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Emotion-Related Socialization in the Classroom: Considering the Roles of Teachers, Peers, and the Classroom Context

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**Emotion-Related Socialization in the Classroom:
Considering the Roles of Teachers, Peers, and the Classroom Context**

Abstract

The goal of this paper was to apply aspects of the heuristic model advanced by Eisenberg, Cumberland, and Spinrad (1998) to the study of socialization that takes place in preschool and elementary school classrooms. Investigating socialization in this context is important given the number of hours students spend in school, the emotional nature of social interactions that take place involving teachers and students, and the emotions students often experience in the context of academic work. Guided by Eisenberg and colleagues' (1998) call to consider complex socialization pathways, we focus our discussion on ways teachers, peers, and the classroom context can shape students' emotion-related outcomes (e.g., self-regulation, adjustment) and academic-related outcomes (e.g., school engagement, achievement) indirectly and differentially (e.g., as a function of student or classroom characteristics). Our illustrative review of the intervention literature demonstrates that the proposed classroom-based socialization processes have clear applied implications, and efforts to improve socialization in the classroom can promote students' emotional and academic competence. We conclude our discussion by outlining areas that require additional study.

Keyword: Socialization; Teachers; Peers; Classroom context; Adjustment; Academics

Emotion-Related Socialization in the Classroom:

Considering the Roles of Teachers, Peers, and the Classroom Context

In their seminal paper, Eisenberg, Cumberland, and Spinrad (1998) organized and advanced much of the parental socialization literature and provided a heuristic model to guide research efforts toward understanding whether, when, and why parents influence children's social behavior and competence. The data reviewed by Eisenberg, Cumberland, et al. (1998), along with subsequently published findings, indicate that parents play a critical role as socializers of developmental outcomes. At the same time, Eisenberg et al.'s model and the broader socialization literatures provide reasons to consider other sources of emotion-related socialization, beyond parents and home environments—an idea in keeping with Eisenberg et al.'s own assessment: "It is not surprising that relations between most parental emotion-related behaviors (e.g., reactions and expressivity) and child outcomes are not very strong or highly consistent. There are many socializing forces besides parents, including siblings, peers, and teachers" (Eisenberg, Cumberland, et al., 1998, p. 267). Our goal, therefore, was to build upon the heuristic model advanced by Eisenberg and colleagues to include emotion-related socialization that takes place in the classroom. In particular, we discuss work highlighting mechanisms involved in how teachers, peers, and the classroom context can foster important aspects of students' emotion- and academic-related outcomes. We then turn our attention to discussing intervention efforts that provide experimental support for the pathways outlined in the proposed heuristic model, and we conclude with recommendations for future research. Based on the broad literature covering the preschool and elementary years, and the importance of this developmental period for later functioning (Vitaro, Brendgen, Larose, & Trembaly, 2005; Vitaro, Brendgen, & Tremblay, 2014), we focus on socialization in the preschool and elementary years, recognizing that the processes we describe likely apply, but may be somewhat different, as students age.

A primary contribution of Eisenberg, Cumberland, et al.'s (1998) target article was their recommendation to consider that socialization processes are likely more complex than had been traditionally considered, and investigations must reflect this conceptually and statistically. Central to this idea is the importance of testing processes and mechanisms that might mediate or moderate

associations linking emotion-related socializing behaviors (ERSBs) to students' outcomes, as well as considering how ERSBs could mediate or moderate other processes, all within the context of longitudinal designs capable of accommodating bidirectional relations. For example, Eisenberg, Cumberland, et al. (1998) hypothesized that the association between parental characteristics (e.g., parental regulation, emotionality) and children's social and behavioral competence is mediated by parents' ERSBs or moderated by children's sex, age, or temperament.

The heuristic model presented in Figure 1 illustrates our application of many of these ideas into classrooms. We posit that teachers' social-emotional functioning, peers' social-emotional and academic functioning, and the classroom context are related to students' emotion- and academic-related outcomes, in part, through emotion-related interactions among classroom actors. Although we propose that the socialization process influences student outcomes, the double-headed arrows at each pathway reflect our belief that reciprocal—and even cascading—processes involving actions and reactions between members of the classroom exist (Pianta & Walsh, 1996). For example, student outcomes may predict the student-teacher relationship (STR) quality, peer interactions, the learning environment, or teachers' stress and peer achievement. Although not depicted for parsimony, we acknowledge that student characteristics (e.g., age, sex, temperament) and other constructs considered here (e.g., STR-quality, the learning environment, peers' emotion) likely moderate the hypothesized pathways. Further, while recognizing that student characteristics are often related to the central constructs in Figure 1, we do not focus on describing direct effects from these variables given our goal to illustrate processes involving teachers, peers, and the classroom context. Consistent with Eisenberg, Cumberland, et al.'s (1998) approach, we provide an illustrative, rather than comprehensive, review of relevant mechanisms involved in classroom-based socialization.

Socialization in the Classroom Context

According to Eisenberg, Spinrad, and Cumberland (1998), emotion-related socialization involves behaviors that shape children's emotionality, self-regulation, emotion-related behaviors, and learning of content. Emotion-related socialization is likely to take place in preschool and elementary classrooms, in part because most elementary-aged students in the USA spend approximately 6-7 hours

per day, for up to 180 days a year in classrooms (Rowland, 2014). Children who attend preschool often spend even more time in school settings. During much of this time students are expected to sit still, focus attention, delay desired activities, engage in social interactions, and participate in a host of other deliberate, effortful tasks associated with the student role (Rimm-Kaufman, Pianta, & Cox, 2000). Importantly, in early formal schooling, these experiences take place during an important developmental period when students are learning about emotions and contextually appropriate behaviors (Raver, 2002; Rothbart, Sheese, & Posner, 2007).

The emotional nature of classrooms represents another primary reason to study socialization in school. Students frequently experience a range of emotions throughout the day, including anxiety regarding academic performance or test-taking, sadness stemming from difficult social interactions, frustration from the difficulty of learning a new academic concept, and joy in response to earning good grades (Pekrun & Linnenbrink-Garcia, 2014). Teachers also frequently report significant amounts of work-related stress and a range of different emotions across the school day (Frenzel, 2014; Montgomery & Rupp, 2005). Moreover, elementary classrooms are typically comprised of numerous students and at least one teacher, whose unique emotional histories and competencies collectively contribute to the overall context.

Taken together, classrooms present numerous opportunities for teachers, peers, and the classroom context to shape student outcomes. Here, we focus on facets of students' emotion-related outcomes (e.g., self-regulation, social competence, problem behaviors) and academic-related outcomes (e.g., academic engagement, achievement). Emotion-related outcomes are important both as developmental outcomes in their own right, and as antecedents of academic-related outcomes (Brackett, Rivers, & Salovey, 2011; Dodge, Coie, & Lynam, 2006; Liew, Valiente, Hernández, & Abrera, 2019). Indeed, our model incorporates many findings published since Eisenberg, Cumberland, et al.'s (1998) paper which show that emotion-related outcomes may serve as a potential mechanism linking socialization processes to academic-related outcomes.

When discussing extant empirical findings, we first consider direct effects on relevant emotion-related outcomes. We then discuss direct effects on academic-related outcomes. When data are

available, we then discuss indirect effects, bidirectional relations, and moderated effects.

Teachers as Socializing Agents

Teachers of young students are charged with the task of guiding students toward proficiency in a range of academic topics. At the same time, teachers in the early grades often directly and indirectly instruct students in social-emotional competence, such as how to get along with diverse peers and strategies to focus on and follow directions. Consequently, consistent with Eisenberg, Spinrad, et al.'s definition (1998) of emotion-related socialization, teachers are prime candidates to consider as socializers of emotion-related behaviors. We posit that facets of teachers' social-emotional functioning (e.g., stress, emotion, self-regulation, mental health) and emotion-related interactions (e.g., teachers' reactions to students' emotional displays, STRs) are teacher-related socializing variables.

Teachers' social-emotional functioning. When discussing the parenting literature, Eisenberg, Cumberland, et al. (1998) recommended scholars consider the role of parental characteristics (e.g., temperament) as predictors of child outcomes. Consistent with this approach, and informed by more recent scholarship, we believe it is critical to consider the role of similar constructs for teachers. Given the stressful and emotional nature of teaching, we focus on teachers' stress, emotion, self-regulation, and mental health as important socializing aspects of their social-emotional functioning.

Teachers have a challenging job, involving long hours, often without meaningful breaks, for low pay and appreciation, and little training in classroom management (Greenberg, Brown, & Abenavoli, 2016; Jennings & Frank, 2015). Not surprisingly, teachers generally report high levels of stress stemming from job pressures (Greenberg et al., 2016). Teachers' stress involves the experience of negative emotions (e.g., anxiety, anger, guilt, shame, pity) resulting from occupational demands throughout the school day (Frenzel, 2014; Kyriacou, 2010). When these feelings are prolonged, there is risk of cascading negative interactions associated with burnout and lower levels of teacher commitment, with implications for students' emotion- and academic-related outcomes (Chang, 2009; Jennings & Greenberg, 2009; Jones & Youngs, 2012; Lambert, McCarthy, Fitchett, & Eyal, 2018).

Teachers' stress is related to many of the constructs outlined in Figure 1. For example, teachers' stress is related to declines in kindergartners' executive functioning (Neuenschwander,

Friedman-Krauss, Raver, & Blair, 2017) and negatively related to students' social competence (Siekkinen et al., 2013). Teachers' stress is often related to leaving the profession, which is problematic given evidence that turnover is negatively related to students' English and math scores (especially for Black and low performing students) and total years of experience in the same grade is associated with increases in students' reading (Huang & Moon, 2009; Ronfeldt, Loeb, & Wyckoff, 2013). Recent reports provide evidence that teachers' stress is also related to key aspects of the learning environment and STR conflict (Friedman-Krauss, Raver, Morris, & Jones, 2014; Whitaker, Dearth-Wesley, & Gooze, 2015). In a study involving Finnish students, the relation between teachers' stress and students' reading skills was indirect, via students' engagement (Pakarinen et al., 2010). The findings that students' externalizing problems, attention-deficit/hyperactivity related behaviors, and teachers' perception and management of misbehavior predict teachers' stress and burnout support the feedback loop included in Figure 1 connecting student outcomes to socialization agents (Friedman-Krauss, Raver, Morris, et al., 2014; Friedman-Krauss, Raver, Neuspiel, & Kinsel, 2014; Greene, Beszterczey, Katzenstein, Park, & Goring, 2002; Kokkinos, 2007).

As displayed in Figure 1, teachers' emotion might be related to students' emotion- and academic-related outcomes via the quality of the STR and classroom processes that are proximally related to key student outcomes (Jennings & Greenberg, 2009; Pianta, La Paro, Payne, Cox, & Bradley, 2002; Schonert-Reichl, 2017; Sutton & Wheatley, 2003). There is some, albeit limited, evidence that teachers' emotion is related to student outcomes. For example, teachers' expression of negative emotion has been negatively related to students' prosocial behavior (Morris, Denham, Bassett, & Curby, 2013). Beilock, Gunderson, Ramirez, and Levine (2010) found that teachers' anxiety about teaching math (but not anxiety at levels typically associated with a mental health condition) was negatively related to girls', but not boys', math achievement. In contrast, when teachers experience positive emotions their facilitation of a positive learning environment appears to positively relate to students' engagement and retention of information (Frenzel, 2014; Minor, Onwuegbuzie, Witcher, & James, 2002; Sutton, 2007). The processes linking teachers' positive emotion to student outcomes can be partially understood from the Broaden and Build Theory of Positive Emotions (Fredrickson, 2001).

Specifically, teachers who experience positive emotions are likely to be creative, flexible with obstacles that arise during the school day, effective in building high-quality relationships, and able to provide cognitively stimulating classrooms that contribute to students' own ability to regulate emotions, engage in school, and achieve (Frenzel, 2014). Indeed, elementary teachers' emotional ability (e.g., the ability to recognize, label, and regulate emotions) has predicted their instructional ability, as well as their ability to facilitate a positive social environment (Brown, Jones, LaRusso, & Aber, 2010).

Beyond teachers' stress and emotionality, there are reasons to believe that teachers' self-regulation is relevant to ways teachers socialize students. In fact, there is recent evidence that teachers' self-regulation is related to students' self-regulation (Bardack & Obradović, 2019). This relation may exist because teachers report consciously regulating their emotion to improve their management of student behavior (Taxer & Gross, 2018), and teachers high in self-regulation serve as good role models when they effectively monitor and manage their own attention, emotions, words, and behaviors (Swanson, Valiente, Bradley, Lemery-Chalfant, & Abry, 2016). It may be that teachers high in self-regulation are better able to react more supportively to deviations in classroom routines and students' emotional outbursts than poorly regulated teachers (Swartz & McElwain, 2012). In turn, they should consistently facilitate the classroom's day-to-day functioning and long-term learning objectives (Sutton & Wheatley, 2003). In addition to shaping the classroom context and student outcomes, teachers high in self-regulation create learning opportunities for students to develop optimal management of emotions, relationships, and behaviors, all of which are important for success in school (Raver, Blair, & Li-Grining, 2012). Conversely, teachers low in self-regulation often cannot adequately supervise and manage classroom goals, resulting in a chaotic classroom, poor student support, and risk for burnout; these teachers may experience more frequent and intense conflict with students than their colleagues, and they can lose valuable instructional time engaging with disruptive students (Lavy & Eshet, 2018; Raver et al., 2012). In support of the proposed mediating pathways, Swanson and colleagues (2016) found support for the premise that STR conflict is a mechanism linking second-grade teachers' effortful control (i.e., a self-regulation component of temperament, Eisenberg, Duckworth, Spinrad, & Valiente, 2014) to their students' externalizing behaviors.

As displayed in Figure 1, teachers' mental health represents another important component of teachers' social and emotional functioning that is germane to student outcomes. Although many facets of teachers' mental health are potentially relevant, including anxiety, depression, post-traumatic stress disorder, and obsessive-compulsive disorder, we focus on teachers' depression given that this is the topic that has received the most extensive attention in the empirical literature. Teachers' depression likely contributes to how well teachers cope with the emotional and occupational demands of the job, to how positively they interact with students, and to the learning environment of the classroom (Gray, Wilcox, & Nordstokke, 2017), all of which are likely related to student outcomes. In support of these ideas, findings from a study of preschoolers demonstrated that teachers' depressive symptoms were positively related to students' problem behaviors and negatively related to students' social skills (Roberts, LoCasale-Crouch, Hamre, & DeCoster, 2016). Further, elementary teachers' depression has been negatively related to students' math achievement (especially for students who entered the school year low in achievement) and the relation was mediated by the quality of the learning environment (McLean & McDonald Connor, 2015). Recent work also demonstrates that preschool teachers' depression has been negatively related to their facilitation of a positive learning environment (e.g., instructional support and classroom organization) and high-quality relationships (Hamre & Pianta, 2004; Sandilos et al., 2015).

Teachers' reactions to students' emotions. Children experience many emotions throughout the school day, often in the presence of teachers. As discussed by Eisenberg, Cumberland, et al. (1998) and Denham, Bassett, and Zinsler (2012), adults' reactions to children's emotional expressions instruct and model appropriate contextual and cultural social-emotional behaviors. Teachers may react in supportive, constructive ways which encourage students' expression and management of their own negative emotions, or teachers can react in invalidating ways that do not take students' perspectives into account. In general, socializers' positive reactions are expected to involve permitting students to express emotions freely and to validate students' experience without minimizing or punishing them for the emotional display. Negative reactions tend to involve making light of the students' experience or threatening punishment for the emotional outburst, sometimes accompanied by socializers' own

distress (e.g., frustration, anger, anxiety). Teachers' social-emotional functioning likely plays a part in how they react to students' emotions, as well as how they facilitate an environment in which students feel safe to express emotions (Jennings & Greenberg, 2009). In partial support of this idea, preschool teachers' social-emotional functioning (a composite of depression, stress, and emotional exhaustion) has predicted their negative reactions, whereas teachers' emotion regulation and coping abilities predicted their positive reactions (Buettner, Jeon, Hur, & Garcia, 2016).

In one of the few studies to examine associations between teachers' reactions and student outcomes, Bassett et al. (2017) found that preschoolers expressed more positive emotion and were more social-emotionally competent, including experiencing emotion-regulation gains, when teachers were low in negative reactions. Moreover, consistent with the premise that student characteristics may moderate the pathways outlined in Figure 1, associations were strongest for students low in surgency (a component of temperament). Similarly, Swanson and Valiente (2019) found an interaction between second-grade teachers' positive reactions and students' temperament, such that teachers' reactions were most strongly positively associated with high-quality teacher- and peer-relationships for students low in effortful control and high in impulsivity and shyness. The limited theory and empirical data support the contention that teachers' reactions to students' emotions represent emotion-related socialization behaviors.

Student-teacher relationship quality. STR-quality is commonly studied as one way teachers shape students' emotion- and academic-related outcomes. Informed by attachment and self-determination perspectives (Niemi & Ryan, 2009; Verschueren & Koomen, 2012), interactions and personal connections between teachers and students are generally conceptualized in terms of closeness and conflict. Close, minimally conflictual STRs can provide students with a secure base from which they can actively and confidently explore their classrooms and engage in active learning (Verschueren & Koomen, 2012). A high-quality relationship can also provide students with an external source of stress-regulation, which allows them to direct their energies toward classroom tasks and constructive interactions with peers and teachers (Hughes, 2012).

There is mounting evidence of associations between the STR and markers of preschool and

elementary students' self-regulation, compliance, social competence, and problem behaviors (Acar et al., 2018; Crockett, Wasserman, Rudasill, Hoffman, & Kalutskaya, 2018; Hamre et al., 2013; Maldonado-Carreno & Votruba-Drzal, 2011; Portilla, Ballard, Adler, Boyce, & Obradovic, 2014; Williford, Vick Whittaker, Vitiello, & Downer, 2013). In addition, decades of research supports the premise that STR-quality is related to students' emotional and behavioral engagement and academic achievement (Baker, Grant, & Morlock, 2008; Hernández et al., 2016; Hughes, Wu, Kwok, Villarreal, & Johnson, 2011; Maldonado-Carreno & Votruba-Drzal, 2011; McCormick, O'Connor, Cappella, & McClowry, 2013). In a multi-year longitudinal study, Spilt Hughes, Wu, and Kwok (2012) demonstrated that chronic STR conflict across grades 1-5 significantly predicted low student achievement. Further, investigators have outlined mediating mechanisms, such as the overall classroom learning environment and students' emotional or behavioral engagement (Hughes, Luo, Kwok, & Loyd, 2008; Roorda, Jak, Zee, Oort, & Koomen, 2017; Rucinski, Brown, & Downer, 2018). Consistent with the transactional processes depicted in Figure 1, elementary students' effortful control predicts the STR (Portilla et al., 2014), and the STR mediates the relations between students' temperament and academic outcomes (Hernández et al., 2016; Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008), highlighting the need for longitudinal investigations to test for reciprocal relations. In support of the hypothesis that student characteristics can operate as moderators, associations between STR-quality and student outcomes are sometimes moderated by students' sex or problem behaviors (Hamre & Pianta, 2001; McCormick & O'Connor, 2015; Spilt et al., 2012).

Summary. The pattern of findings is consistent with the premise that teachers operate as socializers of students' emotion- and academic-related outcomes. At the same time, there are limitations in this literature that need to be addressed. First, there is an overreliance on teacher-reported data. Several research groups have demonstrated the value of obtaining students' perspectives of the STR and classroom environment beginning in third grade (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Rucinski et al., 2018; Sandilos, Rimm-Kaufman, & Cohen, 2017). Second, there is a need to consider other aspects of teachers' mental health beyond depression, especially positive aspects of mental health that may relate to teachers' self-regulation, reduced burnout, and

positive student outcomes (Beltman, Mansfield, & Price, 2011). Third, more work must test why teachers' social-emotional functioning is associated with student outcomes (e.g., indirectly via emotion-related interactions or the classroom context) and especially for whom (e.g., differentially depending on child, teacher, or context characteristics) relations exist.

Peers as Socializing Agents

Students' numerous interactions with peers throughout the school day are believed to be related to students' emotion- and academic-related outcomes. This idea is in keeping with Eisenberg, Cumberland, et al.'s (1998) perspective that peers are important emotion-related socializers, especially because of the value students place on peer interactions (Asher & Coie, 1990). At the same time, when compared to the parenting and teaching literature, consideration of peers as socializers is more limited, especially during the preschool and elementary years. This is due, in part, to the shifting and complex nature of peer relationships that render them difficult to assess and analyze. Unlike students' social interactions and relationships with parents or teachers, which represent an unbalanced power-hierarchy and in which children are typically mandatory participants, associations with peers are often voluntary; either member of the dyad can decide to engage in, or dissolve, the relationship at any time. Nevertheless, because students strongly value peer relationships and often match their behaviors to the behaviors of their peer group, peers are believed to influence student outcomes (King, McLaughlin, Silk, & Monahan, 2018).

Peer influence can be described as the process whereby one child changes, or is changed by, another child (Laursen, 2018). Influence indicates that an individual behaves in such a way that they would not have acted alone. This change in behavior is attributed to a desire to match peers in behavior or ability level. Peer influence can take place because peer interactions create social and behavioral norms, such as prosocial versus antisocial interaction norms, self-regulated versus dysregulated interaction norms, and norms around social inclusion versus exclusion (Blackhart, Baumeister, & Twenge, 2006). Peers also provide social resources, opportunities for collaboration, and sources of support during the learning process (Wentzel & Watkins, 2002). In this section, we illustrate how peer influence may unfold to shape students' emotion- and academic-related outcomes by focusing on

peers' social-emotional and academic functioning (e.g., problem behavior, prosocial behavior, achievement, emotion and self-regulation). We also consider the potential roles of positive and negative peer interactions in the classroom.

Peers' social-emotional and academic functioning. Scholarly inquiries regarding how peer functioning can contribute to students' emotion- and academic-related outcomes are built upon evidence that spending time engaging in high-quality peer interactions is associated with positive emotion- and academic-related outcomes (Rubin, Hymel, & Mills, 1989). The peers a child decides to select (or deselect) as interaction partners further contributes to the classroom context that may either foster or hinder emotional and academic success (Gest & Rodkin, 2011; Ladd, Birch, & Buhs, 1999; Wentzel & Caldwell, 1997).

The existing peer work describes peer functioning in terms of the influence of peer interactions at the dyadic level and peer social group level. In line with literature demonstrating the importance of parents' and teachers' providing an intellectually stimulating environment, as shown in Figure 1, peers' social-emotional and academic functioning are expected to influence students outcomes, as described within a number of theoretical frameworks, including (a) disequilibrium models (e.g., observed differences between the self and a peer create cognitive dissonance that children aim to eliminate, Juvonen & Galván, 2008); (b) social interaction models (e.g., positive reinforcement in the context of peer interactions, Dishion, Spracklen, Andrews, & Patterson, 1996); and (c) individual needs models (e.g., attachment needs, Ainsworth, 1989; see Kindermann, 2016, for a more complete review of theories of peer influence).

Consistent with these ideas, there is evidence that affiliation with aggressive and prosocial peers is associated with emotion- and academic-related outcomes (see Dishion & Tipsord, 2011, for a more comprehensive review of peer contagion). Illustratively, Snyder, Horsch, and Childs's (1997) finding that aggressive preschoolers have a preference to play together, and that their interactions predict increases in aggression, supports the premise that peer problem behaviors are associated with emotion-related outcomes. Likewise, preschoolers who affiliate with prosocial peers experience more positive emotions and fewer dysregulated emotions, even when controlling for prior levels of the same

outcome (Fabes, Hanish, Martin, Moss, & Reesing, 2012). Of particular relevance here, Dishion and Tipsord (2011) suggest that peer contagion can result from maladjusted peer relationships, with implications for poor emotion- and academic-related outcomes.

Peers' achievement may relate to individual student outcomes because interactions with high-achieving peers offer opportunities for the types of positive peer interactions that facilitate regulated behaviors, collaborative learning, and participation in joint academic engagement (Wentzel & Watkins, 2002). Although we are unaware of studies linking peer achievement to emotion-related outcomes, higher-achieving peers positively contribute to the mathematical reasoning of lower-achieving students, even when controlling for parental effects (DeLay et al., 2015). Likewise, preschoolers' early academic performance is positively related to their peers' academic aptitude (Henry & Rickman, 2007). Furthermore, peers' expressive language is positively related to students' language abilities, particularly for students high in initial levels of language abilities (Mashburn, Justice, Downer, & Pianta, 2009). Student characteristics, such as academic motivation, self-regulation and negative emotion may further moderate the strength of peer influence (DeLay, Laursen, et al., 2016; Nocentini, Palladino, & Menesini, 2019). These relations may occur because friendship is a context in which strong emotional bonds may form that make children particularly influential and/or susceptible to peer influence in a variety of social, behavioral, and academic domains. Highly academically motivated students may be more susceptible to peer influence toward improved academic functioning than less-motivated students because they similarly value achievement, making influence toward heightened levels of academic achievement more salient to these motivated students.

Recently, scholars have examined the roles of peers' emotion and self-regulation for students' STR-quality, engagement, and academic achievement (Hernández, Valiente, Eisenberg, & Spinrad, 2019; Johns et al., 2019). The expectation is that students will perform better socially and academically when they interact with peers high in effortful control and positive emotion or low in negative emotion, partly because such peers may be less distracting and may foster a better classroom experience. Studies directly linking peers' emotion or self-regulation to students' emotion-related outcomes have yet to be published (to our knowledge). Nevertheless, there is emerging evidence that peers' negative

emotion is positively related to STR conflict and negatively related to STR closeness, whereas peers' positive emotion and effortful control predict low STR conflict primarily when students are low in effortful control (Hernández et al., 2019). In addition, Johns et al. (2019) found that the links between kindergartners' negative emotionality and changes in their academic-related outcomes were strongest for those with peers low in negative emotion and high in effortful control. Further, second graders' effortful control predicted higher reading scores most strongly for those with peers with low negative, or high positive, emotionality (Hernández et al., 2019). Although early in this line of inquiry, the pattern presented here suggests that peers' emotion and self-regulation play a role in elementary-school students' relationships and achievement.

Positive peer interactions. Positive peer interactions provide a rich relationship context believed to relate to students' emotion- and academic-related outcomes. It is likely that the most common form of positive peer interaction occurs in the context of friendships. Friends foster a sense of well-being, socialize one another, and support one another in moving through developmental transitions and activities (Hartup & Stevens, 1999). In fact, having at least one friend promotes emotion-related outcomes such as behavioral and emotional health (Laursen, Bukowski, Aunola, & Nurmi, 2007). The positive nature of peer interactions, beyond mere exposure to peers, is critical for students' emotional competence, including self-regulation (King et al., 2018; Klimes-Dougan et al., 2014). These relations may exist because supportive friends offer protection from emotional problems, such as internalizing symptoms after exposure to peer victimization (Schmidt & Bagwell, 2007; Thompson & Leadbeater, 2013). Even one high-quality peer interaction can improve students' emotional health even when faced with social rejection and isolation (Hodges, Boivin, Vitaro, & Bukowski, 1999).

Friendships are also important for students' achievement. When students were encouraged to engage in prosocial peer interactions, social influence toward improved learning outcomes was more likely to occur (DeLay, Zhang, et al., 2016). In a rare study involving multiple sources of influence (e.g., students' cognitive maturity, family characteristics, STR), Ladd and colleagues (1999) found an indirect association between the number of kindergartners' mutual best friends and achievement via students' engagement. More research is necessary, however, to disentangle the specific characteristics of

friendships that foster social influence toward improved, rather than diminished, emotional and academic functioning.

Negative peer interactions. Bully-victim interactions, which are representative of many types of negative peer interaction, are relevant to students' emotion- and academic-related outcomes. This form of negative peer treatment, or negative reactions to peers, occurs at all grade levels and provides a means whereby peers socialize students to interact in maladaptive ways. Exposure to victimization is associated with many emotion- and academic-related outcomes, including lower levels of self-regulation, engagement, achievement, and attendance (Iyer, Kochenderfer-Ladd, Eisenberg, & Thompson, 2010; Juvonen, Nishina, & Graham, 2000; Rudolph, Troop-Gordon, Hessel, & Schmidt, 2011). Victimization is positively related to problem behaviors, which, in turn, is negatively related to engagement in school activities and academic performance (Juvonen et al., 2000; Schwartz, Gorman, Nakamoto, & Toblin, 2005). Although scholars are learning more about the developmental trajectories of victimized youth (Ladd, Ettekal, & Kochenderfer-Ladd, 2017), it is unclear how and why the bully-victim dyad forms and how stable these relationships and their influence are over time. Given evidence that students' aggression is predictive of increases in later victimization (Kochenderfer-Ladd, 2003), it is likely that there are reciprocal relations between emotion-related outcomes and negative peer interactions.

Summary. The empirical examples reviewed illustrate how peers' social-emotional and academic functioning might render students influential or susceptible to peer influence. For example, relative levels of academic interests, achievement, peer acceptance, emotion and self-regulation in the peer group might moderate the process of peer influence in the classroom. Furthermore, various types of peer interactions influence student outcomes, including students' self-regulation in the classroom and academic success (Wentzel, Jablansky, & Scalise, 2018). More research is needed on the direct links between the creation of positive new peer relationships that lead to changes in the classroom context that then, in turn, lead to more positive child emotional and academic outcomes. Likewise, although there is some evidence of bidirectional relations between peer liking and STR-quality (Hughes & Chen, 2011), the relations between peer interactions in the classroom and teachers' social-emotional

functioning are not well understood. Finally, based on evidence from middle and high school samples that popularity is positively related to aggression and substance use, and isolation is negatively related to substance use (Curlee, Aiken, & Luthar, 2019; Luthar & McMahon, 1996), care must be taken before assuming that all positive peer interactions are adaptive and that all negative peer interactions interfere with high-levels of adjustment.

Classroom Context

When thinking about ways socialization takes place in classrooms, it would be an error to omit how the overall classroom context may contribute to relevant student outcomes. Indeed, Eisenberg, Cumberland, et al. (1998) noted the importance of integrating contexts when considering emotion-related socialization. The classroom context is unique from the processes described above, in part, because the classroom context is influenced by more than just the individual teacher or one peer, and it is assessed at the classroom level. These ideas are in keeping with systems theorists' argument that, "the whole is greater than the sum of its parts" (Bertalanffy, 1973, p. 18). As depicted in Figure 1, we focus on the learning environment (e.g., classroom-level emotional and instructional support, organizational climate, and chaos) and the collective peer-group functioning (see Maxwell, 2010, for a more comprehensive review of classroom environment features).

Learning environment. The hypothesis that the classroom context is associated with student outcomes, in part, via a pathway through emotion-related interactions is consistent with Brackett, Elbertson, and Rivers's (2015) contention that teachers who are better at creating a healthier learning environment lead effective emotion-related conversations with students (see also, Jennings & Greenberg, 2009). Seminal studies by Pianta and colleagues have shown that the learning environment in preschool and elementary classrooms can be summarized by three primary domains: emotional support (e.g., teacher sensitivity, positive climate), instructional support (e.g., concept development, quality of feedback), and classroom organization (e.g., behavior management, productivity, see Center for Advanced Study of Teaching and Learning, 2018, for a review). Findings from thousands of elementary classrooms demonstrate that high scores in these three domains are associated with students' social competence, self-control, engagement, and achievement (see Center for Advanced

Study of Teaching and Learning, 2018, for a review; Hamre, Pianta, Downer, & Mashburn, 2008; Mashburn et al., 2008; Pianta, Belsky, Vandergrift, Houts, & Morrison, 2008; Ponitz, Rimm-Kaufman, Brock, & Nathanson, 2009; Rimm-Kaufman, Baroody, Larsen, Curby, & Abry, 2015). There is also evidence that the positive relation between the classroom emotional environment and positive student behaviors is mediated by the quality of the STR relationship (Brackett, Reyes, Rivers, Elbertson, & Salovey, 2011).

Another way scholars have studied the learning environment is by assessing the level of chaos in the classroom. Whereas Hamre and Pianta (2010) have described highly organized, efficient, productive classrooms as resembling a “well-oiled machine” (p. 32), chaotic classrooms are characterized as noisy, crowded, and lacking routine. Chaotic classrooms are believed to be detrimental to emotion- and academic-related outcomes (Maxwell, 2010; Vernon-Feagans, Mokrova, Carr, Garrett-Peters, & Burchinal, 2019). High classroom chaos has been negatively related to preschoolers’ compliance (Wachs, Gurkas, & Kontos, 2004), but interestingly not elementary students’ self-control (Ponitz et al., 2009). We expect that associations between classroom chaos and student outcomes may be mediated by teachers’ reactions to students’ emotions and students’ emotion-related behaviors. Illustratively, teachers in chaotic classrooms employ more negative reactions to students’ emotions than colleagues who oversee more organized classrooms (Jeon, Hur, & Buettner, 2016). Findings from the broader teaching literature suggest that teachers’ perceptions of classroom chaos is negatively associated with their belief that they can affect student outcomes (Grant, Jeon, & Buettner, 2019).

Interactions between the learning environment and other socialization processes or student characteristics have been reported. For instance, Rucinski et al. (2018) reported that STR conflict was related to students’ externalizing problems when the learning environment was low, but not high, in emotional support. Consistent with our prediction that student characteristics are likely to function as moderators of the relations between the classroom context and student outcomes, Vernon-Feagans and colleagues (2019) found that the positive relation between classroom quality from kindergarten to third grade and reading skills was only significant for students who started kindergarten low in reading.

Associations between classroom organization or instructional support and student engagement is sometimes stronger for boys than girls (Rimm-Kaufman et al., 2015), and whereas classroom chaos was negatively related to boys' and girls' reading, prediction of math from classroom chaos was only significant for boys (Ponitz et al., 2009).

Collective peer group functioning. The effect of the collective peer group on student outcomes is also distinct from the influence of singular peer interactions (e.g., bully-victim dyads, friendship dyads), because the collective peer group creates a social climate (or norms) which influences individual student outcomes in unique ways from the influence of any particular peer interaction. Support for the role of the peer group comes from a study showing that the average level of classroom aggression contributes to increases in individual students' aggression (Thomas, Bierman, & Powers, 2011). Similarly, work involving national samples indicates that classroom-level adversity predicts change in elementary-students' externalizing and internalizing behaviors and is negatively associated with emotion- and academic-related outcomes via its influence on teachers' instructional practice (Abry et al., 2017; Abry et al., 2018). Finally, in classrooms where many students have high-levels of self-regulation, individual students' literacy is improved (Skibbe, Phillips, Day, Brophy-Herb, & Connor, 2012).

Peers can collectively shape the social environment of the classroom by encouraging what are considered acceptable emotional and behavioral expressions in the classroom (Salmivalli & Voeten, 2004; Terry, Hogg, & White, 1999). When the peer group facilitates individual students' ability to positively interact with a broad array of peers, individual students' success is more likely (Baumeister & Leary, 1995). Preschoolers who are socially well-integrated into the peer group, and who experience many positive peer interactions, may be more likely than their counterparts to engage in classroom activities and to be academically successful in school (Ladd, 1990).

The overall classroom levels of, and variations in, peer acceptance and peer rejection represent another important contributor to the classroom social context. Some classroom peer groups are generally positive and prosocial, leading to higher levels of peer acceptance than rejection. In these classrooms, same-classroom peers are well-liked, and collaborative relationships and friendships are

likely to form (Hoglund & Leadbeater, 2004). Other classroom peer groups are antisocial and exclusionary leading to higher levels of peer rejection, relative to peer acceptance. In these classrooms, same-classroom peers are disliked and bullying and peer victimization may take the place of positive peer relationships that may foster friendship and collaborative learning (Thomas et al., 2011). Direct forms of peer rejection have been associated with the growth of antisocial and disruptive interactions in the peer group, that may hinder emotion- and, in turn, academic-related outcomes (Dodge et al., 2003). A peer group characterized by social rejection may also further exacerbate problem behaviors for students already struggling with their behavioral regulation and learning at school. Peer rejection is associated with negative school attitudes, school avoidance (forms of emotional engagement), and academic underachievement (Kiuru, 2008). In contrast, in elementary classrooms with higher levels of overall peer acceptance, children are more likely to feel included and to engage in academic tasks (Ladd, Kochenderfer, & Coleman, 1997), which may predict gains in academic performance (Furrer & Skinner, 2003).

Summary. The overall pattern of findings suggests that the classroom context is associated with emotion- and academic-related outcomes. These relations may be mediated by the STR and teachers' instructional practices. Students can also exacerbate negative interactions in the classroom via disruptive behaviors that fuel an already challenging environment (Jennings & Greenberg, 2009). Consistent with complex pathways outlined by Eisenberg, Cumberland, et al. (1998), the context of the classroom often interacts with student characteristics. A particularly important line of research involves documenting potential unique, additive, or interactive effects between the family and school contexts.

Experimental Evidence

The premise that teachers, peers, and the context play an important role in socializing students' emotion- and academic-related outcomes has given rise to school-based intervention programs designed to improve these critical outcomes. Intervention studies overcome many of the challenges in this line of research stemming from the use of correlational data, and can help confirm, or refute, the processes in Figure 1. In this section, we review several representative school-based programs to illustrate how changing the behaviors of teachers, peers, or the classroom context can positively affect

students' behaviors and learning (see Brackett & Rivers, 2014; or Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011, for a more comprehensive discussion).

A representative teacher-focused intervention. The Chicago School Readiness Project (CSR) represents a promising intervention designed to help teachers positively impact students' emotion- and academic-related outcomes by targeting many of the key aspects of the proposed heuristic model. For example, teachers in the intervention condition of the CSR received training designed to improve their mental health, reduce stress, and minimize burnout, while promoting quality student-teacher interactions and classroom management techniques (e.g., implementation of clear rules, redirecting dysregulated behavior, Raver et al., 2008; Raver et al., 2011). Results are quite promising. Treatment-group teachers experienced decreases in work-related stress and were better able than control group teachers to facilitate the classroom and to provide an emotionally supportive classroom (Raver et al., 2008; Zhai, Raver, & Li-Grining, 2011). Further, students in the intervention condition experienced fewer internalizing and externalizing problem behaviors, and there was evidence of moderation by student gender and race/ethnic group membership (Raver et al., 2009). Last, the CSR improved students' self-regulation, vocabulary, letter-naming, and math skills, and the effects were mediated by the STR and students' self-regulation (Jones, Bub, & Raver, 2013). In summary, the CSR provides experimental support for the premise that supporting teachers' functioning can lead to cascading effects that ultimately benefit student outcomes.

Representative peer-focused interventions. Among peer-focused interventions, the KiVa intervention uses both universal (i.e., the entire peer group) and targeted (i.e., specific youth in the peer group) intervention strategies to improve relationships by minimizing classroom bullying (Salmivalli, Kärnä, & Poskiparta, 2011). The idea is to both change individual thinking about bullying and victimization and to shift peer norms toward a distaste for bullying behaviors overall. All KiVa students receive access to lessons and online games aimed at bullying prevention. When a case of bullying emerges, the intervention targets the bully-victim dyad to support the victim and diminish aggressive behaviors in the bully. The intervention has been used in Finland and international implementations have been undertaken in, for example, Italy, the Netherlands, Estonia, and the United Kingdom. There

are currently several ongoing studies of the KiVa intervention, and we hypothesize that the intervention may diminish bullying while promoting more general forms of emotion- (e.g., reduced anxiety, depression, and negative peer perceptions) and academic-related outcomes (e.g., emotional engagement and motivation).

Another promising avenue for peer intervention has been a focus on creating positive peer interactions, rather than diminishing negative peer interactions (e.g., bullying), to improve the classroom context (e.g., heighten self-regulation and improve academic achievement). This type of peer-focused intervention design is called a peer-pairing intervention and is based on the ideas of Intergroup Contact Theory (Allport, 1954; Pettigrew, Tropp, Wagner, & Christ, 2011), wherein providing individuals with opportunities for positive, cooperative, and supportive interactions can enhance attitudes, interactions, understanding, and support of others. Such positive interactions provide the opportunity to learn about and build relationships with others. Empirical examples of the success of such peer-pairing interventions include pairing sociometrically neglected first- and second-graders with popular children in the same class to engage in playful and cooperative interactions and showing that pairs, compared to neglected children in the control condition, demonstrate improvements in sociometric status and positive peer interactions (Morris, Messer, & Gross, 1995). Similarly, Hektner, August, and Realmuto (2003) used a buddy system to pair aggressive with non-aggressive second-graders during a six-week summer school program and found that the buddy pairs evidenced more effective interactions with one another than did the non-buddy pairs. Additional support for the effects of pairing youth on academic, friendship, and behavioral outcomes has been demonstrated for 5- to 12-year-olds diagnosed with Attention Deficit Hyperactivity Disorder (Hoza, Mrug, Pelham, Greiner, & Gnagy, 2003). Thus, there is evidence that peer-pairing can be effectively implemented across a range of developmental levels. As each of these examples illustrate, peer-pairing can promote positive outcomes for identified at-risk youth (Mervis, 1998). Nevertheless, others have used this peer-pairing method in novel ways that support relationship building for all children in a class and strategically promote relationship-building with diverse peers (Martin et al., 2017).

Representative classroom interventions. Finally, movement toward supporting both

classroom teachers and classroom peers simultaneously may enhance the classroom context, which, in turn, may foster students' emotion- and academic-related outcomes. Project Supporting Early Adolescents' Learning and Social Success (SEALS) is one example of this type of universal classroom intervention (Hamm, Farmer, Lambert, & Gravelle, 2014). The intervention focuses on using professional development programs to equip teachers with social-emotional skills to promote students' self-regulation, positive peer interactions, and engagement. In addition, there is a focus on improving the peer social context in the classroom. Aspects of the peer context (e.g., value for school and academic achievement) appear to respond favorably to the SEALS intervention. The INSIGHTS program represents another intervention that specifically targets teachers and peers (as well as parents, O'Connor, Cappella, McCormick, & McClowry, 2014). A central component of the intervention aims to target teachers' ability to develop high-quality STRs and to respond appropriately to students' emotional displays and related behaviors. INSIGHTS also aims to improve students' self-regulation and related abilities, which are then expected to promote academic-related outcomes. Consistent with expectations, elementary students involved in INSIGHTS experienced more growth in reading and math achievement than students in the control group, and additional tests indicated that gains in aspects of self-regulation and decreases in problem behaviors partially explain the changes in achievement (O'Connor et al., 2014). Associations appear strongest for students prone toward a difficult temperament and may be partially mediated by improvements in STR-quality (McCormick, O'Connor, Cappella, & McClowry, 2015).

Summary. The intervention studies discussed here represent an especially important supplement to findings generated from correlational studies. The pattern of results observed across multiple intervention programs provides evidence that interventions designed to improve the ways teachers and peers socialize students can affect students' emotion-related behaviors and achievement. At the same time, evidence of long-term effectiveness is lacking, as most follow-ups are only maintained for a few years.

Research Agenda

The findings reviewed here indicate that much has been learned about socialization that takes

place in the classroom. In this final section, we make recommendations to advance this line of inquiry.

Knowledge related to socialization efforts by teachers and peers is likely to benefit from the increased consideration of mediators and moderators. Guided by Eisenberg, Cumberland, et al.'s (1998) model, and as noted throughout this review, there are good reasons to expect emotion-related interactions and the classroom context to mediate the relations between teachers' and peers' functioning and student outcomes. Likewise, student characteristics are likely to interact with many of the teacher, peer, and context constructs discussed here. We hypothesize that peer influence will be moderated by the intersecting characteristics of both the influential peer and the influenced peer, the interacting influence of multiple types of simultaneous and overlapping peer interactions in the classroom, as well as the effect of the overall peer context. An increased focus on delineating the pathways and interactions involved in socialization in the classroom is likely to increase understanding of the roles of teachers, peers, and the classroom context.

Scholars must simultaneously consider the roles of multiple sources of socialization (e.g, parents, teachers, peers, context). Presently, most of what is known about socialization comes from studies that only consider one socializer, which is likely to inflate effects associated with that socializer. In support of considering multiple socializers, Maxwell (1996) found that the negative relation between a crowded home and negative behavioral outcomes was strongest when students attended a crowded preschool. Moreover, evidence suggests that socialization by a parent or teacher may be more important at one developmental period than another (Bryce, Bradley, Abry, Swanson, & Thompson, 2019). Because children develop in the context of multiple socializers and multiple socialization contexts, neglecting to simultaneously account for these disparate influences offers a one-sided vantage point of a many-sided reality.

There is a need to examine the processes discussed here in samples of children living outside of the USA and other similarly developed countries. Indeed, almost all of the relevant data were obtained from participants living in high-income countries, as defined by the World Bank (The World Bank, 2018). The need to engage in this line of scholarship is especially important because too often interventions are delivered in societies without sufficient regard for cultural issues. Although there are

some papers that describe the processes addressed here in low-income countries (e.g., Cueto, Leon, Guerrero, & Muñoz, 2009; Obradović et al., 2019), this is the rare exception. Studying children who live in low-income countries (and more diverse developmental contexts) provides a unique opportunity to examine the generalizability of the pathways proposed here and is a necessary step toward developing interventions that are both culturally sensitive and appropriate for a wider range of children. This is critical given that many of the constructs identified in Figure 1 may operate quite differently in low-income countries. For example, the role of peer relationships may function differently in low-income nations than in high-income nations due to differences in gender norms or classroom structures. Likewise, the frequent use of large class sizes in low-income countries may change the role of the STR and the learning environment. Progress in examining these types of questions is needed, and the development of appropriate measures that assess teachers' behaviors (e.g., the Teach Observer Manual, by Molina, Melo Hurtado, Pushparatnam, & Wilichowski, 2018), students' emotion-related abilities (Obradović et al., 2019), and achievement (e.g., Cueto et al., 2009) for individuals living in low-income countries makes this line of inquiry increasingly feasible.

Scholars must utilize increasingly sophisticated longitudinal designs. Two issues in this regard seem particularly relevant. First, longitudinal designs capable of modeling the bidirectional processes identified in Figure 1 can offer a greater understanding of developmental processes. One could test for reciprocal relations between STRs (or friendships) and students' engagement and math achievement by assessing each construct multiple times across an academic year (e.g., in October, January, and May). Findings from this type of a design can go a long ways toward clarifying socialization processes that take place within a school year. Further, there is a need for longitudinal designs that attend to the implications of changes in teacher and peer groups within and across academic years and to consider how unique constellations of students in a classroom contribute to the functioning of specific learning environments and collective peer groups. Most investigators using multi-year longitudinal studies assess how a teacher, peer, or context may operate at one grade (e.g., STR in first grade) and then examine the effects of this construct at some later grade (e.g., reading in fifth grade). Although these studies are useful, they generally ignore potential effects from teachers, peers, and context that take

place in the years between the predictor and outcome. One way to overcome this issue is to examine the index of socialization each year and to consider changes or continuity in the index of socialization (see, for example, Spilt et al., 2012).

Educators who work with students in the classroom daily need simple and effective strategies for building positive peer relationships among students. This is due, in part, to the complexity of peer relationships. When managing a classroom of multiple students interacting simultaneously, it is daunting to imagine ways of helping each of these students engage with peers in ways that enhance their social and educational experiences. Therefore, it may be useful to focus on improving the classroom context by allowing students to engage in unstructured play, organized games, and other positive and prosocial classroom activities that have the possibility of allowing new friendships and positive peer interactions to form in the classroom and, at the same time, allow existing peer relationships to improve in quality. When interventions change the social climate of a classroom, academic engagement for the students in these classrooms improves (Hamm et al., 2014).

There is a need to better understand how aspects of the school climate can be integrated into the proposed heuristic model. Although the school climate is broader than our focus, it is relevant to student outcomes and the other constructs considered here (Wang & Degol, 2015). The school climate can be assessed in multiple ways, but it often involves the consideration of school safety, the community, academic processes, and the institutional environment (Wang & Degol, 2015). Given that preschool and elementary school children spend the majority of their day in an individual classroom, we hypothesize that the school climate is likely to relate to student outcomes by shaping teachers' (and peers') functioning, emotion-related interactions, and the classroom context. For example, a lack of a clearly articulated (or enforced) discipline policy by a principal, or lack of perceived safety, may lead to increases in teachers' stress, conflictual student-teacher interactions, lower-quality learning environments, and then poor student outcomes. Given the occurrence of extreme school violence (e.g., school shootings), it seems especially important to evaluate how such events relate to students' and teachers' functioning, interactions, the classroom context, and student outcomes.

There is a need to expand the study of how teachers, peers, and the classroom context shape middle and high school students' emotion- and academic-related outcomes. Teacher-, peer-, and classroom-related constructs are all related to middle or high school students' emotion- or academic related outcomes (Becker, Goetz, Morger, & Ranellucci, 2014; Center for Advanced Study of Teaching and Learning, 2018; Ruzek et al., 2016), yet investigations that consider the complexity of associations discussed here are needed to assess whether the proposed model generalizes to older samples. Investigations of students in middle and high school likely must consider both an expanded list of variables (e.g., substance abuse, school violence, sexual activity, the effects of multiple teachers, school-based extracurricular contexts and activities) and the increasingly complex role of peers. There is also a need to further develop intervention programs for older students. As currently designed, the CSR and INSIGHTS interventions are not developmentally appropriate for older students, whereas Project SEALS and KiVa are likely to be successful among middle and high school students (Hamm et al., 2014; Salmivalli, Poskiparta, Ahtola, & Haataja, 2013). In addition, as noted by Jagers, Harris, and Skoog (2015), other social-emotional interventions that target the principle variables in the proposed heuristic model are effective for middle school students, whereas clear evidence of effectiveness is lacking in high school samples (Williamson, Modecki, & Guerra, 2015). Consequently, scholars must consider and integrate developmental processes and specific contextual influences unique to later adolescence and emerging adulthood when developing programming for emotion-related socialization in high schools.

Conclusions

In conclusion, the heuristic model advanced by Eisenberg, Cumberland, et al. (1998) can significantly inform efforts to understand socialization processes that take place among socializers other than parents and in contexts outside the home environment. We have illustrated how teacher, peer, and classroom context variables are involved in emotion-related socialization. Multiple similar constructs across developmental, educational, and psychological literatures (e.g., teachers' resilience, classroom resources) can also be incorporated into extending this line of inquiry. Importantly, data from the intervention literature generally support the processes described here. Substantial progress

regarding the complex nature of emotion-related socialization in children's lives calls for investigators to integrate multiple sources of influence across time and contexts, accounting for indirect, moderated, and reciprocal pathways.

References

- Abry, T., Bryce, C. I., Swanson, J., Bradley, R. H., Fabes, R. A., & Corwyn, R. F. (2017). Classroom-level adversity: Associations with children's internalizing and externalizing behaviors across elementary school. *Developmental Psychology, 53*(3), 497-510.
doi:<http://dx.doi.org/10.1037/dev0000268>
- Abry, T., Granger, K. L., Bryce, C. I., Taylor, M., Swanson, J., & Bradley, R. H. (2018). First-grade classroom-level adversity: Associations with teaching practices, academic skills, and executive functioning. *School Psychology Quarterly, 33*(4), 547-560.
- Acar, I. H., Kutaka, T. S., Rudasill, K. M., Torquati, J. C., Coplan, R. J., & Yıldız, S. (2018). Examining the roles of child temperament and teacher-child relationships as predictors of Turkish children's social competence and antisocial behavior. *Current Psychology*. doi:10.1007/s12144-018-9901-z
- Ainsworth, M. S. (1989). Attachments beyond infancy. *American Psychologist, 44*(4), 709-716.
doi:<http://dx.doi.org/10.1037/0003-066X.44.4.709>
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Asher, S. R., & Coie, J. D. (1990). *Peer rejection in childhood*: Cambridge University Press, New York, NY.
- Baker, J. A., Grant, S., & Morlock, L. (2008). The teacher-student relationship as a developmental context for children with internalizing or externalizing behavior problems. *School Psychology Quarterly, 23*(1), 3-15. doi:10.1037/1045-3830.23.1.3
- Bardack, S., & Obradović, J. (2019). Observing teachers' displays and scaffolding of executive functioning in the classroom context. *Journal of Applied Developmental Psychology, 62*, 205-219. doi:10.1016/j.appdev.2018.12.004
- Bassett, H. H., Denham, S. A., Fettig, N. B., Curby, T. W., Mohtasham, M., & Austin, N. (2017). Temperament in the classroom: Children low in surgency are more sensitive to teachers' reactions to emotions. *International Journal of Behavioral Development, 41*(1), 4-14.
doi:10.1177/0165025416644077

- Battistich, V., Solomon, D., Kim, D., Watson, M., & Schaps, E. (1995). Schools as communities, poverty levels of student populations, and students' attitudes, motives, and performance: A multilevel analysis. *American Educational Research Journal*, *32*(3), 627-658.
doi:<http://dx.doi.org/10.2307/1163326>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. doi:10.1037/0033-2909.117.3.497
- Becker, E. S., Goetz, T., Morger, V., & Ranellucci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions: An experience sampling analysis. *Teaching and Teacher Education*, *43*, 15-26. doi:<http://dx.doi.org/10.1016/j.tate.2014.05.002>
- Beilock, S. L., Gunderson, E. A., Ramirez, G., & Levine, S. C. (2010). Female teachers' math anxiety affects girls' math achievement. *Proceedings of the National Academy of Sciences of the United States of America*, *107*(5), 1860-1863. doi:10.1073/pnas.0910967107
- Beltman, S., Mansfield, C., & Price, A. (2011). Thriving not just surviving: A review of research on teacher resilience. *Educational Research Review*, *6*(3), 185-207.
doi:10.1016/j.edurev.2011.09.001
- Bertalanffy, L. (1973). *General system theory; foundations, development, applications*. (Rev. ed.). New York: G. Braziller.
- Blackhart, G. C., Baumeister, R. F., & Twenge, J. M. (2006). Rejection's impact on self-defeating, prosocial, antisocial, and self-regulatory behaviors. In K. D. Vohs & E. J. Finkel (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes* (pp. 237-253): Guilford Press, New York, NY.
- Brackett, M. A., Elbertson, N. A., & Rivers, S. E. (2015). Applying theory to the development of approaches to SEL. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 20-32): The Guilford Press, New York, NY.

- Brackett, M. A., Reyes, M. R., Rivers, S. E., Elbertson, N. A., & Salovey, P. (2011). Classroom emotional climate, teacher affiliation, student conduct. *Journal of Classroom Interaction*, *46*(1), 27-36.
- Brackett, M. A., & Rivers, S. E. (2014). Transforming students' lives with social and emotional learning. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 368-388): Routledge/Taylor & Francis Group, New York, NY.
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, *5*(1), 88-103. doi:<http://dx.doi.org/10.1111/j.1751-9004.2010.00334.x>
- Brown, J. L., Jones, S. M., LaRusso, M. D., & Aber, J. L. (2010). Improving classroom quality: Teacher influences and experimental impacts of the 4rs program. *Journal of Educational Psychology*, *102*(1), 153-167. doi:10.1037/a0018160
- Bryce, C. I., Bradley, R. H., Abry, T., Swanson, J., & Thompson, M. (2019). Parents' and teachers' academic influences, behavioral engagement, and first- and fifth-grade achievement. *School Psychology Quarterly*, *34*, 492-502. doi:DOI:10.1037/spq0000297
- Buettner, C. K., Jeon, L., Hur, E., & Garcia, R. E. (2016). Teachers' social-emotional capacity: Factors associated with teachers' responsiveness and professional commitment. *Early Education and Development*, *27*(7), 1018-1039. doi:10.1080/10409289.2016.1168227
- Center for Advanced Study of Teaching and Learning. (2018). *Measuring and Improving Teacher-Student Interactions in PK-12 Settings to Enhance Students' Learning*. Retrieved from https://curry.virginia.edu/uploads/resourceLibrary/CLASS-MTP_PK-12_brief.pdf
- Chang, M. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, *21*(3), 193-218. doi:10.1007/s10648-009-9106-y
- Crockett, L. J., Wasserman, A. M., Rudasill, K. M., Hoffman, L., & Kalutskaya, I. (2018). Temperamental anger and effortful control, teacher-child conflict, and externalizing behavior across the elementary school years. *Child Development*, *89*(6), 2176-2195. doi:10.1111/cdev.12910

- Cueto, S., Leon, J., Guerrero, G., & Muñoz, I. (2009). *Psychometric characteristics of cognitive development and achievement instruments in Round 2 of Young Lives. Young Lives Technical Notes, 15*. Retrieved from <https://www.younglives.org.uk/content/psychometric-characteristics-cognitive-development-and-achievement-instruments-round-2-young>
- Curlee, A. S., Aiken, L. S., & Luthar, S. S. (2019). Middle school peer reputation in high-achieving schools: Ramifications for maladjustment versus competence by age 18. *Development and Psychopathology, 31*(2), 683-697. doi:10.1017/S0954579418000275
- DeLay, D., Laursen, B., Kiuru, N., Poikkeus, A.-M., Aunola, K., & Nurmi, J. (2016). Friend influence and susceptibility to influence: Changes in mathematical reasoning as a function of relative peer acceptance and interest in mathematics. *Merrill-Palmer Quarterly, 62*(3), 306-333. doi:<http://dx.doi.org/10.13110/merrpalmquar1982.62.3.0306>
- DeLay, D., Laursen, B., Kiuru, N., Poikkeus, A. M., Aunola, K., & Nurmi, J. E. (2015). Stable same-sex friendships with higher achieving partners promote mathematical reasoning in lower achieving primary school children. *British Journal of Developmental Psychology, 33*(4), 519-532. doi:<http://dx.doi.org/10.1111/bjdp.12117>
- DeLay, D., Zhang, L., Hanish, L. D., Miller, C. F., Fabes, R. A., Martin, C. L., . . . Updegraff, K. A. (2016). Peer influence on academic performance: A social network analysis of social-emotional intervention effects. *Prevention Science, 17*(8), 903-913. doi:10.1007/s11121-016-0678-8
- Denham, S. A., Bassett, H. H., & Zinsser, K. (2012). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education Journal, 40*(3), 137-143. doi:10.1007/s10643-012-0504-2
- Dishion, T. J., Spracklen, K. M., Andrews, D. W., & Patterson, G. R. (1996). Deviancy training in male adolescent friendships. *Behavior Therapy, 27*(3), 373-390. doi:10.1016/S0005-7894(96)80023-2
- Dishion, T. J., & Tipsord, J. M. (2011). Peer contagion in child and adolescent social and emotional development. *Annual Review of Psychology, 62*, 189-214.
- Dodge, K. A., Coie, J. D., & Lynam, D. (2006). Aggression and antisocial behavior in youth. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.) (Ed.), *Handbook of Child Psychology. Vol. 3*.

Social, emotional, personality development (6th ed.) (pp. 719-788). Hoboken, NJ: John Wiley & Sons.

Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Pettit, G. S., Fontaine, R., & Price, J. M. (2003).

Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. *Child Development, 74*(2), 374-393.

doi:<http://dx.doi.org/10.1111/1467-8624.7402004>

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x

Eisenberg, N., Cumberland, A. J., & Spinrad, T. L. (1998). Parental socialization of emotion.

Psychological Inquiry, 9(4), 241-273. doi:10.1207/s15327965pli0904_1

Eisenberg, N., Duckworth, A. L., Spinrad, T. L., & Valiente, C. (2014). Conscientiousness: Origins in childhood? *Developmental Psychology, 50*(5), 1331-1349. doi:10.1037/a0030977

Eisenberg, N., Spinrad, T. L., & Cumberland, A. (1998). The socialization of emotion: Reply to commentaries. *Psychological Inquiry, 9*(4), 317-333.

doi:http://dx.doi.org/10.1207/s15327965pli0904_17

Fabes, R. A., Hanish, L. D., Martin, C. L., Moss, A., & Reesing, A. (2012). The effects of young children's affiliations with prosocial peers on subsequent emotionality in peer interactions.

British Journal of Developmental Psychology, 30(Pt 4), 569-585. doi:10.1111/j.2044-835X.2011.02073.x

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-226.

doi:10.4135/9781412956253.n75

Frenzel, A. C. (2014). Teacher emotions. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), *International handbook of emotions in education* (pp. 494-519): Routledge/Taylor & Francis Group, New York, NY.

- Friedman-Krauss, A. H., Raver, C. C., Morris, P. A., & Jones, S. M. (2014). The role of classroom-level child behavior problems in predicting preschool teacher stress and classroom emotional climate. *Early Education and Development, 25*(4), 530-552.
doi:<http://dx.doi.org/10.1080/10409289.2013.817030>
- Friedman-Krauss, A. H., Raver, C. C., Neuspiel, J. M., & Kinsel, J. (2014). Child behavior problems, teacher executive functions, and teacher stress in head start classrooms. *Early Education and Development, 25*(5), 681-702. doi:10.1080/10409289.2013.825190
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*(1), 148-162. doi:10.1037/0022-0663.95.1.148
- Gest, S. D., & Rodkin, P. C. (2011). Teaching practices and elementary classroom peer ecologies. *Journal of Applied Developmental Psychology, 32*(5), 288-296.
doi:<http://dx.doi.org/10.1016/j.appdev.2011.02.004>
- Grant, A. A., Jeon, L., & Buettner, C. K. (2019). Chaos and commitment in the early childhood education classroom: Direct and indirect associations through teaching efficacy. *Teaching and Teacher Education, 81*, 50-60. doi:10.1016/j.tate.2019.02.010
- Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology/Psychologie canadienne, 58*(3), 203-210. doi:10.1037/cap0000117
- Greenberg, M. T., Brown, J. L., & Abenavoli, R. M. (2016). *Teacher stress and health effects on teachers, students, and schools*. Retrieved from Edna Bennett Pierce Prevention Research Center, Pennsylvania State University.
- Greene, R. W., Beszterczey, S. K., Katzenstein, T., Park, K., & Goring, J. (2002). Are students with ADHD more stressful to teach? Patterns of teacher stress in an elementary school sample. *Journal of Emotional and Behavioral Disorders, 10*(2), 79-89.
doi:<http://dx.doi.org/10.1177/10634266020100020201>

- Hamm, J. V., Farmer, T. W., Lambert, K., & Gravelle, M. (2014). Enhancing peer cultures of academic effort and achievement in early adolescence: Promotive effects of the SEALS intervention. *Developmental Psychology, 50*(1), 216-228. doi:<http://dx.doi.org/10.1037/a0032979>
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*(2), 625-638. doi:10.1111/1467-8624.00301
- Hamre, B. K., & Pianta, R. C. (2004). Self-reported depression in nonfamilial caregivers: prevalence and associations with caregiver behavior in child-care settings. *Early Childhood Research Quarterly, 19*(2), 297-318. doi:10.1016/j.ecresq.2004.04.006
- Hamre, B. K., & Pianta, R. C. (2010). Classroom environments and developmental processes. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 25-41). New York: Routledge.
- Hamre, B. K., Pianta, R. C., Downer, J. T., DeCoster, J., Mashburn, A. J., Jones, S. M., . . . Hamagami, A. (2013). Teaching through interactions: Testing a developmental framework of teacher effectiveness in over 4,000 classrooms. *The Elementary School Journal, 113*(4), 461-487. doi:<http://dx.doi.org/10.1086/669616>
- Hamre, B. K., Pianta, R. C., Downer, J. T., & Mashburn, A. J. (2008). Teachers' perceptions of conflict with young students: Looking beyond problem behaviors. *Social Development, 17*(1), 115-136.
- Hartup, W. W., & Stevens, N. (1999). Friendships and adaptation across the life span. *Current Directions in Psychological Science, 8*(3), 76-79. doi:<http://dx.doi.org/10.1111/1467-8721.00018>
- Hektner, J. M., August, G. J., & Realmuto, G. M. (2003). Effects of pairing aggressive and nonaggressive children in strategic peer affiliation. *Journal of Abnormal Child Psychology, 31*(4), 399-412. doi:<http://dx.doi.org/10.1023/A:1023891502049>
- Henry, G., T., & Rickman, D., T. (2007). Do peers influence children's skill development in preschool? *Economics of Education Review, 26*, 100-112. doi:10.1016/j.econedurev.2005.09.006

- Hernández, M. M., Eisenberg, N., Valiente, C., VanSchyndel, S. K., Spinrad, T. L., Silva, K. M., . . . Southworth, J. (2016). Emotional expression in school context, social relationships, and academic adjustment in kindergarten. *Emotion, 16*(4), 553-566. doi:10.1037/emo0000147
- Hernández, M. M., Valiente, C., Eisenberg, N., & Spinrad, T. L. (2019). *Prediction of student-teacher conflict from the interaction between children's and peers' temperament*. Manuscript in preparation.
- Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*(1), 94-101. doi:10.1037/0012-1649.35.1.94
- Hoglund, W. L., & Leadbeater, B. J. (2004). The effects of family, school, and classroom ecologies on changes in children's social competence and emotional and behavioral problems in first grade. *Developmental Psychology, 40*(4), 533-544. doi:<http://dx.doi.org/10.1037/0012-1649.40.4.533>
- Hoza, B., Mrug, S., Pelham, W. E., Jr., Greiner, A. R., & Gnagy, E. M. (2003). A friendship intervention for children with attention-deficit/hyperactivity disorder: Preliminary findings. *Journal of Attention Disorders, 6*(3), 87-98. doi:<http://dx.doi.org/10.1177/108705470300600301>
- Huang, F. L., & Moon, T. R. (2009). Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. *Educational Assessment, Evaluation and Accountability, 21*(3), 209-234. doi:<http://dx.doi.org/10.1007/s11092-009-9074-2>
- Hughes, J. N. (2012). Teacher–student relationships and school adjustment: Progress and remaining challenges. *Attachment & Human Development, 14*(3), 319-327. doi:<http://dx.doi.org/10.1080/14616734.2012.672288>
- Hughes, J. N., & Chen, Q. (2011). Reciprocal effects of student-teacher and student-peer relatedness: Effects on academic self efficacy. *Journal of Applied Developmental Psychology, 32*(5), 278-287. doi:10.1016/j.appdev.2010.03.005
- Hughes, J. N., Luo, W., Kwok, O. M., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal of Educational Psychology, 100*(1), 1-14. doi:10.1037/0022-0663.100.1.1

- Hughes, J. N., Wu, J.-Y., Kwok, O., Villarreal, V., & Johnson, A. Y. (2011). Indirect effects of child reports of teacher-student relationship on achievement. *Journal of Educational Psychology, 104*(2), 350-365. doi:10.1037/a0026339
- Iyer, R. V., Kochenderfer-Ladd, B., Eisenberg, N., & Thompson, M. (2010). Peer victimization and effortful control: Relations to school engagement and academic achievement. *Merrill-Palmer Quarterly: Journal of Developmental Psychology. Special Issue: Contexts, causes, and consequences: New directions in peer victimization research, 56*(3), 361-387. doi:10.1353/mpq.0.0058
- Jagers, R. J., Harris, A., & Skoog, A. (2015). A review of classroom-based SEL programs at the middle school level. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 167-180, Chapter xxii, 634 Pages): The Guilford Press, New York, NY.
- Jennings, P. A., & Frank, J. L. (2015). Inservice preparation for educators. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 422-437): The Guilford Press, New York, NY.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491-525. doi:10.3102/0034654308325693
- Jeon, L., Hur, E., & Buettner, C. K. (2016). Child-care chaos and teachers' responsiveness: The indirect associations through teachers' emotion regulation and coping. *Journal of School Psychology, 59*, 83-96. doi:10.1016/j.jsp.2016.09.006
- Johns, S. K., Valiente, C., Eisenberg, N., Spinrad, T. L., Hernández, M. M., Southworth, J., . . . Pina, A. A. (2019). Prediction of children's early academic adjustment from their temperament: The moderating role of peer temperament. *Journal of Educational Psychology, 111*(3), 542-555. doi:10.1037/edu0000288
- Jones, N., & Youngs, P. (2012). Attitudes and affect: Daily emotions and their association with the commitment and burnout of beginning teachers. *Teachers College Record, 114*(2), 1-36.

- Jones, S. M., Bub, K. L., & Raver, C. C. (2013). Unpacking the black box of the CSRP intervention: The mediating roles of teacher-child relationship quality and self-regulation. *Early Education and Development, 24*(7), 1043-1064. doi:10.1080/10409289.2013.825188
- Juvonen, J., & Galván, A. (2008). *Peer influence in involuntary social groups: Lessons from research on bullying*. Guilford Press, New York, NY.
- Juvonen, J., Nishina, A., & Graham, S. (2000). Peer harassment, psychological adjustment, and school functioning in early adolescence. *Journal of Educational Psychology, 92*(2), 349-359. doi:10.1037/0022-0663.92.2.349
- Kindermann, T. A. (2016). Peer group influences on students' academic motivation. In K. R. Wentzel & G. B. Ramani (Eds.), *Handbook of social influences in school contexts: Social-emotional, motivation, and cognitive outcomes* (pp. 31-47). New York: Routledge.
- King, K. M., McLaughlin, K. A., Silk, J., & Monahan, K. C. (2018). Peer effects on self-regulation in adolescence depend on the nature and quality of the peer interaction. *Development and Psychopathology, 30*(4), 1389-1401. doi:10.1017/S0954579417001560
- Kiuru, N. (2008). *The role of adolescents' peer groups in the school context*. Jyväskylä, Jyväskylä University Printing House.
- Klimes-Dougan, B., Pearson, T. E., Jappe, L., Mathieson, L., Simard, M. R., Hastings, P., & Zahn-Waxler, C. (2014). Adolescent emotion socialization: A longitudinal study of friends' responses to negative emotions. *Social Development, 23*(2), 395-412. doi:10.1111/sode.12045
- Kochenderfer-Ladd, B. (2003). Identification of aggressive and asocial victims and the stability of their peer victimization. *Merrill-Palmer Quarterly, 49*(4), 401-425. doi:10.1353/mpq.2003.0022
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology, 77*(12), 229-243. doi:10.1348/000709905X90344
- Kyriacou, C. (2010). Teacher Stress: Directions for future research. *Educational Review, 53*(1), 27-35. doi:10.1080/00131910120033628

- Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development, 61*(4), 1081-1100. doi:10.2307/1130877
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development, 70*(6), 1373-1400. doi:10.1111/1467-8624.00101
- Ladd, G. W., Ettekal, I., & Kochenderfer-Ladd, B. (2017). Peer victimization trajectories from kindergarten through high school: Differential pathways for children's school engagement and achievement? *Journal of Educational Psychology, 109*(6), 826-841. doi:10.1037/edu0000177
- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1997). Classroom peer acceptance, friendship, and victimization: Distinct relational systems that contribute uniquely to children's school adjustment? *Child Development, 68*(6), 1181-1197. doi:10.2307/1132300
- Lambert, R. G., McCarthy, C. J., Fitchett, P. G., & Eyal, M. (2018). Examining elementary teachers' risk for occupational stress: Associations with teacher, school, and state policy variables. *Teachers College Record, 120*, 1-42.
- Laursen, B. (2018). Peer influence. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups (2nd ed.)* (pp. 447-469). New York: Guilford Press.
- Laursen, B., Bukowski, W. M., Aunola, K., & Nurmi, J. (2007). Friendship moderates prospective associations between social isolation and adjustment problems in young children. *Child Development, 78*(4), 1395-1404. doi:<http://dx.doi.org/10.1111/j.1467-8624.2007.01072.x>
- Lavy, S., & Eshet, R. (2018). Spiral effects of teachers' emotions and emotion regulation strategies: Evidence from a daily diary study. *Teaching and Teacher Education, 73*, 151-161. doi:10.1016/j.tate.2018.04.001
- Liew, J., Valiente, C., Hernández, M. M., & Abrera, D. (2019). Self-regulation and reactivity, school-based relationships, and school engagement and achievement. In D. Whitebread & M. McClelland (Eds.), *SAGE Handbook on Developmental Psychology and Early Childhood Education* (pp. 42-62). Cambridge, UK.

- Luthar, S. S., & McMahon, T. J. (1996). Peer reputation among inner-city adolescents: Structure and correlates. *Journal of Research on Adolescence*, 6(4), 581-603.
- Maldonado-Carreno, C., & Votruba-Drzal, E. (2011). Teacher-child relationships and the development of academic and behavioral skills during elementary school: A within- and between-child analysis. *Child Development*, 82(2), 601-616. doi:10.1111/j.1467-8624.2010.01533.x
- Martin, C. L., Fabes, R. A., Hanish, L. D., Gaertner, B., Miller, C. F., Foster, S., & Updegraff, K. A. (2017). Using an intergroup contact approach to improve gender relationships. *The Wiley Handbook of Group Processes in Children and Adolescents*. doi:10.1002/9781118773123.ch21
- Mashburn, A. J., Justice, L. M., Downer, J. T., & Pianta, R. C. (2009). Peer effects on children's language achievement during pre-kindergarten. *Child Development*, 80(3), 686-702. doi:<http://dx.doi.org/10.1111/j.1467-8624.2009.01291.x>
- Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., . . . Howes, C. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*, 79(3), 732-749. doi:<http://dx.doi.org/10.1111/j.1467-8624.2008.01154.x>
- Maxwell, L. E. (1996). Multiple effects of home and day care crowding. *Environment and Behavior*, 28(4), 494-511. doi:<http://dx.doi.org/10.1177/0013916596284004>
- Maxwell, L. E. (2010). Chaos outside the home: The school environment. In *Chaos and its influence on children's development: An ecological perspective*. (pp. 83-95). Washington, DC: US: American Psychological Association.
- McCormick, M. P., O'Connor, E. E., Cappella, E., & McClowry, S. G. (2013). Teacher-child relationships and academic achievement: A multilevel propensity score model approach. *Journal of School Psychology*, 51(5), 611-624. doi:<http://dx.doi.org/10.1016/j.jsp.2013.05.001>
- McCormick, M. P., & O'Connor, E. E. (2015). Teacher-child relationship quality and academic achievement in elementary school: Does gender matter? *Journal of Educational Psychology*, 107(2), 502-516. doi:10.1037/a0037457

- McCormick, M. P., O'Connor, E. E., Cappella, E., & McClowry, S. G. (2015). Getting a good start in school: Effects of INSIGHTS on children with high maintenance temperaments. *Early Childhood Research Quarterly, 30*, 128-139. doi:10.1016/j.ecresq.2014.10.006
- McLean, L., & McDonald Connor, C. (2015). Depressive symptoms in third-grade teachers: Relations to classroom quality and student achievement. *Child Development, 86*(3), 945-954. doi:10.1111/cdev.12344
- Mervis, B. A. (1998). The use of peer-pairing in schools to improve socialization. *Child & Adolescent Social Work Journal, 15*(6), 467-477. doi:<http://dx.doi.org/10.1023/A:1022336124860>
- Minor, L. C., Onwuegbuzie, A. J., Witcher, A. E., & James, T. L. (2002). Preservice teachers' educational beliefs and their perceptions of characteristics of effective teachers. *The Journal of Educational Research, 96*(2), 116-127. doi:10.1080/00220670209598798
- Molina, E., Melo Hurtado, C. E., Pushparatnam, A., & Wilichowski, T. M. (2018). *Teach: Observer Manual (English)*. Retrieved from Washington, D.C., World Bank Group. <http://documents.worldbank.org/curated/en/949541542659103528/Teach-Observer-Manual>
- Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education, 28*(3), 458-486. doi:<http://dx.doi.org/10.2307/4126479>
- Morris, C. A., Denham, S. A., Bassett, H. H., & Curby, T. W. (2013). Relations among teachers' emotion socialization beliefs and practices, and preschoolers' emotional competence. *Early Education and Development, 24*(7), 979-999. doi:10.1080/10409289.2013.825186
- Morris, T. L., Messer, S. C., & Gross, A. M. (1995). Enhancement of the social interaction and status of neglected children: A peer-pairing approach. *Journal of Clinical Child Psychology, 24*(1), 11-20. doi:http://dx.doi.org/10.1207/s15374424jccp2401_2
- Neuenschwander, R., Friedman-Krauss, A. H., Raver, C., & Blair, C. (2017). Teacher stress predicts child executive function: Moderation by school poverty. *Early Education and Development, 28*(7), 880-900. doi:10.1080/10409289.2017.1287993

- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144. doi:10.1177/1477878509104318
- Nocentini, A., Palladino, B. E., & Menesini, E. (2019). For whom is anti-bullying intervention most effective? The role of temperament. *International Journal of Environmental Research and Public Health*, 16(3). doi:10.3390/ijerph16030388
- O'Connor, E. E., Cappella, E., McCormick, M. P., & McClowry, S. G. (2014). An examination of the efficacy of INSIGHTS in enhancing the academic and behavioral development of children in early grades. *Journal of Educational Psychology*, 106(4), 1156-1169. doi:10.1037/a0036615
- Obradović, J., Finch, J. E., Portilla, X. A., Rasheed, M. A., Tirado-Strayer, N., & Yousafzai, A. K. (2019). Early executive functioning in a global context: Developmental continuity and family protective factors. *Developmental Science*. doi:<http://dx.doi.org/10.1111/desc.12795>
- Pakarinen, E., Kiuru, N., Lerkkanen, M., Poikkeus, A., Siekkinen, M., & Nurmi, J. (2010). Classroom organization and teacher stress predict learning motivation in kindergarten children. *European Journal of Psychology of Education*, 25(3), 281-300. doi:10.1007/s10212-010-0025-6
- Pekrun, R., & Linnenbrink-Garcia, L. (2014). *International handbook of emotions in education*: Routledge/Taylor & Francis Group, New York, NY.
- Pettigrew, T. F., Tropp, L. R., Wagner, U., & Christ, O. (2011). Recent advances in intergroup contact theory. *International Journal of Intercultural Relations*, 35(3), 271-280. doi:<http://dx.doi.org/10.1016/j.ijintrel.2011.03.001>
- Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal*, 45(2), 365-397. doi:<http://dx.doi.org/10.3102/0002831207308230>
- Pianta, R. C., La Paro, K. M., Payne, C., Cox, M. J., & Bradley, R. (2002). The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *Elementary School Journal*, 102(3), 225-238. doi:10.1086/499701

- Pianta, R. C., & Walsh, D. J. (1996). *High-risk children in schools: Constructing sustaining relationships*. New York: Routledge.
- Ponitz, C. C., Rimm-Kaufman, S. E., Brock, L. L., & Nathanson, L. (2009). Early adjustment, gender differences, and classroom organizational climate in first grade. *The Elementary School Journal*, 110(2), 142-162. doi:<http://dx.doi.org/10.1086/605470>
- Portilla, X. A., Ballard, P. J., Adler, N. E., Boyce, W. T., & Obradovic, J. (2014). An integrative view of school functioning: transactions between self-regulation, school engagement, and teacher-child relationship quality. *Child Development*, 85(5), 1915-1931. doi:10.1111/cdev.12259
- Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report, Society for Research in Child Development*, 16, 3-18. doi:<https://doi.org/10.1002/j.2379-3988.2002.tb00041.x>
- Raver, C. C., Blair, C., & Li-Grining, C. P. (2012). Extending methods of emotional self-regulation to classroom settings: Implications for professional development. In C. Howes, B. K. Hamre, & R. C. Pianta (Eds.), *Effective early childhood professional development: Improving teacher practice and child outcomes*. Brookes: Baltimore, MD.
- Raver, C. C., Jones, S. M., Li-Grining, C., Zhai, F., Metzger, M. W., & Solomon, B. (2009). Targeting children's behavior problems in preschool classrooms: A cluster-randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 77(2), 302-316. doi:10.1037/a0015302
- Raver, C. C., Jones, S. M., Li-Grining, C. P., Metzger, M., Champion, K. M., & Sardin, L. (2008). Improving preschool classroom processes: Preliminary findings from a randomized trial implemented in Head Start settings. *Early Childhood Research Quarterly*, 23(1), 10-26. doi:10.1016/j.ecresq.2007.09.001
- Raver, C. C., Li-Grining, C. P., Bub, K., Jones, S., M, Zhai, F., & Pressler, E. (2011). CSRP's impact on low-income preschoolers' preacademic skills: Self-regulation as a mediating mechanism. *Child Development*, 82(1), 362-378. doi:10.1111/j.1467-8624.2010.01561.x
- Rimm-Kaufman, S. E., Baroody, A. E., Larsen, R. A. A., Curby, T. W., & Abry, T. (2015). To what extent do teacher-student interaction quality and student gender contribute to fifth graders'

engagement in mathematics learning? *Journal of Educational Psychology*, *107*(1), 170-185.

doi:<http://dx.doi.org/10.1037/a0037252>

Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, *15*(2), 147-166.

doi:10.1016/s0885-2006(00)00049-1

Roberts, A., LoCasale-Crouch, J., Hamre, B., & DeCoster, J. (2016). Exploring teachers' depressive symptoms, interaction quality, and children's social-emotional development in Head Start. *Early Education and Development*, *27*(5), 642-654. doi:10.1080/10409289.2016.1127088

Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement.

American Educational Research Journal, *50*(1), 4-36. doi:10.3102/0002831212463813

Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. Y. (2017). Affective teacher–student relationships and students' engagement and achievement: A meta-analytic update and test of the mediating role of engagement. *School Psychology Review*, *46*(3), 239-261.

doi:<http://dx.doi.org/10.17105/SPR-2017-0035.V46-3>

Rothbart, M. K., Sheese, B. E., & Posner, M. I. (2007). Executive attention and effortful control: Linking temperament, brain networks, and genes. *Child Development Perspectives*, *1*(1), 2-7.

doi:10.1111/j.1750-8606.2007.00002.x

Rowland, J. (2014). *Number of Instructional days/hours in the school year*. Retrieved from

http://www.ecs.org/wp-content/uploads/Number-of-Instructional-Days-Hours-in-a-School-Year_Revised.pdf

Rubin, K. H., Hymel, S., & Mills, R. S. L. (1989). Sociability and social withdrawal in childhood: Stability and outcomes. *Journal of Personality*, *57*, 237-255.

Rucinski, C. L., Brown, J. L., & Downer, J. T. (2018). Teacher–child relationships, classroom climate, and children's social-emotional and academic development. *Journal of Educational Psychology*, *110*(7), 992-1004. doi:10.1037/edu0000240

Rudolph, K. D., Troop-Gordon, W., Hessel, E. T., & Schmidt, J. D. (2011). A latent growth curve analysis of early and increasing peer victimization as predictors of mental health across

elementary school. *Journal of Clinical Child and Adolescent Psychology*, 40(1), 111-122.

doi:10.1080/15374416.2011.533413

Ruzek, E. A., Hafen, C. A., Allen, J. P., Gregory, A., Mikami, A. Y., & Pianta, R. C. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and Instruction*, 42, 95-103.

doi:10.1016/j.learninstruc.2016.01.004

Salmivalli, C., Kärnä, A., & Poskiparta, E. (2011). Counteracting bullying in Finland: The KiVa program and its effects on different forms of being bullied. *International Journal of Behavioral*

Development, 35(5), 405-411. doi:<http://dx.doi.org/10.1177/0165025411407457>

Salmivalli, C., Poskiparta, E., Ahtola, A., & Haataja, A. (2013). The implementation and effectiveness of the KiVa antibullying program in Finland. *European Psychologist*, 18(2), 79-88.

doi:<http://dx.doi.org/10.1027/1016-9040/a000140>

Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development*, 28(3), 246-258.

doi:<http://dx.doi.org/10.1080/01650250344000488>

Sandilos, L. E., Cycyk, L. M., Hammer, C. S., Sawyer, B. E., Lopez, L., & Blair, C. (2015). Depression, control, and climate: An examination of factors impacting teaching quality in preschool classrooms. *Early Education and Development*, 26(8), 1111-1127.

doi:10.1080/10409289.2015.1027624

Sandilos, L. E., Rimm-Kaufman, S. E., & Cohen, J. J. (2017). Warmth and demand: The relation between students' perceptions of the classroom environment and achievement growth. *Child*

Development, 88(4), 1321-1337. doi:10.1111/cdev.12685

Schmidt, M. E., & Bagwell, C. L. (2007). The protective role of friendships in overtly and relationally victimized boys and girls. *Merrill-Palmer Quarterly*, 53(3), 439-460.

doi:<http://dx.doi.org/10.1353/mpq.2007.0021>

Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. *The Future of Children*, 27, 137-155.

- Schwartz, D., Gorman, A. H., Nakamoto, J., & Toblin, R. L. (2005). Victimization in the peer group and children's academic functioning. *Journal of Educational Psychology, 97*(3), 425-435.
doi:10.1037/0022-0663.97.3.425
- Siekkinen, M., Pakarinen, E., Lerkkanen, M., Poikkeus, A., Salminen, J., Poskiparta, E., & Nurmi, J. (2013). Social competence among 6-year-old children and classroom instructional support and teacher stress. *Early Education & Development, 24*(6), 877-897.
doi:10.1080/10409289.2013.745183
- Skibbe, L. E., Phillips, B. M., Day, S. L., Brophy-Herb, H. E., & Connor, C. M. (2012). Children's early literacy growth in relation to classmates' self-regulation. *Journal of Educational Psychology, 104*(3), 541-553. doi:10.1037/a0029153
- Snyder, J., Horsch, E., & Childs, J. (1997). Peer relationships of young children: Affiliative choices and the shaping of aggressive behavior. *Journal of Clinical Child Psychology, 26*(2), 145-156.
doi:http://dx.doi.org/10.1207/s15374424jccp2602_3
- Spilt, J. L., Hughes, J. N., Wu, J. Y., & Kwok, O. M. (2012). Dynamics of teacher–student relationships: Stability and change across elementary school and the influence on children's academic success. *Child Development, 83*(4), 1180-1195. doi:10.1111/j.1467-8624.2012.01761.x
- Sutton, R. E. (2007). Teachers' anger, frustration, and self-regulation. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 259-274): Elsevier Academic Press, San Diego, CA.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review, 15*(4), 327-358.
doi:<http://dx.doi.org/10.1023/A:1026131715856>
- Swanson, J., & Valiente, C. (2019). *Teachers' reactions to elementary students' negative emotions affect academic relationships: Moderation by students' temperament*. Poster presented at the 73rd biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Swanson, J., Valiente, C., Bradley, R. H., Lemery-Chalfant, K., & Abry, T. (2016). Teachers' effortful control and student functioning: Mediating and moderating processes. *Social Development, 25*(3), 623-645. doi:10.1111/sode.12165

- Swartz, R. A., & McElwain, N. L. (2012). Preservice teachers' emotion-related regulation and cognition: Associations with teachers' responses to children's emotions in early childhood classrooms. *Early Education & Development, 23*(2), 202-226. doi:10.1080/10409289.2012.619392
- Taxer, J. L., & Gross, J. J. (2018). Emotion regulation in teachers: The “why” and “how”. *Teaching and Teacher Education, 74*, 180-189. doi:10.1016/j.tate.2018.05.008
- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *British Journal of Social Psychology, 38*(3), 225-244.
doi:<http://dx.doi.org/10.1348/014466699164149>
- The World Bank. (2018). World bank country and lending groups. Retrieved from
<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>
- Thomas, D. E., Bierman, K. L., & Powers, C. J. (2011). The influence of classroom aggression and classroom climate on aggressive–disruptive behavior. *Child Development, 82*(3), 751-757.
doi:<http://dx.doi.org/10.1111/j.1467-8624.2011.01586.x>
- Thompson, R. S. Y., & Leadbeater, B. J. (2013). Peer victimization and internalizing symptoms from adolescence into young adulthood: Building strength through emotional support. *Journal of Research on Adolescence, 23*(2), 290-303. doi:<http://dx.doi.org/10.1111/j.1532-7795.2012.00827.x>
- Valiente, C., Lemery-Chalfant, K., Swanson, J., & Reiser, M. (2008). Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology, 100*(1), 67-77. doi:10.1037/0022-0663.100.1.67
- Vernon-Feagans, L., Mokrova, I. L., Carr, R. C., Garrett-Peters, P. T., & Burchinal, M. R. (2019). Cumulative years of classroom quality from kindergarten to third grade: Prediction to children's third grade literacy skills. *Early Childhood Research Quarterly, 47*, 531-540.
doi:10.1016/j.ecresq.2018.06.005

- Verschueren, K., & Koomen, H. M. Y. (2012). Teacher–child relationships from an attachment perspective. *Attachment & Human Development, 14*(3), 205-211.
doi:<http://dx.doi.org/10.1080/14616734.2012.672260>
- Vitaro, F., Brendgen, M., Larose, S., & Trembaly, R. E. (2005). Kindergarten disruptive behaviors, protective factors, and educational achievement by early adulthood. *Journal of Educational Psychology, 97*(4), 617-629. doi:10.1037/0022-0663.97.4.617
- Vitaro, F., Brendgen, M., & Tremblay, R. E. (2014). Early predictors of high school completion: The developmental interplay between behavior, motivation, and academic performance. In M. Boivin & K. L. Bierman (Eds.), *Promoting school readiness and early learning: Implications of developmental research for practice* (pp. 15-45): Guilford Press, New York, NY.
- Wachs, T. D., Gurkas, P., & Kontos, S. (2004). Predictors of preschool children's compliance behavior in early childhood classroom settings. *Journal of Applied Developmental Psychology, 25*(4), 439-457. doi:10.1016/j.appdev.2004.06.003
- Wang, M., & Degol, J. L. (2015). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review, 28*(2), 315-352. doi:10.1007/s10648-015-9319-1
- Wentzel, K. R., & Caldwell, K. (1997). Friendships, peer acceptance, and group membership: Relations to academic achievement in middle school. *Child Development, 68*(6), 1198-1209.
doi:10.2307/1132301
- Wentzel, K. R., Jablansky, S., & Scalise, N. R. (2018). Do friendships afford academic benefits? A meta-analytic study. *Educational Psychology Review, 30*(4), 1241-1267.
doi:<http://dx.doi.org/10.1007/s10648-018-9447-5>
- Wentzel, K. R., & Watkins, D. E. (2002). Peer relationships and collaborative learning as contexts for academic enablers. *School Psychology Review, 31*(3), 366-377.
- Whitaker, R. C., Dearth-Wesley, T., & Gooze, R. A. (2015). Workplace stress and the quality of teacher–children relationships in Head Start. *Early Childhood Research Quarterly, 30*, 57-69.
doi:10.1016/j.ecresq.2014.08.008

- Williamson, A. A., Modecki, K. L., & Guerra, N. G. (2015). SEL programs in high school. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 181-196, Chapter xxii, 634 Pages): The Guilford Press, New York, NY.
- Williford, A. P., Vick Whittaker, J. E., Vitiello, V. E., & Downer, J. T. (2013). Children's engagement within the preschool classroom and their development of self-regulation. *Early Education and Development, 24*(2), 162-187. doi:10.1080/10409289.2011.628270
- Zhai, F., Raver, C. C., & Li-Grining, C. (2011). Classroom-based interventions and teachers' perceived job stressors and confidence: Evidence from a randomized trial in head start settings. *Early Childhood Research Quarterly, 26*(7), 442-452. doi:10.1016/j.ecresq.2011.03.003

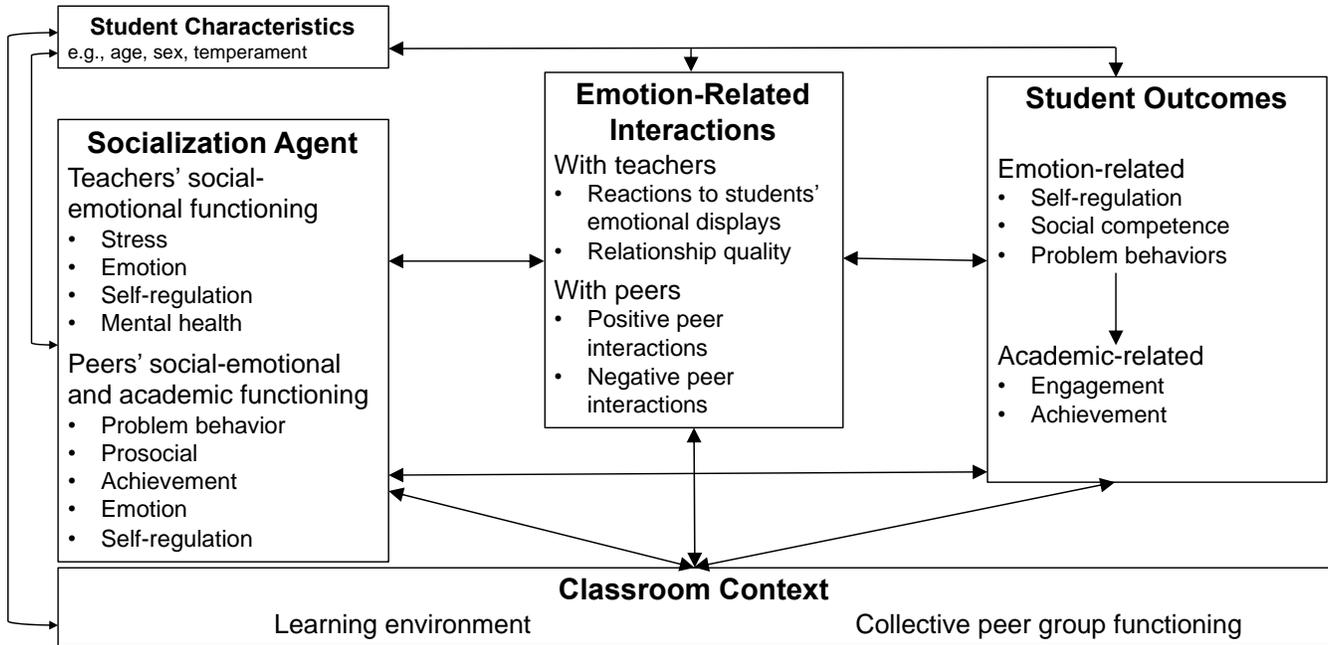


Figure 1. Heuristic model depicting emotion-related socialization in the classroom. The associations between the socialization agent and outcomes may be moderated by emotion-related interactions, classroom context, and student characteristics. To ease the presentation, not all potential pathways and moderating effects are shown, and we recognize other factors (e.g., student IQ, family SES, teacher education, teachers' personal life, peer experiences and expectations) are also relevant to student outcomes.