Reflection when Resolving Peer Conflict: The Use of Mindfulness Training to Improve Preschool Social Competence

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Introduction

- Peer conflict is a normative occurrence in preschool classrooms and children must navigate these situations in an appropriate manner to promote peer acceptance and friendship.
- Executive function (EF) — the conscious control of thought, action, and emotion needed for goal-oriented behavior (Zelazo & Carlson, 2012) — is associated with overall social competence (e.g., Kochanska & Knaack, 2003) and, specifically, responding to peer conflict (e.g., Denham et al., 2014).
  - EF and social competence may be related because they share a common underlying mechanism– i.e., reflection, the ability to engage in thought about representations.
  - In peer conflict, it may be beneficial for children to reflect and evaluate their response options before reacting to conflict situations to refrain from impulsive, potentially aggressive, responses (Fontaine & Dodge, 2006).
- Mindfulness training may increase the likelihood that children engage in reflection because it provides children with the opportunity to practice and exercise reflective processes (Zelazo & Lyons, 2011).
- Conversely, cognitively taxing situations (in the absence of mindfulness instructions) could decrease the likelihood that children will engage in effortful reflection.

Hypotheses:

- Compared to a control condition, participants in the mindfulness training condition will endorse more competent responses, while those in the taxing training condition will endorse fewer.
- Aggressive responses will have shorter response times than competent responses because increased reflection will increase the time needed to perform competent responses (Fontaine & Dodge, 2006).
- Biological sex may interact with these effects because of documented differences in aggression between boys and girls (Crick et al., 2006).

Method

Participants:

- One hundred and fourteen 5-year-old children, *M* age = 64.41months, *s* = 3.54, 57 girls (*n* = 5 participants were excluded due to non-compliance)

Materials & Procedure:

- Peer conflict assessment: Virtual School Game (VSG)- an adapted version of the Challenging Situations Task (Denham et al., 2013) presented on a laptop computer (Figure 1).
  - Participants responded to six conflict situations (e.g., peer knocking over block tower) and three benign situations (e.g., peer waving hello).
  - Participants were given four response options to choose from:
    - *Aggressive response options*: physical aggression (e.g., kick your peer), verbal aggression (e.g., yell at you peer)
    - *Competent response options*: avoidant (e.g., go do something else), prosocial (e.g., ask your peer to help you rebuild your tower)

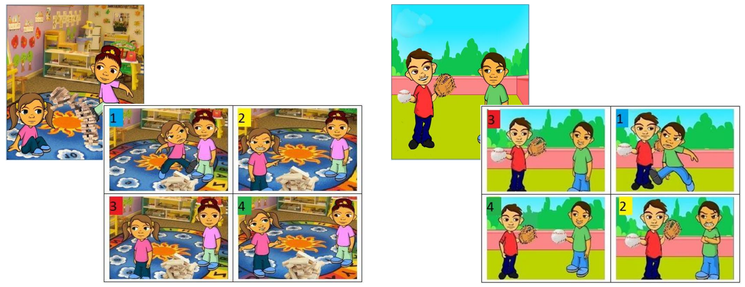

Figure 1. Example situation and response pictures for a conflict (left) and benign (right) situation

Method (cont.)

- Mindfulness training: Participants completed the following four contemplative tasks (Boguszewski & Lillard, 2015):
  - *Gummy Bear Task* – Participants answered questions about the perceptual characteristics of a gummy bear while they looked at, held in hand, held in mouth, and chewed the gummy bear for a total of five minutes.
  - *Line Walking Task* – Participants walked around a circle for two minutes, putting one front in front of the other while keeping their feet on the circle and thinking about how their foot felt when they put weight on it.
  - *Tummy Breath Task* – Participants held a stuffed animal on their stomachs and watched it go up and down while breathing in and out for two minutes.
  - *Mindful Listening Task* – Participants listened to a meditation bell with their eyes closed for two minutes and raised their hand when they could no longer hear the bell.
- Taxing training: Participants completed the same four tasks that were used in mindfulness training, but without the guided directions used to focus attention.
- Control condition: Components of all four mindfulness tasks were included (e.g., they ate a gummy bear and heard the meditation bell), but participants were able to play with a small box of toys throughout the training period.

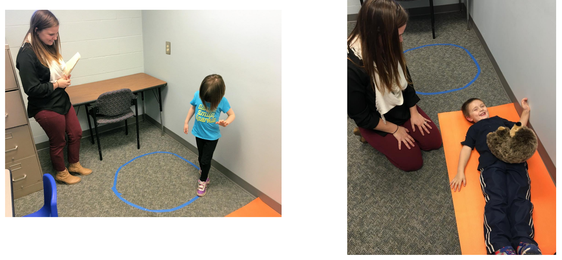

Figure 2. Participants completing the Line Walking and Tummy Breath Tasks

Results

Number of Competent Responses: A 3 (condition) X 2 (sex) between subjects ANOVA revealed a main effect of training condition, $F(2, 108) = 3.60$ $p = .03$, a main effect for sex, $F(1, 108) = 7.24$, $p = .01$, and a marginally significant interaction between condition and sex, $F(2, 108) = 2.89$, $p = .06$ (Figure 3).

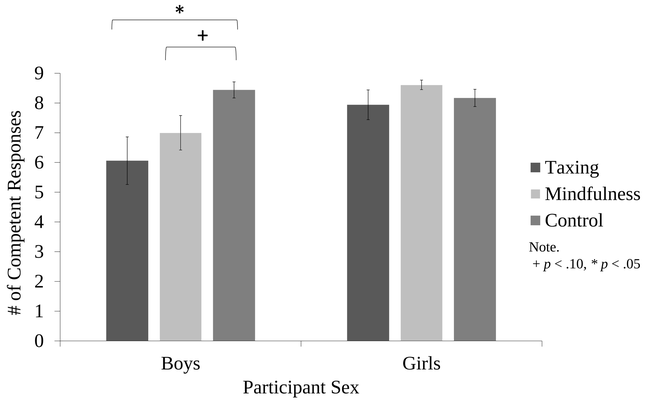

Figure 3. Means and standard errors of the number of competent responses on the VSG by training condition and sex

Results (cont.)

Response Times: A 3 (condition) X 2 (sex) X 2 (response type- competent or aggressive) mixed ANOVA ($n = 44$) with response type as a repeated measure revealed a two-way interaction between response type and sex, $F(1, 43) = 4.39$, $p = .04$ (Figure 4).

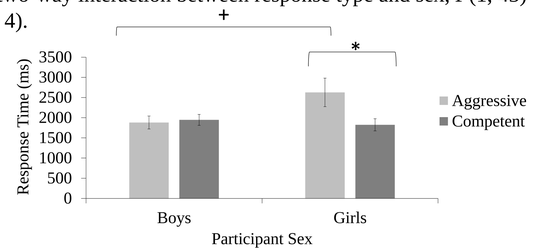

Figure 4. Means and standard errors of VSG median response times by response type and sex

A one-way ANOVA revealed that response times for competent choices marginally differed for girls by condition, $F(2, 56) = 2.986$, $p = .06$ (Figure 5).

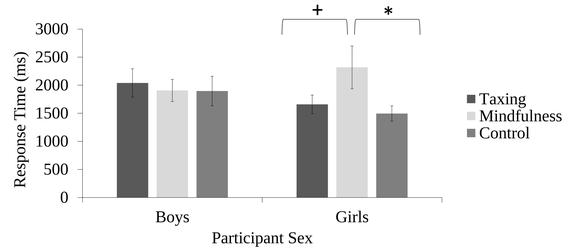

Figure 5. Means and standard errors of VSG median response times by condition and sex

Discussion

- Taxing training did produce a decrease in competent responses to peer conflict, but only for the boys.
  - Because boys are more likely to have higher baseline rates of physical aggression (Crick et al., 2006), perhaps their ability to respond competently was more susceptible to the cognitive and emotional demands of the taxing training.
- Mindfulness training did not produce an increase in competent responding but it did produce an increase in reflective responding for girls.
  - This increase in reflective responding did not correspond to an increase in competent response as girls overwhelmingly chose competent responses in all conditions despite changes in response time across the conditions.
  - In fact, aggressive response choices appeared to take longer for girls. It is possible that the girls had a habitual competent response to override in favor of an aggressive response.
- Together, these results suggest that it may not be appropriate to assume that every child has an habitual aggressive response that must be inhibited in order to enact a competent response to peer conflict.

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