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DOI
10.17105/SPR-2018-0086.V48-4

Publication date
2019

Document Version
Final published version

Published in
School Psychology Review

Link to publication

Citation for published version (APA):
Bosman, R. J., Zee, M., & Koomen, H. M. Y. (2019). Do Teachers Have Different Mental Representations of Relationships With Children in Cases of Hyperactivity Versus Conduct Problems? *School Psychology Review*, *48*(4), 333-347. https://doi.org/10.17105/SPR-2018-0086.V48-4

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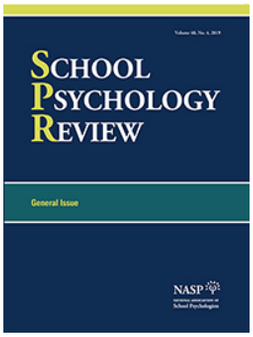

School Psychology Review

ISSN: (Print) 2372-966x (Online) Journal homepage: https://www.tandfonline.com/loi/uspr20

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To cite this article: Rianne J. Bosman, Marjolein Zee & Helma M. Y. Koomen | (2019) Do Teachers Have Different Mental Representations of Relationships With Children in Cases of Hyperactivity Versus Conduct Problems?, School Psychology Review, 48:4, 333-347

To link to this article: https://doi.org/10.17105/SPR-2018-0086.V48-4

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School Psychology Review
2019, Volume 48, No. 4, pp. 333–347
DOI: 10.17105/SPR-2018-0086.V48-4

Do Teachers Have Different Mental Representations of Relationships With Children in Cases of Hyperactivity Versus Conduct Problems?

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Abstract. The present study examined how different externalizing child behaviors (i.e., hyperactivity, conduct problems) were uniquely associated with teachers' mental representations of relationships with individual children. Participants were 61 teacher–child dyads from typical Dutch elementary schools. Using a two-wave design, teachers first reported about a child's behavior. Four months later, they were interviewed using the Teacher Relationship Interview to assess relationship representations. The Teacher Relationship Interview was rated by coders on 9 constructs that comprised 3 dimensions: content (e.g., sensitive practices of teachers); affect (e.g., positive and negative feelings); and process (e.g., coherence of narratives). Regression analyses revealed that teachers had higher levels of positive affect and sensitive practices when it came to hyperactivity, whereas teachers experienced more anger when it came to conduct problems. The results indicate that hyperactivity and conduct problems may uniquely contribute to teachers' mental representations of their relationships with children.

Teacher–child relationships are considered important for both teachers and children. Ample research has shown that teacher–child relationships characterized by warmth and support (*closeness*) may help children develop the necessary skills for behavioral and academic success in school (Jerome, Hamre, & Pianta, 2009; Roorda, Jak, Zee, Oort, & Koomen, 2017). Alternatively, teacher–child relationships involving high levels of negativity (*conflict*) may hinder children's behavioral and academic development in school (McCormick, O'Connor, Cappella, & McClowry, 2013). Furthermore, teacher–child relationships that are high in conflict and low in closeness are associated with higher levels of teacher stress and anger and lower levels of teacher competence and job satisfaction (Hagenauer, Hascher, & Volet, 2015). Therefore, it is important to investigate which factors contribute to teacher–child relationship quality.

One of the most important predictors of teacher–child relationship quality is children's externalizing behaviors (e.g., Jerome et al., 2009). Children who display externalizing behaviors, such as hyperactivity or conduct problems, are likely to have relationships with teachers that are generally marked by high levels of conflict and low levels of closeness (e.g., Silver, Measelle, Armstrong, & Essex, 2005). Although children's hyperactivity and conduct problems are often substantially associated, they correlate with different behaviors and social outcomes (Hinshaw, 1987). Still, most studies on teacher–child relationship quality have used a composite measure of externalizing behaviors (see Nurmi, 2012). Consequently, little is known about how different externalizing behaviors are uniquely associated with teacher–child relationship quality.

In addition, most researchers have used explicit measurements such as questionnaires to examine teacher perceptions of relationship quality with children showing externalizing behaviors (Lei, Cui, & Chiu, 2016). Recently, investigators have underscored the importance of including implicit measurements in research (Hahn, Judd, Hirsh, & Blair, 2014; Kumar, Karabenick, & Burgoon, 2015). Such implicit measurements may provide additional insight into underlying processes such as feelings, beliefs, and attitudes of teachers about their relationships with children showing different externalizing behaviors. These underlying processes are often referred to as a teacher's mental representation of their relationship with a child (Bowlby, 1982). Researchers have argued that understanding such mental representations on the part of teachers is necessary for the design of

Authors' Notes: This research was supported by Grant 411-12-036 from the Netherlands Organization for Scientific Research. The authors declare that they have no conflict of interest.

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appropriate interventions that improve teacher–child relationship quality (Spilt & Koomen, 2009), which is especially important for children with high risk of poor development (e.g., those with externalizing behaviors). Therefore, the present study examines how different externalizing child behaviors (i.e., hyperactivity and conduct problems) are associated with teachers' mental representations of relationships with individual children.

Teachers' Mental Representations of Teacher–Child Relationships

The majority of research on teacher–child relationships is based on an extended attachment perspective (Pianta, Hamre, & Stuhlman, 2003), derived from parent–child attachment research (Bowlby, 1982). Attachment theory states that children form mental representations about the self and significant others, including views, feelings, and attitudes that shape the development of new relationships (Bowlby, 1982). Mental representations are considered subconscious processes that influence how children interpret the behaviors of others and, in turn, how they direct their own behavior (Bretherton, 1990). Similarly, caregivers are considered to develop a parallel set of mental representations. This theory has also been applied to relationships between teachers and individual children, asserting that both teacher and child form mental representations of their mutual relationship (Pianta et al., 2003). For teachers, these mental representations consist of their view of the child, beliefs and expectations about the interactions with this child, and beliefs about themselves as teachers (Pianta et al., 2003).

To date, most research has used explicit measurements, especially questionnaires, to capture teachers' perceptions of the relationship with an individual child. Of these measures, the Student–Teacher Relationship Scale (STRS; Pianta, 2001) is the most common. The STRS has demonstrated sufficient internal consistency, metric invariance across gender and age, and adequate construct and criterion validity from preschool to upper elementary school (e.g., Koomen, Verschueren, van Schooten, Jak, & Pianta, 2012; Milatz, Glüer, Harwardt-Heinecke, Kappler, & Ahnert, 2014). The STRS is aimed at identifying relational strengths and difficulties in terms of conflict (i.e., negative interactions), closeness (i.e., warmth), and dependency (i.e., overly reliant child behavior). The STRS provides a global overview of several explicit aspects of a teacher's perception of teacher–child relationship quality (Koomen et al., 2012). However, questionnaires primarily capture the feelings and assumptions of which a teacher is already aware. Questionnaires may therefore not be well-suited to capture teachers' mental representations, as mental representations are believed to operate outside conscious awareness.

In parent–child research, interviews and qualitative coding of these interviews have been used to reveal mental representations of parents, thereby giving insight into parent–child relationship quality (e.g., Parent Attachment Interview; Bretherton, Biringen, Ridgeway, Maslin, & Sherman, 1989). Interviews are considered implicit when specific questions and related answers do not directly correspond with different psychological constructs (Furman & Wehner, 1994). For instance, rather than directly asking a caregiver about their sensitive parenting behavior, the interviewer asks for a series of experiences (e.g., some in which the child is misbehaving and some in which the child is upset and seeks help from the caregiver). Next, the caregiver's answers are coded by an independent coder using a qualitative description of the construct to assess (e.g., the degree of sensitive practices). Thus, interviews may uncover aspects that are not perceived directly by the caregiver but rather by the coder of the entire interview, which makes these implicit measurement techniques (Furman & Wehner, 1994).

Three principal dimensions have been suggested to effectively reflect mental representation models (Button, Pianta, & Marvin, 2001). The first dimension is the *content* of mental representations, which refers to what someone reveals during the interview about their beliefs and practices in a relationship. The second dimension is the *affective*, representing both positive and negative feelings someone might experience in their relationship. The third dimension is the *processing* of information, which refers to how information is transferred to the interviewer (Button et al., 2001). For instance, someone might react defensively or may be reluctant to explain how he or she is feeling.

In teacher–child relationship research, the Teacher Relationship Interview (TRI) can be used to assess teachers' mental representations of a teacher's relationship with an individual child (Koomen, Verschueren, & Thijs, 2006; Spilt & Koomen, 2009; Stuhlman & Pianta, 2002). This interview offers information about teachers' feelings, beliefs, and expectations regarding their relationship with an individual child. The TRI is based on methods used in parent–child research (Button et al., 2001; Pianta, 1999) and can also be framed in terms of the dimensions *content, affect,* and *process* (Spilt & Koomen, 2009). Independent coders rate the interview on nine separate constructs, which taken together represent the three dimensions. The content dimension includes processes such as a sensitive and proactive management style, providing a secure base, perspective taking in the child's internal states, and intentionality (Spilt & Koomen, 2009). The affective dimension includes the degree to which teachers narrate their relationship with the child in terms of positivity, anger, and feelings of helplessness. The final dimension, processing of information, gives insight regarding the extent to which teachers are willing to discuss negative emotions and the degree of coherence in their narratives (Spilt & Koomen, 2009; see Table 1 for a description of the TRI constructs).

To validate the TRI as an appropriate measurement of teachers' mental representations of relationships, two studies have evaluated the concordance of the TRI with other measurements of teacher–child relationship quality. First, Stuhlman and Pianta (2002) applied a first version of the TRI to observed teacher–child interactions. Second, Spilt and Koomen (2009) investigated how a slightly adapted version

Table 1. Different Constructs of the Teacher Relationship Interview

Construct	ICC	Description
Content		
Sensitivity of discipline	.79	Sensitive and proactive management style
Secure base	.81	Understanding the connection between emotional support and the child's social, emotional, and cognitive development
Perspective taking	.85	Awareness of children's internal states
Intentionality	.82	Promoting children's growth in social, emotional, or academic domains
Affect		
Positive affect	.92	Positive feelings such as joy, pride, happiness, and love about interacting with the child
Anger	.90	Feelings of anger, disapproval, or hostility about interacting with the child
Process		
Neutralizing of negative affect	.78	Avoiding discussion of negative emotions during the interview
Coherence	.60	Presenting experiences in a reasonable and understandable way

Note. ICC = intraclass correlation coefficient.

of the TRI correlated with the different subscales of the STRS. Both studies found moderate agreement between the TRI constructs and observed interactions or the STRS subscales, indicating that the TRI assesses related aspects of teacher–child relationship quality. More specifically, Spilt and Koomen (2009) found that teachers' expressions of anger during the interview were positively associated with the STRS Conflict subscale. In addition, Stuhlman and Pianta (2002) found that expressed negative emotion during the interview was most strongly linked to observed negative behavior toward the child. Overall, these findings show that the TRI is useful to gain greater insight into teachers' mental representations of their relationships with children, especially with regard to affective processes.

To date, there has only been one study that investigated teachers' mental representations of their relationships with typically developing children versus children showing (undifferentiated) externalizing behaviors (Spilt & Koomen, 2009). Using the TRI, Spilt and Koomen (2009) found that teachers expressed more anger and feelings of helplessness toward children who displayed externalizing behaviors, which is in accordance with questionnaire research that found associations between behavioral problems in children and relational negativity (e.g., Birch & Ladd, 1997; Jerome et al., 2009). Spilt and Koomen (2009) did not find differences in teachers' expressions of positive affect when discussing relationships with children with and without externalizing behaviors. In addition, no differences were found with regard to sensitive practices of teachers in their narratives concerning the two groups of children. In sum, Spilt and Koomen (2009) found that teachers' relationships with children with more externalizing behavior were characterized by more negative affect.

Different Externalizing Behaviors of Children

Externalizing, or undercontrolled, behaviors include different behavioral symptoms such as hyperactivity, impulsivity, inattention, oppositional behaviors, aggression, and disregarding others' rights (Hinshaw, 1992). Two general categories have been identified based on these symptoms hyperactivity/inattention[1] and conduct problems (Hinshaw, 1987, 1992). Hyperactivity/inattention refers to the inability to focus attention for a sufficient period of time and to impulsive behavior (Barkley, DuPaul, & McMurray, 1990). In contrast, conduct problems are characterized by behaviors such as picking on others, starting fights, telling lies, breaking rules, behaving violently, or ignoring the teacher (Hughes & Cavell, 1999). Hyperactivity and conduct problems can appear together. The developmental precursor model suggest that symptoms of hyperactivity can lead to the development of conduct problems due, for instance, to stress in the family or in school (Johnston & Jassy, 2007). Despite their overlap (e.g., Offord, Alder, & Boyle, 1986), these categories are considered different aspects of externalizing behaviors (e.g., Martel, Gremillion, Roberts, von Eye, & Nigg, 2010). Furthermore, both aspects of externalizing behaviors correlate strongly with children's emotional symptoms (e.g., correlations between .27 and .58; Huey & Weisz, 1997). Therefore, when analyzing differences between hyperactivity and conduct problems, it is important to take children's emotional symptoms into account.

[1]When we refer to hyperactive behavior or hyperactivity in this study, we explicitly refer to the combination of hyperactivity and inattention.

Different types of externalizing behaviors have been linked to different academic outcomes. For instance, children who display high levels of hyperactive behavior often experience multiple difficulties in school (DuPaul & Stoner, 2003). Generally, they are likely to have more problems staying on task, to talk excessively with their peers when it is not allowed, and to experience difficulties remaining seated (DuPaul & Stoner, 2003). These behaviors can be very disruptive for teachers. Therefore, it is not surprising that children with hyperactive behavior are at risk for developing social problems (Andrade & Tannock, 2014; DuPaul & Weyandt, 2006), including poor teacher–child relationships.

Children with conduct problems may show a somewhat different pattern of school adjustment. Research has indicated that conduct problems in school are primarily associated with peer rejection or peer coercion (Snyder, Prichard, Schrepferman, Patrick, & Stoolmiller, 2004). It has also been found that interactions between teachers and children with conduct problems are often characterized by anger and punishment, in particular when children openly resist a teacher's authority (Brophy & McCaslin, 1992). Due to these issues, children's conduct problems may be a risk factor for poor teacher–child relationships.

The behavioral patterns of hyperactivity or conduct problems in children may influence teachers' mental representations of relationships differently. However, previous studies investigated the associations between hyperactivity or conduct problems with school adjustment in isolation. They did not combine these different types of externalizing behaviors in one study to determine if they had similar or different associations with teacher–child relationship quality.

Teachers' Appraisals of Hyperactivity and Conduct Problems

Teachers' mental representations regarding relationships and the ways in which they judge different child behaviors may increase their unpleasant experiences and emotions (Chang & Davis, 2009). Teachers may hold different types of judgments on or appraisals of children's actions in the classroom. According to Chang and Davis (2009), two specific types of appraisals of specific classroom incidents, including teachers' judgments of control and their perceived ability to cope with problems, may explain why they consider their relationships to be different for children with different types of behavior. Concerning the first type of appraisal (i.e., teachers' judgments of control), these authors assume that teachers are likely to feel frustration or anger toward an individual child when they feel this child could have controlled their behavior (i.e., the child has high potential for self-control). This frustration or anger, in turn, might be reflected in teachers' subsequent actions toward the child. For instance, teachers may respond less sensitively to a child at a specific moment when they are feeling frustrated. However, when teachers perceive the child as being unable to control his or her behavior (i.e., the child has low control potential), teachers' responses may be more differentiated—ranging from annoyance to sympathy—or, in general, more positive (Chang & Davis, 2009). For instance, teachers may respond more sympathetically to a child at a specific moment when they feel that the child's disruptive behavior is unintentional.

The second type of appraisal is based on teachers' coping potential, specifically their ability to eliminate a perceived threat (Lazarus, 2001). For example, teachers with high coping potential in the face of challenging child behavior probably have milder and more controllable emotional responses. Consequently, their reactions to challenging behavior may be mild. However, teachers with low coping potential may demonstrate increased emotional intensity, including anxiety, frustration, or anger, which may lead to less professional responses to challenging behavior (Chang & Davis, 2009). Teachers' appraisals may thus influence their feelings about children, which in turn may influence their perceptions of relationships with children showing specific types of externalizing behaviors.

Based on these concepts, we can assume that teachers feel or behave differently toward children who display hyperactivity versus conduct problems. For instance, teachers may have feelings of sympathy toward children with hyperactivity but not toward those with conduct problems. One possible reason for these different feelings is that hyperactivity is often perceived as an indication of attention deficit hyperactivity disorder (ADHD), which has several genetic components (Brassett-Harknett & Butler, 2007). Indeed, the large majority of teachers reported ADHD and hyperactivity to be caused by biological factors rather than environmental factors (Glass & Wegar, 2000). This implies that hyperactive behaviors are not intentional and lie outside the child's control (Stinnett, Crawford, Gillespie, Cruce, & Langford, 2001). In other words, children often do not intend to display hyperactive behavior (i.e., their control potential is low). This low potential for control of hyperactive behavior may evoke a teacher's sympathy toward the child.

With perceived conduct problems, the cause of such behavior is not always evident, and teachers may perceive the child exhibiting these behaviors as annoying, disrespectful, or lacking parental guidance (Chang & Davis, 2009). Teachers may also feel that these children could have controlled their behavior had they wanted to, or that they had specific intentions with their behavior, which could amplify teachers' negative emotional experiences. As a result, teachers may feel frustrated or angry, which in turn may negatively influence the sensitivity of their practices.

Based on Patterson's theories (1982, 2002), coercive family dynamics may emerge in the case of conduct problems. Specifically, Patterson argued that caregivers may reinforce children's difficult behaviors, which in turn elicits negativity in interactions. This coercive pattern of interactions may also be visible in the school context. For instance, a teacher may reinforce certain child behaviors, such as resistance or disobedience, and this may in turn evoke anger and hostility on the teacher's part. Based on this coercion theory, we anticipated

that teachers would feel greater anger and frustration in the case of conduct problems and that they would then respond to resistance or disobedience with less sensitive practices.

Previous studies have repeatedly shown that externalizing child behaviors in general are associated with poor teacher–child relationship quality, both cross-sectionally (e.g., Nurmi, 2012) and longitudinally (e.g., Hamre & Pianta, 2001). Furthermore, externalizing behaviors can both be a predictor and an outcome of poor-quality teacher–child relationships (e.g., Silver et al., 2005). To our knowledge, however, there are only two studies that have examined associations between a specific type of externalizing behavior and teacher–child relationship quality. A study by Thijs, Koomen, and van der Leij (2008) revealed that kindergarten teachers reported higher levels of conflict, lower levels of closeness, and greater dependency in their relationships with children with higher levels of hyperactivity compared to their relationships with typically developing children. Furthermore, these authors noted that teachers experienced increased obstacles and disruptiveness when teaching hyperactive children. In a study focusing on conduct problems, Hughes, Cavell, and Willson (2001) indicated that conduct problems in elementary school-age children were associated with high levels of peer-rated teacher–child conflict. Although these two studies focused on a specific type of externalizing behavior, they investigated this behavior in isolation. Because of the substantial overlap between hyperactivity and conduct problems (Offord et al., 1986), it is necessary to control for the other type of externalizing behavior to assess possible differentials and unique effects of each type of externalizing behavior.

Present Study

The present study examined the extent to which children's hyperactive behavior and conduct problems were associated with teachers' mental representations of relationships. We did not compare groups of children with either hyperactivity or conduct problems but focused on examining unique associations of children's hyperactive behavior and conduct problems with teacher's mental representations in a nonclinical sample of upper-grade elementary school students. Because of the substantial overlap between hyperactive behavior and conduct problems, we controlled for the other type of externalizing behavior. Additionally, we decided to control for the associations of children's emotional symptoms with teachers' mental representations of relationships as well, because these emotional symptoms are usually linked to both hyperactivity and conduct problems. Furthermore, as teacher–child relationships are often differently associated with gender (e.g., Birch & Ladd, 1997) and ethnicity (e.g., Saft & Pianta, 2001), we also included these background characteristics as covariates. Based on the theories of Chang and Davis (2009) and Patterson (1982, 2002) and the findings of Spilt and Koomen (2009), we assumed that teachers would express higher levels of positive feelings and demonstrate higher levels of sensitive practices in the case of hyperactive behavior when controlling for comorbid conduct problems. In contrast, we expected that teachers would express higher levels of negative feelings and show lower levels of sensitive practices in the case of conduct problems when controlling for comorbid hyperactive behavior.

METHOD

The present study was part of a larger research project that examined teachers' dealings with diversity in the classroom (Zee, de Jong, & Koomen, 2016). For this project, 350 schools across the Netherlands were recruited by email or telephone. When school principals granted permission to conduct research within their schools, information letters and informed consent forms were sent to all upper-level elementary teachers within the schools. The final sample consisted of 61 teachers in 24 regular elementary schools in both urban and rural areas across the Netherlands. Of this sample of teachers, 16 were male (26.2%) and 45 were female (73.8%). On average, they had 16.9 years of experience in teaching (SD = 12.0, range = 1.5–44 years). The teachers had a mean age of 41.3 years (SD = 12.6, range = 23–63 years).

The nonclinical student sample consisted of 61 children, of which 36 were boys (59%) and 25 were girls (41%). They had a mean age of 10.2 years (SD = 1.2, range = 8–13 years). At the time of data collection, 5 children were in Grade 3 (3.3%), 23 in Grade 4 (37.7%), 13 in Grade 5 (21.3%), and 20 in Grade 6 (32.8%). Most children had mothers with a Dutch background (85.2%), whereas 14.8% had mothers with an ethnic minority background.

Procedure

Ethical approval was granted from the Ethics Review Board of the Faculty of Social and Behavioral Sciences of the University of Amsterdam (Project No. 2013–CDE–3188). Teachers distributed informed consent forms to parents of all children in their classrooms. In the larger project on dealing with diversity (Zee et al., 2016), data were collected in two waves. A sample of eight children was randomly selected from each teacher's classroom, in which, on average, 25 students were enrolled. During the first wave (January–March), when teachers had known the children for at least 4 months, teachers reported on the behavioral adjustment of the selected children using the Strengths and Difficulties Questionnaire (SDQ) and their own background characteristics. Additionally, children were asked to fill out questionnaires about their background characteristics during a planned school visit. During the second wave, at the end of the school year (May–July), researchers visited the participating schools to administer the TRI. The duration of the interview ranged from 30 to 45 min. For this interview, we selected one child for each teacher based on the child's level of externalizing behaviors. For half of the teachers, a child with a mean score higher than 2.5 on the Hyperactivity subscale and/or Conduct Problems subscale was selected (i.e., the subscales ranged from 1 to 5, so a cutoff criterion of 2.5 or higher was used to construct a normally distributed sample of problematic

behaviors). When multiple children had a high score on the subscales, the child with the highest scores on the two subscales was selected. For the other half of the teachers, a child was selected with a mean score lower than 2.5 on Hyperactivity and Conduct Problems. This procedure was followed to collect a sample of children with a normally distributed level of, and sufficient variation in, externalizing behaviors.

Instruments

Teachers reported on children's behavioral adjustment and, several months later, they were interviewed about their relationship with a child. Teachers reported on children's behavior using the Dutch version of the SDQ (Goodman & Scott, 1999; Van Widenfelt, Goedhart, Treffers, & Goodman, 2003). The SDQ measures a variety of problematic child behaviors in the classroom. Five subscales can be derived from 25 items: Prosocial Behavior, Emotional Symptoms, Conduct Problems, Hyperactivity/Inattention, and Peer Problems. In the present study, we used only three subscales: Emotional Symptoms, measuring the internalizing behavior of children (e.g., "Many worries or often seems worried"); Conduct Problems (e.g., "Often has temper tantrums or is hot tempered"); and Hyperactivity (e.g., "Restless, overactive, cannot sit still for long"). All subscales consisted of five items that were answered on a 5-point Likert scale, ranging from 1 (*definitely does not apply*) to 5 (*definitely applies*). Previous research has indicated good psychometric properties of the Dutch version of the SDQ (Van Widenfelt et al., 2003). Cronbach's alphas of the SDQ subscales in the present study were .77 for Emotional Symptoms, .85 for Conduct Problems, and .89 for Hyperactivity.

A Dutch version of the TRI (Koomen & Lont, 2004; Pianta, 2003; Spilt & Koomen, 2009) was used to assess teachers' mental representations of their relationship with an individual child. The TRI is a semistructured interview; the Dutch version consists of 12 questions and related follow-up questions that provide insight into teachers' experiences, beliefs, and emotions about their relationship with an individual child. First, teachers were asked to choose three words that described their relationships with the child. For each of the three words, teachers were asked to further describe that word through explaining an experience they had with the child. Eleven of the remaining questions were about teachers' negative and positive experiences with a child, and one question was about the teacher's relationship with the child's family. All questions were aimed at discussing recent interactions between the teacher and the selected child. For almost all questions, follow-up questions concerned teachers' feelings about these specific experiences and their perceptions of the child's feelings or emotions. For example, for the prompt, "Can you tell me about a time when [name of the child] was upset and came to you," follow-up questions include the following: "Could you describe exactly what you did at that moment?" "Why did you choose this particular approach?" "How did you feel in this situation?" and "How do you think [name of the child] felt at that moment?"

The interviews were recorded and independent raters coded the audiotapes. Ratings were provided by at least two trained, independent coders on nine scales representing different relationship constructs. With respect to the content dimension, four constructs were rated (see Table 1): sensitivity of discipline, secure base, perspective taking, and intentionality. Regarding the dimension of affect, three constructs were rated: helplessness, positive affect, and anger. For the processing dimension, two constructs were rated: neutralizing of negative affect and coherence.

With the exception of coherence, which was rated on a 5-point scale, each construct was coded on a 7-point rating scale. The scores 1 and 2 represented the lower end of the scale (i.e., there is little or no evidence for the construct); the scores 3–5 were in the midrange of the scale (i.e., the teachers provide mixed evidence of the construct); and scores 6 and 7 were on the high end of the scale (i.e., there is sufficient evidence for the construct, and the teacher provides clear and detailed examples). For each score of each of the constructs, the coding manual provided a detailed example of what the teachers should have narrated to receive a particular score (Koomen & Lont, 2004; Pianta, 1999, 2003).

Coders were trained extensively until they reached sufficient interrater agreement. Coders attended three meetings in which they discussed the codes of interviews they had practiced at home. First, they practiced with the TRI themselves to gain familiarity with the interview questions and the coding manual. They practiced with nine interviews and received feedback about each coding from the trainer. None of the coders were familiar with the child or the teacher, and they did not administer the interviews themselves. Coders were also unaware of whether children had high or low levels of externalizing behaviors.

Intraclass correlation coefficient (ICCs), based on the average measures of the coders, were calculated for each of the constructs to assess the degree of consistency between coders. Cicchetti et al. (2006) concluded that an ICC between .40 and .59 is fair, between .60 and .74 good, and above .75 is excellent. Excellent consistency was found for all constructs (ICCs ranging from .78 to .92), except for coherence (ICC of .60), which still had good consistency (Cicchetti et al., 2006; see Table 1). Average scores from two independent coders were used for all interviews. When there were significant differences (≥3 scale points) between the two coders for one of the constructs, a third coder independently rated the interview again to extract the most appropriate score for that specific construct. Of all scores, 2.7% were coded again. The score of the third coder was then used for that construct.

Data Analysis

We conducted multiple regression analyses[2] in SPSS Version 22 to predict all constructs of the TRI based on

[2]As ICC at the school level was very low (ICC = .03), it was not necessary to conduct multilevel analyses.

children's hyperactivity or conduct problems. For each TRI construct, a multiple regression was performed. For each model, the following covariates were added first: gender (0 = boy, 1 = girl), ethnicity (0 = ethnic majority, 1 = ethnic minority) and emotional symptoms. We then added conduct problems and hyperactivity.[3] Gender was not included in the final models because it was not a significant predictor of any of the TRI constructs ($p > .05$).

For all included variables, there were missing data in the range of 0%–4.9%. Little's missing completely at random test showed that the data were missing at random, $\chi^2(12) = 9.82$, $p = .632$. To uphold sufficient power for the analyses, we chose to impute missing data using the expectation–maximization algorithm. For all models, residuals, leverage values, and Cook's distance were examined. No multivariate outliers were found (Tabachnick & Fidell, 2007), nor were any significant violations of assumptions for linearity, homoscedasticity, or normality. All variables had a nonsignificant skewness and kurtosis, indicating normality (skewness < 2.0, kurtosis < −1.9). There was no indication of multicollinearity in the regression models (Slinker & Glantz, 1985) because variance inflation factors ranged from 1.00 to 2.47 in all regression models.

RESULTS

Before presenting the regression models for each construct of the TRI, we must discuss the descriptive statistics. Table 2 presents the means, standard deviations, and zero-order correlations of all study variables. Constructs from the content dimension of the TRI (e.g., sensitivity of discipline, secure base, perspective taking, and intentionality) had large intercorrelations, were positively correlated with positive affect, and were negatively correlated with helplessness. Secure base and intentionality were also negatively associated with anger. Perspective taking was negatively associated with neutralizing of negative affect, and both perspective taking and secure base positively correlated with coherence. Correlations between constructs of the affect dimension were also in the expected directions. Constructs of the affect dimension (e.g., helplessness, anger, and positive affect) were not significantly correlated with constructs of the processing dimension (e.g., neutralizing of negative affect and coherence). With regard to the processing dimension, neutralizing of negative affect had a negative association with coherence of teachers' narratives.

Furthermore, a positive association was found between neutralizing of negative affect and ethnicity, indicating that teachers tended to neutralize negative affect more in relationships with ethnic minority children. Ethnicity was negatively correlated with intentionality and positive affect of teachers. Emotional symptoms of children showed negative correlation with positive affect and positive correlation with anger. In addition, emotional symptoms were associated with increased hyperactivity and conduct problems in children. Children's conduct problems were also positivity correlated with teachers' anger and increased hyperactivity. Last, hyperactivity was positively correlated with all constructs of the content dimension and to teacher anger. No significant associations were found between children's gender and any other variables.

Using regression analyses, we investigated how children's hyperactivity and conduct problems correlated with teachers' mental representations. Separate regression analyses were performed for the constructs of the content dimension of these mental representations, including sensitivity of discipline, secure base, perspective taking, and intentionality (Table 3). A regression analysis was performed to identify how hyperactivity and conduct problems correlated with teachers' sensitivity of discipline. The model was not significant and explained only 15.3% of the variance, $F(4,56) = 2.52$. Only hyperactivity was positively associated with sensitivity of discipline, $\beta(SE) = .47\ (0.12)$, $p = .009$.

The model predicting secure base was also not significant, $F(4,56) = 1.75$. In this model, hyperactivity was positively associated with secure base of teachers, $\beta(SE) = .38\ (0.14)$, $p = .039$, indicating teachers provided more security when it came to hyperactivity. The model with all variables included had an explained variance of 11.1%.

The model of perspective taking was significant and explained 18.9% of the variance for perspective taking, $F(4,56) = 3.27$. Hyperactivity was positively associated with teachers' ability to gain perspective about the child's feelings, $\beta(SE) = .52\ (0.14)$, $p = .003$.

Finally, the model of intentionality was significant and explained 17.9% of the variance, $F(4,56) = 3.06$ (Table 3). It appeared that teachers were less focused on seeking opportunities to promote children's growth when it came to ethnic minority students, $\beta(SE) = -.29\ (0.36)$, $p = .028$. Hyperactivity was positively associated with intentionality of teachers, $\beta(SE) = .46\ (0.14)$, $p = .009$.

Separate regression analyses were performed for the constructs of the affect dimension as well, including helplessness, anger, and positive affect (see Table 4). First, the model of helplessness was not significant, $F(4,56) = 1.12$, and none of the predictors were significant.

The model predicting positive affect was significant and explained 26.2% of the variance, $F(4,56) = 4.97$. Teachers reported less positive affect in relationships with ethnic minority children, $\beta(SE) = -.32\ (0.38)$, $p = .011$, and children with increased emotional symptoms, $\beta(SE) = -.35\ (0.19)$, $p = .016$. In addition, hyperactivity was positively associated with positive affect, $\beta(SE) = .39\ (0.14)$, $p = .024$.

The model predicting teacher anger was also significant and explained 38.1% of the variance, $F(4,56) = 8.63$. Teachers expressed higher levels of anger in cases of conduct problems, $\beta(SE) = .74\ (0.20)$, $p < .001$.

Separate regression analyses were performed for the constructs of the processing dimension (see Table 5).

[3]Interaction terms of Conduct Problems × Hyperactivity were also added in the regression models; however, these caused multicollinearity problems. Therefore, we decided to exclude the interaction terms from the models.

School Psychology Review, 2019, Volume 48, No. 4

DOI: 10.17105/SPR-2018-0086.V48-4

Table 2. Correlations Between Constructs of the TRI, the Included Covariates, and Externalizing Behavior of Children

TRI Constructs and Children's Behavior	1.	2.	3.	4.	5.	6.	7.	8.	9.
Content									
1. Sensitivity of discipline	–								
2. Secure base	.56**	–							
3. Perspective t.	.54**	.76**	–						
4. Intentionality	.70**	.61**	.54**	–					
Affect									
5. Helplessness	–.40**	–.34**	–.34**	–.56**	–				
6. Positive affect	.31*	.53**	.46**	.35**	–.38**	–			
7. Anger	–.23	–.30*	–.10	–.26*	.55**	–.47**	–		
Process									
8. Neutralizing of negative affect	–.20	–.24	–.34**	–.25	.06	–.06	–.15	–	
9. Coherence	.21	.34**	.45**	.17	.08	.10	.09	–.51**	–
Covariates and Children's Behavior									
10. Gender	.01	–.07	–.19	–.14	–.02	–.07	.01	–.18	–.18
11. Ethnicity	–.15	–.17	–.13	–.26*	.12	–.30*	–.01	.28*	–.05
12. Emotional symptoms	.03	.09	.03	–.01	.17	–.34**	.37**	–.13	.04
13. Conduct problems	.16	.12	.19	.13	.17	–.13	.58**	–.18	.22
14. Hyperactivity	.33*	.26*	.38**	.28*	.04	.04	.29*	–.04	.22
M (SD)	4.75 (0.85)	4.10 (0.97)	4.21 (0.99)	4.53 (1.00)	2.9 (1.21)	4.27 (1.11)	2.36 (1.29)	3.04 (0.54)	3.52 (0.54)
Range	2.00–7.00	2.00–6.00	2.00–6.50	1.00–6.00	1.00–6.00	1.50– 5.50	1.00–5.50	1.50–5.50	2.00–5.00

	10.	11.	12.	13.	14.
Covariates and Children's Behavior					
10. Gender	–				
11. Ethnicity	–.17	–			
12. Emotional symptoms	.19	.07	–		
13. Conduct problems	.05	–.19	.56**	–	
14. Hyperactivity	.01	.01	.46**	.69**	–
M (SD)	0.41 (0.50)	0.15 (0.36)	1.88 (0.83)	2.05 (1.07)	2.68 (1.25)
Range	0.00–1.00	0.00–1.00	1.00–3.80	1.00–4.80	1.00–5.00

*$p < .05$, **$p < .01$.

Table 3. Regression Models Predicting Teacher's Narratives of the Content Dimension

Content Dimension	β(SE)	R^2	ΔR^2	*p*
Sensitivity of discipline				
Overall model		.15	.11	.051
Ethnicity	–.17 (.31)			.188
Emotional symptoms	–.09 (.16)			.563
Conduct problems	–.15 (.15)			.431
Hyperactivity	.47 (.12)			.009**
Secure base				
Overall model		.11	.07	.153
Ethnicity	–.21 (.36)			.120
Emotional symptoms	.04 (.18)			.823
Conduct problems	–.20 (.18)			.327
Hyperactivity	.38 (.14)			.039*
Perspective taking				
Overall model		.19	.14	.018*
Ethnicity	–.15 (.35)			.245
Emotional symptoms	–.13 (.18)			.376
Conduct problems	–.13 (.18)			.511
Hyperactivity	.52 (.14)			.003**
Intentionality				
Overall model		.18	.11	.024*
Ethnicity	–.29 (.36)			.028*
Emotional symptoms	–.09 (.18)			.564
Conduct problems	–.20 (.18)			.298
Hyperactivity	.46 (.14)			.009**

Note. *$p < .05$, **$p < .01$.

Table 4. Regression Models Predicting Teacher's Narratives of the Affect Dimension

Affect Dimension	β(SE)	R^2	ΔR^2	*p*
Helplessness				
Overall model		.07	.02	.355
Ethnicity	.17 (.46)			.231
Emotional symptoms	.09 (.23)			.584
Conduct problems	.29 (.23)			.158
Hyperactivity	–.20 (.18)			.277
Positive affect				
Overall model		.26	.07	.002**
Ethnicity	–.32 (.38)			.011*
Emotional symptoms	–.35 (.19)			.016*
Conduct problems	–.26 (.19)			.159
Hyperactivity	.38 (.14)			.024*
Anger				
Overall model		.38	.03	.000**
Ethnicity	.12 (.40)			.276
Emotional symptoms	.06 (.20)			.639
Conduct problems	.74 (.20)			.000**
Hyperactivity	–.25 (.15)			.100

Note. *$p < .05$, ** $p < .01$.

The models of neutralizing of negative affect, $F(4,56) = 1.64$, and coherence, $F(4,56) = 1.07$, were not significant. Additionally, none of the predictors significantly affected the dependent variables (Table 5).

Table 5. Regression Models Predicting Teacher's Narratives of the Process Dimension

Process Dimension	β(SE)	R^2	ΔR^2	*p*
Neutralizing of negative affect				
Overall model		.11	.01	.164
Ethnicity	.26 (.37)			.058
Emotional symptoms	–.11 (.19)			.482
Conduct problems	–.15 (.18)			.468
Hyperactivity	.11 (.14)			.533
Coherence				
Overall model		.07	.01	.379
Ethnicity	.01 (.21)			.933
Emotional symptoms	–.14 (.10)			.379
Conduct problems	.20 (.10)			.319
Hyperactivity	.14 (.08)			.444

DISCUSSION

The purpose of the present study was to examine the unique effects of teacher-reported hyperactivity and conduct problems on teachers' mental representations of their relationships with individual children. Guided by the theoretical ideas of Chang and Davis (2009), we hypothesized that teachers would experience increased positive affect regarding hyperactivity (given the effects of conduct problems) and increased negative affect regarding conduct problems (controlling for the effect of hyperactivity). We also expected that teachers would be more inclined to use

sensitive practices in cases of hyperactive behavior and less sensitive practices in cases of conduct problems. To establish support for these hypotheses, we used an implicit measurement technique based on attachment theory to capture teachers' beliefs, practices, and feelings in their relationships with a particular child.

Overall, findings from the present study suggest that teachers have different relationship experiences when it comes to different externalizing behaviors, leading us to two main conclusions. First, teachers feel more positive about their relationships when it comes to perceived hyperactive behavior and more negative when it comes to perceived conduct problems. Second, teachers show more sensitive practices (i.e., they manage behavior more sensitively, function more as a secure base, are better able to gain perspective, and experience greater intentionality) when they perceive more hyperactive behaviors. These results are important and relevant given that teachers' mental representations occur outside their conscious awareness (Bretherton, 1990; Pianta, 1999). As teachers may focus unintentionally on behaviors that are similar to the beliefs they already hold about a child, mental representations about relationships can function as self-fulfilling prophecies (Pianta, 1999). Uncovering these unconscious feelings, beliefs, and attitudes through reflection may be a first step in reducing negativity in teacher–child relationships.

Children's Hyperactive Behavior and Teachers' Mental Representations

Following the theory of Chang and Davis (2009), we assumed that teachers would display more feelings of sympathy in interactions with children when they felt that children had low potential for self-control. Although we did not test these ideas directly, we did find that teachers were inclined to express more positive feelings—including feelings of happiness, joy, closeness, and pride—in cases of higher levels of hyperactivity if controlling for comorbid conduct problems. Furthermore, teachers acted more sensitively in such cases. These empirical findings seem to be in accordance with the theories of Chang and Davis (2009), who stated that teachers' positive appraisals may influence the feelings they have about a child, which in turn may have an effect on how they approach this child. These results seem plausible in light of research showing that teachers' behavior is based on their beliefs and feelings (Alderman & Nix, 1997). Thus, the feelings or attitudes of teachers may be associated with their actions toward a specific child. When teachers have predominantly negative feelings, this may negatively influence their responses or actions toward a child. Consequently, it seems important to focus interventions on the level of mental representation models rather than directly on teachers' behaviors (Pianta, 1999). Creating more flexible and differentiated mental representations could help teachers develop the skills that enable them to respond sensitively to children's behavior.

Based on the small, nonsignificant bivariate correlation between hyperactivity and positive affect ($r = .04$), we did not expect hyperactivity to be a moderate predictor for teachers' positive feelings ($\beta = .38$, $p = .024$). As hyperactivity correlated significantly with emotional symptoms ($r = .46$) and conduct problems ($r = .69$) and not with positive affect, it is possible that conduct problems functioned as a suppressor variable for the other predictors of positive affect. This means that the independent variables (e.g., hyperactive behavior and conduct problems) are more strongly correlated with each other than with the dependent variable (e.g., positive affect). As a consequence, the independent variables filter their shared (irrelevant) information, which results in the separation of each of the predictor's information (Maassen & Bakker, 2001). It thus seems important to include all aspects of the child's behavior in one model for positive affect to fully understand the unique contribution of hyperactivity on teachers' affect; Pandey and Elliott (2010) also argued that it is better to interpret correlated predictors in combination in one model rather than in isolation. The results showed that, more so than other behavioral difficulties that children may experience, hyperactivity plays the most important role in teachers' positive affect. More specifically, it suggests that teachers respond differently to hyperactivity in the context of (comorbid) conduct problems.

With regard to the specific aspects of the content dimension, we found that teachers did provide more security when they perceived hyperactivity, indicating that the teacher was able to foster trust and warmth and believed that these aspects were important for the cognitive and emotional development of the child. Previous research has also shown that the teacher can function as a secondary attachment figure by providing support to young children in times of stress (Koomen & Hoeksma, 2003). The present study indicates that the teacher may also function as an attachment figure for older children with various socioemotional behaviors. These results are promising considering the findings of Olivier and Archambault (2017), who concluded that, for children with high levels of hyperactivity, support in the teacher–child relationship may function as a protective factor against further behavioral disengagement.

Within the content dimension, teachers were more aware of the internal state of children with higher levels of hyperactive behavior, which indicates that they are better able to understand the perspective of the child in the case of hyperactivity. In addition, teachers were more inclined to seek opportunities to promote growth in children with higher levels of hyperactive behavior. A possible explanation for these findings is that teachers may have acquired sufficient knowledge about hyperactivity or symptoms of ADHD. Many studies confirm that teachers have adequate knowledge regarding symptoms and causes of hyperactivity and ADHD (e.g., Bekle, 2004). Given that the prevalence of ADHD is relatively high (Sayal, Prasad, Daley, Ford, & Coghill, 2017), we can assume that most teachers have had direct experience with a child with hyperactivity in their classroom. Therefore, teachers' knowledge about hyperactive behavior could be sufficient to understand the internal state of hyperactive children.

In addition to a basic understanding of hyperactive behavior, teachers are probably also well informed about the motives of children showing higher levels of hyperactivity. When they understand that these children are not able to, or struggle to, control their behavior in the classroom, this may influence the sensitivity of their management style in a positive way (see Chang & Davis, 2009). Our study confirmed that teachers were better able to manage children's hyperactive behavior in a sensitive manner.

Children's Conduct Problems and Teachers' Mental Representations

In line with our expectations, we found that teachers felt greater negativity when they perceived conduct problems, controlling for comorbid hyperactivity. They spoke more frequently about negative aspects of the relationship and showed more feelings of anger and frustration in cases of conduct problems. It is possible that a child's disobedient and aggressive behaviors undermine the teacher's authority in the classroom (Brophy & McCaslin, 1992) and, as a result, teachers feel threatened or frustrated because these behaviors hamper their professional functioning. Furthermore, it is possible that teachers' coping potential is lower in interactions with children with higher levels of conduct problems (Chang & Davis, 2009), leading to feelings of negativity and anger.

With regard to the process dimension, we did not find an association between teachers' helplessness and higher levels of conduct problems, nor in relation to hyperactivity. Based on the theoretical ideas of Chang and Davis (2009), we expected that teachers would feel more ineffective or powerless in relation to children with conduct problems because these behaviors might be judged as intentional (i.e., the teacher may think that the child has a higher level of control potential). However, children's externalizing behaviors were not associated with teachers' feelings of helplessness. Two explanations for these findings could be offered. First, we selected children based on the level of externalizing behaviors and not the degree to which they experienced relational difficulties. Therefore, it is possible that teacher–child relationship quality was not that poor and teachers did not feel ineffective in their relationship with the child. Second, the levels of externalizing behaviors were not that high for most of the children, as we used a nonclinical regular elementary school sample instead of a clinical sample. This may have led to lower levels of helplessness in the current sample. Nonetheless, the pattern of coefficients indicated higher levels of helplessness in relationships with children showing more conduct problems versus lower levels of helplessness in relationships with children with more hyperactive behavior. More research is needed to draw firmer conclusions about teachers' feelings of helplessness.

With regard to the content dimension, we did not find that teachers responded less sensitively toward students with perceived conduct problems. Although all coefficients of the content dimension were negative (βs ranging from –.13 to –.20; see Table 3), indicating that teachers might be less sensitive toward children with higher levels of conduct problems, these coefficients were not significant and cannot be interpreted as such. A possible explanation for the nonsignificant results may lie in the emotional regulation strategies of teachers. Sutton (2004) has revealed that teachers may behave more neutrally in response to adverse child behavior because of adequate emotional regulation strategies such as pausing, breathing deeply for a few seconds, or controlling facial features. By using such strategies, teachers may be better able to control their negative feelings in interactions with students in cases of conduct problems. If teachers are able to regulate their emotions in this way, we also would expect an increased level of neutralizing of negative affect in regard to conduct problems. In contrast, the beta coefficient for conduct problems was negative (although not significant), which may indicate that teachers were less inclined to avoid discussing negative emotions during the interview. Because we were not able to find higher levels of neutralizing of negative affect in the case of conduct problems, we think it is more plausible to assume that a power problem may have influenced our results with regard to sensitive practices. We may simply not have had a large enough sample to detect significant effects of conduct problems on constructs of the content dimension. Therefore, it is recommended this study be replicated with a larger sample of teachers to test the effects of the content and process dimensions for teachers in relationships with children with higher levels of conduct problems.

Children's Ethnicity and Emotional Symptoms

Our results seem to suggest that teachers had lower levels of positive affect in interactions with ethnic minority children and children with perceived emotional symptoms. With regard to children's ethnicity, our results contradict previous findings. A Dutch study by Thijs, Westhof, and Koomen (2012) found, for instance, similar levels of teacher–child closeness for ethnic minority and ethnic majority children, yet there are important differences between the study by Thijs et al. (2012) and the present study. First, Thijs et al. (2012) used an explicit method of measuring teacher–child closeness, whereas we tried to uncover subconscious feelings of warmth about the relationship with a child. It is possible that teachers want their relationships with ethnic minority children to be as close as those with ethnic majority children, although they may subconsciously feel less positive about a child from an ethnic minority. Additionally, we found that teachers acted less intentionally in their interactions with ethnic minority children, meaning that they were less inclined to promote social, emotional, or academic growth. Multiple studies have shown that children for whom positive relationships with their teacher are especially important are less likely to be selected as interaction partners (Muller, Katz, & Dance, 1999). Muller et al. (1999) found that a teacher's perception of a child's similarity to the teacher, social skills, and expressed desire for the relationship were all aspects that teachers take into account

in interactions with a child. Since most of the teachers in the Netherlands have a Dutch background (Thijs et al., 2012), minority children may be especially at risk for being excluded by their teacher as interaction partners because of a lack of similarity (Monroe & Obidah, 2004), possibly resulting in lower levels of intentionality.

Previous studies have disclosed that teachers perceive their relationships with inhibited children (i.e., children with emotional or internalizing symptoms) as less close compared to their relationships with uninhibited children (e.g., Zee & Koomen, 2017). The present study suggests that teachers feel less positive when it comes to increased emotional symptoms. Several authors have argued that children who tend to be quiet and avoid personal interaction present a challenge for teachers attempting to develop a positive relationship because children shy away from contact, and teachers may unintentionally neglect them in a classroom with many students (e.g., Chang & Davis, 2009). This may result in teachers feeling less connected with children who show emotional symptoms.

Limitations and Future Research

The strengths of our study lie in the fact that we collected the data on two separate occasions (with 4 months between waves) and that we had a relatively large sample of teacher–child dyads considering the time-consuming design of this study. Despite these strengths, some limitations must also be noted. First, although problem behaviors in children and teachers' relationship representations were assessed at different times during the school year, the design of this study remains correlational. Therefore, no conclusions about causation can be drawn. Longitudinal research may provide more insight into the order of effects.

Second, the probability of detecting significant effects was somewhat limited because of the relatively small number of teachers ($N=61$) in the present study. Indeed, post hoc power analysis revealed that the power to test statistically significant effects was .63, which is relatively low. It is therefore recommended to attempt to replicate these findings using a larger group of teachers to enable researchers to test more complex associations (including more variables) and potentially increase the statistical power.

Third, a larger sample size will also make it possible to perform a confirmatory factor analysis to reduce the number of outcomes. By reducing the number of outcomes, a clearer overview of the three dimensions of content, affect, and process may appear. In this study, the number of inferences was relatively large, which could lead to increased Type I errors. By reducing the number of outcomes, the number of inferences would be smaller, limiting the potential for spurious findings.

Fourth, the high correlation between hyperactivity and externalizing behaviors may have resulted in multicollinearity issues, such as inflation of variances. However, based on relatively small variance inflation factors and stable models, we assumed that multicollinearity did not play a large role in our regression analyses.

Conclusions and Implications

The results of the present study indicate that teachers have different implicit feelings and beliefs underlying their actions in relationships with children with different types of externalizing behavior. It seems that teachers have positive feelings and act sensitively in cases of hyperactive behavior. This is notable because a recent study found that teacher–child closeness or warmth can act as a protective factor against behavioral disengagement, especially for children with high levels of hyperactivity (Olivier & Archambault, 2017). Although this result seems promising for children with increased levels of hyperactivity, our study revealed a somewhat more negative picture for relationships between teachers and children with higher levels of conduct problems (or comorbid conduct problems).

School psychologists and teachers must increase their awareness of how behavioral problems and characteristics of children contribute to teachers' feelings and perceptions and evaluate how these problems influence their daily practices. It is possible that teachers need additional training in dealing with externalizing behaviors and the positive or negative emotions that follow certain behaviors. For instance, teachers should be urged to reflect on ways in which negative feelings about children's behaviors and characteristics emerge—ethnicity and conduct problems in particular—and how these emotions influence their daily practices. A school psychologist may be able to help teachers using relationship-focused reflection (Spilt, Koomen, Thijs, & van der Leij, 2012), which seems suitable to target teachers' beliefs and feelings about their relationships with a specific child. Teachers can be made aware of predominantly negative feelings toward children with conduct problems (or comorbid hyperactivity and conduct problems) and begin to think about how to alter these feelings. The relationship-focused reflection program, currently known as LLInC (Leerkracht Leerling Interactie Coaching in Dutch; or Teacher Student Interaction Coaching), has been shown to increase kindergarten teachers' sensitivity in interactions with a given child (Spilt et al., 2012). Future research could further examine the effects of relationship-focused reflection for teachers working with older children, especially in regard to children with higher levels of conduct problems.

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Date Received: August 29, 2018
Date Accepted: April 5, 2019
Associate Editor: Timothy Curby ■

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