Compassion Learning Spiral



Any schools view compassion as a core value and hope to nurture compassionate action within their students and faculty. We see evidence of this hope demonstrated in schools' mission statements and operational plans; many schools have adopted programs to help situate social and emotional skill development as one of the key pillars of their institutions.¹ Yet, if we don't know how compassion develops as a skill, how many opportunities are we missing to cultivate compassion in everyday life? If we understand how students develop the key social-emotional skills needed to enact moral values such as compassion, we can construct learning environments that bolster those skills and values.

Compassion is a sense of concern for the suffering of others and an aspiration to see that suffering relieved.² The generation of compassion is dynamic and involves both cognitive and emotional factors,3 as well as an appraisal process.⁴ In this study, by asking students to reflect on compassion and describe their own experiences, we mapped out a common learning pathway that many of the students followed as they engaged in situations that offered an opportunity for compassionate action.⁵ Our goal was to understand the common processes through which young people learn to be compassionate,6 so that educators can intentionally support those learning pathways. In addition, we



guidance they shared. If we understand how students develop the key social-emotional skills needed to enact moral values such as compassion, we can construct learning environments that bolster those skills and values.

aimed to identify obstacles that were commonly encountered when students were learning to be compassionate.⁷ The insights from these children are inspiring, and teachers, school leaders, and parents stand to benefit from the wisdom and

> Our partner school for this study was a bilingual English-Spanish school in Ecuador that includes a preschool, a primary school, and a secondary school. The school serves primarily native Ecuadorian students but also includes students from approximately twenty nationalities. Most students are from families with middle or high socioeconomic status. The school uses a program that strives to instill six pillars of

character education: trustworthiness, respect, responsibility, fairness, caring, and citizenship.8

In this study, we used the Biblical story "The Prodigal Son"—which focuses on compassion and is well known in Ecuadorian culture—as a prompt to help students think about different aspects of compassion and relate those aspects to their own experiences.9 The interview questions explored students' thoughts about and experiences with compassion.10 For example: How did each student describe their understanding of compassion? What led to each student's decision to take compassionate action or not? How and why did each student decide who deserved compassion?¹¹

Our analysis (Supplement 1) of the students' responses revealed a map of the most common learning pathway in the development of compassion, which we have named the Compassion Learning Spiral (CLS). This learning pathway was shared among most participants, regardless of

age and gender (Supplement 2).

The CLS comprises four transitional stages—recognition of suffering, evaluation, action, and unfolding—that students move through when developing compassion as



Figure 1. The Compassion Learning Spiral (CLS).

In this way, experiences at each stage of the CLS can either enhance or inhibit the development of compassion.

experiences at any

of the transitional

stages could stall

the development of compassion as a

skill and, in some

students' capacity

cases, decrease

or willingness

compassionate

action in the future.

to engage in

a skill. The CLS is best viewed as a reiterative cycle that students go through continuously and expansively as they grow or wane in their capacity to enact compassion.

Compassion Learning Spiral and Its Learning Pathway

The four transitional stages in the CLS are: 1) the recognition of suffering, 2) evaluation, 3) action, and 4) unfolding. Each of these four stages displayed aspects of cognitive, affective, motivational, and attentive processes, which is consistent with a multidimensional conceptualization of compassion. For example, students described how they engaged in cognitive processes to determine if they needed to take compassionate action while simultaneously naming the emotions they associated with the individuals they were considering helping.

For most students, the transitional stages operated in a self-perpetuating spiral through which positive experiences expanded students' capacity for compassion. This growth occurred during all four transitional stages, with students experiences encouraging complex, empathetic, inclusive, and expansive skill development. Likewise, negative

First Stage: Recognition of Suffering

The first stage of the CLS is the ability to recognize suffering. In our study, this was a prerequisite to the generation and expansion of compassion.¹³
This stage was directly related to the attention or awareness aspect of compassion,¹⁴ as well as moral decision making, which encodes cues that include emotion recognition and attention.¹⁵ A 10th-grade student provided a thoughtful description of this stage in their definition of compassion:

Always wondering what your friend is doing... maybe, watching [a friend], knowing when he needs your help, always knowing what to say to him.

This student's definition of compassion implicitly assumed that one must be able to recognize suffering to act compassionately by directing their attention towards others. Another student defined compassion as "when someone is in trouble, and you are willing to help." Similarly, a different student described compassion as "when another person

has problems, and you care for and help them." In each of these statements, acting compassionately implicitly required recognizing "trouble" or "problems."

Further, when students were asked to describe an experience of giving or receiving compassion, many indicated there was recognition of physical and/or psychological suffering. For example, one student's compassionate experience began when they witnessed a classmate crying because they

had "fallen and hurt themselves" while another student's compassionate experience started toward a classmate who "got in a fight with her parents and was lonely and sad."

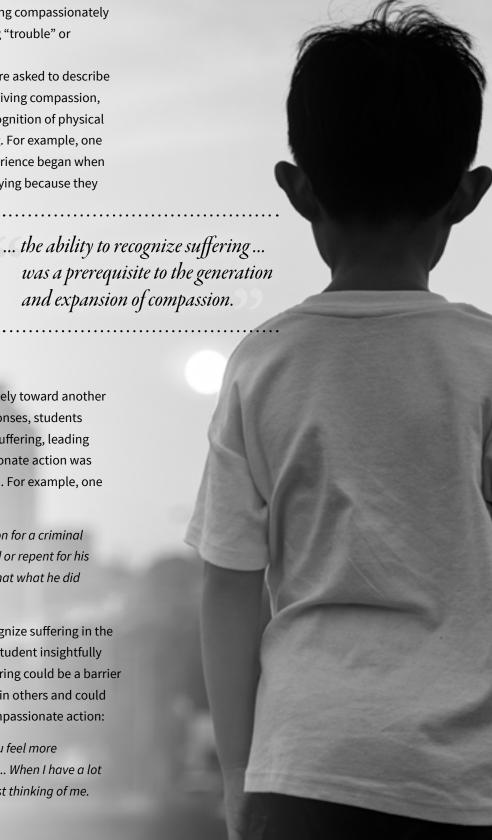
student said:

We asked students
to describe a time when
they did not act compassionately toward another
person. In many of these responses, students
did not recognize the other's suffering, leading
them to decide that compassionate action was
inappropriate for the situation. For example, one

I would not have compassion for a criminal in jail that does not feel bad or repent for his actions... and that thinks that what he did was right.

This student struggled to recognize suffering in the absence of remorse. Another student insightfully discussed how their own suffering could be a barrier to the recognition of suffering in others and could inhibit their ability to take compassionate action:

Obviously in some cases you feel more compassion than in others.... When I have a lot of my own problems, I'm just thinking of me.



I'm not able to think of showing compassion to others while I am suffering.

This highlights that a student's ability to direct cognitive, affective, and motivational capacities toward the recognition

of suffering is a prerequisite for the generation of compassionate action. In fact, in many of the examples of noncompassionate action in our study, there was a lack of recognition of suffering.

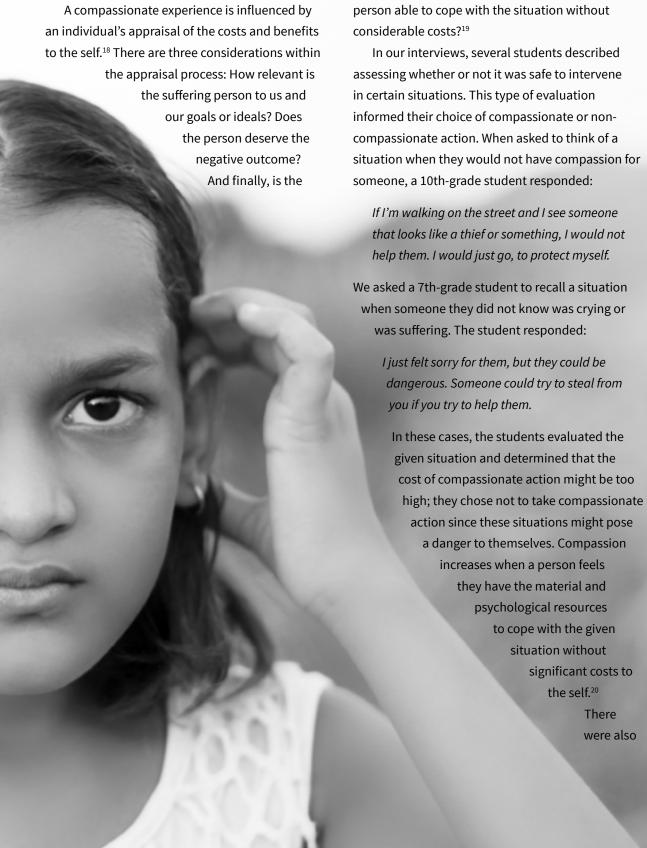
connecting with the other's distress, and tolerating uncomfortable feelings in response to the suffering individual.¹⁷ While some evaluation processes can lead to compassionate action, others may lead to non-compassionate action.

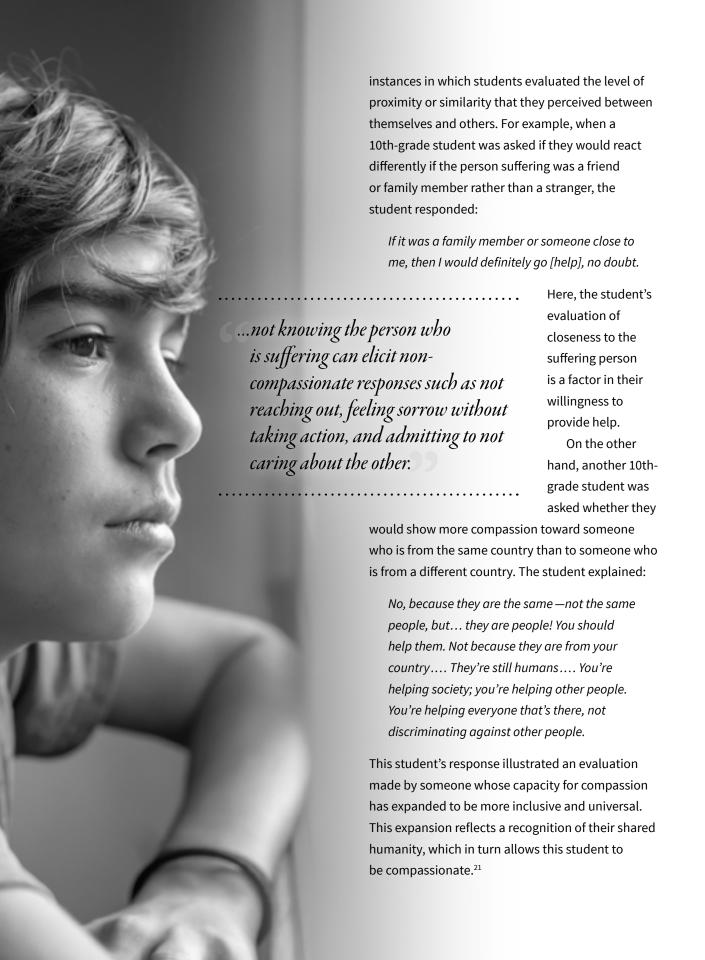
A compassionate experience is influenced by an individual's appraisal of the costs and benefits to the self.

It may be particularly important to cultivate the recognition of suffering in students from relatively higher socioeconomic status. Previous studies found that students from higher socioeconomic backgrounds underestimate distress and suffering more frequently and present lower levels of dispositional compassion than those from lower socioeconomic backgrounds. ¹⁶ We need to explore how we can support all students to become more sensitive to suffering.

Second Stage: Evaluation

The second stage of the CLS, *Evaluation*, describes the set of appraisal processes individuals undergo after they recognize suffering. In this stage, students analyzed the situation of the individual who was suffering and decided whether or not compassionate action was appropriate. This transitional stage relates to three elements of compassion: understanding the universality of suffering in human experience, feeling empathy for the individual who is suffering or





In the evaluation stage, students frequently cited unfamiliarity or not knowing the suffering individual as justification for non-compassionate action. For instance, a 10th-grader was asked, "Can you remember a situation when someone who you didn't know was crying or was suffering?" The student responded:

Many times, I've seen people who were crying who I didn't know or have never seen before. And obviously, something in me says "poor them." And I will wish them the best, but it's not like I will reach out to them or ask them if they need anything.

In another interview, a 10th-grader was asked why they thought it was hard to be compassionate toward people they didn't know, the student replied:

Because you don't feel as identified with them as someone you know or are related to. You just don't feel that sorry for them. Maybe because you don't talk to them that much, you maybe don't know his or her situation.

In another interview, a 7th-grader was asked why they would react differently to a stranger than to a friend or family member. The student stated:

I am not sure, probably because when you don't know him, you really don't know the situation, so you really don't care for him; as a person you try to know if this person needs anything, but you really don't put effort [in] because he is not someone you know.

These three responses suggest that not knowing the person who is suffering can elicit non-compassionate responses such as not reaching out, feeling sorrow without taking action, and admitting to not caring about the other.

Whether or not the sufferer was believed to have good character or to have deserved their situation also informed the compassionate action of the students in this study.²² For example, when a 10th-grade student was asked why the father in the Biblical story showed compassion toward the son who returned home, the student suggested:

Maybe because he [the son] came ashamed and he [the father] was happy to see him back and they could try again.

This student believed that if the son felt ashamed, then he was deserving of compassion.

A 4th-grade student was asked how they decided who deserved compassion and who did not. The student offered evidence that there was some type of appraisal mechanism at work, stating:

You see their character and see if they are ashamed.

The same student was then asked if there was anything that someone could do to not deserve compassion. The student responded:

For example a robber that doesn't feel ashamed, doesn't deserve compassion.

This student's response reflects how an evaluation of whether or not the suffering person seemed to deserve their situation can serve as a guiding variable in the consideration of whether or not to act compassionately.

These examples also highlight an integral characteristic of the CLS: the transitional stages inform one another and are ultimately inseparable from one another. Accordingly, the evaluation stage has an effect on the next transitional phase, which is action. For example, when a 10th-grade student was asked what they did when they saw

someone they didn't know who was suffering, the student answered:

I just saw him and didn't know what to do ... because he was like a random person in the street crying.... I didn't know who he was. He was probably faking, so I didn't do anything. I don't know....

In this example, the initial recognition of suffering was offset by an evaluation that the suffering lacked authenticity, resulting in a choice not to take a compassionate action.

Third Stage: Action

Action—the third stage of the CLS—occurs after individuals recognize suffering and evaluate the given situation. In this study, we categorized any action as compassionate if the students said the goal of the action was to comfort or relieve suffering within the self or others. This compassionate action involved delegating attentive, cognitive, affective, motivational processes to relieve suffering. Similarly, we categorized an action as non-compassionate if the goal was not to comfort or relieve the suffering within the self or others. Therefore, not taking any action in response to suffering was labeled as non-compassionate.

A 7th-grade student described taking action to relieve suffering, providing an illustration of compassionate action:

I was on vacation, and I saw a little boy who was lost. He couldn't find his parents. And I remember the first time I got lost, it was very frustrating, and the only thing I wanted was for someone to help me, to tell me that everything was all right. But no one came and helped. So when I saw the little boy crying, I saw myself. Maybe he was feeling the same way I felt, so why not help him? I grabbed his hand. He was maybe six or seven. I told him things would get better, there was hope, that everything was all right, and eventually we would be found. We sat down on the bench together.

This student identified with the experience of the little boy during their evaluation of the situation and connected it to their own experiences of suffering.

Failure to connect with another person and understand their perspective can lead to

non-compassionate action. A 7th-grade student recognized a homeless man's suffering, but during the evaluation process the student determined that man was not deserving of compassionate action. When asked, "Can you think of a situation where it is okay to be non-compassionate towards someone?," the student replied:

Like maybe when people are not who you think they are. When I was in Europe there were many poor people, and I was sad for them. I saw this guy asking for money and everybody around me was

like no, no don't do it. But I was like, oh that is so sad, so I kept looking at him. But, when nobody was with

Unfolding includes all the perceived positive and negative impacts of the action on the self or others.

cognitive, or active orientation toward relieving the suffering of others among the students in our study.

Fourth Stage: Unfolding

The immediate or long-term consequences that resulted from the first three stages of CLS lead to unfolding, the last of the four transitional stages. Unfolding refers to the impact of the compassionate action (or inaction, or non-compassionate action) on the students in the study.

The 7th-grader who acted compassionately in the above example demonstrated the unfolding

transitional stage in their final comments. They stated:

After we sat down on the bench together, the boy stopped

crying. We shared a little about ourselves. We laughed. It was very nice.

Unfolding includes all the perceived positive and negative impacts from the action on the self or others. It also includes the lessons that an individual takes away throughout the recognition, evaluation, and action stages of the CLS. Sometimes when people attempt to act compassionately, it doesn't go well. How do they process that, and how does that present an obstacle to their future actions? Most students in our study described an unfolding of positive consequences after performing compassionate actions.

For example, one student described a situation with a peer, recalling:

She was crying and I [asked]: What's wrong with you? Then I helped [her]. She hugged me and now we are really close friends.

him in the street, he took out a cigarette and started smoking. I was like whoa, that's not what I thought he was like, he has money to buy cigarettes, it's his own fault he is poor. So I didn't have compassion for him or help him out, and I didn't feel bad about it.

Many students offered very specific conditions in which they believed it was acceptable for them to not take compassionate action. This evaluation led the students to choose either inaction or noncompassionate action in which they did not seek to comfort or relieve the other's suffering.

Inaction can stall or even halt progression through the CLS cycle, effectively narrowing the situations and circumstances in which an individual can develop compassion as a skill.

Non-compassionate action rarely engendered a more expansive motivational, attentive, affective,

In this case, the student described the unfolding by naming the physical sign of affection that was shared and the gain of a friendship. Another student shared an emotional consequence after helping a classmate:

I felt happy because I know the person appreciated what I did.

Students also mentioned that they expected specific outcomes as a result of taking compassionate action. Highlighting how unfolding can impact the affective, motivational, action, and cognitive components of compassion, one student explained:

Everyone deserves love or compassion. If you do that, you feel good with yourself. It's helping you; it's helping the one who needs the care, and you feel good with yourself.

Unpleasant unfoldings could also increase a student's motivation to engage in compassionate action in the future. This was most prominent when students described situations in which they felt their behavior was not appropriate. For example, one student shared:

Many times I lied to my parents. I did something I didn't tell them or told them something else. [Then] I felt ashamed, I felt bad for myself, and thought that I shouldn't have done it.

A 4th-grade student stated:

When I raise my voice to my parents, [or] when I fight with my brothers, [or] when I just do something that I wasn't supposed to, [then] I feel badly and do not want to do that again.

The same student explained how this unfolding determined their actions afterwards:

When I fight with my brothers, I [will] talk to them, I say I'm sorry. To my parents also, I try to apologize.

Finally, a 7th-grade student mentioned:

One time, I got in a big fight with all of my friends. I was mean to them. That's why I felt bad. I decided to change. See my errors, learn how to change, how I need to be.

In this student's experience, unfolding led to an increased motivation to be compassionate, even when the student had originally chosen noncompassionate action.

Students in our study also mentioned how an undesirable unfolding can diminish the generation of compassion toward others in future situations. For example, one student said:

If I had previously helped or tried [to help someone], and that person wasn't nice when I tried to help her, then I wouldn't give it another try.

When another student was asked, "How do you decide who deserves care and compassion and who does not?" they responded:

I think everybody does [deserve compassion] until they do something to prove they don't.

Some students suggested that negative unfoldings did not always impede future opportunities for compassionate action. For example, one student shared:

Parents, such close family, will always love you, no matter how evil or bad you've become. A mother or father would never like to see his son being judged in the wrong way, or not being shown compassion.



DEVELOPING COMPASSION



SHARED UNDERSTANDING

Bring everyone on board. Introduce faculty, staff, and caregivers to the stages of the CLS and invite them to reflect together. When all members of a school community work together, using a common language and a shared understanding of compassion, there is a greater chance of initiatives succeeding.



PRACTICE AND REFLECTION

Look outside the classroom. Opportunities for students to practice and reflect on compassionate action can happen throughout the day in the halls, cafeteria, stairwells, at home, and in other public places.



CULTIVATING AWARENESS

Invite students to become better at recognizing suffering by engaging in daily journaling, with the goal of becoming more attuned to recognizing suffering. Encourage students to name the emotions involved—their own and others'—through direct feedback.



Emphasize learning moments where choices to act are difficult to make. Use dilemmas and case studies to practice the evaluation stage of the CLS with students in a low-risk format.



Expose students to various fictional and nonfictional stories with characters who take compassionate actions or refrain from doing so. Engage students in examining how events in these stories unfolded and encourage them to reflect on how they might act in similar situations.



MODELING

Model compassion directly. Seek out opportunities to practice compassion yourself and share the triumphs and failures that you yourself have experienced when engaging in the CLS. This can help normalize and cultivate the development of skills like compassion in students' everyday lives and can underline the need for consistent practice and reflection.

Supplement 1

We analyzed the students' interviews using grounded theory with inductive, iterative, and comparative methods23 by using an emic (bottomup), and then etic (top-down, theory-based) coding process.24 In order to establish inter-rater agreement and reliability, each member of the coding team first independently listened to the audio recording while taking note of the trends and their impressions on a written transcript of the interviews. Next, we discussed each observation, identified common trends, and constructed several different ways to categorize the trends into codes. These discussions were audio-recorded.

After reviewing all the interview recordings and transcripts, we arrived at an emic coding structure that best reflected the most common conceptual trends that emerged from each interview. Each conceptual trend within the coding structure that emerged from these discussions had aspects of attentive, cognitive, affective, and motivational processes, aligning with the multidimensional definition of compassion. In other words, one could not singularly define a theme as cognitive, affective, motivational, or attentive; the four processes appeared to be interwoven into each theme and dependent on one another.

The results of each emic coding session were summarized in a memo. Each memo included a general overview of the student, descriptions and examples of the potential codes observed, and counterexamples. Once all the emic coding themes were identified, they were listed in a codebook. We then carried out etic analysis of the interviews to settle on a final list of codes.

We explored the relationships among each code and mapped them to identify potential learning pathways. In this analysis, we looked for the stages and barriers that the students experienced as they reflected on compassionate action and related it to their own lives. The results of this step of the data analysis uncovered a progression through the codes, which resembled transitional stages that corresponded with the students' recollections of their compassionate or non-compassionate experiences.25

Supplement 2

We conducted this study in a particular school setting within a specific cultural context. The findings may therefore have limited generalizability to other contexts. Furthermore, the prompt that was used for the interviews, "The Prodigal Son," introduces certain Christian values and biases about the nature of compassion that could have influenced student responses. Still, since the CLS is informed by previous research,²⁶ as well as by the results of this study, we hypothesize it may have relevance in other contexts as well.

Further research is needed to explore the CLS in different contexts. Moreover, students often follow different learning pathways depending on various factors.²⁷ While we did not find different learning pathways based on age or gender in this study, it is possible that the learning pathways of students in other contexts vary based on these or other characteristics.²⁸ We encourage further research into how the learning pathways students follow in the development of compassion may vary based on various factors in different contexts.

Tyler R. Miller is the CEO and Co-Founder of 34GiGs, and the Director of Education at Ivy Method Tutors. Previously, he served as a Co-Founder at Ischemia Care, the Director of School Operations at Achievement First's Aspire Elementary in Brooklyn, New York, and as Managing Director of Programs at Teach for America-Connecticut.

Emiliana Rodríguez is Co-Founder and Chief Content Officer at Made for Joy. Her area of expertise is the intersection between neuroscience, education, contemplative practices and technology. She has more than twenty years of intensive training on contemplative practices.

Cyntia Barzelatto is a doctoral student in the Developmental Science program at Boston University. Previously, she worked as a Parent-Child Clinician providing mental health services to Latino immigrant families in the Boston area.

Nascira Ramia is the Director of Programs in Education at Universidad San Francisco de Quito.

Christina Hinton is a Research Associate at the Human Flourishing Program and founder and CEO of Research Schools International. Previously, she taught at HGSE on the neuroscience of learning, character education, and school-based research. Hinton was a primary editor and author of the books, *Understanding the Brain: The Birth of a Learning Science* and *Languages in a Global World: Learning for Better Cultural Understanding* published by the OECD.

Acknowledgements

Our team would like to extend a warm thank you to Carlos Montúfar, Andrew Sherman, Dr. Renata Castillo, Edgar Illescas, and Paulina Miño at Universidad San Francisco de Quito, who provided logistical and technical support throughout the study. Our team expresses deep gratitude to our collaborative team at Harvard Graduate School of Education, which aided in study design, interview support, and transcription: Lauren Schiller, Daniel Oh, Madhumita Subramanian, Anna Maria Melachrinou, Tulsi Meetha Chase, Juan Paulo Barzelatto, Sharanya Misra Sharma, Carlos Quintero, Sofia Hurtado, Lindsey Dahlben, Alison Gover, and Rogelio Hernandez. We also very much appreciate the thought partnership of Eve Eckman and Leandro Chernicoff in this work and extend a warm thank you to our school partner. Finally, we thank Betty Zane and The Charles and Lynn Schusterman Family Foundation for the generous financial support they provided to cover travel expenses for this study.

Endnotes

- Programs such as Caring School Community and Facing History and Ourselves aim to nurture compassion.
- Geshe T. Jinpa, "Compassion Cultivation Training (CCT): Instructor's Manual" (unpublished manuscript, 2010).
- Katrin Preckel, Philipp Kanske, and Tania Singer, "On the Interaction of Social Affect and Cognition: Empathy, Compassion and Theory of Mind," Current Opinion in Behavioral Sciences 19 (2018): 1–6, https://doi.org/10.1016/j. cobeha.2017.07.010; Tania Singer and Matthias Bolz, Compassion: Bridging Practice and Science (Leipzig: Max Planck Institute for Human Cognitive and Brain Sciences, 2013), http://www.compassion-training.org/.
- Jennifer L. Goetz, Dacher Keltner, and Emiliana Simon-Thomas, "Compassion: An Evolutionary Analysis and Empirical Review," *Psychological Bulletin* 136, no. 3 (2010): 351–74, https://doi.org/10.1037/a0018807.
- 5. In this study, we followed the Research Schools International model, in which researchers carry out schoolbased research with direct practical relevance. Researchers from Harvard Graduate School of Education and Universidad San Francisco de Quito partnered with a school in Ecuador. To learn more about the Research Schools model, visit Research Schools International's website at www.researchschoolsinternational.org.
- 6. All participants were bilingual students (n=60) who had been at the school since three or four years of age. Among students who met those criteria, we randomly selected twenty 4th-graders, twenty 7th-graders, and twenty 10th-graders to participate in the interviews. A representative from the school oversaw the randomized selection. The sample had an equal number of males and females. Parents of students who were selected to participate signed an informed-consent letter that authorized their children's participation in the study.
- 7. In order to address these questions, we carried out interviews with students aged 9 to 17 at an independent school in Ecuador. We used qualitative analysis to find common themes and patterns that could be generalized into a learning pathway. For more information on our approach see Kurt W. Fischer and Thomas R. Bidell, "Dynamic Development of Action and Thought," in

- Handbook of Child Psychology: Theoretical Models of Human Development, 6th edition, eds. Richard M. Lerner and William Damon (Hoboken: John Wiley and Sons, Inc., 2006): 313–99.
- "The Six Pillars of Character," Drake University, The Robert D. and Billie Ray Center, accessed August 23, 2023, https:// charactercounts.org/six-pillars-of-character-5/.
- We adapted a story well known in Ecuadorian culture, the Prodigal Son (Luke 15:11-32), so that students would be familiar with the plot of the story. The central theme in the Prodigal Son story is compassion, making it a strong prompt for the purposes of this research study.
- We used developmentally appropriate interview protocols, with versions in English and Spanish.
- 11. The interview protocol was divided into four sections. The first section included introductory questions that asked students to provide their own definition of compassion. This section also asked questions that required the students to reflect on how language affects their expression of compassion, care, love, and other emotions. The goal was to introduce the topic of compassion, elicit students' working definition of compassion, and explore their understanding of compassion. The second set of questions invited students to reflect on the experiences of the characters in the story and their own personal experiences. Questions addressed topics such as giving compassion, receiving compassion, evaluating situations, and describing obstacles to compassionate action. The third section included questions that invited students to explore the situations and conditions in which they did not act compassionately. Finally, the fourth section asked students to explain the perceptual rules that governed their expression of compassion toward others, as well as to explore their ideas about familial, local, national, and global citizenship in relation to compassion. Each interview was approximately thirty minutes long. The interviewers took notes throughout, and the interviews were captured by audio recording. The audio recordings were later transcribed and translated to English for data analysis.
- Jinpa, "Compassion Cultivation Training"; Beverley Garrigan, Anna L.R. Adlam, and Peter E. Langdon, "Moral Decision-Making and Moral Development: Toward an Integrative Framework," *Developmental Review* 49 (2018): 80–100, https://doi.org/10.1016/j.dr.2018.06.001.
- 13. Clara Strauss et al., "What is Compassion and How Can We Measure It? A Review Definitions and Measures," Clinical Psychology Review 47 (2016): 15–27, https://doi.org/10.1016/j.cpr.2016.05.004.
- 14. Matthieu Ricard, *Plaidoyer* pour L'Altruisme: La

- Force de la Bienveillance (Paris: Nil, 2013); B. Alan Wallace and Shauna L. Shapiro, "Mental Balance and Well-Being: Building Bridges between Buddhism and Western Psychology," *The American Psychologist* 61, no. 7 (2006): 690–701, doi: 10.1037/0003-066X.61.7.690.
- Beverley Garrigan, Anna L.R. Adlam, and Peter E. Langdon, "Moral Decision-Making and Moral Development: Toward an Integrative Framework," *Developmental Review* 49 (2018): 80–100, https://doi.org/10.1016/j.dr.2018.06.001.
- Jennifer E. Stellar et al., "Class and Compassion: Socioeconomic Factors Predict Responses to Suffering," Emotion 12, no. 3 (2011): 449–59, https://doi.org/10.1037/a0026508.
- 17. Strauss et al., "What is Compassion?"
- 18. Goetz, Keltner, and Simon-Thomas, "Compassion."
- 19. Goetz, Keltner, and Simon-Thomas, "Compassion."
- 20. Goetz, Keltner, and Simon-Thomas, "Compassion."
- Christina Hinton, "Cosmopolitan Education: Building on a Biological Inclination for Care in a Globalised World," in Languages in a Global World: Learning for Better Cultural Understanding, eds. Bruno Della Chiesa, Jessica Scott, and Christina Hinton (Paris: OECD Publishing, 2012): 409–26, https://doi.org/10.1787/9789264123557-en.
- 22. Goetz, Keltner, and Simon-Thomas, "Compassion."
- Kathy Charmaz and Linda L. Belgrave, "Qualitative Interviewing and Grounded Theory Analysis," in The SAGE Handbook of Interview Research: The Complexity of the Craft, eds. Jaber F. Gubrium et al. (Thousand Oaks: SAGE Publications, Inc., 2012): 347–66, https://doi.org/10.4135/9781452218403.
- Robert Thornberg and Kathy Charmaz, "Grounded Theory," in Qualitative Research: An Introduction to Methods and Designs, eds. Stephen D. Lapan, Marylynn T. Quartaroli, and Frances J. Riemer (San Francisco: Jossey-Bass, 2012): 41–67.
- 25. Charmaz and Belgrave, "Qualitative Interviewing."
- 26. Nancy Eisenberg, Sarah K. VanSchyndel, and Claire Hofer, "The Association of Maternal Socialization in Childhood and Adolescence with Adult Offsprings' Sympathy/Caring," Developmental Psychology 51, no. 1 (2015): 7-16, doi: 10.1037/a0038137; Garrigan, Adlam, and Langdon, "Moral Decision-Making"; Goetz, Keltner, and Simon-Thomas, "Compassion"; Hinton, "Cosmopolitan Education"; Jinpa, "Compassion Cultivation Training"; Antoine Lutz et al., "Long-Term Meditators Self-Induce High-Amplitude Gamma Synchrony during Mental Practice," Proceedings of the National Academy of Sciences of the United States of America 101, no. 46 (2004): 16369-73, doi: 10.1073/pnas.0407401101; Ricard, Plaidoyer pour L'Altruisme; Singer and Bolz, Compassion; Strauss at al., "What is Compassion?"; Wallace and Shapiro, "Mental Balance and Well-Being."
- Kurt W. Fischer and Thomas R. Bidell, "Dynamic Development of Action, Thought, and Emotion," in Theoretical Models of Human Development. Handbook of Child Psychology, vol. 1, 6th ed., eds. Richard M. Lerner and William Damon (New York: Wiley, 2006): 313–99.
- 28. Fischer and Bidell, "Dynamic Development;" Carol Gilligan, In a Different Voice: Psychological Theory and Women's Development (Cambridge: Harvard University Press, 1982).