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

Adaptation of emotion and behavior regulation strategies
(Change or no change in strategy use)

Emotionally challenging situations
(Arsenio & Lover, 1997; Järvenoja, Volet & Järvelä, 2012)

Teacher monitoring
(Active monitoring or no/weak monitoring)
(Thompson & Meyer, 2007; Thompson, 1994)
Phase 1 Selective video analysis
- Locating socio-emotionally challenging situations (75 events, 44 with teacher involved)

Phase 2 Coding children’s strategies and adaptation
- Codes for occurrence of strategies
- Independent and teacher supported strategies
- Event level analysis of adaptation (change or no change in strategy use)

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 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

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 the teacher and tells her “Pekka is teasing me!” (SM, independent)
- Teacher: (reading books with other children) Who is teasing you? Pekka? (Teacher involvement)
- It’s not ok to tease. (moves back to reading books with other children)
- Pekka: takes another toy and continue the play (RA, supported)
- Joni: looks 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

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?” Approaches children. (Teacher involvement)
- Teacher: Sits down to the level of children’s play and says “you can all look at it together” with a warm, high pitched tone of voice. Continues “you can all play with it together”
- Mia: Insists: “this is mine!” (PI, supported)
- Teacher: Says, “no it’s not Mia’s own, you can play with it together” shows the car she found from the toy box
- ”Look, you can drive 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?

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.

**Situation selection**
- $Z = 3.3^{**}$

**Response modulation**
- $Z = 3.6^{**}$

**Situation modification**
- $Z = 3.8^{**}$

**Redirecting activity**
- $Z = 12.1^{**}$

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

$F = 90$ **$p < .001$**
How is teachers’ level of monitoring in the challenging situation related to children’s different strategy types?

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

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

**STRATEGY DISTRIBUTION DURING ACTIVE MONITORING**

- SM: 14%
- PI: 31%
- RA: 29%
- SS: 10%
- RM: 16%

**STRATEGY DISTRIBUTION DURING NO/WEAK MONITORING**

- SM: 18%
- PI: 23%
- RA: 29%
- SS: 20%
- RM: 10%
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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