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Dependency in teacher–child relationships: deepening our understanding of the construct

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ABSTRACT

Within an attachment perspective on teacher–child relationships three affective relationship dimensions have been identified: closeness, conflict, and dependency. Whereas a lot of research is available on relational closeness and conflict, far less is known about the construct of dependency. In this paper, we aim to further the conceptualization of child–teacher dependency in several ways. First, we define dependency as a relational construct, not a stable child characteristic. Second, we review relevant research on child–parent attachment to guide hypotheses regarding antecedents and developmental consequences of dependency in child–teacher relationships. Third, we provide an overview of attachment-based research on child–teacher dependency, highlighting unanswered questions, such as how its meaning and correlates may vary depending on cultural orientation and child developmental stage. The studies in this special issue address these questions, thereby deepening our understanding of this neglected relationship dimension.

KEYWORDS

Teacher–child relationships; dependency; secure-base; attachment; anxious–ambivalent

Ample research has demonstrated the role of teacher–student relationship quality for children’s academic and psychosocial development. An attachment perspective on teacher–student relationships typically identifies three affective relationship dimensions: closeness, conflict, and dependency (Birch & Ladd, 1997; Pianta et al., 1995). Whereas a lot of research is available on the antecedents and consequences of relational closeness and conflict, far less is known about the construct of dependency. Dependency as a relational dimension refers to the degree of overreliance of the child on the teacher and the extent to which the child displays clinginess and possessiveness toward the teacher (Pianta, 2001; Sabol & Pianta, 2012). Referring to the teacher’s role as ad hoc attachment figure for children, dependency has been hypothesized to indicate a lack of secure-base use of the teacher (Verschueren & Koomen, 2012). However, conceptual and empirical work on the construct of child–teacher dependency, its antecedents and consequences, and possible variations in its meaning across cultures or developmental stages is relatively scarce, leaving many questions unanswered.

This special issue addresses questions such as How can we measure child–teacher dependency? Does the construct of dependency and its associations with the other

relationship dimensions differ depending on culture or the developmental stage of the child? How do child and family factors, such as child temperament and child-parent attachment history, contribute to the development of child-teacher dependency? What is the developmental significance of child-teacher dependency, and do outcomes of dependency differ according to culture or child risk status. Together, the contributions aim to deepen our understanding of this teacher-child relationship dimension that has too often been neglected in research.

Attachment theory and dependency

When Bowlby (1969/1982) introduced the concept of attachment, he clearly distinguished it from dependency as it was conceptualized those days: *"The fact is that to be dependent on a mother-figure and to be attached to her are very different things"* (p. 228). Although both dependency and attachment partly refer to similar behaviors, such as seeking and maintaining contact with caregivers and eliciting nurturing behavior of them, there are clear differences between both constructs, that were gradually brought to the fore (Sroufe et al., 1983). Specifically, attachment was conceptualized as a relational construct, varying in quality across different caregiving relationships. Dependency, in contrast, was typically defined as an individual (acquired) trait. Also, attachment behavior, such as seeking contact and attention from adult caregivers, was considered biologically adaptive given that adults' proximity and availability are key to infants' survival. Hence, whereas children could be considered excessively dependent, they could *not* be considered excessively attached to their caregiver. Or, as noted by Bowlby (1969/1982): *"... whereas dependency in personal relations is a condition to be avoided or left behind, attachment is often a condition to be cherished"* (p. 229). Finally, it was emphasized that when children's bids for attention were effectively met by caregivers, this paved the way for autonomy later on, with children being able to balance smoothly between, on the one hand, self-reliance and individual mastery, and, on the other hand, effective help- and contact-seeking with adult caregivers when needed (Sroufe et al., 1983). This idea refers to the organizational perspective on development: Children may exhibit different behaviors across situations and time, but the underlying organization is coherent (Sroufe, 2005; Sroufe et al., 1983).

In this special issue, we do not refer to dependency as a stable, individual trait. Rather, it is defined as a relational construct indicated by a child's degree of overreliance on a particular adult caregiver, excessive and developmentally inappropriate help-seeking, and clinging behavior toward that caregiver. Although it is the child that shows dependent behavior toward the teacher, dependency is not seen as a stable child characteristic, but as a feature of child interactive behavior that may vary among different relationships children have (e.g., to mother, father, grandmother, teacher). Accordingly, teacher interactive behaviors are also assumed to play a role in the degree of dependency displayed by children.

To guide hypotheses regarding antecedents and developmental consequences of dependency in child-teacher relationships, attachment research on parent-child relationships can provide clues. Within child-parent attachment research, a relationship pattern marked by *"clinging, immature overdependency, preoccupation with attachment figures ... – all mixed with ambivalence"* (Cassidy & Berlin, 1994, p. 980) has clearly been demonstrated across childhood. This insecure attachment pattern, labeled as *"insecure-ambivalent"* or *"insecure-resistant"* attachment, has been consistently related to indices of inhibited exploration both with toys

and with peers. Specifically, research in laboratory and real-life situations has revealed that children with insecure-ambivalent attachment to their primary caregiver show more restricted exploration, are less interested in exploring novel aspects of the environment, show less imaginative symbolic play, and demonstrate more withdrawn behavior in relation to peers (see Cassidy & Berlin, 1994 for an overview of these studies). A recent meta-analysis has confirmed that early insecure-ambivalent attachment relates to higher risk for subsequent socio-emotional problems, most notably problems in interactions with peers (Groh et al., 2017a). Regarding its antecedents, insecure-ambivalent attachment has been linked to a combination of relatively low availability of caregivers and direct interference with children's exploration (Cassidy & Berlin, 1994), pointing to deficiencies in the attachment figure's functioning as a secure base from which to explore. In addition, recent meta-analytic findings suggest that, although associations between attachment quality and temperament are generally weak, insecure-ambivalent attachment shows a modest association with negative child temperament (Groh et al., 2017b), a link that may be moderated by family support and broader social support variables (e.g., Crockenberg, 1981; Wong et al., 2009).

An insecure-ambivalent pattern of attachment has not only been identified among infants but also among preschoolers and early elementary school children (Cassidy-Marvin system for preschoolers; Main-Cassidy system for 6-year-olds; Solomon & George, 2008). Moreover, also dimensional approaches to infant attachment identified an underlying dimension of resistance (Fraley & Spieker, 2003).

Overall, the findings regarding ambivalent child-parent attachment suggest that a relationship marked by an excessive, developmentally inappropriate overreliance of the child on the adult caregiver generally inhibits children's exploration of the environment, thus leading to negative developmental consequences for the child. Similarly, one may hypothesize that dependency in teacher-child relationships also forecasts negative educational and social outcomes.

Teachers as ad hoc attachment figures

Inspired by Pianta's (1992) pioneering work, scholars have applied attachment theory and research to increase understanding of the nature, antecedents, and consequences of teacher-child relationships for almost three decades. Complementing educational and motivational perspectives, an attachment perspective on teacher-student interactions stresses the importance of the *affective quality of dyadic* teacher-child relationships. In specific, attachment researchers have argued that, although for most children the relationship with the teacher cannot be defined as an attachment bond, teachers can be regarded as temporary or *ad hoc* attachment figures (Verschuere & Koomen, 2012; Zajac & Kobak, 2006). After all, teachers can provide a *secure base* for children to explore the learning and social environment, and a *safe haven* to turn to in times of stress (see Verschuere & Koomen, 2012 for a discussion of similarities and differences between parent-child and teacher-child relationships). Especially for younger and more vulnerable children, teachers' role as attachment figure is assumed to be key, as these children's attachment system gets activated more easily and their capacity for self-regulation is more limited (Verschuere & Koomen, 2012).

To assess the quality of teacher-child relationships from an attachment perspective, researchers have relied on (adapted) observational measures for child-parent attachment, such as Attachment Q-sort (AQS) assessments (e.g., Doumen et al., 2009; Pianta et al.,

1997). In a series of studies among preschoolers and their teachers, Howes and Ritchie (1999) combined AQS dimensional scores to create attachment organization categories. One of these categories, labeled “resistant insecure” shows striking resemblance to the pattern of insecure-ambivalent child-parent attachment, with fussy, crying, clinging, and demanding behavior towards the teacher (Howes & Ritchie, 1999).

Although observational assessments of teacher–student relationships have been applied occasionally, the most widely used measure to assess the affective quality of teacher–child relationships is a teacher-rated instrument, namely the Student–Teacher Relationship Scale (STRS; Pianta, 2001). The STRS assesses the teacher’s perceptions of the quality of the interpersonal relationship with a specific child, the interactive behavior of the child toward the teacher, and the child’s and teacher’s feelings and thoughts about each other. It evaluates three affective dimensions: closeness, conflict, and dependency. Closeness refers to the degree of warmth and openness in the relationship and the extent to which the child turns to the teacher for support and comfort. Conflict represents the degree to which a teacher perceives the interaction with the child as negative, discordant, unpleasant and unpredictable. Dependency refers to the degree of overreliance and possessiveness shown toward the teacher by the child, as perceived by the teacher (Koomen et al., 2012). Linking these dimensions to the secure base and safe haven function of teachers, Verschueren and Koomen (2012) have argued that whereas closeness refers primarily to children’s safe haven use of teachers, dependency primarily indicates that a child fails to use the teacher as a secure base from which to explore. It should be kept in mind, however, that secure base and safe haven functions of caretakers are highly interrelated.

A large body of research has supported the validity of the STRS. Its three-factor structure has been confirmed in several studies, both within the US (Pianta, 2001) and in other countries (Fraire et al., 2013; Koomen et al., 2012; Solheim et al., 2012; Tsigilis et al., 2018; Zhang, 2010). Moreover, teacher perspectives on relationship quality, assessed by the STRS, have been found to converge with teacher reports in narrative measures (Koenen et al., 2019; Spilt & Koomen, 2009), peer reports (Doumen et al., 2009; Zee et al., 2020), student reports (Chen et al., 2019; Doumen et al., 2009; Henricsson & Rydell, 2004; Koomen & Jellesma, 2015; Vervoort et al., 2015; Zee & Koomen, 2017), and observer ratings of dyadic teacher–student interactions (Doumen et al., 2012; Henricsson & Rydell, 2004).

Research on child-teacher dependency

Whereas a large body of research, mainly using the STRS, has shed light on the antecedents and consequences of closeness and conflict in teacher–student relationships (e.g., Lei et al., 2016; McGrath & Van Bergen, 2015; Nurmi, 2012; Roorda et al., 2011, 2017; Sabol & Pianta, 2012 for reviews), much less is known about the antecedents and developmental sequelae of child-teacher dependency. This is in large part due to the fact that the original STRS scale for Dependency tended to show low internal reliability (Koomen et al., 2012). As a consequence, many researchers have refrained from measuring or reporting on this relationship dimension.

The studies that did assess child-teacher dependency have shown that children who are perceived as dependent by their teacher, are observed to show the expected ambivalent pattern of more physical contact seeking in interactions with this teacher, but also more fussy and difficult behavior and less compliance with the teacher’s wishes (Doumen et al., 2009).

With regard to antecedent child behaviors, several longitudinal studies pointed to internalizing and externalizing problems in the early school years as precursors of child-teacher dependency in later years (Arbeau et al., 2010; Birch & Ladd, 1998; Henricsson & Rydell, 2004; Howes et al., 2000). Prosocial behavior has been reported to predict less dependent relationships in later years (Howes et al., 2000). Similar associations with internalizing, externalizing, and prosocial behaviors were found in the meta-analysis of Nurmi (2012) summarizing the results of cross-sectional as well as longitudinal studies. Overall, however, the number of studies in the meta-analysis considering relational dependency ($n = 15$) was strikingly smaller than the number of studies examining relational closeness ($n = 37$) and conflict ($n = 47$). Even fewer studies have considered possible antecedent teacher (interactive) behaviors. As an exception, Henricsson and Rydell (2004) found that independently observed dyadic teacher-child interactions characterized by mutual anger contributed to more dependency in teacher-child relationships the next school year, beyond the effect of child behavior problems. In terms of developmental consequences, longitudinal research has shown that higher child-teacher dependency forecasts lower gains in working memory skills (Vandenbroucke et al., 2018). This is in line with the assumption that excessive dependency on teachers impedes children's exploration of the learning environment, limiting opportunities to practice and develop cognitive skills. Furthermore, students with increasing levels of dependency from kindergarten to Grade 6 showed lower achievement and motivation at the end of elementary school compared to students with a normative trajectory of decreasing dependency (Bosman et al., 2018). In addition, higher child-teacher dependency has also been found to relate to increases in behavioral problems over time, including internalizing problems (e.g., Arbeau et al., 2010; Roorda et al., 2014). However, other studies examining developmental sequelae of child-teacher dependency showed null or even contrasting findings (Birch & Ladd, 1998; Garner et al., 2014; Ladd & Burgess, 1999; Sette et al., 2013), suggesting that child or context factors, such as child developmental period, risk status or cultural background, may moderate its effects.

With this special issue, we seek to further our understanding of the construct of child-teacher dependency. Largely relying on attachment theory and research, we aim to shed more light on its antecedents and developmental consequences. Also, we seek to provide more insight into how child-teacher dependency and its correlates may differ according to cultural orientation, child risk status, and child developmental stage. Finally, we aim to contribute to the assessment of child-teacher dependency, by testing the validity and the interrelations of different dependency measures.

Overview of studies

To shed light on the developmental consequences of child-teacher dependency for children's academic and behavioral adjustment, Roorda et al. (2021) summarized the currently available and mixed evidence using meta-analysis. (Longitudinal) associations between, on the one hand, child-teacher dependency, and, on the other hand, children's school engagement, achievement, externalizing, internalizing, and prosocial behavior were estimated. The study tested the attachment-based assumption that when children fail to use their teacher as a secure base, such relationships prevent them from autonomously exploring the learning and social context, thus leading to more difficulties in academic and behavioral adjustment. Also, the moderating role of student and teacher characteristics was examined, testing if

associations would be stronger for certain (risk) groups of students, such as ethnic minority students, and students from higher grades, and for certain groups of teachers. In addition, two longitudinal studies provided insight into the consequences of child-teacher dependency. In a sample of Portuguese preschoolers, Ferreira, Cadima, Matias, Leal, and Mena Matos (2021) examined the role of child-teacher dependency in predicting children's effortful control. In a US-sample, Neuhaus et al. (2021) investigated if child-teacher dependency in preschool provides a pathway through which early child-mother attachment is associated with children's behavior problems across middle childhood.

Regarding the antecedents of child-teacher dependency, two longitudinal studies (Neuhaus et al., 2021; Verschueren & Spilt, 2021) tested the link between early child-parent attachment quality and later dependency in relationships with teachers, building on Bowlby's central hypothesis that secure attachments to primary caregivers provide the foundation for children's later self-reliance. These studies examined if early insecure child-parent attachments forecast increased dependency on teachers, as expected based on attachment theory and research (Sroufe, 2005; Sroufe et al., 1983). Verschueren and Spilt also examined the antecedent role of child temperamental inhibition to the development of child-teacher dependency and its interplay with child-parent attachment quality, relying on contemporary temperament theories.

With regard to cultural variations, two studies in this special issue (Ferreira et al., 2021; Gregoriadis et al., 2021) examined the relational and behavioral correlates of child-teacher dependency in countries with a heightened collectivistic orientation (Portugal and Greece). This is important given that most empirical studies on child-teacher dependency have been conducted in countries with more individualistic cultural orientations. Both studies examined interconnections between child-teacher dependency, closeness, and conflict. Ferreira and colleagues through the teacher's perception, using the STRS. Gregoriadis and colleagues tested these interrelations using a child-rated measure (CARTS) in addition to the STRS.

Regarding the measurement of child-teacher dependency, the studies included in this special issue all used the STRS Dependency scale to assess child dependency from the teacher's perspective. In addition to teacher reports, also child reports (Gregoriadis et al., 2021) and observer ratings (Verschueren & Spilt, 2021) were used. This allows to test the generalizability of findings across informants. In addition, the study of Gregoriadis and colleagues tested the construct validity of the Child Appraisal of Relationship with Teacher Scale (CARTS), developed to assess closeness, conflict and dependency from the child's perspective. The study of Ferreira (2021) also contributed to the construct validation of the STRS, by assessing its longitudinal measurement invariance.

Finally, Kathleen Rudasill comments on the five papers from the viewpoint of an educational psychology researcher. Alan Sroufe closes the special issue by reviewing the papers from an organizational developmental perspective on attachment.

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No potential conflict of interest was reported by the author(s).

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