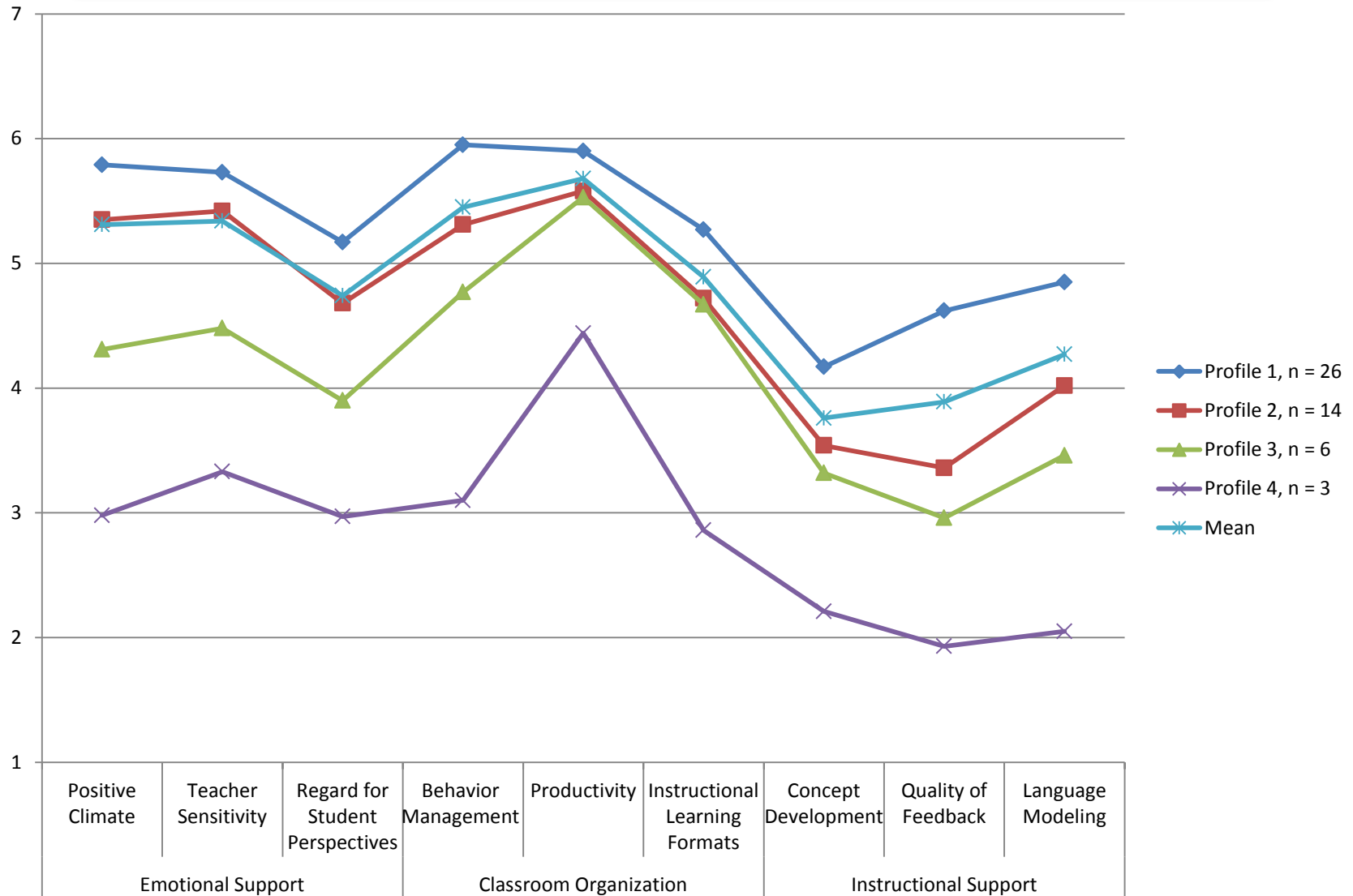
<i>Class</i>	<i>logL</i>	<i>BIC</i>	<i>ABIC</i>	<i>AIC</i>	<i>VLMR</i>	<i>LMR</i>	<i>BLTR</i>	<i>n(class1)</i>	<i>n(class2)</i>	<i>n(class3)</i>	<i>n(class4)</i>	<i>n(class5)</i>
1	-507.000	1,084.053	1,027.568	1,050.000	-	-	-	49				
2	-308.780	870.532	782.666	817.561	0.0075	0.0083	0.0000	4	45			
3	-308.419	764.726	645.481	692.837	0.4256	0.4336	0.0000	3	17	29		
4	-280.904	748.615	597.989	657.808	0.3067	0.3159	0.0000	3	26	6	14	
5	-389.587	1,004.899	822.892	895.173	0.2398	0.2398	1.0000	0	8	41	0	0

Note.

log L = log likelihood; BIC = Bayesian information criterion; ABIC = adjusted Bayesian information criterion; AIC = Akaike's information criterion; VLMR = Vuong-Lo-Mendell-Rubin test, p value; LMR = Lo-Mendell-Rubin test, p value; BLTR = parametric bootstrapped likelihood ratio test, p value.



Classroom quality profiles



Teacher and classroom characteristics

- Profile 4 differed significantly from other profiles in regard to **teachers' work experience** $F(3, 43) = 3.77, p < .05$
- Profiles 1 and 4 differed significantly from each other with respect to the **extent of the teachers' self-reported literacy instruction** $F(3, 44) = 2.86, p < .05$
- Statistically significant differences were found among the profiles concerning ECCOM **child-centered** $F(3, 45) = 25.66, p < .001$ and **teacher-directed practices** $F(3, 45) = 26.26, p < .001$



Discussion

- Low porportion of teachers in lower quality profiles
- High CLASS scores on the domain of Emotional Support, biggest differences between profiles
- High scores also on the domain of Classroom Organization, modest differences between profiles
- Generally lower scores on the Instructional Support in all profiles. Only Language Modeling differentiated all profiles in the domain of Instructional Support
- Profiles 2 and 3 differed only on Teacher Sensitivity, Positive Climate and Language Modeling. Significance of the combination of Emotional Support and Instructional support?



Discussion

- Overlapping nature of the CLASS and ECCOM observations
 - High quality Emotional Support and Classroom Organization (CLASS) reflect practices associated with child-centered practices (ECCOM)
 - Low Instructional Support (CLASS) reflects less constructing knowledge with children and more weight given to practicing basic skills in teacher-directed manner (ECCOM)

- Teacher and classroom characteristics



Implications

- Strengths and areas of Finnish preschool education within this sample
 - Developing teacher education
 - Aid in developing professional interventions

- Critical message to the field of Finnish ECEC





Thank you for your attention!

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