Indispensable Insight: Children's Perspectives on Factors and Mechanisms That Promote Educational Resilience

Jayne A. Downey
Montana State University, Bozeman, MT

Abstract

In order to foster educational resilience in children who face adversity, adults need a clear grasp of which factors are most relevant and motivating for these children. This study asked 50 children (ages eight to 12) who face serious life difficulties to share their perspectives on which factors support academic performance and how those factors operate in their lives. Participants identified eight factors (intelligence, feelings, behaviours, home environment, family assistance, school support, community connections, organized programs) that improve academic performance and described three mechanisms (facilitating work, increasing understanding, preventing negative behaviour) by which the factors function. Implications for practice and further research are discussed.

Keywords: children's beliefs, educational resilience, interview methodology

Résumé

Afin d'encourager la résilience chez les enfants faisant face à des contextes d'adversité, les adultes doivent clairement saisir quels facteurs sont les plus pertinents et motivants

pour ces enfants. Nous avons demandé à cinquante enfants entre huit et douze ans faisant face à des sérieuses difficultés de nous indiquer quels facteurs soutenaient la performance académique, et comment ces facteurs se déployaient dans leur vie. Les participants ont identifié huit facteurs (intelligence, sentiments, comportements, environnement familial, soutien familial, soutien scolaire, contacts dans la communauté, programmes structurés) qui amélioraient leurs performances académiques, et ont décrit trois mécanismes (faciliter le travail, augmenter la compréhension, prévenir les comportements négatifs) par lesquels les facteurs entraient en action. Nous abordons ensuite les implications de ces données pour la pratique et la recherche.

Mots-clés : croyances des enfants, résilience éducative, méthodologie des entretiens

Introduction

In the discussion of how to promote academic success for children facing adversity, one important perspective has been neglected—the views of children. Numerous expert adults have expressed their views (e.g., Goldstein & Brooks, 2013), and several researchers have sought out adolescents' perspectives on the factors related to academic success (Chen, 2010; Yonezawa & Jones, 2009). However, only a few researchers have talked with children who face adversity to document their views on what helps them to experience positive academic outcomes (Mitra & Serriere, 2012; Beaudoin, 2005). Thus, this study was designed to ask children ages eight to 12 who face adversity to share their perspectives on the factors and mechanisms related to educational resilience—academic success in the face of adversity.

The Critical Role of Children's Perspectives in Fostering Educational Resilience

At a time when growing numbers of children face adverse environments that place them at risk for school failure, educators face mounting pressure to increase students' academic performance. In response, schools, districts, and states across the country have begun to institute a wide variety of instructional changes and reforms. However, while many of these initiatives have been informed by the perspectives of teachers and other adults (Beaudoin, 2005; Mitra, 2008), views from students, in particular, have been noticeably absent (McCallum, Hargreaves, & Gipps, 2000; Mitra & Serriere, 2012). In fact, some experts suggest that listening to the views of children is one of the most neglected aspects of educational research (Bishop & Pflaum, 2005).

Failing to include children's perspectives in the development of strategies designed to improve academic outcomes is a serious oversight for three reasons. First, research suggests that achievement is tied not only to what occurs in the classroom but also to children's interpretations of what happens in the classroom (Bishop & Pflaum, 2005; Dahl, 1995). It will be very difficult for adults to explain, let alone improve, children's achievement as long as they lack a solid grasp of how children interpret their school experiences and their teachers' behaviours.

Second, despite advanced knowledge and experience, adults do not always understand what children are thinking. For example, adults are sometimes surprised when children make mistakes or misunderstand. Even Piaget (1952) recorded an incident in which he was amazed at the difficulties a child encountered when presented with a simple reasoning task. Alternately, as Lincoln (1995) declares, "adults often underestimate the ability of children to be shrewd observers, to possess insight and wisdom about what they see and hear, and to possess internal resources we routinely underestimate" (p. 89). Children have unique viewpoints and values about many things, including their education (Mazzoni & Harcourt, 2013). Given that adults cannot anticipate the totality of children's views regarding what supports their academic achievement, adults would do well to listen to children's perspectives.

Finally, if adults and children do not necessarily share the same understandings, the effectiveness of strategies built on adult perspectives alone is likely to be limited (Beaudoin, 2005). If these efforts fail, children stand to lose the most (Chen, 2010), since they are "in a very real sense, the primary stakeholders in their own learning process" (Lincoln, 1995, p. 89). Although improved academic performance is no guarantee of future positive outcomes, evidence suggests that school failure is connected to rising rates of illiteracy, poverty, drug dependency, teenage pregnancy, welfare dependency, and criminal activity (Beaudoin, 2005; Chen 2010). Given the negative outcomes connected to academic failure, both for children specifically and for society as a whole, there is an urgent need for insight into factors that foster children's educational resilience. Listening to their perspectives will play a pivotal role in this task.

Theoretical Framework

This study is grounded in the body of literature pertaining to children's risk and resilience. Previous research examined the relationship between environmental risk factors (such as poverty, abuse, and alcoholism) and the likelihood of children's negative developmental outcomes and has found that some children in high-risk environments have been able to experience relatively positive outcomes in spite of the adversity in their lives (Masten, Best, & Garmezy, 1990; Werner & Smith, 1992). This finding became the basis for the construct of resilience defined as "a dynamic process encompassing positive

adaptation within the context of significant adversity" (Luthar, Cicchetti, & Becker, 2000, p. 543).

Research has suggested that the process of positive adaptation may not be pervasive across all domains of adjustment (Werner, 2013). For example, it is possible for a child to display social competence but struggle academically. Thus, experts have recommended that resilience research should be a domain-specific study of positive adaptation (Luthar, Cicchetti, & Becker, 2000). In this light, educational resilience is defined as "the heightened likelihood of educational success despite personal vulnerabilities and adversities brought about by environmental conditions and experiences" (Wang, Haertel, & Walberg, 1996, p. 1). This construct refers to a process of ongoing interactions between the child and the resources in his or her environment that support ongoing academic achievement. Research in this domain attempts to identify which factors foster successful academic performance and how those factors make a difference for children facing adversity.

The study is also grounded in the research literature pertaining to the study of students' beliefs and perspectives, i.e., the links that youth make between an object (such as a person, event, group, behaviour, or institution) and various attributes (such as a trait, property, quality, characteristic, outcome, or event) (Fishbein & Ajzen, 1975). In the present study, the term "perspective" was selected to refer to a child's point of view of the world as informed by beliefs, attributions, conceptions, and interpretations of facts, ideas, and personal experiences. Researchers have explored this domain by examining students' perspectives about school environment, teacher practices, and student characteristics such as intelligence, motivation, competence, and self-efficacy (e.g., Thiessen & Cook-Sather, 2007).

Researchers who study children's beliefs and attributions occasionally encounter objections regarding the merit of children's self-reports. Critics' misgivings tend to centre on issues of significance and validity. Those who have been pessimistic about the value of children's perspectives contend that while they are an interesting topic for investigation, the studies reveal children's immature thinking and thus are of little consequence (Christensen & Prout, 2005). Advocates for the study of children's perspectives argue that the views of children are of essential importance for school improvement (Beaudoin, 2005). They recognize students as legitimate participants in the educational debate, because it is simply not possible for adults to fully comprehend children's experience of reality in

schools through adult assumptions (Bucknall, 2012). In fact, inclusion of students' perspectives may be the only way for adults to overcome the limitations of their own biases and perspectives.

The validity of children's self-reports has also been raised as a concern. For example, some educators wonder if students have anything relevant to say or if they will only offer biased complaints and criticisms of their educational experience (Greig & Taylor, 2007). Others are concerned that due to the adult–child power differential, children might provide only responses perceived to be most pleasing to the adult (Scott, 2000).

Experts recommend four approaches that can support the validity of children's self-reports. First, researchers need to choose methods that take into account participants' age, cognitive skills, and level of social development (Scott, 2000). Second, researchers should provide multiple ways for children to express themselves, which helps increase precision in data collection and interpretation (Graue & Walsh, 1998). Third, the accuracy of children's responses depends on their developmental capacity and ability to understand the questions (Greig & Taylor, 2007); researchers can support the validity of the data by checking that the child has understood the intended meaning of the question. Finally, the issue of socially desirable answers can be addressed by developing a friendly, authentic relationship with each child (Greig & Taylor, 2007) and making a concerted effort to legitimize children's positive and negative responses. When care is taken in the selection and administration of instruments, the data will provide a more balanced and systematic representation of children's experiences and perceptions (Graue & Walsh, 1998).

Method

Participants

The study was situated in a small city in the Rocky Mountain region. Interviews were conducted with 50 children (35 boys and 15 girls) who had been referred to a community agency that provides adult mentors for children facing personal, social, and academic challenges. The children in this study were waiting to be matched with an adult mentor. All of the participants in this study had been identified by school or community professionals as experiencing academic difficulties at school, and all participants were receiving

free or reduced-price school lunches. In addition to dealing with poverty-related stressors that have been shown to interfere with academic performance (Masten, 2012), a majority of these children also experienced adversity in terms of prejudice and racism, family disruption, familial alcoholism and drug abuse, and community violence.

Participants' ages were distributed as follows: six eight-year-olds, seven nine-year-olds, 14 ten-year-olds, 15 eleven-year-olds, and eight twelve-year-olds. The grade level distribution was two second graders, seven third graders, 11 fourth graders, 16 fifth graders, 10 sixth graders, and four seventh graders. The ethnicity of the sample was 62% Hispanic American, 32% Caucasian American, and 6% African American.

The interviews were conducted in the children's homes located in various areas throughout the city. Some families lived in trailer parks, some lived in apartment complexes, and others lived in one- or two-bedroom homes. The children's families were configured in a variety of ways, including two parents (biological and step-parents), single mothers, single fathers, and grandparents as guardians. Some families also included a number of extended family members living in the home, and several families found themselves in situations that required them to move frequently.

Instruments

Two methods of data collection were employed to discover children's perspectives on the factors and mechanisms related to educational resilience: The Constructed Situation Interview Protocol (CSIP) (example in Appendix A and Appendix B), and the Personal Interview (PI) (Appendix C). The CSIP consists of a semi-structured interview based upon a hypothetical situation of real life. This approach to interviewing children permits participants to respond to questions concerning hypothetical children in realistic situations without having to reveal personal information about academic success or failure that might feel sensitive or embarrassing (Grotberg, 1996; Downey, 2002a).

A pilot study was used to develop valid scenarios for the CSIP methodology (Downey, 2002a, 2002b). Three realistic scenarios were designed using recommendations from the literature and in consultation with child development experts, including a youth and family service worker, a private practice counsellor, and a school counsellor. Given the limits of children's working memory and attention (Dempster, 1981), the three scenarios were each restricted to six main points. A professional artist illustrated the six points

in a colourful, child-friendly manner. Illustrations such as these provide visual cues for the participants and have been recommended as a practical way to provide a focal point, help the task be more enjoyable, and sustain children's attention during the interview process (Bishop & Pflaum, 2005; Graue & Walsh, 1998).

The final product for the pilot study included a set of three laminated six-frame colour line drawings with an accompanying story and a set of relevant interview questions. The first scenario depicted a boy having difficulties in school due to family discord. The second depicted a girl from a single-parent family experiencing the effects of poverty, and the third depicted two boys who were best friends with almost everything in common except that one was academically successful and the other was not. The experts provided fidelity checks for the completed scenarios and deemed them to be meaningful and developmentally appropriate for children ages eight through 12.

The pilot study was conducted with 40 children, ages eight through 12, from a local elementary school. Findings from the data analyses provided two key insights to increase the validity of the data gathered using the CSIP methodology. First, the CSIP could be strengthened by providing illustrations matched to participants' age, gender, and ethnicity (Downey, 2002a, 2002b). This matching would allow the participants to relate more personally to the hypothetical child in the scenario and increase the validity of the participants' responses to the questions. Second, analyses revealed that it was unnecessary to offer three separate scenarios as the data led to redundant responses in two of the scenarios. In light of these findings, the scenarios and semi-structured interview questions were adjusted to form one scenario. The set of questions also included the most effective probes from the three scenarios used in the pilot study. Experts provided a fidelity check for the completed scenario and deemed it to be meaningful and developmentally appropriate for children ages eight through 12.

The second method was a Personal Interview (PI) in which the children were given the opportunity to talk about the factors and mechanisms that were personally relevant to their academic success. Given that much of what children know is implicit (Graue & Walsh, 1998), interviews with children are optimal when both indirect and direct methods are included. Thus, upon completion of the CSIP, participants were asked some direct questions about their experiences in school.

The purpose of the questions that formed the Personal Interview (PI) was to move from a focus on what helps hypothetical children to a more specific focus on what helps

the participant personally. When participants had identified as many factors as possible, each child was asked to go to the top of the list and explain how each item helped him or her to get good grades in school. Periodically, the researcher asked each participant to provide an example to ensure clarity and understanding (Scott, 2000).

Procedure

Upon receiving parental consent and participant assent, the researcher met with each child for 45 to 60 minutes to complete the CSIP and PI. Attempts were made to find a quiet location in the home that was convenient for the child and his or her family.

The laminated CSIP illustration, matched for gender, age, and ethnicity (example in Appendix A), was placed on the table in front of the child and used as a reference throughout the semi-structured interview. While the child looked at the CSIP illustration, the researcher pointed to the pictures, told the story, and then asked the interview questions (example in Appendix B). The child was invited to take the role of teacher and help the researcher understand his or her ideas and opinions about the characters depicted in CSIP illustration. Upon completion of the CSIP task, the researcher switched to the PI task and asked the participant to identify the factors that helped him or her in school (Appendix C). Coloured markers and a sketchpad were used to record the participant's ideas.

Key insights regarding the process by which adults learn about children's perspectives occurred during the PI portion of this study. The first PI question had been designed to permit the child to spontaneously identify the factors that help him or her in school. The original design of the PI had been for the researcher to record the child's ideas using coloured markers and sketchpad. However, the first child asked if he could write the list himself. The researcher recognized the value of this approach and amended the PI to give the next nine participants the choice to write the list or have the researcher write the list. A second key insight occurred when the tenth participant suggested that he "would like it more if we could take turns writing the list." Based on this input, the PI was amended again to provide the rest of the participants with three choices for writing. Children were asked if they wanted to write their ideas, if they wanted the researcher to write their ideas, or if they wanted to take turns writing down their ideas. Each participant chose what felt most comfortable and the ideas were recorded on the sketchpad. Analyses of the PI data

revealed that a large majority of participants elected to share the writing portion of the PI and clearly communicated their preference for this type of support in completing the task.

Data Analysis

The children's responses to the CSIP and PI were audiotaped and transcribed verbatim. Transcriptions were segmented and systematically coded. Each participant's complete response (CR) to each question was divided into distinct segments (DS) that could be coded to accurately represent the complexity of children's perspectives. For example, one participant's CR contained the following ideas: "'Cuz Juan is like in a taller grade than Luis. And Luis doesn't like know that much and he's probably not listening to the teacher and not doing his homework." This participant had provided four distinct ideas about why one boy was getting good grades and the other was not (advanced grade, knowledge, listening, and completion of homework). The researcher went through all of the participants' responses and divided the CRs into DSs. A colleague evaluated if the DSs met the above criteria. All discrepancies were noted and discussed until agreement was reached.

Coding for protective factors. Previous resilience research (e.g., Luthar et al., 2000; Werner & Smith, 1992) led to the identification of three clusters of protective factors for children facing adversity. These include personal protective factors (such as concentration, problem-solving skills, impulse control), family protective factors (such as stability, rules, provision of help), and community protective factors (such as connections with school, neighbours, organized programs). Given that use of relevant literature is a legitimate manner by which to form appropriate codes (Constas, 1992), these general factors were tentatively selected as an organizational device for coding responses. Children's responses provided key insights and details into this three-part scheme and thus, protective factor codes were created and assigned to the children's responses to both the CSIP and PI.

Coding for protective mechanisms. In order to understand the participants' perspectives on protective mechanisms, responses were studied extensively. Emerging themes were organized according to the compensatory model of protection (Garmezy, Masten, & Tellegen, 1984). This model suggests that protective factors prevent negative outcomes

by outweighing or counterbalancing the adversity in individuals' lives. Thus, mechanisms were defined and coded as the unique ways or processes by which the factors support academic success in the face of adversity.

Verification of the factor and mechanism codes. To assess the validity of the factor and mechanism codes, the technical method was employed to verify the coding (Constas, 1992). A colleague unrelated to the study was given an orientation to the construct under investigation, an overview of the study's design, and a random sample of the data from the CSIP and PI. Data were coded using the factor and mechanism definitions. The raw rate of agreement was 95% for protective factors and 90% for protective mechanisms. Cohen's (1960) Kappa was calculated to assess the inter-rater agreement corrected for chance and resulted in $\kappa = .8506$ for the protective factors coding and $\kappa = .8453$ for the protective mechanisms coding. These results can be interpreted as representing a strong level of overall agreement.

Results

Analysis of participants' responses revealed children's perspectives regarding the protective factors most relevant to fostering academic success and provided insight into children's views as to how those factors make a difference in their lives.

Protective Factors

The children in this study identified eight factors (intelligence, feelings, behaviours, home environment, family assistance, school support, community connections, and organized programs) that they believed made a difference in academic success. The first factor that children believed supported academic success was named *intelligence*. The participants described various individual differences related to intellectual ability with statements such as "They were made different," "He is smart in his brain," "Some people are pretty dumb but some are really smart," and "They don't learn the same way."

The second factor was named *feelings*. The participants described the importance of the role of personal affect connected to school with statements such as "One likes doing the work and the other doesn't really care," "He likes school so much…[but] he

thinks it's too boring … he thinks it's no fun," "She don't care about school," and "He wants to be something."

The third factor was named *behaviours*. The participants described personal conduct related to productive behaviours that support academic achievement, such as paying attention ("He listens to the teacher" and "If a friend bothers her she says, 'Please be quiet; I'm trying to work'"), engagement ("He's probably participating in all his classes"), completing work, and being thorough ("…works very hard and doesn't write all quick and that. He takes his time"). They also described personal conduct related to disruptive behaviours that tend to interfere with achievement, such as interrupting ("Like when the teacher is talking, he interrupts"), being off-task ("Luis is probably just messing around and talking to everybody and passing notes"), fighting ("He don't fight or anything"), and talking back ("He doesn't talk back or anything to his teacher").

The fourth factor was named *home environment*. The category is defined as the dynamics, climate, and structure children experience in the home. Children identified components such as the role of the atmosphere at home ("Maybe he grew up with more trouble"), the relationship between parents ("Maybe his mom and dad got in a lot of fights and that's why he doesn't have a dad, and maybe Juan's mom and dad were a good couple and they never fought"), available resources ("They don't have all the same things"), and the way the family is organized and time is structured ("Maria goes to bed early. When it's a school day she gets up at the same time and her mom tells her to," and "Maybe they're too busy cleaning and she's too busy helping out her mom").

The fifth factor was named *family assistance*. The category is defined as direct assistance and support with homework, projects, studying, and practising. For example, participants described situations such as "When she works on her homework and she doesn't understand it her mom helps her out. She doesn't do it for her but…if she was stuck on a problem her mom would make it to where she understands how to do it." Potential helpers included mom, dad, siblings, and extended family members. For example, participants said, "His mom helps him when she don't have to work," "Probably his dad when he was there…played stuff with him like a game that involves math." "His sister… if it's for reading they have him read to them…they have him write a story and they go through it and edit it," and "Her aunt, uncle, grandma, cousins. They could tell her more and more stuff."

The sixth factor was named *school support*. The category includes school-related resources such as specific forms of teachers' scaffolding ("He works with the teacher on his things," "[The teacher] probably comes over and says, 'Are you having trouble?' and she'd help him and give him little hints"), class climate ("I don't think people disrupt her"), and success with key subjects such as math, reading, and spelling ("He's doing well in math").

The seventh factor was named *community connections*. The category is defined as the help and influence provided by non-familial adults ("A neighbour they could help him on questions, like they could give him hints to help answer questions," "If his mom don't want to help him he could ask somebody or a neighbour if they could help him"), friends ("I would say that they should be in the same class and helping each other out so that Ben can help Tyler get good grades"), and media sources ("…the TV, the news, and some other channels").

The final factor was named *organized programs*. The category is defined as structured after-school activities and programs designed to provide academic and personal support (e.g., "He might take extra classes," "Maybe they have after-school programs," "On some activities [the community agency] have homework night and they help you get your homework done").

Protective Mechanisms

The participants also described a variety of ways in which they believed the factors identified above operated to support children's academic success in the face of adversity. The first mechanism was named *facilitating work*. Participants believed that the factors identified above fostered academic achievement through providing assistance and encouragement in the process of doing class work and homework. Participants explained the function of this mechanism with statements such as "It helps her do her work a lot more better," "She knows what she's doing in class," "The teacher breaks it down…it's easier to do it step by step instead of doing it all at once," "If he didn't know his math real good, that's probably the reason he's scared to do his work. But they'd probably help him with his math," and "…like show you through the problem, like explain it."

The second mechanism was named *increasing understanding*. Participants believed that the protective factors fostered academic achievement in that they increased

students' comprehension and learning. Participants explained the function of this mechanism with statements such as "Then he gets the hang of it," "It'll light up in his head… and then he'll be learning," "You understand it more better," "…because when you pay attention you learn more than other people that you used to hang around with that never paid attention and talked all the time."

The third mechanism was named *preventing negative behaviours*. Participants believed that the protective factors fostered academic achievement through supporting children's efforts to engage in appropriate actions and avoid off-task behaviours. Participants explained the function of this mechanism with statements such as "…like when he's doing what he's supposed to do and he'll do other things and one day he'll come up with an A," "…not messing with his friends," "If you talk back to the teacher you could get suspended," "You're not always out of class in time out and everything like that," "… not talking to other people when you're not supposed to then you're going to get a good grade," "If you don't have good behaviour, they're going to kick you out or expel you and that affects your grade a lot." Given their responses, it appeared that these children were very aware of links between their actions and academic performance. Their responses also suggested that they had a sense of personal responsibility for their actions and held a belief that, with support from adults, they could make positive choices that would support their academic success.

Discussion

The primary purpose of this study was to listen to children who face adversity and identify their perspectives on the factors and mechanisms related to educational resilience. The findings also reveal several implications for research methodology with children and professional practice.

Implications for Research with Children

The research methodology designed for this study could be considered an important development in the task of valuing and understanding children's perspectives. The methodology has several strengths that support this assertion. The combination of the CSIP and PI was found to be a useful method for collecting and understanding children's

perspectives. In the CSIP, the combination of illustrations and story served as an interesting and understandable tool for children. The open-ended questions about the hypothetical children allowed the participants to respond freely, and the laminated page served as a guide to help children organize their thoughts and ideas.

The data provided evidence that the children used their own experiences to form their answers to the CSIP questions. For example, as one child talked earnestly about how his academic success would be supported by finding a quiet place to work, the noise level in his home made it almost impossible for the researcher to hear him speak. Participants also drew from their own experiences with statements such as "I'm trying to think how I get good grades. I'm trying to think here. Ummm, not drawing on your desk. Things like that," and "I would think he probably thinks real hard. And if anybody's real loud, well like me, sometimes if things are real loud, sometimes I picture myself in a different place and I'm working good or I just sit there and say I can do this." The fact that many of the participants' responses were drawn from their personal experiences infused the categories with authenticity that could not have been achieved through the constructions of experts alone.

The PI also proved to be an engaging task as the children talked about their own experiences. As in the CSIP, the use of open-ended questions permitted a wide range of responses. When the participants collaborated with the interviewer in the writing portion of the PI, they seemed to enjoy the task and put significant effort into it. Thus, the combination of the CSIP and PI provided a balanced interview approach and an important validity check for the data.

One of the strengths of this study was the position the researcher chose to take relative to the children. In the context of this project, the researcher did not talk with these children as a stranger or someone who came in to study them. Rather, the children in this study knew the researcher as an adult who was interested in their lives and opinions beyond the confines of a single study. The researcher's interactions with these children took place over 18 months and revealed many things about their lives and experiences at school that were not immediately evident. Thus, the researcher regularly chose the position of learner and asked the children to teach her about their lives. Initially, the children were slow to respond. One of the reasons for this may have been that children "have come to expect that when adults ask them questions, either the adult already knows the answer…or they are in trouble" (Graue & Walsh, 1998, p. 113). Few children, and

particularly those facing adversity, have had adults regard them as experts. However, many of the participants eventually warmed to the idea of being the authority. Some even appeared to enjoy the opportunity to educate the researcher about various aspects of their experiences and their lives.

Experts who investigate children's perspectives have expressed the need to carefully negotiate the interview process with children (Graue & Walsh, 1998). In the present study, the researcher maintained the position of learner. The children were reminded of previous conversations in which they had helped the researcher to understand their experiences. They were then asked to take this role again and teach the researcher about how they experience school and what helps them to get good grades.

There is the possibility that having a prior relationship with all of the participants could have decreased researcher objectivity in the collection and analysis of the data. However, as indicated by Hatch (1990), interviews with children are usually improved when researchers take the time to develop a relationship with the children prior to data collection. Thus, it is possible that the established relationships with the children served to enhance the interview process. Careful efforts were also made to maintain appropriate objectivity during data analysis through the use of carefully designed procedures and reliability safeguards (such as inter-rater agreement).

This study revealed one final methodological insight. Not only were participants able to provide valuable insight into the factors and mechanisms related to educational resilience, they were also able to provide insight into better ways to conduct the interview. One child's suggestion improved the PI experience for the 40 children who were interviewed after him and helped to improve the quality of the data collected. This is a powerful reminder that adults may not always be aware of the questions that should be asked (Heshusius, 1995) or the best ways to ask those questions. However, if adults take the time to listen carefully, children can be an important source of many kinds of information.

Implications for Fostering Educational Resilience

The results of this study help to shed some much-needed light on protective factors that support children's academic achievement, and provide support for the implementation of a number of strategies in schools and community agencies that will help to improve

academic outcomes for children facing adversity. Given that participants were able to articulate many of the things they needed to be academically successful, educators would do well to ask children to contribute their ideas about what they need to improve academic performance such as identifying available resources to include on their individualized education plans (IEPs).

The children in this study were able to acknowledge the role of personal responsibility in academic success while also recognizing that success cannot be achieved in a vacuum. Responses clearly revealed that children wanted and needed support from a variety of people in their lives, and they were able to articulate the kinds of assistance they perceived as effective, particularly to complete their class work and homework. These findings highlight the important role of individual attention and caring in education. Experts have long suggested that caring needs to be a central feature of the learning experience (Noddings, 1984). The children in the study clearly supported this notion.

Children facing adversity will have a chance to thrive when adults look for ways to provide individual attention, opportunities for peer and cross-age tutoring, and specialized support in reading, spelling, and math. Thus, for children facing adversity, educators need to find meaningful ways to communicate with parents and guardians about students' homework. Ties need to be strengthened not only between school and home but also between school and the community agencies that serve these children. Schools and community agencies should provide ideas for how adults and children can work together and offer training and resources that adults can use outside school.

A large majority of the participants in this study identified the critical link between student understanding and academic success. This finding indicated that these children were able to recognize times when they did not understand the content and offered concrete ideas for ways in which this could be addressed. These findings are in concert with studies of children's metacognition indicating that children are capable of multifaceted metacognitive thought (Haywood, 2010), and these thoughts can be used to improve learning (Schunk, 2011). Participants unmistakably wanted to increase their understanding. Thus, in order to support the academic success of children facing adversity, effective classroom instruction must include careful explanation, child-friendly illustrations, and concrete visuals (Tay-Lim & Lim, 2013), frequent checks for understanding (Waring, 2012), and multiple structures to permit asking for help (Calarco, 2011).

The important role of personal behaviour is worthy of note. The children in this study were able to articulate their understanding of the connection between positive behaviours and academic success. As the children considered which factors really helped them get good grades, they may have recalled the emphasis their schools place on positive classroom behaviours. It is possible that they had heard frequent admonitions to sit still, pay attention, and do their work. In fact, anecdotal evidence revealed that many of the participants had either been in serious trouble or were on the verge of getting in trouble at school. For example, the researcher was invited to interview one boy in the middle of the day, because he had been expelled earlier that week for yelling at the teacher. Another boy talked about his experiences in a number of "time outs." However, it is also possible that the children could have been reflecting on their own personal responsibility to achieve academic success. In other words, they may have been aware that efforts to stay on task and follow classroom rules result in improved school grades. This responsibility could be construed as self-regulated learning. The literature defines this construct as "the process whereby students personally activate and sustain cognitions and behaviours systematically oriented toward the attainment of academic learning goals" (Schunk, 2011, p. 265). Although the data did not specifically indicate one of these interpretations over the other, it is possible that the children were aware of the importance of self-regulation in the learning process. Thus, for children facing adversity, adults need to support the development of self-regulated learning strategies, provide clear and meaningful instruction about making behavioural choices, and make a concerted effort to affirm responsible behaviour.

Limitations of the Study

The findings from this study provide valuable insights into the protective factors and mechanisms related to educational resilience. However, two considerations must be taken into account in the interpretation of the data. First, the children clearly identified numerous protective factors relevant to their academic success. The fact that some of the children used their own experiences to form their responses to the CSIP suggests that these may be part of their daily experience. However, the data provided no concrete indication as to how often the children actually experienced specific protective factors, or if they knew how to engage the specific factors on a regular basis. Given that most of

participants were experiencing academic difficulties, the data in the present study provide little insight as to why the children were aware of multiple protective factors yet were still failing academically. Further research is needed to identify how adults can increase children's access to protective factors and how to support their implementation. This finding has important links to the literature on perceived self-efficacy. Self-efficacy is defined as "judgments of one's capability to organize and implement action necessary to attain designated performances" (Schunk, 2011, p.121). The theory indicates that knowing what to do does not guarantee the action will be carried out. For example, a boy may know that a particular action could help him improve his grades, but he does not engage in the action because he doubts his ability to do it correctly. This complex issue would best be addressed through further interviews with children, parents, and teachers, and accompanied by classroom observations.

Second, this was an exploratory study and the data were intended to be descriptive in nature. Thus, no definitive conclusions can be drawn regarding cause-and-effect relationships between factors, mechanisms, and academic achievement. Furthermore, since longitudinal data have not been gathered in this area, there is no evidence to suggest how the relationship between the protective factors and mechanisms evolve over time.

Conclusion

The results of this study provide clear evidence that educational resilience, defined as academic success in the face of adversity, cannot be viewed as the responsibility of any single entity. Rather, the findings point to a complex set of opportunities and responsibilities that need to be distributed throughout the community. For this complex work to make a difference, all members of the community must begin by listening to children and valuing their perspectives as indispensable. When done with authenticity, listening to the perspectives of children has the potential to be a truly transformative experience, both for our children and us (Cook-Sather, 2007). The voices of the children in this study call out to all of us—school leaders, teachers, counselors, families, and community organizations—to transform our views on the value of children's insights and to elevate the importance of children's perspectives as we work to foster academic achievement for children who face adversity.

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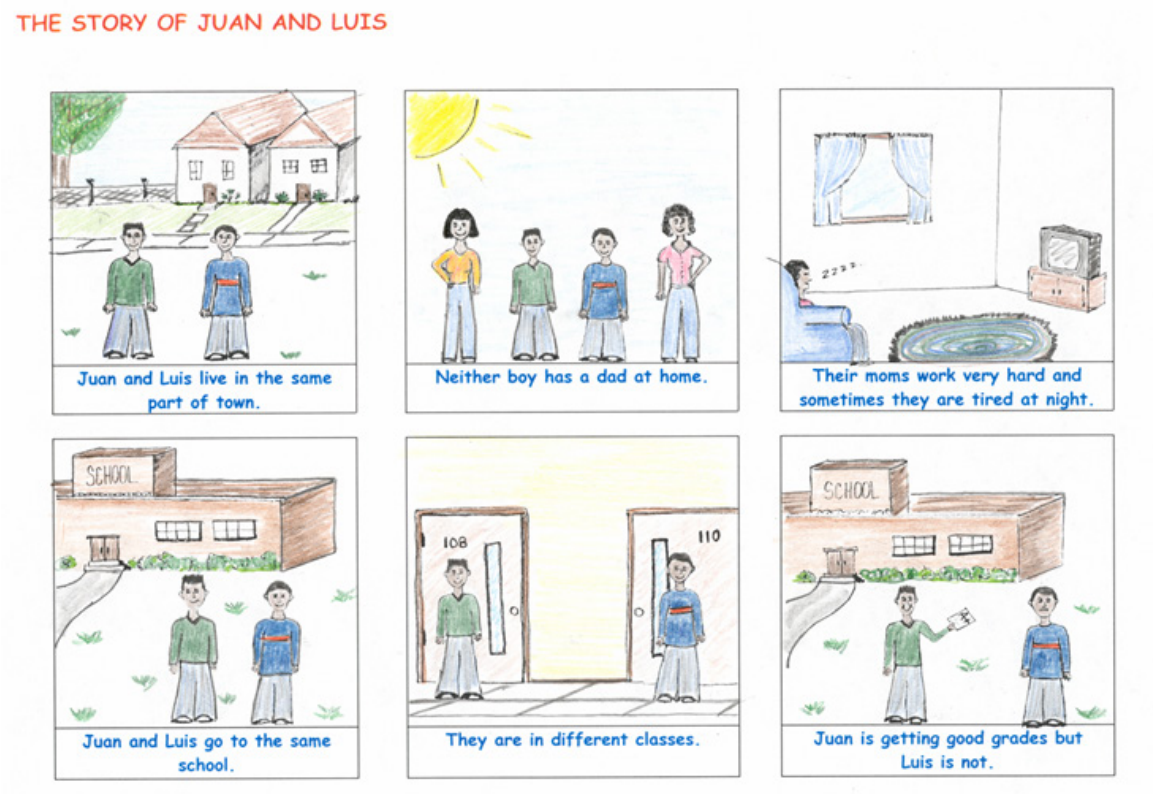
Appendix A

Example of Constructed Situation Interview Protocol (CSIP) for Boys (Hispanic)



Appendix B

Constructed Situation Interview Protocol (CSIP)
Story & Questions

Story of Juan/Ben and Luis/Tyler

Juan/Ben and Luis/Tyler are good friends. They are about the same age as you. They live in the same part of town and they have fun hanging out and playing together. Neither Juan/Ben nor Luis/Tyler has a dad at home, so their moms have to work very hard to support their families. Both moms love their boys very much, but sometimes they are very tired at night because they work so much.

Both boys go to the same school but are in different classes. Now here's the interesting part. Even though they have all these other things in common, they have one important difference: Juan/Ben is getting good grades in school but Luis/Tyler is not.

*Interview Questions for the C*S

1. Why do you think there is a difference between A and B?

OK. Let's talk some more about A.

2. Why do you think A is getting good grades?
3. What helps A to get good grades?
4. How does that help A?
5. Who helps A to get good grades? What do they do?
6. How does it help A?

OK. Now let's talk about B.

7. Why is B not getting good grades?
8. If B was going to get good grades, what could he/she do?
9. How would that help?
10. Who else could help B? What could they do?
11. How would that help?

Appendix C

Personal Interview (PI)

1. I want you to think of all the things that *really help* you to get good grades in school. Think of all the things you can that really help you. We'll write them down here. Why don't you pick your favorite colour marker? Now, you can write your ideas, or I can write your ideas, or we can take turns. What would you like to do? OK, let's make the list.

Upon completion of the spontaneous list:

2. What things can teachers do to help you get good grades?
3. What things can your friends do to help you get good grades?
4. What things can you do to help you get good grades?

Upon completion of list, go back to top and, pointing to each factor, ask:

5. How does that help you?
6. Now (pointing to the whole list), out of all of these things, which one would you say helps you *the most* to get good grades?
7. Why do you think that helps you the most?
8. How do you think that helps you?