Finding the Fluoride: Examining How and Why Developmental Relationships Are the Active Ingredient in Interventions that Work

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Abstract

Leaders in education and youth development expend considerable effort identifying and testing programs and strategies to improve outcomes for young people from marginalized communities. Yet too few efforts yield measurable progress. Li and Julian (2012) argued that an underappreciated factor in the success and failure of interventions is the degree to which they promote "developmental relationships." This article describes a multi-year, multi-method effort by Search Institute to operationalize and test that hypothesis that has involved operationalizing a framework of developmental relationships, examining how those relationships are built in diverse contexts and their association with positive attitudes, skills, and behaviors among young people, particularly those from marginalized communities. It concludes by describing the next phase of this initiative, which involves using an improvement science approach to co-create strategies for strengthening developmental relationships in partnership with youth-serving organizations in multiple sectors.

Keywords: developmental relationships; improvement science; adolescence; positive youth development; marginalized youth

Across the fields of education and youth development, practitioners, researchers, policy makers, and funders are all asking a critical question: What works to put young people who live in poverty and are from marginalized communities on the path to becoming thriving adults? Leaders in a wide range of environments—from early childhood programs to K-12 schools to out-of-school time programs to social service agencies—are asking that question as they adopt research-based programs, use data to measure progress, train staff, and implement many other strategies intended to improve youth outcomes. Far too often, however, these initiatives do not lead to the improvements that their creators and implementers intend and that young people deserve (Barton, 2013; Bryk et al., 2015). These findings lead to a second question: Why aren't these interventions working?

There are, of course, no simple answers to either of those questions. Numerous factors influence the success or failure of an intervention, including the soundness of the program design, the fidelity of implementation, the capacity of the people and organizations involved, and external factors that cannot be controlled and often cannot be anticipated.

In 2012, Junlei Li and Megan Julian argued in this journal that a major and underappreciated factor in the success and failure of interventions intended to improve the lives of children and youth at risk is the degree to which those interventions promote what the authors called *developmental relationships*. They asserted that "developmental interventions produce desirable outcomes if and only if such interventions enhanced developmental relationships" (p.12). To illustrate their hypothesis, Li and Julian compared the role of developmental relationships in effective interventions to the role that fluoride plays in toothpaste: It is the active ingredient that directly and most powerfully contributes to the intended outcome. Although inactive ingredients such as those that determine the color and taste of toothpaste add value, it is

the active ingredient of fluoride that is essential for fighting cavities. In the context of interventions for youth at risk, Li and Julian argued that rather than focusing on the active ingredient of relationships, strategies too often focus on "inactive ingredients" such as performance incentives, systems for holding employees accountable for performance, and the creation of new curricula.

Li and Julian supported their argument by summarizing studies that showed how outcomes improved when young people experienced developmental relationships in four different contexts: an orphanage, a school in a high-poverty community, a mentoring program for at-risk youth, and a home visiting program for new mothers. Looking across these four settings, they proposed that the role of developmental relationships could form the foundation of a unifying theory of "what works" in interventions for young people at risk.

Li and Julian bolstered their hypothesis with strong theory and case examples, but they also emphasized that their claim is one that can and should be operationalized and tested. They observed that testing that claim first requires defining a developmental relationship in terms that go beyond "the common notions of emotional attachment or connection" (p. 2). They also called for the creation of valid and reliable measures of developmental relationships, integrating efforts to build those relationships into programs and systems, and carefully assessing the contribution of relationships to the effectiveness of interventions.

Li and Julian are not, it should be noted, the only researchers who have described and demonstrated the positive power of relationships in program effectiveness and human development. See, for example, Benson et al., 2006; Caughlin & Huston, 2010; Feeney & Collins, 2014; Pianta, Hamre, & Allen, 2012; Reis, 2007; Reis & Collins, 2004; and Wubbels et

al., 2016. Nobel Laureate James Heckman and his colleague Tim Kautz (2013) reached the following conclusion after their review of the evidence:

> The common feature of successful interventions across all stages of the life cycle through adulthood is that they promote attachment and provide a secure base for exploration and learning for the child. Successful interventions emulate the mentoring environments offered by successful families. (p. ii)

Search Institute, the non-profit applied research organization with which the authors are affiliated, is in the midst of a multi-year and multi-method effort to operationalize and test the hypothesis that developmental relationships are the active ingredient in interventions that work for young people, particularly those from marginalized communities. We began this work in 2013, animated by the idea that, if the developmental relationships hypothesis is supported, the implications could be far-reaching and profound. Testing Li and Julian's hypothesis and learning *how* developmental relationships change the equation would not only enable us to better understand why interventions have limited or no effects; it would also enable us to design, contextualize, and implement interventions with a greater chance of success.

This article describes the process followed and the findings from the first phase of Search Institute's long-term project of applied research. It outlines the definition of a developmental relationship that we have created through both qualitative and quantitative research and the early conclusions we have reached about the degree to which young people in the United States today experience those relationships. It reports on learning about *how* developmental relationships are built. It also reports on the attitudes, skills, and behaviors that developmental relationships appear to cultivate in young people. Finally, the article briefly describes the next phase of this work, which involves partnering with youth-serving organizations in multiple sectors to co-

create strategies for strengthening developmental relationships, using an improvement science approach, and to examine the impact that use of those strategies has on youth outcomes.

Our Approach

Articulating a Guiding Framework

We began our journey to activate the active ingredient of developmental relationships by defining the term and operationalizing it with principles and practices. For Li and Julian (2012), a relationship is developmental if it meets four criteria:

a. There is a strong and lasting emotional attachment.
b. Reciprocal activity takes place in which both people invest in the relationship.
c. There is progressive complexity in the things the people in the relationship do together.
d. The balance of power shifts to give the young person more autonomy as he or she grows.

Li and Julian's four criteria aptly describe key features of a developmental relationship, and are a valuable resource for constructing a theory of relationships and conducting research on relationships. They do not, however, articulate the types of specific actions educators, youth workers, parenting adults, friends, or another adults might take to operationalize each of these criteria. How, for example, should a teacher facilitate reciprocal activity with a student? How should a parent shift power to a child to promote autonomy without introducing excessive risk of failure, or worse? How should a mentor build a strong emotional attachment with a new mentee?

Because we seek not just to understand, but also to provide practical guidance for strengthening relationships, we describe a developmental relationship as a set of interpersonal actions between adults and youth that facilitate growth, learning, and development. Although

there are moments in any relationship when no interaction is taking place, conceptualizing developmental relationships as actions encourages both practitioners and researchers to see relationships as actionable and malleable, not mysterious or intangible.

We also decided early in our work that our goal was to develop a definition of a developmental relationship that could be applied across the environments in which young people live their lives. Numerous studies have examined the nature of relationships in particular contexts, such as parent-child relationships in the home or teacher-student relationships at school. While that research has been invaluable and has deeply informed our work, it was our sense that young people often experience relationships comparatively. They frequently feel more cared about in one environment than another, or more challenged by one person than another.

Thus, we created a framework that would facilitate the examination, alignment, and strengthening of relationships across contexts to inform a broader ecological view. If it takes a village to raise a child, we reasoned, then using the same lens to observe how children experience relationships throughout the village would be a useful contribution. Among other benefits, it would enable us to understand the degree to which marginalized young people have a diverse “portfolio” of relationships in their lives. As Chandra and Leong (2016) have recently shown, surrounding people with such a web of positive relationships contributes to greater resilience, mood stability, self-efficacy, and social competence, much as a diversified financial portfolio maximizes advantage from investment opportunities while buffering against inevitable risks.

Our effort to operationalize the elements and actions within developmental relationships began with qualitative research. We initially conducted 18 focus groups, each about 45 minutes long, with a total of 125 parenting adults, young people ages 10-19, young adults, youth workers,

and educators across several states, from differing racial-ethnic groups, different socio-economic levels, and in rural, suburban, and urban communities (Syvertsen et al., 2015). These focus groups examined what actually happens in diverse relationships that positively influences young people's generalized well-being and, more specifically, helps them set and achieve life goals related to college, careers, and civic and social life.

Themes from the focus groups were supplemented by an extensive review of existing research on the roles that relationships play in child and youth development. This review draws from general discussions of the power of relationships (e.g., National Research Council and Institute of Medicine, 2009; National Scientific Council on the Developing Child, 2009; Reis, Collins, & Berscheid, 2000; Smetana, Campione-Barr, & Metzger, 2006) as well as from literature across multiple theories of development and developmental contexts, including positive youth development (e.g., Benson et al., 2006; Damon, 2004; Lerner, 1998), attachment and bonding (e.g., Bowlby, 1969/1982; Fearon & Roisman, 2017), resilience (e.g., Cicchetti, 2012; National Research Council, 2014; Ungar, Ghazinour, & Richter, 2013), motivation and self-determination (e.g., Martin & Dowson, 2009; Ryan & Deci, 2000), parenting and family relationships (e.g., Kuczynski, 2003; Laursen & Collins, 2009), student-teacher relationships (e.g., Pianta, Hamre, & Allen, 2012; Wentzel, 2009), peer relationships (e.g., Brown & Larson, 2009; Chen, French, & Schneider, 2006), mentoring and other non-parent adult relationships (e.g., Celio, Durlak, & Dymnicki, 2011; Sánchez et al., 2004; Schwartz & Rhodes, 2016), youth programs (e.g., Eccles & Gootman, 2002; Jones & Deutsch, 2011; Larson & Angus, 2011), and community and social capital (e.g., Christens, Winn, & Duke, 2016; Stanton-Salazar, 2011).

Taken together, the insights gained through the focus groups and the literature review were synthesized into the Developmental Relationships Framework. As shown in Table 1, the

framework identifies five elements of a developmental relationship: expressing care, challenging growth, providing support, sharing power, and expanding possibilities. Each of the five elements is explicated by specific actions through which the element is expressed and experienced. Although actions are articulated in the framework from the perspective of the young person, they are bidirectional in both theory and practice.

Insert Table 1 About Here

Utilizing an Improvement Science Approach

In a traditional research-to-practice paradigm (e.g., Durlak, 2013), our team would spend several years conducting independent studies and analyses to test the framework. We would then design interventions based upon the findings of those analyses. Eventually, we would recruit practitioners to implement our interventions (we would hope with fidelity), while we and other researchers evaluate those efforts.

As we began our work on developmental relationships, however, we were aware that a growing body of evidence suggests that the traditional research-to-practice approach rarely has the desired impact. Tseng (2012) argued that simply spreading the word to “passive recipients” about completed research is unlikely to affect either policy or practice. Similarly, Bryk and colleagues (2015) catalog “the chronic failure of promising reform ideas” (p. 5) in education that ended in disappointment due to their inability to produce improvements that could be implemented reliably and at scale. As both researchers and practitioners have often learned the hard way, what worked for some young people in one school or program often does not work the same, if at all, for other young people in other contexts and cultures.

Testing Li and Julian’s claim requires an alternative approach. The traditional paradigm might work well if our task were to develop and test an intervention that was focused on one particular aspect of building relationships. However, our objective was to test the hypothesis that the full experience of a relationship—the care *and* the challenge, the good *and* the bad days—is the active ingredient in youth development. We wanted to understand how relationships could be built both through structured activities and through informal interactions in the course of everyday life. In addition, we wanted to examine a wide range of young people’s experiences of developmental relationships across the contexts in which they live their lives, including families, schools, youth programs, and communities.

Given these objectives, we adopted improvement science as our guiding methodology because it is both rigorous and flexible. Building on Bryk and colleagues’ (2015) process, we have articulated nine distinct steps that occur iteratively and dynamically. The methodology emphasizes a focus on end users, experimentation, failing fast, learning quickly, and continually iterating toward effective solutions. Those steps are:

1. *Define a specific problem:* Fully analyze the current situation from the perspectives of people most affected in order to clearly articulate a core problem that is undermining effectiveness.
2. *Understand variation:* Identify differences in practice, quality, and performance within and across contexts.
3. *See the underlying causal systems:* Understand how current structures and processes (explicit and implicit) produce the current results (often called “root cause analysis”).

4. *Articulate aims:* Define long- and short-term goals and measures to guide improvement efforts, particularly emphasizing leading indicators that give immediate feedback on progress.
5. *Identify high-leverage opportunities for improvement:* Articulate a specific aim you seek to work on and the change you will introduce to achieve that aim, based on your understanding of the causal systems and available resources.
6. *Create prototype tools and strategies:* Design prototypes of process or tool innovations that you believe will address the aim and yield meaningful improvements.
7. *Design measurement systems:* Collect and analyze formative data to ensure that changes produced by use of the tools and strategies actually improve performance across differences within the overall system.
8. *Test innovations:* Engage in rapid Plan-Do-Study-Act cycles to try, and then improve, the tools and strategies in diverse settings, with a focus on identifying what reliably catalyzes improvement in the identified aim.
9. *Form Networked Improvement Communities (NICs):* Create broad research-practice partnerships for ongoing learning and improvement within and across systems, ensuring that innovations continue to yield meaningful results.

Findings to Date

The Relationship Gap

A central principle of improvement science is that the issue being addressed must be framed as a problem from the perspectives of those most directly affected. Based upon our research and the studies of other scholars (e.g., Center for Promise, 2015; Li and Julian, 2012; Osher et al., 2017; Putnam, 2015; Varga & Zaff, 2017), we have found a pervasive relationship

gap among young people across all types of communities. However, given the growing inequities in society and the structural barriers to relationships in these contexts, we focused particular attention on the lower rate at which young people from marginalized communities have relationships with adults through which they experience all five elements of a developmental relationship.

Having defined this relationship gap as the problem we seek to solve, Search Institute has sought to understand variation in young people's experience of developmental relationships and to see how systems currently cause or influence that variation, particularly in the lives of young people from marginalized communities. Toward those ends, we have conducted a series of quantitative and qualitative studies to understand how young people experience developmental relationships in four settings: families, schools, out-of-school time programs, and communities.

Through the studies summarized below, we have reached two preliminary conclusions about the nature of developmental relationships. First, when young people experience developmental relationships with parents, teachers, and others, they do better on a variety of psychological, social-emotional, academic, and behavioral health indicators (Roehlkepartain et al., 2017). Second, in most of the contexts we examined utilizing the Developmental Relationships Framework, young people report experiencing higher levels of the elements of expressing care, challenging growth, and providing support, and lower levels of sharing power and expanding possibilities.

Developmental Relationships in Families

Our first quantitative study of developmental relationships utilized online surveys of 1,085 parenting adults across the United States with children ages 3-13 in which parenting adults described their interactions with their children (Pekel et al., 2015; Syvertsen et al., 2015).

Although the sample over-represented females (64%), it was diverse, including 31% parenting adults of color, and 38% with an annual household income below $35,000. Majorities of parents self-reported that they expressed care (83%), provided support (75%), and challenged growth (72%) in their relationships with the focus child. Much lower percentages reported sharing power (41%) or expanding possibilities for their children (36%). In general, few or no statistically significant differences were found in levels of developmental relationships by parent age, education, race, immigration status, sexual orientation, or community size. However, parenting adults who reported more family financial strain were less likely to report family relationships that included four of the five elements of developmental relationships (all except express care).

Associations in these data between developmental relationships and parent-reported child well-being indicators suggest the important role relationships play over and above demographic factors such as income, race, Hispanic ethnicity, and family composition. In a stepwise regression model predicting a composite measure of social-emotional skills (such as concern for others, a sense of purpose, a goal orientation, and openness to challenges), developmental relationships in families account for 42% of the variance in parents' reports of those social-emotional skills in their children. In contrast, demographics account for only 4% of the variance. While the cross-sectional nature of this study did not make it possible to conclude that developmental relationships within the family *cause* those positive outcomes, the strong correlations reinforce the research consensus that developmental relationships in families play a powerful role in children's development.

A second family-focused study examined the relationships that exist between 633 matched pairs of a parenting adult and an adolescent child in two U.S. communities, one rural and one semi-urban (Syvertsen, Roehlkepartain, & Wu, 2016). The study enabled comparisons

between the ways that young people and parenting adults view and experience their relationships. In addition to focusing on a diverse sample of families with adolescents (86% female parenting adults; 56% female young people; young people M_{age} = 13.5, Range: 10-18; 33% young people of color; 56% experiencing high to moderate family financial strain), the study indicates that young people assess their relationships with their parents somewhat less positively than their parents did on four of the developmental relationship elements: express care, challenge growth, provide support, and share power, but not expand possibilities.

The matched-pairs study of families also examined connections between adverse family experiences and youth outcomes. The 14 adverse family experiences the study investigated included the death of a parent, a family member's incarceration, or a chronic illness or disability. Families experiencing high levels of stress were defined as those that scored in the top 30% on a measure of all 14 adverse family experiences. Data on stressful life events came from the parent survey, while measures of relationships and outcomes came from the youth surveys.

After controlling for young people's gender, age, race/ethnicity, urbanicity, financial strain, and sexual orientation, these data suggest that families dealing with adversity are better equipped to mitigate the negative impact of stressful events when they have robust parent-child developmental relationships. For example, young people in families that experienced high levels of stress who had strong developmental relationships with their parents were 21 times more likely to manage their emotions well; 17 times more likely to take personal responsibility for their actions; 5 times more likely to be good at making and keeping plans; and 4 times more likely to have a sense of purpose in life.

Developmental Relationships in Schools

Over the course of the 2016-2017 school year, Search Institute studied teacher-student relationships in a middle school in a first-ring suburb of a major metropolitan area in the Midwest. The sample included 675 young people evenly split across grades 6-8, of whom 50% were female; 43% were people of color; and 25% reported experiencing moderate to high financial strain. The study assessed developmental relationships through a youth survey that included 21 items that measured young people's experience of the five developmental relationship elements with their teachers (Scales et al., 2018). According to students' self-reports, only 29% reported experiencing a developmental relationship with their teacher. Within this sample, 44% experienced optimal levels of expressing care, 58% experienced optimal levels of challenging growth, 43% experienced optimal levels of providing support, 28% experienced optimal levels of sharing power, and 24% experienced optimal levels of expanding possibilities in their relationships with teachers.

Student-teacher developmental relationships were strongly correlated with students' concurrent reports of feeling connected to school ($r = .60, p \leq .001$), their sense of being culturally respected and included ($r = .74, p \leq .001$), and the degree to which they rated the instruction they receive as high quality ($r = .83, p \leq .001$). In addition, the better students' relationships with teachers were, the less likely they were to have been suspended ($r = -.11, \leq .001$), and the higher were their GPAs ($r = .18, p \leq .001$). Finally, logistic regressions (controlling for gender, grade, race, and family financial strain) showed that students who reported above-median levels of developmental relationships with their teachers had 7.6 greater odds of exhibiting above-median levels of academic motivation and perseverance (i.e., greater effort, more future goals, better use of cognitive strategies, and deeper intrinsic personal interests) than students with below-median levels of developmental relationships.

Structural equation modeling showed that students with high levels of developmental relationships with teachers had significantly stronger academic motivation at both the beginning and end of the school year. Unfortunately, the typical trajectory for both relationships and motivation was to decline over the year, especially for financially strained students. This normative decrease is critical, because we also found that developmental relationships with teachers significantly and directly predicted students' perception of positive school climate and sense of belonging or connectedness to school. These relationships also indirectly predicted misconduct and GPA, through their positive effect on students' academic motivation.

In addition, students who reported an increase in their developmental relationships with teachers across the year also had better motivation and engagement (school climate, belonging, ratings of instructional quality) at the end of the year. So relationships powerfully affected academic motivation, engagement, and, indirectly, performance. But the typical student had just an adequate level of those relationships with teachers, a relational quality that tended to decline over the year. Only 12% of the students said their developmental relationships with teachers increased. And although we need to replicate this in subsequent studies, it appeared that the students most likely to improve in their relationships with teachers were ones who already have distinct structural advantages in wider society: Males, white students, and students who were *not* financially strained (Van Boekel et al., 2018).

Developmental Relationships in Out-of-School Time Programs

Over a five-year period, we worked with a national organization that engages young people in learning about and conserving the natural environment to clarify and measure how these experiences are shaping participants' development (Sullivan & Syvertsen, 2018). Analyses of pre-post participant surveys found that young people who reported stronger developmental

relationships with their program leaders showed higher levels of a number of key developmental outcomes at the end of the program.

Logistic regressions (controlling for gender, program, amount of in-program reflection, program satisfaction, and pre-test scores on the outcome variables) revealed that every standard deviation increase in young people's self-reported developmental relationship with their program leader was associated with a twofold increase in the likelihood that the young person would exhibit above-median levels of key indicators: stretching themselves to reach goals, being able to set goals, a sense of social responsibility, and being effective team members at post-test.

In addition, young people who felt a strong sense of mattering and feeling valued in the program were, by the end of the program, twice as likely to identify and develop a deep personal interest or talent and report a strong sense of social responsibility; three times as likely to report high levels of self-efficacy and a propensity to engage and inspire others; and four times as likely to report strong communication skills (Syvertsen, Wu, & Sullivan, 2018).

Developmental Relationships in Communities

In addition to studying and working to strengthen developmental relationships within specific environments such as families, schools, and youth programs, important questions remain about how the relationships young people experience in one environment influence the relationships they experience in others. This line of inquiry builds on studies that have shown that relationships in one context can both complement and compensate for the impact of relationships in another. For example, Sabol and Pianta (2012) observed that "children's previous relational models with adults may guide their interactions with teachers; however, a sensitive teacher may reshape children's relational models, and subsequent behavior and relationships" (p. 214). Similarly, studies that examine the strengths of low-income families

identify critical ways parenting adults ameliorate the structural and relational challenges their children face in schools and other institutions (Wilson-Simmons, Jiang, & Aratani, 2017).

In 2016, we surveyed 26,350 students in grades 6-12 (50% female; M_{age} = 13.8, range: 11-18; 76% young people of color) in an urban community in the western United States (Roehlkepartain et al., 2017). In that study, the higher the number of developmental relationships young people reported, the higher their academic motivation, social-emotional skills, and personal responsibility; and the lower their self-reported high-risk behaviors. Figure 1 shows how young people in the study reported experiencing the elements of developmental relationships across contexts. Young people who responded to the survey were most likely to report experiencing the elements of expressing care (especially from siblings and friends) and challenging growth (from parents, teachers, and program leaders). They were least likely to report experiencing expanding possibilities across all five types of relationships.

Insert Figure 1 About Here

Systemic Issues that Contribute to the Relationship Gap

Systems thinking contends that any social system is “the product of interactions among the people engaged with it, the tools and materials they have at their disposal, and the processes through which these people and resources come together to do work” (Bryk et al., 2015, p. 58). Understanding what is and is not working in the social system is a vital, though often overlooked, step in an improvement approach, allowing high-leverage changes to be identified within the system.

Through a series of semi-structured interviews with 55 leaders and staff in a diverse array of schools, out-of-school time programs, mentoring programs, government agencies, and family engagement programs across the United States (Pekel, 2017), we identified a set of structural and

cultural factors that these practitioners and leaders believe undermine young people's experience of developmental relationships within organizational settings. Those factors included insufficient time for building relationships, frequent turnover in frontline staff, and dysfunctional relationships among the adults that provide poor models for and distract from building positive relationships with young people. Several interviewees reported that pressure from funders and policy makers to implement interventions at the broadest scale possible conflicts with keeping staff-student ratios small enough to enable deeper conversations and connections. Several interviewees also said that fear of being accused of acting inappropriately with young people reduces the willingness of some staff and volunteers to ask questions and share experiences that would help them get to know young people well.

Toward Innovation and Improvement

These investigations, which conceptualized developmental relationships and defined the underlying barriers or problems across diverse contexts, have laid the foundation for the next phase of our work: Focused innovation and improvement through a national partnership with five youth-serving organizations. Through the multi-year Relationships for Outcomes Initiative (ROI), we are working with those organizations to study and strengthen relationships in five sectors: schools, out-of-school time programs, mentoring programs, peer-to-peer programs, and programs that work with families. The five partners in ROI are Camp Fire, City Year, Communities in Schools, Generation Citizen, and the National Center for Families Learning. Each partnership includes a local design site where the improvement science principles and approaches are being put into practice.

The ROI project has begun by working at each design site to listen to youth, families, and front-line staff through focus groups and interviews in order to define specific problems or

barriers, examine variability within and across contexts, and map underlying systems that create current processes and practices. We will work together to define short and long-term indicators and measures of change and impact based on identified high-leverage opportunities for improvement. We will then create, test, and refine tools and processes together that tap the strengths and build the capacities of individuals in the system to improve outcomes through strengthened relationships. Depending on what surfaces through the listening, dialogue, and analysis that is now underway, these tools and processes may include:

- Practices and techniques that staff and volunteers can use to express care, challenge growth, provide support, share power, and expand possibilities;
- Activities and lessons that help teachers and youth program staff get to know young people for their sparks (deep interests and talents), strengths, struggles, and supports;
- Professional development strategies that prepare educators and youth program staff to be more intentional and inclusive about building relationships with all youth;
- Practical ways to assess the relationship-building potential and performance of job applicants and current employees; and
- Organizational structures such as school and program calendars and schedules that facilitate substantive and sustained interaction between young people and adults.

Another important aspect of the Relationships for Outcomes Initiative will be the further refinement of measures of developmental relationships. To date, most of our studies have investigated the connections between developmental relationships and a range of self-reported outcomes, including social-emotional skills and a range of risk behaviors, such as smoking and drinking alcohol. Self-report measures serve important purposes, but they must be married to measures that are not as susceptible to social desirability bias and other factors that may lead to

findings that do not reflect the realities of relationships in young people's lives. Toward that end, through this partnership and an ongoing longitudinal study of secondary school students' experience of developmental relationships with their teachers, we are linking self-report data with data from partner organizations, such as students' grades, test scores, attendance rates, and suspension rates.

The final step in the improvement science process involves sharing what works across networked communities that can learn from (as opposed to rigidly replicate) solutions and findings (Bryk, Gomez, & Grunow, 2011). We are currently working with the five partner organizations in ROI to lay the groundwork for the creation of Networked Improvement Communities (NICs) in subsequent phases of the project. While our current work with each of those partners focuses on studying and strengthening relationships at a single design site, all five partner organizations serve multiple sites in locations across the country. Starting in 2020, the relationship-building resources that we prototype at the five design sites will be shared with other sites across the partner organizations' networks. In keeping with the purpose and process of a NIC, we will not simply make those resources available for adoption elsewhere. Rather, we will create structured opportunities for new adopters to understand the intended purposes of those resources, their strengths and limitations, and to think about how they might best be adapted for success at their sites and in their communities.

Beyond *What Works*

In 2013, we took our first steps toward conceptualizing and implementing the program of applied research outlined in this article. That effort remains a work in progress. We have come far enough, however, to articulate some important, if incomplete, conclusions. We have found that developmental relationships can be defined and measured in ways that extend beyond caring

and emotional warmth. We have shown that developmental relationships can be measured reliably and validly for specific uses and contexts, and that they correlate as predicted with a range of important youth outcomes. Unfortunately, we and others have confirmed that there is a relationship gap in the United States today. Most young people experience too few of these relationships (particularly beyond their families), and young people from marginalized communities experience close connections beyond their extended families even less often and intensively than their more advantaged peers. We are now engaged in focused effort to develop practical resources for strengthening developmental relationships in a diverse set of youth-serving organizations. Over time we will examine the effectiveness of those resources using the rigorous experimental methods that will be necessary to test Li and Julian's claim about the role of relationships in interventions that improve the lives of marginalized youth.

Since we began our work on developmental relationships, this effort has generated significant interest among practitioners. More than 18,000 of them have participated in our workshops on developmental relationships. Almost 60,000 young people in their schools, programs, and communities have completed surveys on the impact and outcomes of developmental relationships. These and other indicators of interest in our work suggest that educators and youth developmental professionals are as engaged as ever in their quest to figure out *what works*.

Informal conversations we have had with many of those practitioners also suggest, however, that they are not interested in strengthening developmental relationships with young people only because doing so holds promise for improving school or program outcomes. These dedicated leaders are also eager to invest in relationships with young people from marginalized communities as a response to the current cultural moment. At a time when disconnection and

discord seem to be the norm, and leaders who thrive on division seem ascendant over those that seek to create common ground, strengthening relationships with marginalized youth is a powerful, if indirect, way to begin changing the contours of our current culture.

History offers a number of hopeful examples of times when the nation's focus on young people contributed to broader social change. Objections to the use and abuse of child labor in the factories of the 1800s helped to fuel reform of U.S. labor laws for all workers and to ignite the labor movement during the progressive era in the early 1900s. The U.S. civil rights movement drew a significant share of its moral authority and its political power from its focus on young people. "I have a dream," Martin Luther King (1963) told the thousands assembled at the March on Washington, "that one day right there in Alabama little black boys and little black girls will be able to join hands with little white boys and white girls as sisters and brothers" (p. 5). After the first Earth Day on April 22, 1970, public support for the environmental movement widened as younger children began pushing their families to recycle and older children began organizing efforts to pick up trash on highways and in other public spaces (Lounsbury, Ventresca, & Hirsch, 2003). Similarly, meaningful progress to address gun violence in U.S. schools and communities may finally be catalyzed by youth-led activism on streets and in social media in 2018.

In our qualitative research, we consistently hear from adults that if they are to build developmental relationships with youth, *they* need to experience them with other adults in the organizations and systems in which they work. Perhaps today a similar process of positive social change that begins with young people can become a catalyst to repair the broader social fabric necessary to support a thriving society. Perhaps in building developmental relationships with the young people in our nation who need them most, we can take our first meaningful steps toward re-establishing the broader bonds that are a prerequisite to progress in civic and social life.

Table 1

The Developmental Relationships Framework

Elements	Actions	Definitions
Express Care Show me that I matter to you.	**Be dependable**	Be someone I can trust.
	Listen	Really pay attention when we are together.
	Believe in me	Make me feel known and valued.
	Be warm	Show me you enjoy being with me.
	Encourage	Praise me for my efforts and achievements.
Challenge Growth Push me to keep getting better.	**Expect my best**	Expect me to live up to my potential.
	Stretch	Push me to go further.
	Hold me accountable	Insist I take responsibility for my actions.
	Reflect on failures	Help me learn from mistakes and setbacks.
Provide Support Help me complete tasks and achieve goals.	**Navigate**	Guide me through hard situations and systems.
	Empower	Build my confidence to take charge of my life.
	Advocate	Stand up for me when I need it.
	Set boundaries	Put in place limits that keep me on track.
Share Power Treat me with respect and give me a say.	**Respect me**	Take me seriously and treat me fairly.
	Include me	Involve me in decisions that affect me.
	Collaborate	Work with me to solve problems and reach goals.
	Let me lead	Create opportunities for me to take action and lead.
Expand Possibilities Connect me with people and places that broaden my world.	**Inspire**	Inspire me to see possibilities for my future.
	Broaden horizons	Expose me to new ideas, experiences, and places.
	Connect	Introduce me to people who can help me grow.

Note. Because relationships are, by definition, bidirectional, each person in a strong relationship engages in and experiences each of these actions. However, for the purpose of clarity, the framework is expressed here from the perspective of one young person.

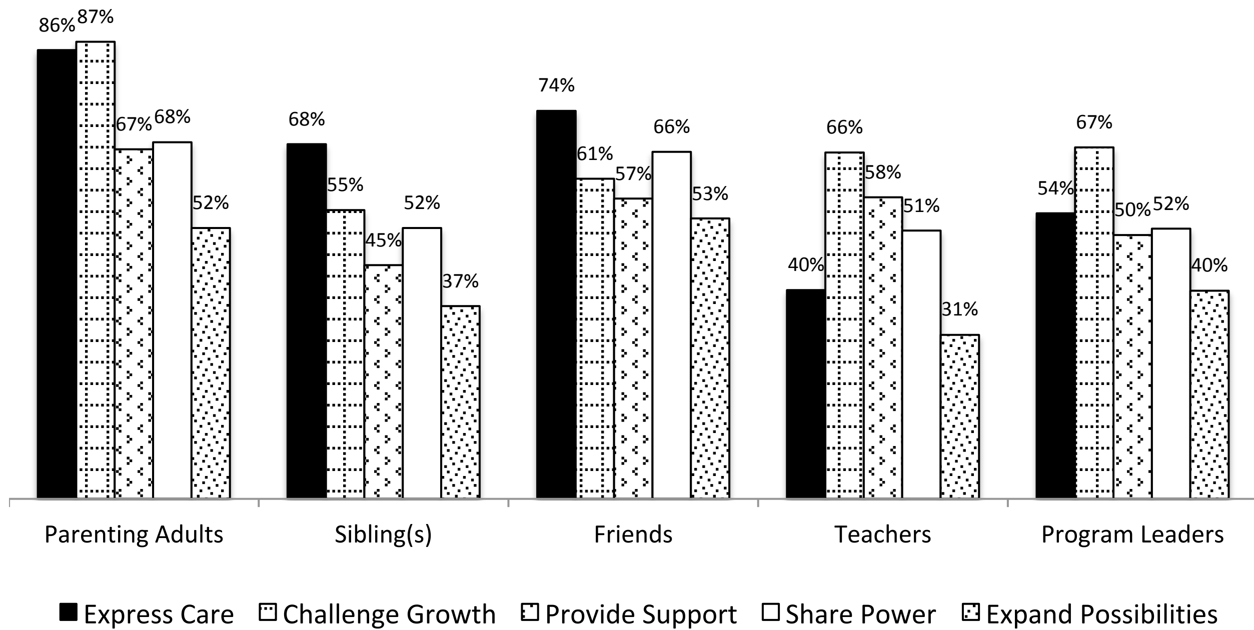

Figure 1: Percentages of young people (n = 25,395, grades 6-12 in one western US community) reporting strength in each element of developmental relationships across five types of relationships. Percentages refer to young people who said they experienced each of the five elements of developmental relationships "often" or "very often" within five types of relationships: parents, siblings (only if they had a sibling), friends, teachers, and program leaders.

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