

Exploring regulatory interactions among young children and their teachers in day-care context – focus on teachers' monitoring

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Regulation of emotions and behaviour



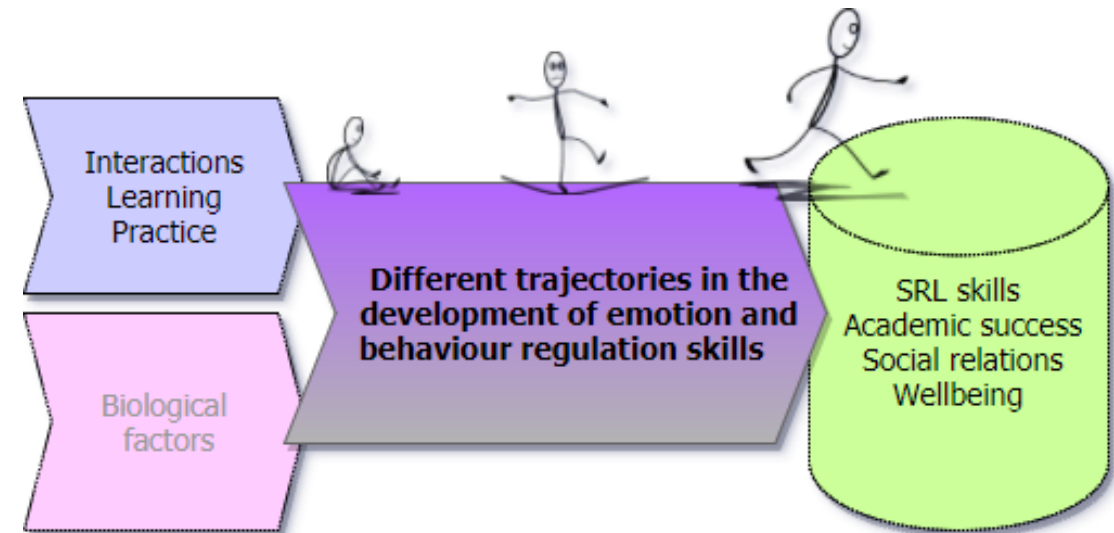
- **Monitoring, evaluating and modifying emotional experiences and reactions**
- External (co-regulated) or internal process
- **Employment of strategies to modify, change or inhibit actions and reactions in accordance with expectations or one's own goals**

Eisenberg, Spinrad & Eggum, 2010; Schutz et al., 2006; Wolters; 2003; Morris et al., 2007; Whitebread & Basilio, 2012, Gross 2014, Kurki et al., 2016; Thompson & Meyer, 2007, Gross & Thompson, 2007)



Why to study young children's emotion and behaviour regulation?

- Regulation skills develop in early years in interaction with others
- Relations to successful development



Eisenberg, Spinrad & Valiente, 2016; McRae et al., 2012; Whitebread & Basilio, 2012; Kim & Hodges, 2012; Schmitt et al., 2015; Valiente et al., 2010; Blair & Raver, 2015; Denham et al., 2003; McLaughlin, 2008; McRae et al., 2012



The role of teachers in children's emotion and behaviour regulation

- In early childhood regulation activities are strongly supported and (co-) regulated externally
- In interactions, children are assumed to internalize SR skills
- Qualities of interactions make a difference to the development of SR-skills
- Own study: teacher involvement in challenging situation is associated with children's adaptation of strategies



Calkins & Hill, 2007; McClelland & Cameron, 2011; Morris et al., 2007; Eisenberg, Spinrad & Eggum, 2010; McCoy & Raver, 2011; Suchodoletz, Trommsdorff & Heikamp, 2011; Hadwin & Oshinge, 2011; McCaslin, 2009, Kurki et al., 2017



Aims

- **To investigate what kinds of emotion and behaviour regulation strategy types children use independently or with teacher support**
- **To explore how teachers' level of monitoring contributes to children's strategy use**
 - How is teachers' level of monitoring in the challenging situation related to children's different strategy types?
 - How is teachers' level of monitoring in the challenging situation related to children's strategy adaptation?



Participants and data collection



- 30 children (2-5 years), 8 teachers
- **Context: Open day-care facilities designed for research purposes**
- Fixed cameras and microphones
- **Video data from authentic open day-care interactions**



Variables

Children's emotion and behavior regulation strategies

(SM, SS, RA, PI, RM)
Kurki et al. 2017, Gross 2014

emotionally demanding situations

Adaptation of emotion and behavior regulation strategies

(Change or no change in strategy use)
Kurki et al. 2017, Hadwin, 2013, Bryce & Whitebread 2012

Teacher monitoring

(Active monitoring or no/weak monitoring)
(Thompson & Meyer, 2007, Thompson, 1994)



Video analysis

Phase 1 Selective video analysis

• Location
challenge
events
involve

SM: Situation modification

SS: Situation selection

PI: Providing information about one's own will or situation

RA: Redirecting one's own activity/attention

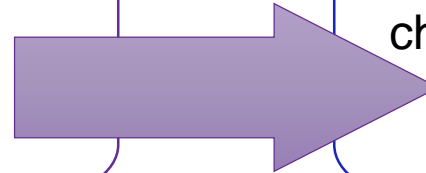
RM: Response modulation

Phase 2 Coding children's strategies and adaptation

presence of

and teacher
strategies

Event level analysis of
adaptation (change or no
change in strategy use)





Video analysis

Phase 3 Analysing teacher support in terms of monitoring

- **Event level analysis of teacher monitoring**
 - Active monitoring
 - No/weak monitoring

Phase 4 Analysing connections of teachers' support and monitoring activities and children's strategy use

- Statistical testing of associations of**
- **Teacher support** (independent, teacher supported strategies) **AND children's strategies**
 - **Teacher monitoring** (active or no/weak monitoring) **AND**
 - (1) **Children's strategies**
 - (2) **Children's adaptation of strategies**
- (Chi-square test)



Example

SM: Situation modification
PI: Providing information
SS: Situation selection
RA: Redirecting activity/attention
RM: Response modulation

Joni (3,7 yrs) has stolen Pekka's (4,5 yrs) toy and Pekka is chasing him to get it back /

- Pekka: chases Joni (SM, independent)
- Joni: Runs away with the toy (SS, independent)
- Pekka: shouts "give it back" (SM, independent)
- Pekka: Pulls the toy from Joni's hand (SM, independent)
- Joni: Goes to another room and says "Pekka is teasing me!"
- Pekka: Looks for Joni (SS, independent)
- Pekka: Finds Joni (SS, independent)
- Pekka: Tells the teacher (PI, independent) (children) Who is involved)
- Pekka: Goes back to reading books with the teacher (SM, independent)
- Pekka: Picks up the toy and continue the play (RA, independent)
- Joni: Gets disoriented and then notices Pekka's new toy. Pekka leaves it for a while. Joni picks it up and begins to run again. (SM, independent)
- Pekka: begins to chase Joni again (SM, independent)

In this event:
TEACHER MONITORING:
No/weak
STRATEGY ADAPTATION:
No change in strategy use



Example

SM: Situation modification
PI: Providing information
SS: Situation selection
RA: Redirecting activity/attention
RM: Response modulation

Children are playing with a toy garage (Mia 3 yrs, Max 2,8 yrs)

- **Mia: Pulls Max away from the play aggressively** (SM, independent)
- **Max: Cries** (RM, independent)
- **Teacher: hears crying and asks what is wrong and approaches children.** (Teacher involvement)
- **Teacher: Sits down and says "you can all look at it together" in a calm voice. Continues to play.**
- **Mia: Insists on playing alone**
- **Teacher: Says "You can play with it together"**
- **Teacher: Continues to play and says "make yourself your own car too" shows the car to Mia and Max in the toy box**
- **"Look, you can do it like this" Shows how to drive the toy car**
- **Mia: takes the car and begins to play with it in the toy garage together with Max** (RA, supported)
- **Max: continues his play, now with Mia.** (RA, supported)

In this event:
TEACHER MONITORING:
Active
STRATEGY ADAPTATION:
Change in strategy use

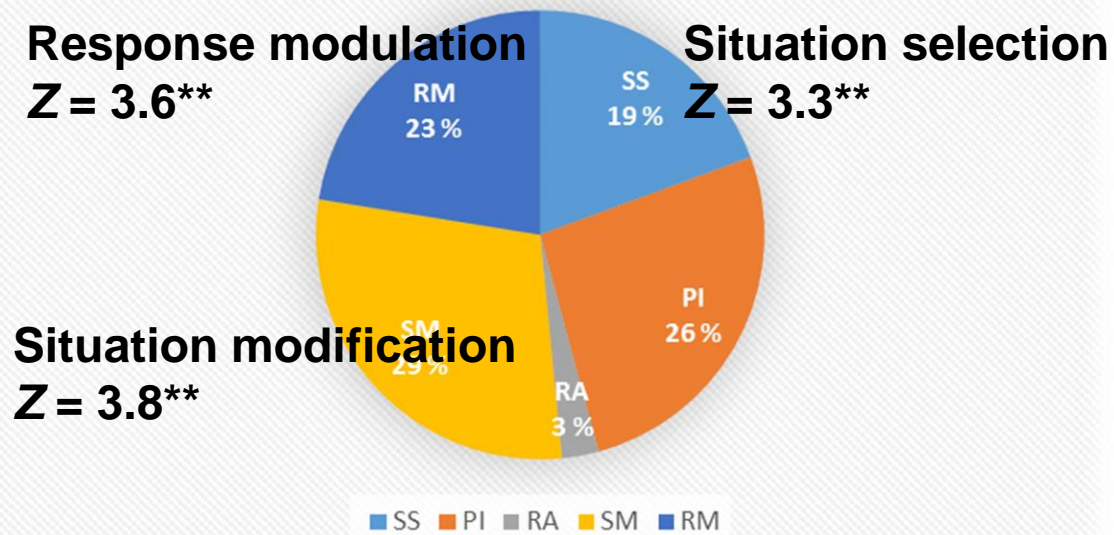


Results



What kinds of regulation strategy types do children use independently or with teacher support?

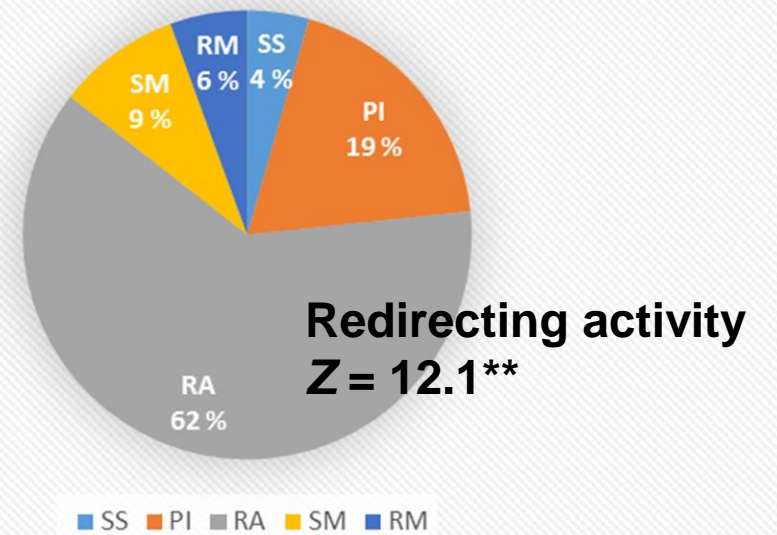
Independent strategies



$F = 227$ $**p < .001$

Chi square results: There is a **significant difference between independent and teacher supported strategy types**. ($\chi^2(4) = 149.659$, $w = 0.34$, $f = 317$, $p < .001$). Adjusted residuals (z scores) show which strategies occur more often in each condition.

Teacher supported strategies



$F = 90$ $**p < .001$

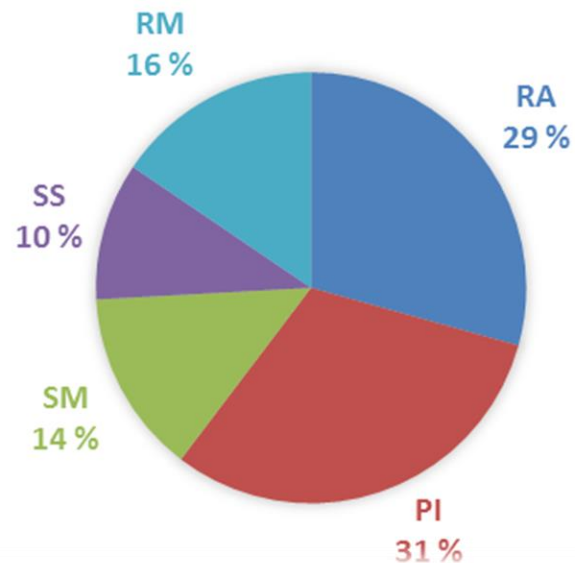


How is teachers' level of monitoring in the challenging situation related to children's different strategy types?

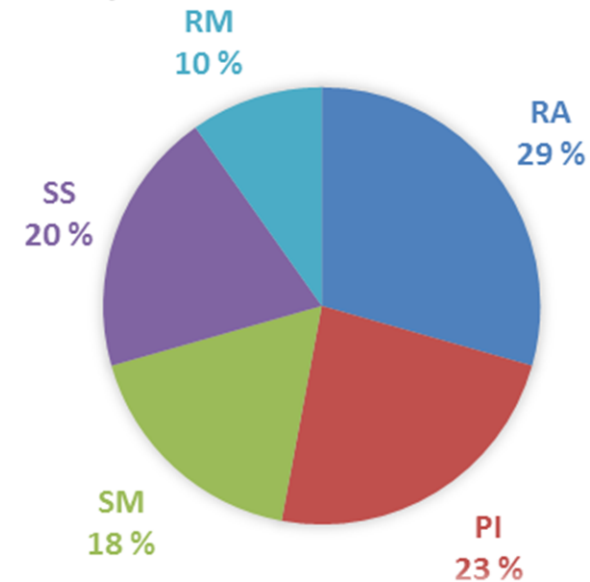
SM: Situation modification
PI: Providing information
SS: Situation selection
RA: Redirecting activity/attention
RM: Response modulation

No significant differences were found in active and no/weak monitoring in terms of children's types of strategies

STRATEGY DISTRIBUTION DURING ACTIVE MONITORING



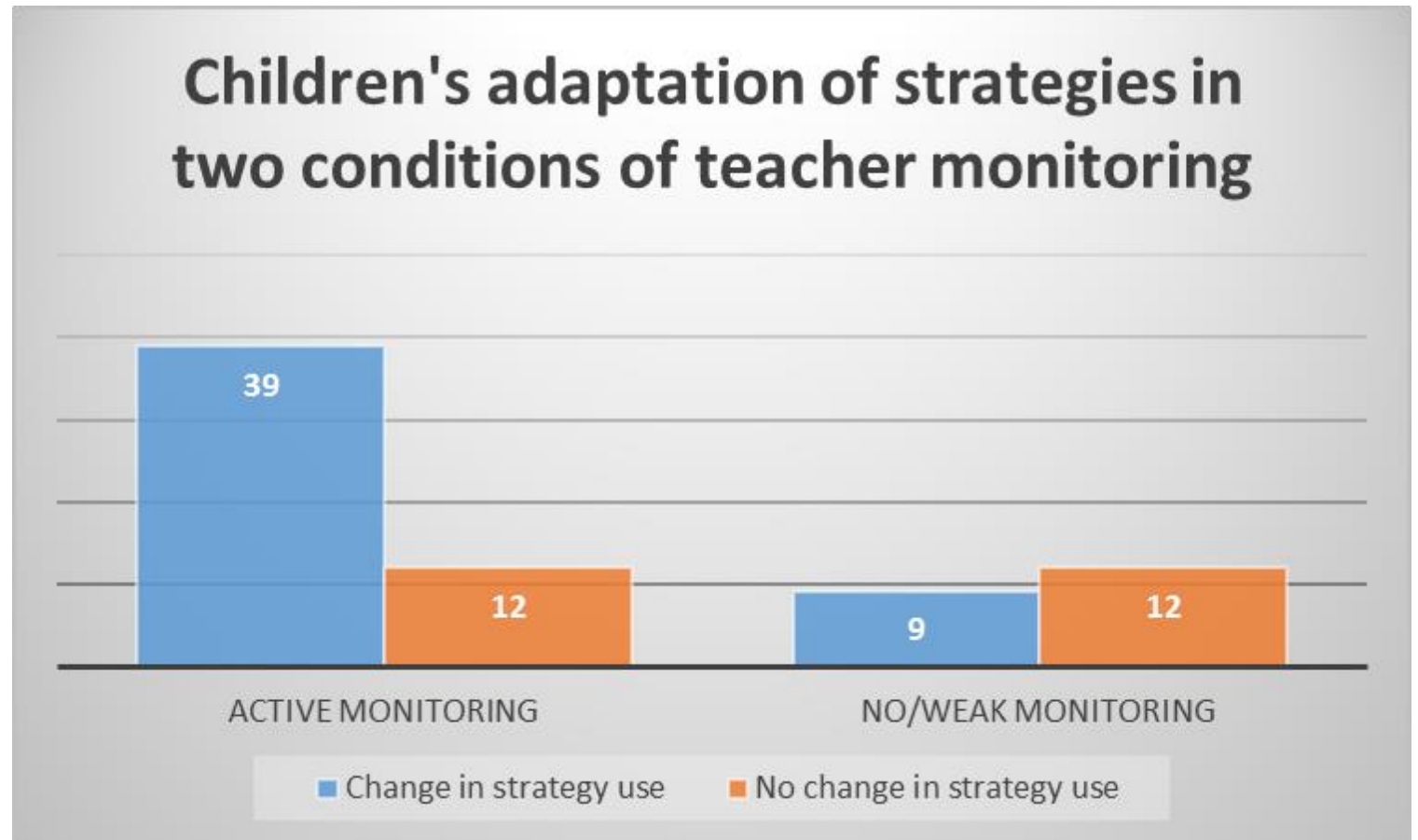
STRATEGY DISTRIBUTION DURING NO/WEAK MONITORING





How is teachers' level of monitoring in the challenging situation related to children's strategy adaptation?

Children adapted their strategies more often when teachers showed active monitoring. ($\chi^2(1) = 7.563$, $w = 0.32$, $f = 72$, $p < .05$)





Discussion

- **Teacher support makes a difference to children's strategy use** (Cole et al., 2009; Fox & Calkins, 2003; Spinrad, Stifter, Donelan-McCall & Turner, 2004)
- **Teachers' level of support in terms of monitoring the challenge made a difference to children's adaptation of strategies, but not qualities of strategies**
- Earlier research: Quality of support has an effect on children's regulation skills (e.g. Kopystynska et al., 2016, Lengua et al., 2013)
- **Challenges are unique and children's abilities to manage them vary** → monitoring the situation and providing support when necessary provides children both an access to sophisticated strategies and a possibility to rehearse strategy use (Meyer & Turner 2002, 2007)



Implications

- **More research on connections on different aspects of teacher support and their instant and long term effects on children's emotion and behaviour regulation**
- **Educators need to be aware of how children use strategies and understand the teachers' role in supporting strategy use**



Thank you for listening!

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