

The different ways that teachers can influence the socio-emotional development of their students: A literature review

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1. Introduction

The purpose of this paper is to review the evidence on the different ways that teachers can positively or negatively influence the socio-emotional development of students in school settings, either directly through explicit socio-emotional learning programs, or indirectly through teachers' behaviors.

School represents the first context of socialization immediately after the household.¹ In school, children observe, identify, learn, and replicate social and emotional skills, social norms, and behavior codes. At the same time, both emotions and relationships play an important role in their learning process.² Therefore, teachers represent a reference point for children and influence their socio-emotional development through the way they model socio-emotional skills in the classroom, they promote teacher-student interaction, and they manage and organize the classroom.³ They can do so either directly or unintentionally, in a positive or a negative way.

The contribution of this document is that it focuses on the specific *ways* or mechanisms through which teachers, at any given education level, can influence the socio-emotional development and well-being of their students, rather than on the results of socio-emotional learning interventions – as most of the existing literature does. For that purpose, the document (i) focuses on programs or situations that take place in educational settings, either in schools or in pre-school centers, and (ii) mostly takes into account the literature that analyzes the effects of socio-emotional programs or actions on the socio-emotional development of students, although, in certain cases, it also considers the effects on other educational or social outcomes that can be interpreted as approximations to socio-emotional skills.

This literature review consisted in (i) compiling research articles in English from different academic outlets related to the fields of education, economics, human resources, child development, human capital, sociology, or related subjects, using keywords such as “teachers”, “socio-emotional skills”, “non-cognitive skills”, “socio-emotional development”, “non-cognitive development”, “behavior”, “classroom organization”, “classroom management”, “classroom climate”, “classroom practices”, “teacher stress”, among other concepts, (ii) reviewing publications from international development organizations,⁴ such as the World Bank or the Inter-

¹ Milicic et al (2014).

² Durlak et al (2011).

³ Jones et al (2013).

⁴ This search process included the most important international development organizations, such as the Organization for Economic Cooperation and Development, the Asian Development Bank, and so on. However, most of the literature available from these organizations focuses on the impact of socio-emotional learning interventions, not on the mechanisms through which they promote socio-emotional skills.

American Development Bank, (iv) identifying and selecting studies that focus specifically on the role of teachers on student outcomes and carry out quantitative analysis, (iv) visiting the webpage, if available or applicable, of several socio-emotional learning interventions mentioned in the literature to learn or verify further details, (v) including additional relevant studies and references, such as dissertations or other literature reviews, and (vi) excluding studies that do not focus specifically on the influence of teachers, even if they deal with student socio-emotional development.⁵

Therefore, this paper is organized as follows: Section 2 overviews the definition, types, and main benefits of socio-emotional skills, as well as the general process of skill acquisition; Section 3 presents the evidence on the ways that socio-emotional learning programs can promote socio-emotional skills in the classroom; Section 4 tackles the indirect channels through which teachers can also influence socio-emotional learning; Section 5 focuses on the attitudes and actions among teachers that can produce negative effects on their students; and, finally, Section 6 concludes.

2. A synopsis of socio-emotional skills and learning

Socio-emotional skills, also known as non-cognitive, soft, or life skills depending on the context⁶, represent the set of behaviors, attitudes, and values that an individual requires to “navigate interpersonal and social situations effectively”⁷ and “deal effectively and ethically with daily tasks and challenges”.⁸ These skills are, on the one hand, emotional because they involve identifying and regulating emotions and behaviors –or working on individual aspects and dimensions– and, on the other, social because they are supposed to help each individual to better interact with other individuals, or groups of individuals.

Thus, socio-emotional learning or SEL refers to “the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions”.⁹ SEL typically refers to the development of five core (social and emotional) skills: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.¹⁰

Increasingly, the literature recognizes and emphasizes the many benefits of socio-emotional skills for society in terms of their relationship with multiple social and economic outcomes –such as higher levels of productivity, employment, income, or personal well-being– outcomes that educational attainment or cognitive skills do not necessarily ensure.¹¹ Actually, the economic theory argues that both cognitive and socio-emotional skills can change over the life cycle of an

⁵ For example, studies that analyze how student characteristics influence teaching styles. This research methodology follows that of Montgomery and Rupp (2005).

⁶ The term “non-cognitive” is mostly used in the literature in economics, while the term “soft” in reports of employability.

⁷ Guerra, Modecki and Cunningham (2014).

⁸ Cunningham, Acosta and Muller (2016); Guerra, Modecki and Cunningham (2014); and CASEL.

⁹ CASEL website.

¹⁰ CASEL’s socio-emotional learning integrated framework. Durlak et al (2011).

¹¹ Some useful references on this point are Heckman and Rubinstein (2001) and Kautz et al (2014).

individual, with different inputs affecting the formation of cognitive and/or socio-emotional skills at different intensity and ages.¹²

In particular, in the education domain, socio-emotional skills are crucial for the academic success of students since they can help them to regulate their stress, to establish and achieve their goals, to manage challenging situations, to avoid participating in risky behaviors, and to develop positive relationships with their peers.¹³ However, these skills are also relevant for teachers (and the school staff in general) in terms of their effectiveness to teach and manage their classroom, their interaction with students, and their capacity to influence the school climate –which in turn also affects the socio-emotional development of students.

There are several methods to specifically promote students’ socio-emotional skills in the classroom, which include, but are not limited to, using socio-emotional language, providing warmth and support, promoting cooperative learning, helping students make responsible choices, encouraging classroom discussions, putting in practice balanced instruction, implementing student-centered discipline, and modeling and coaching, among others.¹⁴ Regardless of the method, the goal is to improve the quality of teacher-student interactions, classroom management, students’ competencies, and teachers’ capacity to respond to students’ (emotional) needs.

The literature in economics, education, and psychology does a great job in describing the effects, mostly positive, of developing socio-emotional skills over a wide range of variables, both in the short and the long run. However, it does not always focus –or at least not in great depth- on the specific mechanisms that can help teachers promote the socio-emotional development of their students, particularly in contexts other than /when out of the scope of SEL programs.

Using the theoretical framework provided by Heckman and his coauthors, skill formation can be conceptualized on the basis that (i) skills are multidimensional; (ii) abilities can be inherited but also developed; (iii) skills beget skills through a multiplier process; and (iv) skill attainment at one stage in the life cycle raises skill attainment at later stages.¹⁵ Thus, in general, the process of skill acquisition depends on:

- The type of skill that will be developed –in this case, a socio-emotional skill, such as grit, self-control, or self-awareness.
- The type of skills that individuals already possess and that can foster the acquisition and/or development of the objective skill; such as cognitive skills or other socio-emotional skills.
- The actors that participate in the acquisition process, and their interaction –from students to parents, teachers and other school actors.
- The inputs that are required to acquire and/or develop that skill in the classroom, such as learning materials, syllabi, curricula, or training schemes.
- The time allocated to acquire and/or develop that skill.

¹² Cunha and Heckman (2008).

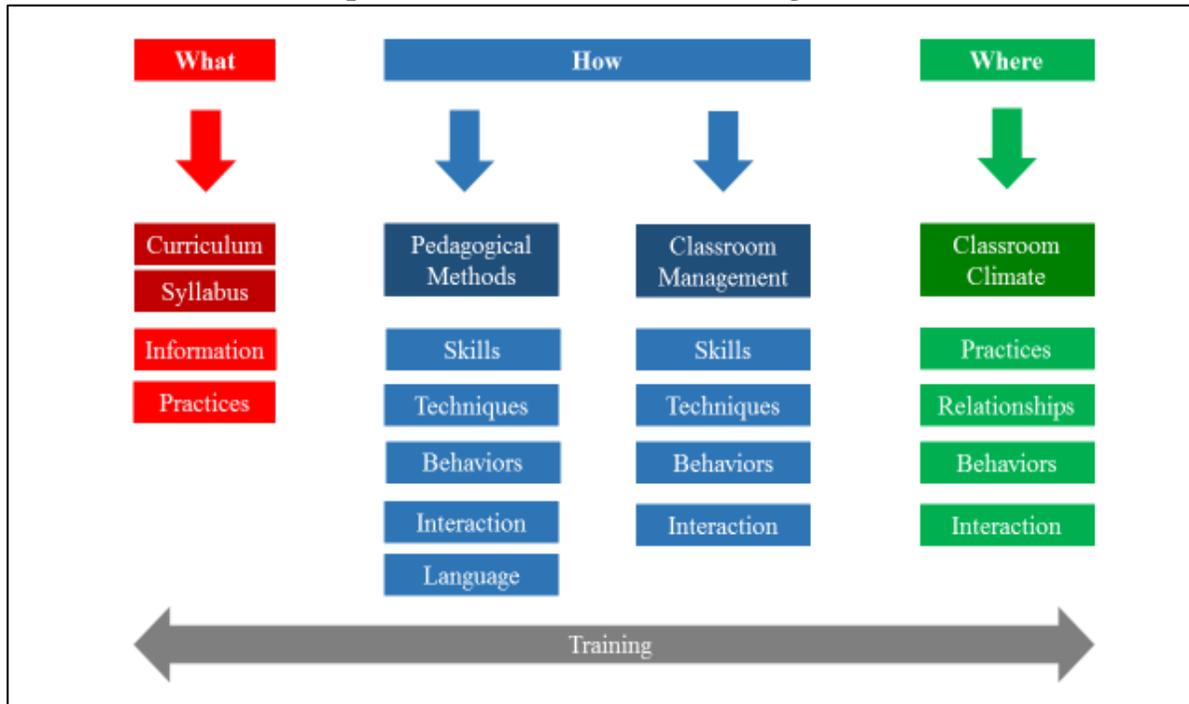
¹³ Whitmore Schanzenbach et al (2016).

¹⁴ Yoder (2014).

¹⁵ Cunha et al (2005). Point (iv) refers to the concept of “self-productivity” proposed by Cunha and coauthors.

- The implementation process per se: whether an intervention to promote socio-emotional learning is properly implemented.

Figure 1
Factors that promote socio-emotional learning in the classroom



Source: own elaboration.

In that sense, four main factors participate and interact in the development of socio-emotional skills in the classroom (see Figure 1):

- (i) *Curriculum*, which sets the content, knowledge, and skills that students are expected to learn, and therefore shapes the learning experience. Curricula can promote the development of socio-emotional skills within a particular subject (vertical model), across different disciplines or subjects (horizontal or interdisciplinary), or in both situations (mixed model). The allocation of instruction time for the development of a particular skill can influence the development of other skills¹⁶; however, the evidence shows that non-cognitive skills can be insensitive to alternative time allocations and rather reactive to formation styles.¹⁷
- (ii) *Pedagogical methods*, which refer to the set of skills, techniques, behaviors, type of language, and interaction that teachers use to provide information, promote knowledge, teach skills, and foster the learning process. Concretely, this factor relates to teachers' teaching styles, as mentioned in (i).
- (iii) *Classroom management*, which refers to the set of skills, techniques, and behaviors that enable teachers to organize students and class work. Effective teachers are supposed to display stronger management skills.¹⁸

¹⁶ Borghans and Diris (2014).

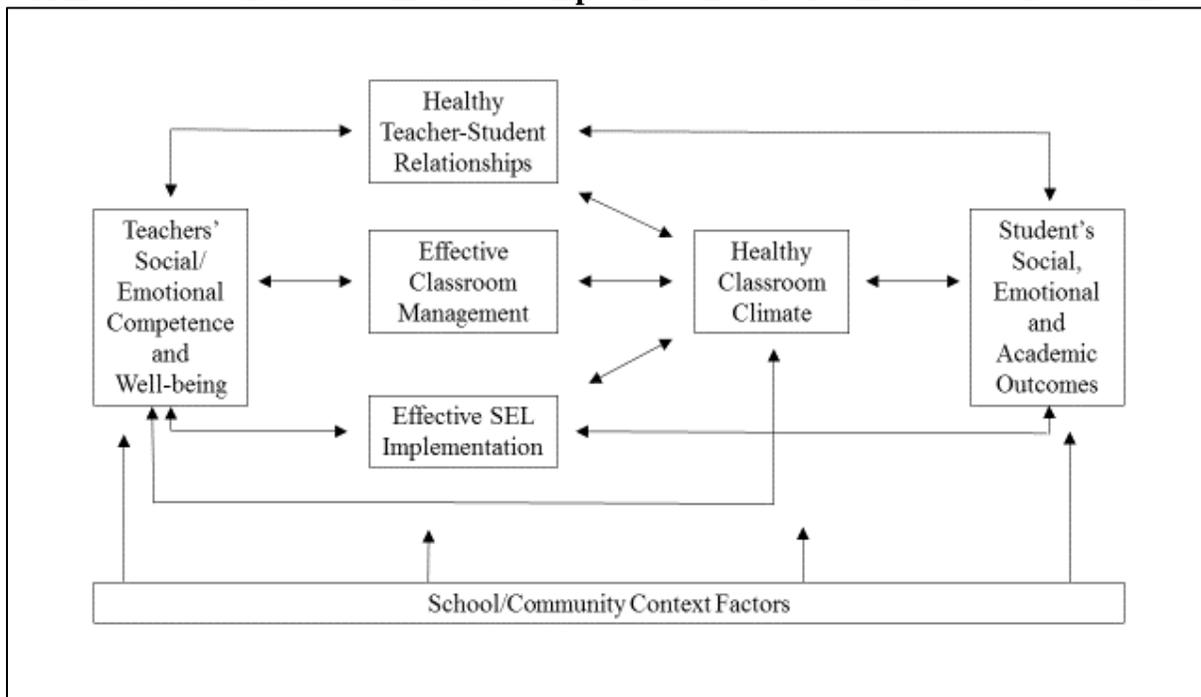
¹⁷ Fiorini and Keane (2014). Note: the paper focuses on parenting style, not teaching style.

¹⁸ Glossary of Education Reform.

- (iv) *School climate* –or, in this case, classroom climate– which refers to the quality and type of school life, and depends on norms, values, interpersonal relations, social interactions, and organizational processes and structures¹⁹ –a concept that is closely related to pedagogical methods and classroom management.

For each of these four main elements, teachers play a unique and determinant role in the process of the socio-emotional development of their students, as the socio-emotional reference they represent in the classroom.²⁰ Their capacity to play this role effectively has to do with their own endowment of socio-emotional skills –either innate or acquired–; their actions and behaviors in (and outside) the classroom as the result of this endowment; their interaction with their students; their ability to identify and manage social and emotional challenges in the classroom; the training they receive and the resources they have access to in order to improve their own socio-emotional development. In the end, teachers influence their students through how and what they teach, and through the way they relate (see Figure 2).²¹

Figure 2
A model of teacher socio-emotional competence and classroom and student outcomes



Source: Jennings and Greenberg (2009).

Thus, the socio-emotional development of teachers can have a direct influence over the socio-emotional status and development of their students, either in a positive or a negative sense. Socio-emotionally competent teachers have higher levels of self-awareness; know how to manage their emotions, behavior, and relationships; are more likely to carry out more effective classroom management; and, therefore, influence their students' socio-emotional and academic

¹⁹ National School Climate Center.

²⁰ Jones, Bouffard and Weissbourd (2013).

²¹ Jennings and Greenberg (2009).

development.²² In turn, when teachers lack socio-emotional skills, access to training, resources, or techniques to foster the socio-emotional and/or academic development of their students, their behaviors and actions can also produce negative outcomes in their students.

Teachers can naturally develop, or learn to develop, students' socio-emotional skills by adopting certain attitudes and behaviors, implementing specific practices to improve their students' well-being and classroom climate, learning new information on the importance of socio-emotional skills, using a socio-emotional language in the classroom while they teach, following a specific curriculum and/or syllabus that promotes socio-emotional learning, receiving training on socio-emotional learning practices, using coaching or supervision techniques, among other resources.

Therefore, this document focuses on the specific channels or mechanisms through which teachers can influence the socio-emotional development and well-being of their students, by analyzing the evidence related to (i) specific characteristics of socio-emotional learning interventions that take place in educational settings, either in schools or in pre-school centers; (ii) teachers' actions and/or behaviors that have a positive influence on their students' socio-emotional development; and (iii) teachers' actions and/or behaviors that have a negative influence on their students' socio-emotional development. The next section presents the most salient characteristics of SEL interventions and the ways through which they stimulate the socio-emotional development of students.

3. Socio-emotional learning programs

One of the most structured ways to develop socio-emotional skills among students is to implement socio-emotional learning interventions. These interventions refer to specific programs that are typically designed to improve educational, social, and/or economic outcomes –such as academic achievement, socio-emotional development, and behaviors (as the result of socio-emotional skills) –by promoting the acquisition and development of socio-emotional skills among children, students, parents, and/or teachers.

These interventions can be implemented before the school years (usually know as early childhood development programs); in school, as part of the curriculum or as parallel activities; after school, as extracurricular activities; in educational settings, such as pre-school centers or schools; in the household, through home visits; through teachers, school staff, non-school staff, parents, among others.²³ They can target children, students, at-risk individuals, parents, and minorities, but also teachers. Regardless of the target population or the main objective (e.g., improving academic achievement), the common feature of these programs is that they all focus on teaching socio-emotional skills.

In order to identify and analyze the potential ways that teachers can influence the socio-emotional development of their students, this document only takes into account programs that (i) work with teachers, in educational settings such as pre-school centers or schools; (ii) target students, teachers, or both; (iii) promote the development of one or several socio-emotional skills; (iv) involve working with students without any identified learning problems; (v) have a positive impact on the socio-emotional development of children, students, and/or teachers; and

²² Jennings and Greenberg (2009).

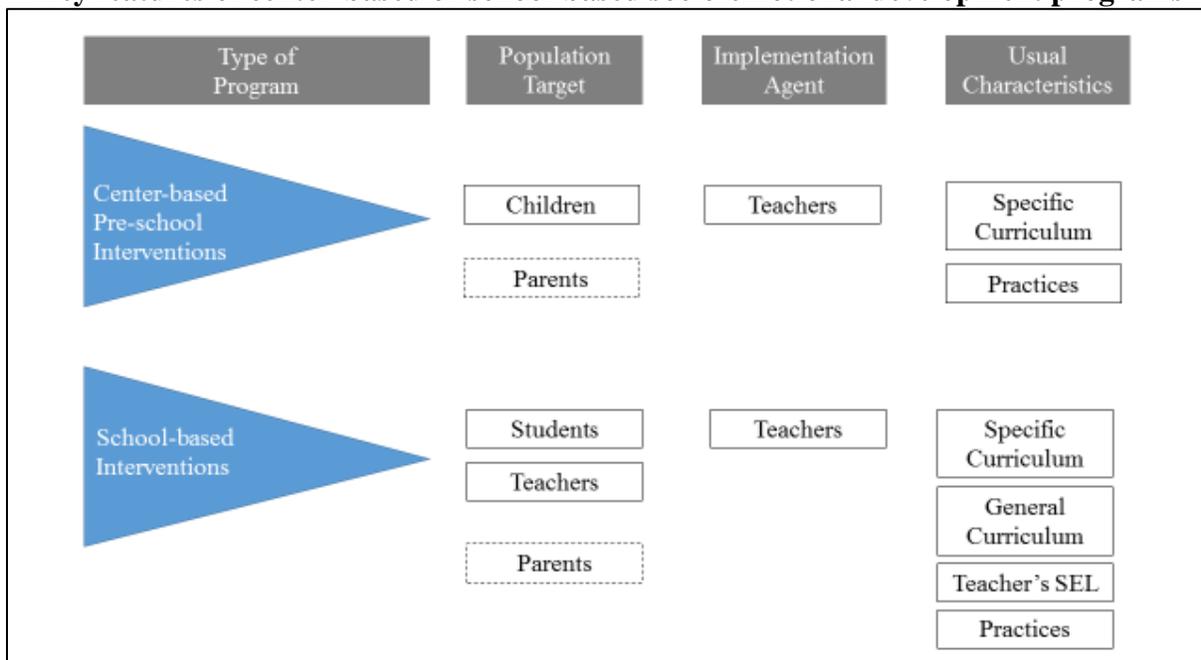
²³ Durlak et al (2011) and Sanchez Puerta et al (2016).

(vi) preferably include a control group.²⁴ Thus, under these criteria, this document excludes home-visit programs and after-school programs.

The socio-emotional development programs considered here may (as shown in Figure 3):

- Target children or students directly, or target teachers directly so that they can in turn work with their students.
- Provide teachers with training.
- Use a specific curriculum on socio-emotional learning, or use a general curriculum that includes socio-emotional learning.
- Promote the implementation of specific practices to improve the socio-emotional development of students, classroom climate, classroom management, or a combination of all these elements.
- Promote the implementation of additional activities in the classroom to improve the socio-emotional development of students.
- Include additional supervision or coaching mechanisms.
- Provide additional materials.

Figure 3
Key features of center-based or school-based socio-emotional development programs



Source: own elaboration.

Considering that there is a high degree of heterogeneity among programs, and among their evaluations, in terms of their characteristics, population target, implementation aspects, and the way they combine different elements, understanding why some programs are more successful than others, in terms of the magnitude of impact and effect sizes, and identifying and isolating

²⁴ This methodology is inspired by the methodology proposed by Durlak et al (2011).

the exact mechanism through which they make a difference becomes challenging.²⁵ However, three main interpretations emerge from the literature review, as explained below.

Teaching socio-emotional skills directly

One of the ways through which teachers can change the socio-emotional status of their students, or the children they work with, is by teaching them one or more socio-emotional skills directly. They can do so by following a specific curriculum, carrying out specific activities, assessing their students' level of socio-emotional development, and/or adopting specific practices in the classroom or the preschool center. For example, in the widely-studied Perry Preschool Program, teachers worked directly with children (and also their mothers), through a "plan-do-review" sequence in order to improve their self-control and social skills.²⁶

Part of the reason why SEL programs can have an impact on the socio-emotional development of children and adolescents has to do with their capacity to enhance their externalizing behaviors. These refer to problem or disruptive behaviors that are manifested externally –such as physical aggression, stealing, or cheating–, that are negatively associated with academic achievement, and that represent a risk factor in terms of future delinquency and crime. In the case of the Perry Program, for example, teachers were able to assess their students' behavior and identify and work on their behavioral problems.²⁷ As a result, induced reductions in externalizing behavior led to declines in the total number of lifetime arrests and the number of felony arrests (interpreted as measures of behaviors and approximate measures of socio-emotional skills).²⁸

Similarly, an evaluation of the xl Club Program, a remedial education intervention that targets underachieving 14-year-old students in secondary schools in England and explicitly focus on promoting students' confidence, self-esteem, and motivation, shows that this type of projects can contribute to increase student attendance, as an approximate measure of non-cognitive skills such as motivation or self-discipline.²⁹ Concretely, xl reduced unauthorized absences by 0.111 standard deviations.³⁰ As explained in the study, the activities carried out within the program did not contribute to students' official records of educational achievement and tended to vary depending upon the program advisors' decisions; yet, the program involved planning and attending activities, implementing small projects, and also rewarding students with a program award if they completed the necessary course work.

Different meta-analyses on the impact of socio-emotional learning programs on the socio-emotional skills or the behaviors of children and/or adolescents show that these interventions can have significant effects on social (or antisocial) behavior, attitudes, stress, and resilience.³¹ These reviews typically consider interventions that take place in schools or educational settings, are implemented by teachers, and target children and/or adolescents. The mean effects oscillate

²⁵ Kautz et al (2014) and Belfield et al (2015).

²⁶ Heckman et al (2013) and Kautz et al (2014).

²⁷ Heckman et al (2013).

²⁸ Heckman et al (2013).

²⁹ Holmlund and Silva (2014).

³⁰ This result was obtained when imposing equal selection of observables and unobservables. When changing the amount of selection, the results vary but show a positive effect.

³¹ Losel and Beelmann (2003), Durlak et al (2011), and Zenner et al (2014).

around 0.30 and 0.40 standard deviations, although the mean effects for specific outcome categories (for example attitudes) may range between 0.22 and 0.57 standard deviations.

Again, the studies considered in these meta-analyses tend to be heterogeneous and not all of them include sufficient information or specify program details. However, even if there is no specific information on the marginal impact of these characteristics, several factors seem to increase the success of these type of programs: teaching along with colleagues, promoting administrative and parental support, teaching specific skills (such as mindfulness), implementing the intervention at least several weeks, and adopting recommended practices to develop students' skills.³²

Specifically, the adoption of recommended practices refers to a program's capacity to use a connected and coordinated set of activities to achieve their objectives; to use active forms of learning to help students learn new skills; to include at least one component devoted to developing personal or social skills; and to target specific socio-emotional skills rather than targeting skills in general.³³

For the developing world, a recent impact evaluation conducted in contexts as diverse as Bhutan, Mexico, and Peru proves that it is possible to teach well-being skills –as a comprehensive set and direct measure of life skills– in schools and at large scale; teaching these skills increases well-being and academic performance on standardized national exams; and three components in particular (skills in this context) –perseverance, engagement, and quality of relationships– constitute the strongest mechanisms underlying increases in well-being and enhanced academic performance.³⁴ As in other cases, this intervention consisted in implementing a specific curriculum promoting 10 life skills, training teachers and school principals on how to practice and teach these life skills and provide students with positive feedback. In particular, in the case of Bhutan, the intervention caused an increase in student performance of 0.53 standard deviations, with student perseverance, engagement, and connectedness as the strongest predictors of the variance in academic performance.

The assessment aspect seems to be another distinctive element of successful programs that work on students' socio-emotional skills. This assessment can come from teachers, from parents, and from students directly through self-reports. For instance, the Positive Action Program, a school-based intervention that promotes students' positive thinking, actions and self-concept through the implementation of a curriculum, the promotion of cultural and family activities, and the use of supplementary materials, has had impacts on student self-reported normative beliefs about aggression and violent behaviors, and on parental reports of conduct problems.³⁵

Promoting teachers' socio-emotional development

Teachers can also change their students' socio-emotional development, or that of the children they work with, by working on their own socio-emotional skills. That is, socio-emotional learning programs can also target teachers directly, recognizing that teachers (i) are adult learners

³² Losel and Beelmann (2003), Durlak et al (2011), and Zenner et al (2014).

³³ Information extracted from Durlak et al (2011).

³⁴ Adler (2016).

³⁵ Belfield et al (2015).

who can benefit from workforce development; (ii) can have a direct influence on children's behavior and social interaction in the classroom through the way they manage the classroom; (iii) can provide emotional support to their students; and (iv) have a direct impact on the efficacy of socio-emotional learning programs through their own socio-emotional skills.³⁶

In the Chicago School Readiness Project, for example, teachers in the treatment condition participated in behavior management training, and they received coaching from mental health consultants to supervise the way they implemented their behavior management strategies. The impact evaluation of this intervention shows that this type of strategies can improve the emotional classroom climate, increase teachers' enthusiasm and responsiveness vis-à-vis their students, and lower teachers' use of emotionally negative practices.³⁷

There are other relevant examples –although aimed at strengthening children's socio-emotional skills, not teachers'– which provide supervision to teachers or program consultants who work with teachers: the Making Choices Program, for its effects on both high- and low-risk students in terms of their externalized behavior,³⁸ and the PROTEEVA Preschool Program in Bangladesh for its impact on young children's socio-personal skills.³⁹

Improving teacher-students interaction and classroom climate

The third mechanism through which socio-emotional learning programs can boost students' socio-emotional development is by working directly on the teacher-students interaction and/or improving classroom climate. For instance, the Seattle Social Development Project (SSPD), which targeted public elementary schools in high-crime areas of Seattle, promoted the interaction between students and their teachers, by training teachers on proactive classroom management, interactive teaching, and cooperative learning, improving the self-efficacy of program beneficiaries, among other outcomes.⁴⁰

Similarly, the Responsive Classroom approach focuses on high-quality instruction and teacher-students interaction, in order to improve student outcomes and strengthen school community ties.⁴¹ This methodology consists in providing teachers with strategies, practices, resources, and techniques to increase their self-efficacy and create joyful and safe classrooms, recognizing that how students learn is as important as what they learn.⁴² The evidence shows that this type of programs can have a positive impact on students' academic performance, social skills, and perception of school.⁴³ Other study shows that primary-grade teachers who use this approach in class report greater instructional self-efficacy (effect size of 0.24), greater efficacy to improve

³⁶ Raver et al (2008) and Jennings and Greenberg (2009).

³⁷ Raver et al (2008). Note: another interesting program in this regard is the Emotionally Intelligent Classroom, which provides the Emotionally Intelligent Teacher training (see Brackett and Katulak, 2006); however, there is no concrete evidence that can link teachers' socio-emotional skills to classroom and student outcomes, as explained in Jennings and Greenberg (2009).

³⁸ Fraser et al (2014).

³⁹ Diazgranados et al (2016).

⁴⁰ Kautz et al (2014).

⁴¹ Belfield et al (2015).

⁴² Belfield et al (2015) and Responsive Classroom website.

⁴³ Belfield et al (2015). Note: the size of the impact of the program on social skills and school perception is not specified in the study.

school climate (0.53), and more positive attitudes towards teaching (0.32), which in turn can also be perceived as factors of students' socio-emotional development.⁴⁴

The PATHS program is another useful example of SEL interventions that contribute to improving classroom climate and learning, through a set of lessons and techniques. This program helps students manage their emotions and solve conflicts in a positive way, while at the same time it empowers teachers to respond to students' psychosocial and emotional needs, and improve their classroom management.⁴⁵ However, the success of the program is more related to teachers' understanding of the program concepts and capacity to implement it, much more than the dosage of lessons and techniques provided by the program per se.⁴⁶ PATHS has contributed to increasing achievement, reducing teachers' reports on students' aggressive behavior, increased teachers' reports of improved behavior in the classroom, reduced conduct problems, among other outcomes.⁴⁷

More recently, an impact evaluation of the RULER Approach to Social and Emotional Learning, a universal SEL intervention designed to improve the (emotional) quality of classroom interaction in fifth and sixth grade, through teacher training and classroom curricula, shows that RULER schools exhibit better classroom organization and more instructional support, in comparison to control-group schools (with effect sizes between 0.48 and 0.71).⁴⁸

Although this study does not provide specific evidence on the impact of the program on the socio-emotional development of students, the theory of change of RULER states that, with teacher training and classroom curricula, emotional support and emotional literacy skills increase, which in turn positively affects classroom organization and instructional practices, which have a final impact on student achievement and socio-emotional development.⁴⁹

Thus, this section has presented the main mechanisms through which well-structured socio-emotional learning programs can improve students' socio-emotional skills and behaviors, among other outcomes. The next section presents the different ways through which teachers can have a positive impact on the socio-emotional development of their students out of the context of a specific socio-emotional learning program.

4. Other mechanisms

Beyond specific and well-structured socio-emotional learning interventions, teachers can also positively influence their students' socio-emotional development, through direct, indirect, intentional, or unintentional methods, behaviors, and attitudes. These mechanisms can be grouped into three categories that interact between them: direct practices; indirect attitudes and behaviors; and classroom organizational features (see Figure 4).

Direct, conscious, explicit mechanisms

⁴⁴ Rimm-Kaufman and Sawyer (2004).

⁴⁵ Jennings and Greenberg (2009) and PATHS website.

⁴⁶ Jennings and Greenberg (2009).

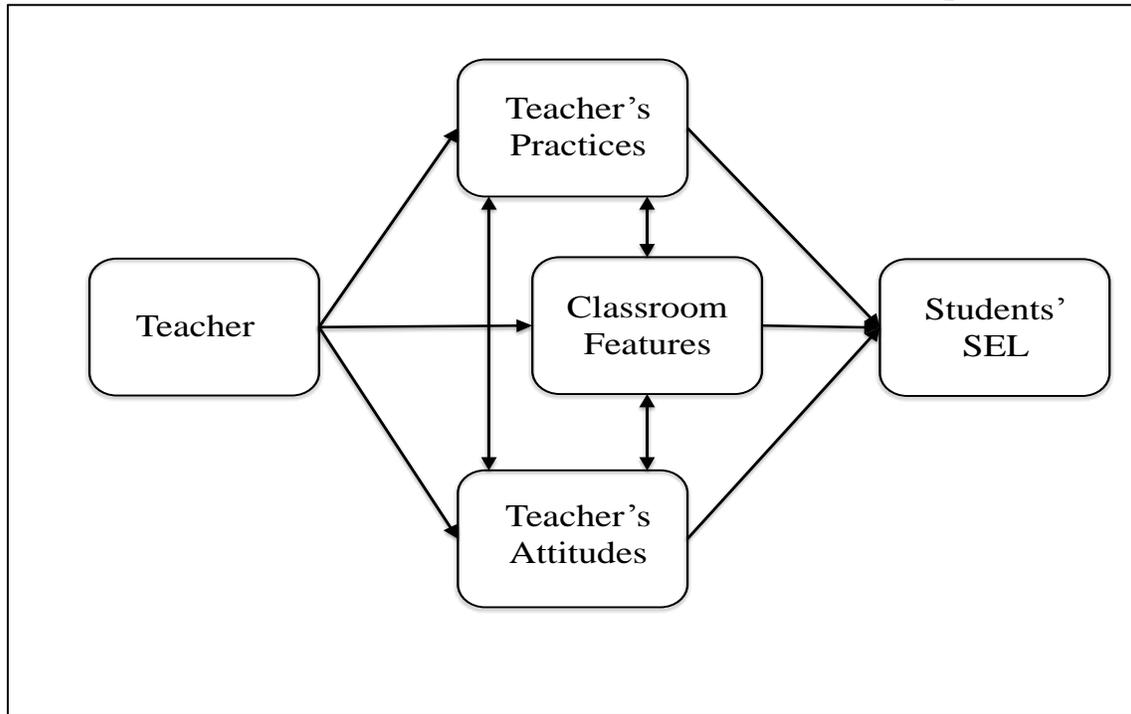
⁴⁷ PATHS webpage.

⁴⁸ Hagelskamp et al (2013).

⁴⁹ Hagelskamp et al (2013).

These mechanisms refer to a diverse set of practices that teachers can carry out in the classroom, without or beyond a socio-emotional learning program, in order to promote the development of socio-emotional skills among their students. Most of these techniques aim to increase students' self-confidence, either by putting in practice different exercises with this purpose or by assessing student performance and/or socio-emotional development.

Figure 4
Teachers' influence on their students' socio-emotional development



Source: own elaboration.

A relevant example of these techniques is providing students with positive affirmation before taking a test; that is explicitly communicating their expectations or beliefs such as “I am sure you will solve the given problems very well” or “ You have already taken tests in the past with success, otherwise you would not be here”.⁵⁰ Teachers can stimulate students' self-confidence through what in Psychology is known as the Pygmalion effect, or the phenomenon through which higher expectations lead to higher performance.⁵¹

The evidence shows that this type of direct mechanisms can produce significant results on test performance, particularly for students with lower self-confidence and higher anxiety: for example, in a field experiment with undergraduate students, providing students in the treatment group with positive affirmation before a math test, on average, increased test scores by 2.5 percentage points, with a maximum score of 10 points.⁵²

⁵⁰ Examples taken from Behncke (2012).

⁵¹ Behncke (2012). Definition obtained from Wikipedia.

⁵² Behncke (2012).

Another type of useful technique is mental contrasting, exercise that consists in mentally contrast a desired future with its present reality, including the obstacles that can hinder attaining that future, in comparison to only focusing on a desired future.⁵³ The evidence, both for German elementary school children and US middle school children, shows that teaching students to apply mental contrasting yielded higher scores in learning than only teaching them to focus on a desired future.⁵⁴ Even though it focuses on learning, not on socio-emotional development per se, the corresponding study recognizes the implications that these techniques can have on “the self-regulation of commitment to solve assigned tasks in classroom settings”.⁵⁵

Positive affirmation and mental contrasting can be particularly helpful tools in the education sector in order to deal with the stereotype threats and stereotype vulnerability that some population groups may face. Stereotype threat can be defined as “being at risk of confirming, as a self-characteristic, a negative stereotype about one’s group” and is associated to changes in performance due to negative stereotype.⁵⁶ A set of studies that explore the differences in test performance between white and black students show that black students underperform in relation to white students when they are made vulnerable to judgement about their intellectual ability.⁵⁷

Teachers can also boost students’ self-confidence by developing specific behaviors or taking actions that shape the way that students feel about school, in the classroom, and vis-à-vis their teachers. In other words, another set of similar techniques to positive affirmation has to do with carrying out practices that promote students’ attachment to school, that improve the teacher-student relationship, and that provide students with socio-emotional support during the learning process.

Teachers who demonstrate they care about their students, encourage them, and provide them with emotional support, and a proper atmosphere that makes them feel valued, respected, and safe, can positively influence their socio-emotional and academic development.⁵⁸ For instance, a study about teachers’ influence on students’ feelings about school, in Chicago, shows that students are more likely to be attached to school when they perceive that their teachers care about them, try to be fair, and praise them, even when in school safety and academic confidence are in control.⁵⁹

Teacher-student interactions also play an important, moderating role in children’s socio-emotional adjustment to school, particularly among shy children. Shyness is a limiting factor in a child’s ability to interact with his or her peers, to participate in class, among other situations. A research project implemented in 14 public schools in Ontario, Canada showed that a close teacher-child relationship in early elementary school (grade 1 specifically) may buffer shy children against negative outcomes such as anxiety, school avoidance, or peer exclusion; in contrast, an emotionally dependent teacher-student relationship is significantly and positively

⁵³ Gollwitzer et al (2011).

⁵⁴ Gollwitzer et al (2011).

⁵⁵ Gollwitzer et al (2011).

⁵⁶ Steele and Aronson (1995).

⁵⁷ Steele and Aronson (1995).

⁵⁸ Hallinan (2008).

⁵⁹ Hallinan (2008).

associated with these same outcomes.⁶⁰ The study consisted in obtaining mothers' observational assessments of their children's degree of shyness, teachers' self-report ratings of their own relationships with every student in their class – whether it was close, emotionally dependent, or conflictive – and information from child interview assessments.

Another study shows that a closer teacher-students relationship, assessed with the Student-Teacher Relationship Scale, which measures a teacher's perception of his/her relationship with a particular student –for example, whether this relationship is warm and affectionate–, is positively related to academic skills, particularly for children whose parents reported more authoritarian attitudes.⁶¹ In particular, according to this study, students' math and basic reading skills increased substantially, approximately between the ages of 4 and 8.

In this regard, mentoring or tutoring also represents a useful technique to increase students' self-confidence. Even when tutoring is not provided by teachers, but by other involved adults, the evidence indicates that these type of actions can be very effective in terms of increasing student achievement, by providing (emotional) support. A methodological review of different studies in the United States about volunteer tutoring shows that the average effect of these programs on reading outcomes for elementary students was 0.23 standard deviations.⁶²

Finally, with respect to the direct measures that they can apply in the classroom, teachers can also influence the development of socio-emotional skills among their students by assessing –and even labeling– the way that their students perform emotionally and/or academically. On the one hand, teachers' ratings of kindergarten students' prosocial skills can help identify their degree of vulnerability to develop socio-emotional skills later in life.⁶³ In particular, the evidence shows that there are statistical significant associations between teachers' ratings of children's socio-emotional skills and young adult outcomes that reflect socio-emotional development, such as high school graduation, college completion, or employability.⁶⁴

Teachers can also help students identify their ability to manage their emotions and identify effective strategies to manage them. The reason why this is important, as different studies in Spain and the United States show, is that students' ability to manage their emotions is associated to their likelihood to develop inappropriate behavior, to their socio-emotional competence, their socio-emotional adaptation to school, and to the quality of the student-teacher interaction: a higher ability to manage emotions is negatively related to teacher ratings of inappropriate behavior and positively related to teacher ratings of the quality of the student-teacher relationship.⁶⁵

Assessing or labeling students' performance can also have effects on their academic performance and their likelihood to attend college, through the way they receive the information about their assessment and thus their self-confidence, since labels capture a summary of student

⁶⁰ Arbeau et al (2010).

⁶¹ Burchinal et al (2002).

⁶² Ritter et al (2009).

⁶³ Jones et al (2015).

⁶⁴ Jones et al (2015).

⁶⁵ Lopes et al (2012).

performance.⁶⁶ A study that analyzes student performance on the state standardized mathematics test in Massachusetts for grades 8 and 10 shows that, as a student, being labeled more positively (for example, from “proficient” to “advanced”) affects his or her decision to attend college, particularly for students on the margin of earning extreme labels (either positive or negative). Thus, as explained earlier, emotions do play an important role in academic decisions and performance.⁶⁷

Indirect mechanisms

Teachers can also positively influence their students’ socio-emotional development through indirect or unintentional methods, behaviors, and attitudes. As mentioned previously, teachers represent a reference of socio-emotional development in the classroom, and their own socio-emotional development significantly influences the quality of student-teacher relationships, their capacity to organize and manage the classroom, and the way that students observe and learn socio-emotional skills.⁶⁸

The literature explains that teachers’ positive traits serve as a buffer against adversity and increase their effectiveness as teachers.⁶⁹ According to a longitudinal study, novice teachers who were one standard deviation higher in grit, life satisfaction, and optimistic explanatory style –or higher in socio-emotional skills or attitudes related to socio-emotional skills– were 31, 43, and 20 percent more likely to outperform their peers, respectively, in terms of students’ academic gains.⁷⁰ Although this study analyzes the performance of teachers from the Teach for America program and although it focuses on the academic achievement of students, not their socio-emotional development, it shows that teachers’ (positive) characteristics have a significant influence on student outcomes, relatively to traditional indicators of teaching competence.

Yet, the literature also indicates that teacher effects on students’ social and behavioral development are not only sizeable but also significant, relative to teacher effects on academic achievement.⁷¹ A study employing data from the Early Childhood Longitudinal Study – Kindergarten Cohort, which includes teacher and parent reports of children’s social and behavioral skills, and cognitive assessments, shows that having a kindergarten teacher at the 75th percentile of the teacher effects distribution increases children’s social and behavioral skills by 0.185 standard deviations, in comparison to having a teacher at the 25th percentile.⁷² The results on academic achievement are lower: 0.042 standard deviations in math and 0.141 standard deviations in reading.

Similarly, an impact evaluation in Chile that analyzes the effect of the Teach for Chile program (Ensenar Chile) on students’ socio-emotional skills shows that students with a Teach-for-Chile teacher display higher levels of self-confidence and social skills in comparison to students with traditional, non-Teach-for-Chile teachers, after one academic cycle.⁷³ Part of the reason has to do

⁶⁶ Papay et al (2011).

⁶⁷ Milicic et al (2014) and Papay et al (2011).

⁶⁸ Jones et al (2013).

⁶⁹ Duckworth et al (2009).

⁷⁰ Duckworth et al (2009).

⁷¹ Jennings and DiPrete (2010).

⁷² Jennings and DiPrete (2010).

⁷³ Alfonso et al (2012).

with the type of skills that the Teach for Chile program promotes among its teachers: positive attitudes, leadership, and social entrepreneurship.⁷⁴

Moreover, teachers do not only influence their students' social and emotional skills: they also have effects on longer-term outcomes, as the literature suggests. A study that extends the traditional test-score value-added model of teacher quality, and explores the diverse set of effects –that are not reflected on test scores– that teachers can have on different student outcomes, shows that (1) on average, a one standard deviation increase in test-score value-added increases the likelihood of graduating from high school by 0.15 percentage points, and (2) when teacher effects on behaviors are also included, a one standard deviation increase in test-score value-added increases the likelihood of graduating from high school by 0.12 percentage points, and a one deviation increase in teacher's behavioral effects increases high-school graduation by 1.46 percentage points.⁷⁵ The same logic applies to other outcomes that relate to socio-emotional development, such as high-school dropout and plans to attend a 4-year college.

Last but not least, the evidence shows that teacher gender –as a really lax signal of teaching style– can positively influence student engagement. A study using student and teacher administrative data from the University of Toronto's Art and Science Faculty analyzed the role of teacher gender on student achievement and subject interest, at the university level, finding that having a same-sex teacher decreases the likelihood of dropping a class –as an approximate measure of several non-cognitive skills– by 1.2 percentage points.⁷⁶ Although marginally –and controversially–, teacher gender (probably through the behaviors and attitudes it involves) therefore seems to affect student behavior, at least regarding course completion, in the context of this study.

Classroom organizational features

In addition to their characteristics, skills, and behaviors, classroom characteristics can also influence the way that teachers contribute to develop students' socio-emotional skills. The intuition is that different elements such as classroom size, classroom management, classroom physical organization, classroom social organization, and/or classroom climate can affect the way that the class is delivered and/or the dynamics of the teacher-students interaction. However, given the limited availability of evidence on this subject, this document only presents information about the effects of class size and classroom management on students' socio-emotional skills.

Class size seems to play an important role on non-cognitive development. On the one hand, low-performing students or struggling teachers may be systematically assigned to smaller classes; on the other hand, smaller classes may help teachers to limit disruptive behaviors and promote student motivation, among other outcomes.⁷⁷ A recent study for middle school that uses the National Education Longitudinal Survey of 1988 and analyzes class size effects conditional on both teacher and student fixed effects, shows that smaller eight-grade classes have effects

⁷⁴ Alfonso et al (2012).

⁷⁵ Jackson (2016).

⁷⁶ Hoffmann and Oreopoulos (2009).

⁷⁷ Dee and West (2011).

between 0.05 and 0.09 standard deviations on several measures of school engagement, and smaller effects persisting two years later.⁷⁸

Effective classroom management is another mechanism to boost students' socio-emotional skills, for its effects on preventing and/or managing disruptive behaviors, and on increasing productive classroom time.⁷⁹ An intervention implemented in 71 preschools in Newark and Chicago, consisting in training and coaching teachers in classroom-management skills, proved to have a positive impact on teachers' positive classroom management (effect size of 0.75), teachers' management of classroom time (0.63), the reduction of problem behavior (-0.40 to -0.27), and children's social and emotional competence (0.60 in overall classroom student engagement).⁸⁰

Effective classroom management, both as a formal and informal mechanism, can also be a useful tool to promote student participation and/or prevent student defiance. Teachers usually struggle between covering the topics of the course, promoting class participation, and preventing student defiance. By observing instructional processes and peer networks, conducting interviews, analyzing school records, in two different types of high schools, a study shows that classroom practices and characteristics have a significant role on classroom disruption.⁸¹ Specifically, even if they are not necessarily better formats of instruction, teacher-centered tasks tend to decrease student defiance relative to student-centered tasks: approximately 8 percent of the variance between classrooms can be attributed to the form and content of classroom instructional practices.

Teachers' ability to effectively manage the classroom also depends upon school discipline choices, attitudes, and practices. Testing the intuition that more severe discipline reduces misbehavior in the classroom, a relatively recent study encompassing eight-grade students suggests that in fact good behavior is more related to student perceptions of fairness and legitimacy towards the authority (or the type of school rules), as well as positive teacher-student relations.⁸² In short, more positive teacher-student interaction leads to lower levels of student misbehavior in the classroom, as an indicator of their socio-emotional development.

Also, it is important to mention that class behavior is different than individual student behavior and, therefore, teachers' perceptions and ratings of global class behavior and individual student behavior may differ. On the one hand, classroom characteristics may affect teachers' perceptions of the behavior of the whole class as a group but not necessarily their perceptions on the behavior of individual students; on the other hand, teachers may rate students regardless of how they behave in comparison to students in other classes.⁸³ This may have implications in terms of labeling students who behave well in comparison to students in other classes but relatively worse in their class.

⁷⁸ Dee and West (2011). Other studies, such as Weaver and Qi (2005) do not find evidence on the effect of class size on student participation (coefficient insignificant and in the wrong direction).

⁷⁹ Morris et al (2013).

⁸⁰ Morris et al (2013).

⁸¹ McFarland (2001).

⁸² Way (2011).

⁸³ Finn and Pannozzo (2004).

Thus, this section presented the different ways through which teachers can have a positive impact on the socio-emotional development of their students, independent of the context of a given socio-emotional learning program. The next section reviews the ways that teachers can have negative effects on their students' socio-emotional development.

5. Negative effects

Even though, at least in theory, teachers are supposed to and expected to promote the socio-emotional development of students, they can also have a negative (indirect) influence on them, through their own behaviors and/or through classroom management practices. Certainly, many of the results and conclusions presented in the previous section of this document can be used in this section in the opposite direction. However, this section specifically presents evidence on teachers' negative influence on students' repertoire of socio-emotional skills .

As pointed out previously, teachers represent a socio-emotional benchmark in the classroom. Their capacity to identify, manage, and channel their emotions, both directly and indirectly, influences their students' ability to identify, manage, and channel their own emotions. Teaching, however, can be one of the most stressful occupations due to the multiple tasks it involves and, in certain contexts, for the type of working conditions it entails.⁸⁴ High levels of stress can affect teachers' psychological and physical health, hinder their performance, cause teacher burnout, reduce their engagement, and therefore negatively influence children's socio-emotional development.⁸⁵

Even though the existing literature tends to focus on the role that teacher stress plays on students' academic achievement, there are also three important empirical results related to socio-emotional development.

Firstly, teacher stress is negatively associated with the learning environment in which students are nested. A recent study that analyzes associations between symptoms of depression of third-grade teachers in North Florida, quality of the classroom-learning environment (CLE), and students' academic performance in math and literacy shows that teachers' depressive symptoms—which in this research are interpreted as an externalized indicator of stress—are negatively associated with quality of CLE (according to the authors, a moderately sized negative correlation of -0.406), which in turn affects student achievement.⁸⁶

Secondly, teacher burnout and classroom quality not only go hand in hand but also predict children's social adjustment in school, in terms of their relationship with their teachers and their friends, and of their engagement with school. A recent study involving students and teachers between kindergarten and third grade, in urban elementary schools in Western Canada, found that (i) teacher burnout significantly predicts less growth in teacher-child relationship-quality as a measure of child social adjustment (ES = 0.05) and (ii) individual externalizing behaviors are associated with lower school engagement levels for children who have more burned-out teachers (ES = 0.16).⁸⁷

⁸⁴ Montgomery and Rupp (2005).

⁸⁵ Robert Wood Johnson Foundation (2016).

⁸⁶ McLean and McDonald Connor (2015).

⁸⁷ Hoglund et al (2015).

Thirdly, teachers' inability to cope with stressful situations in the classroom also relates to their incapacity to reduce student misbehavior. The influence of teachers on students' socio-emotional status, through their influence on classroom structure, organization, and environment, is germane for every student, but particularly for students with poor behavioral regulation skills and for students with novice teachers. An interesting assessment of the way that student teachers react to difficult situations finds that inactive behavior from teachers is ineffective in terms of changing student misbehavior.⁸⁸ This study, which involved teachers in a one-year teacher education program in the Netherlands, concludes that when facing stressful encounters, the more teachers vary their behavior in the classroom, instead of focusing it on disciplinary measures, the less they are able to change class behavior towards on-task behaviors.

Beyond the stress and burnout they can suffer from, teachers can also negatively influence their students' socio-emotional development through their own behaviors and practices. In certain cases, well-intended mentoring can encourage the development of risky behaviors, instead of reducing them. For instance, an impact evaluation of the Quantum Opportunity Program, an adolescent mentorship after-school intervention, found that males in the treatment group were 8 percentage points more likely to have been arrested ten years after the beginning of the program.⁸⁹ A potential explanation for this counterintuitive result is that too much involvement in mentoring from mentors can end up lowering the cost of engaging in risky behaviors for mentees.⁹⁰ Although this program was not implemented in an education setting as such, its evaluation shows that mentoring not only does not automatically promote the socio-emotional development of mentees, but that it can also negatively influence it.

Perhaps one of the most interesting and studied detrimental teacher behaviors in the field of education, for its many negative effects on student achievement, is teacher absenteeism.⁹¹ Nevertheless, there is limited evidence on the potential effects of this type of behavior upon the acquisition (or loss) of socio-emotional skills in students. Intuitively, if teachers are supposed to embody a model of socio-emotional development in the classroom, then teacher absenteeism could promote student absenteeism too, as an approximate measure of students' socio-emotional skills. A recent graduate thesis suggests that teacher absence has little statistical influence on student attendance rates; in turn, teacher tardiness seems to have a significant effect on student behavior and tardiness: teachers who are frequently tardy tend to make more referrals, while students with teachers who are frequently tardy also exhibit higher rates of tardiness.⁹² Since it does not constitute an academic publication, this thesis, a quasi-experimental design study that involves a small sample of eight-grade students and teachers in a Baltimore school, should be considered with empirical caution.

A third mechanism through which teachers can negatively influence their students' socio-emotional development, in addition to teacher stress and teacher behavior, is teachers' expectations about their students' performance. The problematic around expectations is their

⁸⁸ Admiraal et al (2000).

⁸⁹ Kautz et al (2014).

⁹⁰ Kautz et al (2014).

⁹¹ Miller et al (2007).

⁹² Brooks (2015).

relation to labeling theory, which states that labeled individuals will not only perceive themselves but also behave according to the labels inflicted on them.⁹³ One of the areas where this phenomenon acquires relevance is the role of teacher gender on student outcomes. Although this paper does not intend to argue whether a particular teacher gender is better or worse for student development, it does present evidence that teacher gender may affect student behavior, particularly when (negative) labeling is involved, as explained below.

When analyzing whether assignment to a same-gender teacher influences student engagement with academic subjects, a study involving middle-school students in the United States found that teachers are more likely to see opposite-gender students as disruptive, while students are less likely to find a subject useful when their teacher is the opposite sex.⁹⁴ Specifically, with a female teacher, boys are 11 percentage points more likely than girls to be seen as disruptive; similarly, with a male teacher, the variable that measures students' lack of engagement is 0.20 standard deviations higher for girls than for boys. This research does not intend to suggest that assignment to same-gender teachers is the right education policy but rather to shed light on the way that teachers' traits (and their teaching style) may influence learning and socio-emotional development environments.

This section presented the different ways that teachers can have negative effects on their students' socio-emotional development. The next and final section concludes.

6. Conclusion and limitations

Emotions play a more significant role in learning processes, academic performance, and human development that educators and policy makers might suspect. The evidence is clear and conclusive: teachers influence their students' socio-emotional development, and they can do so directly or indirectly, intentionally or unintentionally, in positive ways or negative ones. Several conclusions can be extrapolated from the literature review presented in this paper:

- (i) Teachers influence their students' socio-emotional development through how and what they teach, and through the way they interact with students.
- (ii) Less competent teachers can learn techniques to improve their classroom management skills, increase their own repertoire of socio-emotional skills, and promote their students' socio-emotional development.
- (iii) One of the most effective ways to promote students' socio-emotional development in the classroom is implementing a coordinated set of direct and specific activities, techniques, and practices for socio-emotional learning and growth, either in the context of a socio-emotional learning intervention and/or beyond.
- (iv) Using a positive approach rather than a strictly disciplinary focus appears to be more effective for student behavior management and student motivation, in terms of the quality of the teacher-student relationship and teachers' expectations of student achievement in different domains.

⁹³ Shifrer (2013). This study presents interesting evidence on teacher expectations regarding high school students with learning disabilities: specifically, it finds that the probability that teachers expect a bachelors degree or higher versus no college at all for students with learning disabilities labels is 82 percent lower in comparison to adolescents without these labels. This reference is not included directly in the paper as it involves students with learning disabilities.

⁹⁴ Dee (2007).

- (v) Early teacher assessment of student behavior can contribute to reshaping student behavior in the future.
- (vi) Classroom characteristics influence students' socio-emotional development, but they tend to do so through teachers' capacity to manage the classroom effectively and to engage students.
- (vii) Providing teachers with support structures and positive working environments can help in the socio-emotional development effort.⁹⁵

Nonetheless, it is important to consider that this literature review also presents several limitations that are worth mentioning:

- (i) Most of the research currently available, and therefore considered here, uses studies in the developed world, particularly in the United States, which limits the possibility of extrapolating policy recommendations for less developed countries or more rural contexts.
- (ii) The literature on the potential effects of classroom settings on student socio-emotional development, such as arranging desks in traditional format or in a U-shape, is practically inexistent. Analyzing how classroom characteristics impact learning and socio-emotional development processes could be useful to identify more techniques that teachers can use in the classroom to improve positive interactions and learning.
- (iii) Just as teachers can influence their students' socio-emotional development, students can also contribute to the development of teachers' teaching style, through teacher-student interactions. However, students' preference for certain teaching styles may not always coincide with teachers' own preference, in terms of thinking styles and interpersonal behaviors.⁹⁶ Setting shared objectives and agreed-upon ensuing behavioral norms may contribute to aligning students' and teachers' preferences.
- (iv) The different ways that teachers can influence the socio-emotional development of their students are not exempt from diverse factors that are difficult to separate and can create vicious, paradoxical spirals in this process. For instance, students' socio-emotional skills may be the result of, but also the cause of, effective classroom management,⁹⁷ and analogously for other reciprocal relationships, like the way that social context influences students' perceptions of their own socio-emotional development, and beyond.⁹⁸

Further research could help disentangle the directions of causality and reveal the best levers to enhance the socio-emotional development of children and youth around the world.

⁹⁵ Montgomery and Rupp (2005) and Moore Johnson et al (2011).

⁹⁶ Zhu (2013).

⁹⁷ Day et al (2015).

⁹⁸ West et al (2016).

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